

---

# **BOROUGH OF DUNELLEN MASTER PLAN 2011**

Middlesex County, New Jersey

2011



# BOROUGH OF DUNELLEN MASTER PLAN 2011

Middlesex County, New Jersey

Prepared by:

CME Associates  
3141 Bordentown Road  
Parlin, New Jersey 08859  
732-727-8000



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

---

Bruce J. Rydel, P.P. #3139, AICP #4855

Borough of Dunellen Mayor and Council

Mayor Robert J. Seader

Council President:	Kenneth J. Baudendistel
Councilperson:	Anthony Aversa
Councilperson:	Jason Cilento
Councilperson:	Joseph R. Petracca
Councilperson:	Kenneth Bayer
Councilperson:	Mark Bieniek

Borough of Dunellen Planning and Zoning Board

Members	Class Membership
Roger Dornbierer, Chairperson	IV
Barbara Seif, Vice Chairperson	IV
Mayor Robert J. Seader	I
Scott Luthman, Board Secretary and Zoning Official	II
Kenneth Bayer, Council Representative	III
Thomas D'Amico	IV
Robert F. Krause	IV
Randee Staats	IV
Adam Gordon, Alternate	IV

Board Attorney: John M. Lore, Esq.  
Recording Secretary: Donna Mackey

Consultants

**CME Associates**  
3141 Bordentown Avenue  
Parlin, NJ 08859  
Bruce J. Rydel, P.P., AICP

# Table of Contents

## **SECTION I - GOALS & OBJECTIVES**

Master Plan Requirements.....	1
Community Input.....	2
Master Plan Goals & Objectives.....	3

## **SECTION II - HISTORIC PRESERVATION PLAN ELEMENT**

History of Dunellen.....	5
Historic Properties.....	6
Historic Preservation Commission and Ordinance.....	6
Public Education.....	7
Recommendations.....	7

## **SECTION III - LAND USE PLAN ELEMENT**

Natural Conditions.....	8
Demographic Overview.....	9
Existing Development Patterns.....	11
Proposed Land Use Changes.....	15
Land Use Plan.....	17
Proposed Land Development Ordinance and Zoning Changes.....	17

## **SECTION IV - ECONOMIC PLAN ELEMENT**

Existing Conditions.....	19
Economic Development Planning.....	22
Recommendations.....	22

## **SECTION V - SUMMARY OF HOUSING ELEMENT AND FAIR SHARE PLAN..... 23**

## **SECTION VI - CIRCULATION PLAN ELEMENT**

Existing Conditions.....	24
Issues and Recommendations.....	27

**SECTION VII -  
URBAN DESIGN PLAN ELEMENT**

Goals ..... 29  
Policies ..... 29

**SECTION VIII -  
UTILITY SERVICE PLAN ELEMENT**

Public Water Supply ..... 31  
Stormwater Management and Flood Control ..... 31  
Sewerage and Waste Treatment..... 32  
Solid Waste Disposal ..... 33

**SECTION IX -  
RECYCLING PLAN ELEMENT**

Recycling ..... 35  
Recommendations ..... 37

**SECTION X -  
COMMUNITY FACILITIES PLAN ELEMENT**

Municipal Services ..... 38  
Police ..... 38  
Fire ..... 39  
Rescue Squad..... 39  
Library ..... 39  
Schools ..... 40  
Recommendations ..... 40

**SECTION XI -  
RECREATION PLAN ELEMENT**

Introduction..... 41  
Goals and Policies..... 41  
Inventory..... 41  
Needs Analysis..... 42  
System Classification ..... 45  
Middlesex County Open Space and Recreation Plan 2003 ..... 46  
Resource Assessment ..... 47  
Action Plan ..... 47

**SECTION XII -  
RELATIONSHIP TO OTHER PLANNING EFFORTS**

State Development and Redevelopment Plan ..... 48  
Middlesex County Growth Management Strategy..... 49  
Middlesex County Solid Waste Management Plan ..... 49  
Borough of Middlesex..... 50  
Township of Piscataway..... 50

City of Plainfield.....	50
Township of Green Brook.....	50

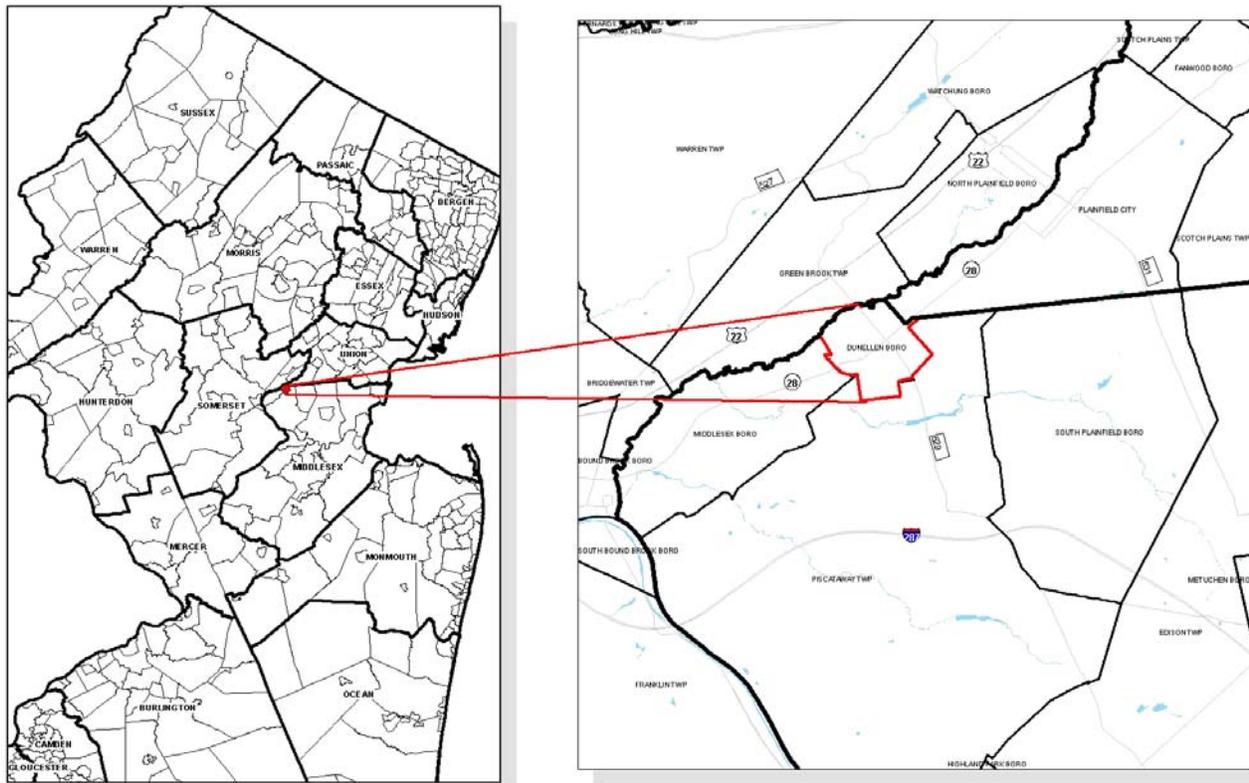
**MAPS**

Figure LU1 - Environmental Constraints Map .....	9a
Figure LU2 - Land Use Map .....	12a
Figure LU3 - Existing Zoning Map .....	13a
Figure LU4 - Residential Land Uses .....	14a
Figure LU5 - Commercial Land Uses .....	15a
Figure LU6 - Mixed Land Uses .....	15b
Figure LU7 - Industrial Land Uses.....	16a
Figure LU8 - Public and Quasi Land Uses .....	16b
Figure LU9 - Vacant Land Uses .....	16c
Figure LU10 - Land Use Plan.....	18a
Figure LU11 - Residential / Professional Office Zone Proposal .....	18a
Figure LU12 - Proposed RA-75 Zone District.....	19a
Figure C1 - Roadway Classification Map .....	26a
Figure C2 - Roadway Jurisdiction Map .....	26b
Figure C3 - Public Transportation Map .....	27a
Figure C4 - Greenways and Bikeways Map .....	27b
Figure RC1 - Existing Recreation and Open Space and Potential Acquisitions.....	43a



# SECTION I GOALS & OBJECTIVES

The Borough of Dunellen, approximately 1 square mile in area, is situated within central New Jersey in the northwest portion of Middlesex County, adjoining both Union and Somerset Counties. The Borough is served primarily by State Route 28 (an east-west corridor) and County Route 529 (a north-south roadway). Access to these aforementioned major arterials can be attained from Interstate 287 and State Route 22. The Borough is adjacent to Piscataway Township and Middlesex Borough in the County of Middlesex - Plainfield City in the County of Union - and the Township of Green Brook in Somerset County. The Borough is also accessible by the New Jersey Transit rail service on the Raritan Valley line providing service to New York City. The Dunellen train station is located at the center of town in the active downtown area. The Borough is also serviced by four NJ Transit bus routes.



Source: NJDEP

## MASTER PLAN REQUIREMENTS

A Master Plan provides a blue print for a municipality that depicts its current land uses, and guides decision making for physical and economic growth in a community. The Municipal Land Use Law (MLUL) (N.J.S.A. 40:55D et. seq.), requires municipalities to re-examine their master plans every six years to reflect the current conditions and visions of the community. The Borough of Dunellen prepared a comprehensive Master Plan in 1979 and three re-examination reports in 1982, 1988, and



1996. This Master Plan takes into account the earlier reports, while emphasizing the existing conditions of the Borough as well as the current vision for the future of Dunellen.

The four required elements of a municipal master plan as outlined in the MLUL include a statement of purpose, a land use element, a housing plan element and a statement describing the plans compatibility and consistency with other regional plans. A Housing Plan Element was prepared and adopted by the Borough in December 2005. The Housing Plan is summarized in this Plan. This Master Plan includes all the required elements set forth in the MLUL as well as the following optional elements:

- Circulation Plan
- Community Facilities Plan
- Economic Plan
- Historic Preservation Plan
- Recreation Plan
- Recycling Plan
- Urban Design Plan
- Utilities Plan

### COMMUNITY INPUT

Public participation is an essential part of the master planning process. Although only one public hearing is required, Dunellen understands that community input is critical in its planning efforts and can provide local knowledge and insight when establishing goals, objectives and strategies. An initial community meeting was conducted at the outset of this planning process, and the following town strengths and areas of concerns were expressed:

#### Strengths

- Small town feel
- Aesthetically pleasing and functional parks
- Well utilized downtown
- Convenient train station location
- Pleasant and well maintained residential neighborhoods

#### Areas of Concern

- Speeding vehicles along major arterials (Route 28 and Washington Avenue)
- Downtown needs some aesthetic improvements, including the regulation of signs
- Some residential areas need maintenance
- Code enforcement issues in residential areas including the parking of vehicles on lawns
- Downtown may need a parking garage to accommodate a revitalized downtown
- Lighting in and around the train station and the downtown would benefit from improvement
- Building height and mass consistency is needed from block to block in the downtown
- Professional services such as legal and medical providers have diminished in number in the Borough

The comments received by the residents during the community meeting were considered and incorporated into this plan. Furthermore, during the final stages of this master plan process, the Plan was presented to the Land Use Board at an open public meeting. Comments received from that meeting were also considered and incorporated into this Plan.



### MASTER PLAN GOALS & OBJECTIVES

The MLUL requires master plans to include a “statement of objectives, principles, assumptions, policies and standards upon which the constituent proposals for the physical, economic and social development of the municipality are based.” The goals and objectives discussed in this plan have been established based on input from the Land Use Board, residents, municipal officials, and other stakeholders.

The listed **Goals** were developed as general statements that define observable and measurable end-results for the growth of the Borough. The **Objectives** provide more specific and attainable actions relating to the goals.

The **Goals** of this master plan are:

- To redevelop the Borough downtown and promote the Redevelopment Plan
- To promote an aesthetically pleasing and safe downtown with a mix of uses
- To promote an aesthetically pleasing and safe train station
- To preserve any remaining open space and environmentally sensitive lands in the Borough
- To facilitate the current and future demand for parking in the downtown to sufficiently accommodate existing and future parking demands, especially in consideration of increased residential and commercial densities permitted and encouraged within the Redevelopment Areas of the Borough
- To encourage pedestrian and bicycle activity throughout the Borough
- To encourage properly designed commercial and professional office uses
- To alleviate the traffic congestion on the major arterials
- To work with appropriate agencies to discourage flooding in the Borough

The **Objectives** that will enable us to attain our goals are:

#### Land Use Objectives:

- Encourage the proper design of building facades throughout the Borough.
- Allow and encourage outdoor dining in the downtown.
- Within the downtown and redevelopment districts, encourage zero side-yard setbacks and zero to minimal front-yard setbacks discouraging development that purposes parking in front.
- Encourage the use of Transit Oriented Development (TOD) techniques in the redevelopment of the downtown.
- Encourage the use of sustainable design and energy conservation building techniques in new development and redevelopment.
- Increase street furniture located in the streetscape and in the train station, including benches, lighting and trash receptacles.
- Minimize reliance on surface parking lots.
- Develop a structured parking deck for Borough residents and visitors that is inviting, and provides easy access to the Train Station, shops, and other amenities.
- Determine strategies for meeting the Borough’s updated COAH obligation for Third Round affordable housing obligation, and apply for substantive certification.



- Allow for the creation of housing choices for a wide range of income levels to ensure that people can live and work in the Borough.
- Make modifications to the zoning ordinance to prevent the conversion of existing low-density housing neighborhoods to out-of-character multi-family uses.
- Utilize on-street parking to create a separation between the automobile and pedestrian realm.
- Achieve Transit Village designation under New Jersey Transit guidelines.
- Continue cooperation with the Green Brook Flood Control Commission.
- Develop a cellular tower land use ordinance.

### **Economic Plan Objectives:**

- Amend the zoning ordinance to allow professional offices and home offices along Washington Avenue.
- Identify funding sources for such activities as façade improvement programs
- Provide opportunity locations downtown as public space encouraging the arts, and environment that is pedestrian focused for shopping, gathering, eating and entertainment.
- Encourage expansion of traditional retail uses in the downtown

### **Circulation Objectives:**

- Create highly definable pedestrian crosswalks at all necessary intersections particularly in the downtown area.
- Provide vehicular intersection improvements along the major arterials, such as dedicated turn lanes
- Designate bikeways and bike routes where necessary throughout the Borough
- Identify funding sources for bikeway and pedestrian improvements
- Provide traffic calming devices in the downtown and near schools

### **Open Space Objectives:**

- Municipal purchase of parcels that can potentially be used for recreational and open space purposes, particularly along the Green Brook
- Incorporate public spaces into downtown redevelopment efforts
- Create a street tree planting program throughout the Borough

### **Municipal Services Objectives:**

- Continue to maintain and upgrade Borough infrastructure
- Identify funding sources to assist with the service and equipment needs



## SECTION II HISTORIC PRESERVATION PLAN ELEMENT

This Historic Preservation Plan Element is prepared following the requirements of the MLUL and includes the following:

- A description of the location and significance of historic sites or districts
- A description of the standards used to assess worthiness for historic sites or districts
- An analysis of the impact of each element of the master plan on the preservation of historic sites or districts

### HISTORY OF DUNELLEN



Dunellen was originally part of Piscataway Township and at one time the personal property of William Dockwa, secretary of the Board of proprietors of East Jersey. In the 1830's the first railroad track was built level to North Avenue traversing land that would become the Borough. The second and third railroad tracks were not laid until 1855 and 1869 respectively.

In 1847 the New Jersey Central Railroad Company was chartered, headed by prominent New York investor John Taylor Johnston. The company took control over the railroad and the main road. Later in 1867 an act of legislature incorporated the

Central New Jersey Land Improvement Company and the parcels along the railroad were deeded to the newly created company, which John Taylor Johnston helped incorporate. It was Johnston's idea to create residential communities along the railroad right of way.

The real estate boom created by Johnston's vision built the Borough of Dunellen. During that time of real estate development, the existing railroad station named "New Market" was abandoned and a new station, with living quarters for the station master was erected and named "Dunellen". The company not only laid out the village, but it presented land for churches, schools and a central park space, known today as Washington Park.

Dunellen officially came into existence in 1886 when it was set up as a Borough commission. A Borough commission, now an extinct type of municipal government in New Jersey, granted the community limited powers while it remained under the jurisdiction of Piscataway Township. As years passed the Borough commission type of government was slowly provided more powers through legislative amendments. Finally in 1895 a referendum by Dunellen citizens along with legislative acts resulted in the transformation of the Borough commission type of government into a Borough government completely separate from Piscataway Township.

In 1896 Dunellen acquired its first Borough hall containing a council meeting room, a two-cell jail, a court room and police headquarters. Although established as a Borough in 1895, confusion regarding this new form of government remained and it was not until 1914 that another act of legislature officially confirmed Dunellen a Borough as it is known today.

Today, Dunellen is a community of over 7,000 citizens. Although the Borough grew as a by-product of the railroad era at one time taken over by the Art Color Printing Company that produced over



10,000,000 magazines every month, the Borough has developed into a unique small town that utilizes its railroad beginnings as a benefit to its residents and visitors.

### HISTORIC PROPERTIES

The following list includes properties or districts either listed on the New Jersey Register of Historic Places (SR), the National Register of Historic Places (NR), or that have received Certifications of Eligibility (COE), opinions of eligibility from the State Historic Preservation Office (SHPO) or Determinations of Eligibility (DOE) from the Keeper of the National Register.

- **Aluminum Press Company Plant** (ID#3296)  
North Avenue Extension  
SHPO Opinion: 3/19/1996
- **Central Railroad of New Jersey Main Line Corridor Historic District** (ID#3500)  
Railroad right-of-way from Phillipsburg to Bayonne, including all associated features  
DOE: 11/30/1995  
SHPO Opinion: 7/19/1991  
(Historic District extends through 29 municipalities in 5 counties)
- **Edward Maurer House** (ID#28898)  
500 Mountain View Terrace  
SHPO Opinion: 8/23/1995

These properties are of interest to Dunellen, but are not registered.

- **Ernest L. Ransome House**  
520 Washington Avenue
- **Dunellen Bungalow Thematic Nomination**  
(various locations)
- **Art Color Office Building**  
100 South Washington Avenue

### HISTORIC PRESERVATION COMMITTEE

The Borough does not currently have a Historic Preservation Committee. However, there is a Dunellen Historical Society organized by Borough citizens. This group has played an important role in promoting historic awareness in Dunellen.

The Borough should consider the establishment of a Historic Preservation Committee that would function in a manner similar to, but without the formality of a Commission, as provided for in the MLUL. The Committee may under the auspices of the Mayor and Council, perform such responsibilities as:

- Prepare a survey of historic sites of the Borough pursuant to criteria identified in the survey report.



- Make recommendations to the Land Use Board on the historic preservation plan element of the master plan and on the implications for preservation of historic sites of any other master plan elements.
- Advise the Land Use Board on the inclusion of historic sites in the recommended capital improvement program.
- Advise the Land Use Board on applications for development.
- Provide written reports on the application of the zoning ordinance provisions concerning historic preservation.
- Work towards the education and information of the public that will promote historic preservation in the Borough.

### **PUBLIC EDUCATION**

Unfortunately, as is the case with many municipalities throughout the state, citizens may not be aware of the historic significance of the Borough or of the sites within the Borough that have historic value. Education at all levels will address the lack of awareness. Currently, the Dunellen Historical Society holds programs and provides information on the historical significance of the Borough that reaches the public. Their efforts can be further advanced by the use of brochures, pamphlets and books that discuss historic preservation topics including the economic advantages associated with the rehabilitation of historic buildings that include tax credits.

### **RECOMMENDATIONS**

All the elements of this master plan impact the preservation of historic sites or districts in some way, particularly the land use and the urban design elements. In the absence of the historic preservation ordinance, changes in the land use ordinance and the Borough design ordinances could be utilized to help in historic preservation efforts.

The following list establishes the historic preservation recommendations for the Borough of Dunellen:

- Conduct outreach to citizens of the Borough to promote the conservation of historic sites and creation of historic districts or sites.
- Update the Borough land use ordinance and design standards as necessary to promote historic structure rehabilitation.
- Conduct a comprehensive survey of historical structures within the Borough.
- Establish a historic marker program to recognize historic sites in the borough and list historic sites with their descriptions on the Borough's website.



## SECTION III LAND USE PLAN ELEMENT

In conformance with the MLUL, the land use element of this master plan addresses the following fundamental items:

- A description of the Borough land use in relation to natural features.
- A description of the existing and future land uses in relation to the zone plan and zoning ordinance.
- Recommendation of standards for population density and development intensity.

### NATURAL CONDITIONS

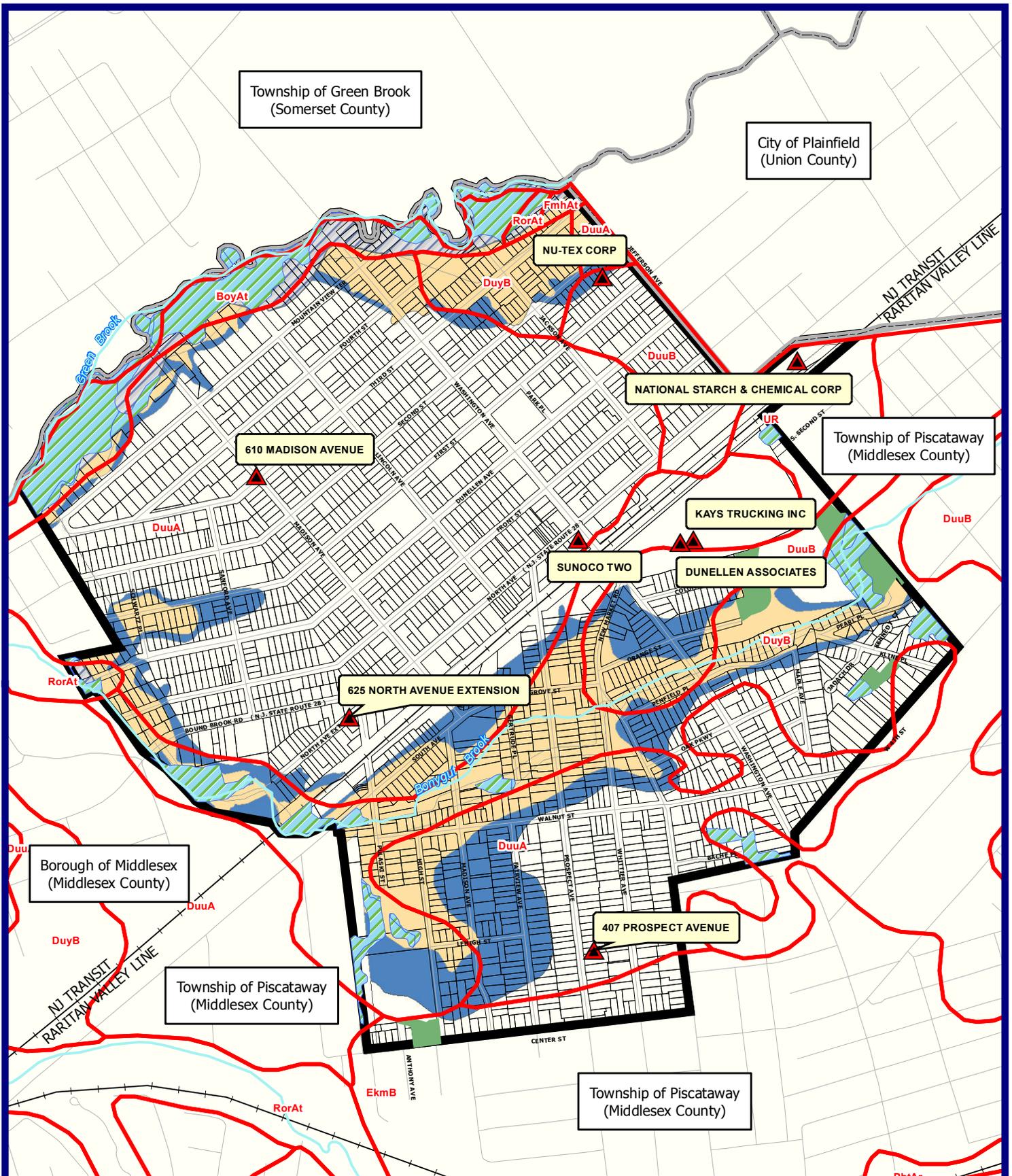
The natural environment influences land development and often times plays a significant role in the land use vision for municipalities. Development factors that are affected by environmental conditions include the selection of the site, the design of the structure, construction, performance after construction, and maintenance. **Figure LU1** shows environmental constraints within Dunellen, including the location of water bodies, forest areas, wetlands, flood prone areas, FEMA flood zones, known contaminated sites (KCS), and soil groups.

There are two brooks in the Borough of Dunellen, including the Green Brook which establishes the municipal boundary between Dunellen and the Township of Green Brook to the north, and the Bonygut Brook that runs along the westerly municipal boundary adjacent to the Borough of Middlesex and crosses Dunellen in an east to west direction south of the railroad tracks.

The New Jersey Department of Environmental Protection (NJDEP) has delineated wetlands and flood prone areas in Dunellen along the Green Brook on properties largely owned by Borough, and along the Bonygut Brook on the westerly side of the Borough.

The FEMA designated flood hazard areas for insurance purposes (AE Zone and X500 Zone), are also adjacent to the two brooks in the Borough, but encompass larger areas than that of the NJDEP flood prone areas and wetlands. Areas designated as the AE Zone are subject to a 1% or greater annual chance of flooding in any given year and indicate an area where flood insurance is mandatory. The X500 Zone represents areas of moderate flood hazard from the principal source of flood in the area, and are determined to be between the limits of the 1% annual chance floodplain and the 0.2% annual chance floodplain and therefore indicates an area where the purchase of flood insurance is not mandatory.

The land adjacent to the Green Brook does experience flooding and according to the 1996 Master Plan Reexamination report, the Green Brook Flood Control Commission and the Army Corps of Engineers continue to address the flooding concerns within the Green Brook basin. The Borough of Dunellen strongly supports the Green Brook Flood Control Commission and the Army Corp of Engineer's Green Brook Flood Control Project. Federal funding was allocated for the construction of levees and other components that impact the Borough. The lands in Dunellen along the Bonygut Brook designated as flood hazard areas by FEMA are 100% developed, and do experience flooding during extreme weather conditions. The remainder and majority of Dunellen falls into FEMA's X Zone. The X Zone designation by FEMA imposes no-mandatory purchase of flood insurance because there

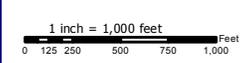


**Legend**

- NJDEP Known Contaminated Sites 2005
- Streams
- Soil Groups
- FOREST
- WETLANDS
- FLOOD PRONE AREAS
- FEMA Data**
- ZONE**
- AE
- X
- X500
- DUNELLEN BORO
- County Boundary

Borough of Dunellen, Middlesex County, New Jersey Figure LU1

**Dunellen Master Plan**  
Environmental Constraints Map



Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.





is minimal flood hazard from the principal source of flood in the area, and the area is determined to be outside the 0.2% annual chance floodplain.

Based on the NJDEP Known Contaminated Sites (KCS) database for 2005, there are five active existing known contaminated sites in the Borough with on-site sources of contamination, and two closed sites with land use restrictions imposed. The majority of the sites are situated along the railroad line, while the others are located along residential streets including Madison Avenue, First Street and Prospect Avenue.

**Table LU1** identifies the soil groups represented in the Borough.

<b>Table LU1 - Dunellen Soil Groups</b>	
<b>Soil Group</b>	<b>Description</b>
DuuA	Dunellen Urban land complex, 0-3 percent slopes, not limited
DuuB	Dunellen Urban land complex, 3-8 percent slopes, not limited
DuyB	Dunellen Moderately well drained variant Urban land complex, 0-6 percent slopes, not limited
EkmB	Ellington Moderately deep variant Urban land complex, 0-6 percent slopes, somewhat limited
RorAt	Rowland Silt Loam, 0-2 percent slopes, frequently flooded, very limited
BoyAt	Bowmansville Silt Loam, 0-2 percent slopes, frequently flooded, very limited
FmhAt	Fluvaquents loamy, 0-3 percent slopes, frequently flooded, very limited

Soil groups categorized as “not limited”, indicate a very favorable soil for development that has good performance with very low maintenance expected. A “somewhat limited” soil indicated that the soil has features that are moderately favorable for development with fair performance and moderate maintenance. A “very limited” soil indicates that the soil is unfavorable for development, and limitations generally cannot be overcome without major soil reclamation, special design or expensive installation procedures. Except for the land adjacent to the Green Brook, the soil in Dunellen is not limited, as its developed status attests.

**DEMOGRAPHIC OVERVIEW**

**Table LU2** identifies the historical population trends for the Borough of Dunellen from the 1930’s to the year 2010. According to U.S. Census data, the Borough of Dunellen experienced a large population increase of 17.4% between 1940 and 1950. For two decades following the 1950’s, the Borough continued to grow but at a smaller pace with increases of 8.7% in 1960 and 3.4% in 1970. Thereafter the population in Dunellen experienced a decline totaling 7.8% to the year 1990. However, based on 2010 Census data, the Borough population has increased by 14.2% since the year 2000. Furthermore, according to the New Jersey Transportation Planning Authority (NJTPA), the MPO (Metropolitan Planning Organization) encompassing Dunellen, the Borough will experience very modest population increases to the year 2030 (see **Table LU3**).



Year	Population	Number Change	% Change
1930	5,148	-	-
1940	5,360	212	4.1%
1950	6,291	931	17.4%
1960	6,840	549	8.7%
1970	7,072	232	3.4%
1980	6,593	-479	-6.8%
1990	6,528	-65	-1.0%
2000	6,823	295	3.5%
2010	7,227	404	10.7%

Source: US Census, NJ Department of Labor and Workforce Development

Year	Population	Number Change	% Change
2010	7,227	-	-
2015	7,500	273	3.8%
2020	7,500	0	0.0%
2025	7,510	10	0.1%
2030	7,530	20	0.3%

Source: 2010 US Census and NJTPA Approved Population and Employment Projections (2003)

**Table LU4** illustrates the 2000 Dunellen population by age cohort. The majority of the Borough residents are between the ages of 35 and 44, with a percentage of 19.4%. The second largest population group in the Borough is the age cohort between the ages of 25 to 34 with a percentage of 16.6%.

**Table LU5** identifies the Borough population by race and ethnicity based on the 2010 Census. The majority of the population in Dunellen is white, totaling 73.5% of the population. The second largest group represented in town is that of Hispanic origin totaling 26.7%.



Age Cohort	Dunellen	
	Total	%
Total Population	6,823	-
Under 5	503	7.4%
5 to 9	469	6.9%
10 to 14	457	6.7%
15 to 19	408	6.0%
20 to 24	331	4.9%
25 to 34	1,133	16.6%
35 to 44	1,324	19.4%
45 to 54	908	13.3%
55 to 59	306	4.5%
60 to 64	211	3.1%
65 to 74	369	5.4%
75 to 84	313	4.6%
85 and over	91	1.3%

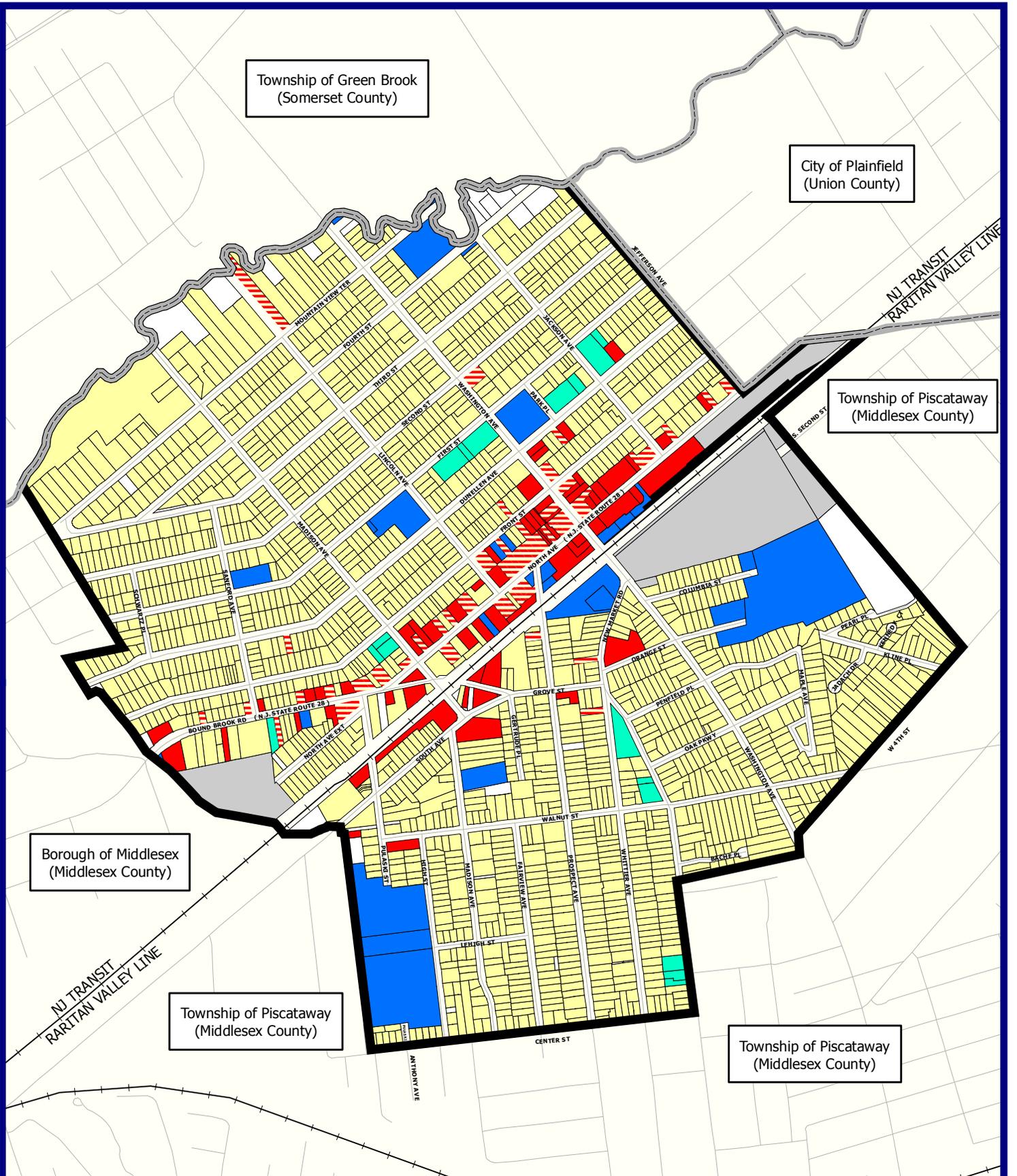
Source: 2000 US Census\*  
 Census 2010 Population data by Age Cohort was unavailable at the time of this analysis.

	Total	%
Total Population	7,227	-
White	5,309	73.5%
African-American	23	0.3%
American Indian & Alaska Native	19	0.3%
Asian	326	4.5%
Native Hawaiian & Other Pacific Islander	4	0.1%
Some Other Race	699	9.7%
Two or more races	247	3.4%
Hispanic Origin	1,933	26.7%

Source: 2010 US Census

## EXISTING DEVELOPMENT PATTERNS

A land use analysis for the Borough of Dunellen was conducted using Tax Assessor MOD IV records and field verification. **Table LU6** identifies the acreage and percentage breakdown for each land use found in the Borough. **Figure LU2** shows the existing land uses in Dunellen as presented in **Table LU6**. Dunellen’s growth was directly related to the railroad station developed at the center of town that brought industry into the Borough. With the end of the industrial revolution, the industrial land uses in the Borough were displaced by commercial land uses. Today the Borough contains an active downtown anchored by the train station with a mix of land uses including retail and residential. The remainder of the town consists of single family residential detached housing with intertwined two-family and multi-family residential dwellings. Only a few industrial uses remain in the Borough, being located along the municipal boundary at both ends of North Avenue (Route 28).



Township of Green Brook  
(Somerset County)

City of Plainfield  
(Union County)

Township of Piscataway  
(Middlesex County)

Borough of Middlesex  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

**Legend**

- County Boundary
- DUNELLEN BORO
- Land Use**
- RESIDENTIAL
- BUSINESS AND COMMERCIAL
- INDUSTRIAL
- PUBLIC
- QUASI PUBLIC
- FRATERNAL
- MIXED USE
- TRANSPORTATION
- VACANT LAND

Borough of Dunellen, Middlesex County, New Jersey

**Dunellen Master Plan**  
Land Use Map

Figure LU2



Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.





<b>Land Use</b>	<b>Tax Lot Count</b>	<b>Building Area (sq.ft.)</b>	<b>Lot Acres</b>	<b>Percent of Total Acres</b>
BUSINESS AND COMMERCIAL	57	843,594	19	3.4%
FRATERNAL	7	124,545	3	0.5%
INDUSTRIAL	3	1,467,832	34	6.0%
MIXED USE	61	507,903	12	2.1%
PUBLIC	27	1,908,011	44	7.7%
QUASI PUBLIC	19	362,829	8	1.5%
RESIDENTIAL	1,882	18,501,655	425	75.1%
TRANSPORTATION	1	101,788	2	0.4%
VACANT LAND	34	825,369	19	3.3%
<b>TOTAL</b>	<b>2,091</b>	<b>24,643,526</b>	<b>566</b>	<b>100.0%</b>

Source: CME Associates

### Zoning

The existing Borough Zoning is illustrated in **Figure LU3**. The existing zoning districts in Dunellen include the following:

- RA – Single Family Residential
- RB – Single Family and Two Family Residential
- B – Business
- I – Industrial
- Redevelopment Area Phase I
- Redevelopment Area Remainder

The RA zone is the most prevalent in the Borough. It permits detached single-family dwellings, community residences, funeral homes, churches and other places of worship. Conditional uses in the RA zone include nursery schools, home professional offices and community residences for the placement of more than six (6) but fewer than sixteen (16) mentally or physically handicapped persons, excluding resident staff.

The RB zone is primarily situated adjacent to the Business (B) Zone and the designated Redevelopment Areas along the downtown, except for a section located along First and Second Streets from Madison Avenue to the westernmost Borough boundary. The RB zone permits detached single-family dwellings, two-family dwellings, community residences, funeral homes, churches and other places of worship. Conditional uses in the RB zone include multi-family homes, nursery schools, home professional offices, community residences for the placement of more than six (6) but fewer than sixteen (16) mentally or physically handicapped persons, excluding resident staff.

Both sides of Route 28 in the downtown are zoned Business (B) along with parcels along Front Street and South Avenue. The B zone permits retail shopping facilities and service establishments, professional and general business offices, banks, recreational and amusement facilities, limited-service restaurants and funeral homes. Conditional uses in the B zone include full-service





restaurants, quasi-public clubs and organizations, gasoline services stations and public garages, and licensed nursing homes and convalescent homes.

There are three lots in Dunellen that are zoned Industrial (I). Two lots contain existing industrial uses that overlap the municipal boundary line from Middlesex Borough into Dunellen. Similarly there is one industrial use adjacent to Piscataway Township that also overlaps the municipal boundary into Dunellen.

Although the Zoning Ordinance references a Municipal (M) Zone, no lots have ever been so designated on any Borough Zoning Map. The Zoning Ordinance M zone permits governmental uses conducted by the Borough of Dunellen or the Borough of Dunellen Board of Education. Bulk requirements for the Municipal Zone are not listed in the ordinance. The Borough should review and rezone those parcels that meet the intentions of the Municipal Zone throughout the Borough and create bulk requirements for the Municipal Zone.

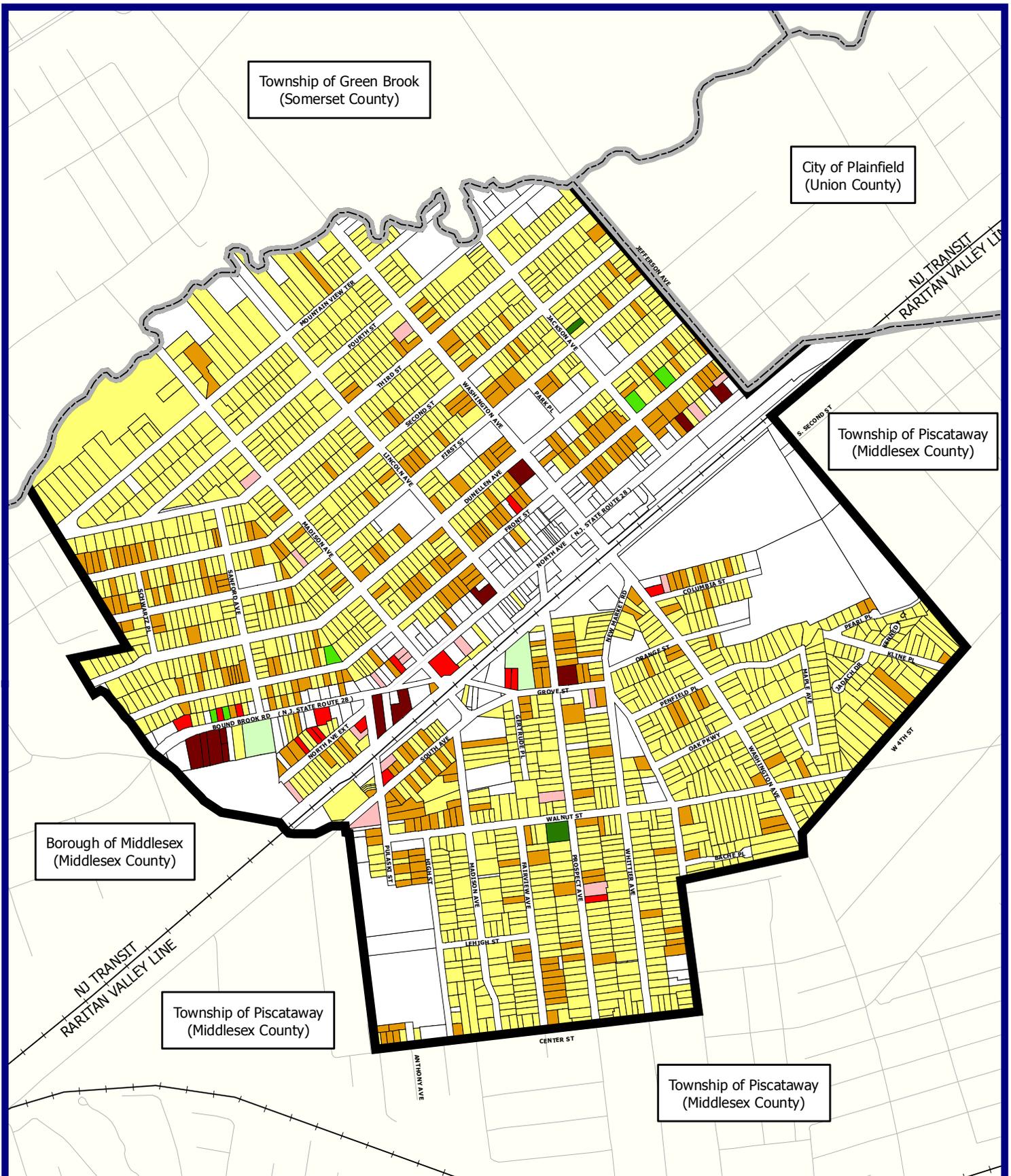
There are two redevelopment areas in the town including the Redevelopment Area Phase I and the Redevelopment Area Remainder. The redevelopment areas focus on improving the utilization of land in the downtown to promote economic opportunities and improve the image and safety of the area. The Redevelopment areas are located in the center of the Borough, paralleling Route 28. A redevelopment plan entitled *Dunellen Downtown Redevelopment Plan Phase I* was prepared in July 2004 establishing land use controls that supersede the requirements set forth in the Zoning Ordinance for both Redevelopment Area Phase 1 and the Redevelopment Area Remainder.

### Residential Land Use

Residential land uses are the most prominent land use in Dunellen. **Figure LU4** identifies the residential land uses by type, including:

- Single Family
- Two Family
- Three Family
- Four Family
- Multi Family
- Condominium
- Rooming House
- Group Home

The most prevalent residential land use in the Borough is the single family detached dwelling, at approximately 80% of the total residential land uses. While the lot dimensions for single family dwellings vary throughout the town, the most typical lot size is 7,500 square feet. The majority of the single family housing stock in Dunellen predates the 1940s, but the homes are well maintained. The residential neighborhoods in the Borough are typical New Jersey small town developments which are railroad centric. The residential neighborhood along Washington Avenue north of Memorial Park however contains large Victorian style structures that are visually predominant upon entering Dunellen via Route 22 from the north. Given their size and presence, these large Victorian structures have the potential for inclusion of professional office uses within them.



Township of Green Brook  
(Somerset County)

City of Plainfield  
(Union County)

Township of Piscataway  
(Middlesex County)

Borough of Middlesex  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

- Legend**
- SINGLE FAMILY
  - TWO FAMILY
  - THREE FAMILY
  - FOUR FAMILY
  - MULTIFAMILY
  - CONDOMINIUM
  - ROOMING HOUSE
  - GROUP HOME
  - DUNELLEN BORO
  - County Boundary

Borough of Dunellen, Middlesex County, New Jersey

## Dunellen Master Plan

### Residential Land Uses

Figure LU4

1 inch = 1,000 feet

Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.



The second most common residential land use in Dunellen is the two family dwelling accounting for 17% of the total residential uses. Two family structures are interspersed throughout the Borough and are present in practically all the residential neighborhoods. Zoning in these areas is not always consistent with the existing two-family uses and should be reviewed for zoning adequacy.

The remaining residential uses in the Borough including three family and four family houses, condominiums, rooming houses and group homes are primarily situated near the center of town along the railroad corridor and downtown. A few of these uses can be found within the single family / two family neighborhoods in town but their presence is very limited.

The Dunellen downtown business area also contains residential land uses in the form of rental apartments situated on the upper floors above first floor retail space. These mixed use structures are common in downtown development and are favored when located in proximity to public transportation. The Borough advocates these residential / retail mixed uses in its downtown.

### Commercial Land Use

With few exceptions, the commercial land uses in Dunellen are situated along Route 28 (North Avenue / Bound Brook Road) and along the railroad right-of-way. Rehabilitation efforts in the Borough are focused along the Route 28 corridor due to the high concentration of retail uses and their proximity to the railroad station.

**Figure LU5** illustrates the commercial land uses in Dunellen including the following:

- Offices
- Retail
- Services

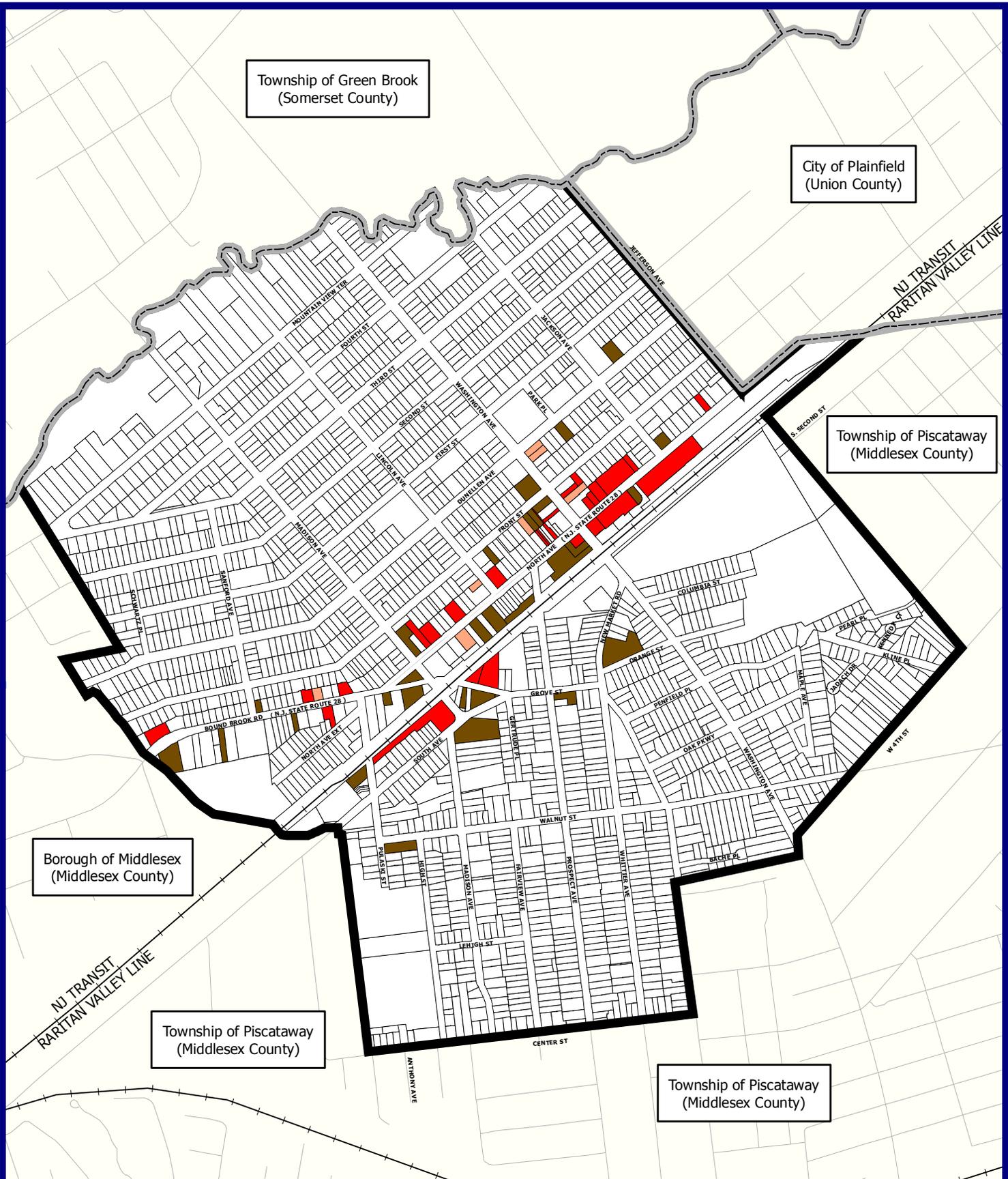
Services is the most prominent commercial use in the Borough accounting for approximately 49% of the total commercial industry, with the second highest commercial use being the retail industry accounting for 45%. Office uses in Dunellen are the least visible consisting of only 6% of the total commercial activity.

Although the existing commercial land use inventory indicates a high proportion of retail in the downtown, there should be a larger emphasis placed on the creation of retail uses that mirror that of traditional downtown uses promoting pedestrian activity, such as restaurants, specialty stores, and arts establishments.

New development and redevelopment of commercial land uses throughout the Borough should be encouraged to utilize sustainable design and energy conservation building techniques.

### Mixed Land Use

An active and successful downtown has traditionally incorporated mixed land uses taking advantage of the residential population living within the area to utilize the retail and services provided throughout the day and night. As identified in **Figure LU6**, presently within the Dunellen downtown, there exist approximately 50 parcels that house mixed use structures primarily with residential uses on upper



Township of Green Brook  
(Somerset County)

City of Plainfield  
(Union County)

Township of Piscataway  
(Middlesex County)

Borough of Middlesex  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

**Legend**

- RETAIL
- OFFICES
- SERVICES
- DUNELLEN BORO
- County Boundary

Borough of Dunellen, Middlesex County, New Jersey

**Dunellen Master Plan**  
Commercial Land Uses

Figure LU5



Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.







floors and typically retail uses on the ground floor. Dunellen advocates the continued construction of such mixed use development within the downtown.

### Industrial Land Use

**Figure LU7**, identifies the industrial land uses in Dunellen that include:

- The Sunrise Industries site situated at the end of North Avenue Extension which traverses the municipal boundary into Dunellen from the Borough of Middlesex;
- The former National Starch site located at the terminus of Route 28 in Dunellen adjacent to the City of Plainfield. (This site has been included in the Dunellen Downtown Redevelopment Remainder Parcels);
- The Art Color site situated on Washington Avenue, next to the railway. (This site has been included in the Dunellen Downtown Redevelopment Phase I);
- The Gold American site that traverses the municipal boundary from Piscataway into Dunellen; and
- The Verizon site that also traverses the municipal boundary from Piscataway into Dunellen.

New industrial development or redevelopment in the Borough should be encouraged to utilize sustainable design and energy conservation building techniques.

### Public and Quasi-Public Land Use

Public uses in Dunellen include municipal services, parks and schools. Existing public buildings include the municipal building, library, rescue squad, fire department, public works, and the parking authority. There are also five Borough parks, three public schools and several properties publicly owned due to foreclosure. Quasi-public uses include places of worship of and fraternal institutions. **Figure LU8** illustrates the location of all public and quasi-public land uses in the Borough.

### Vacant Land Use

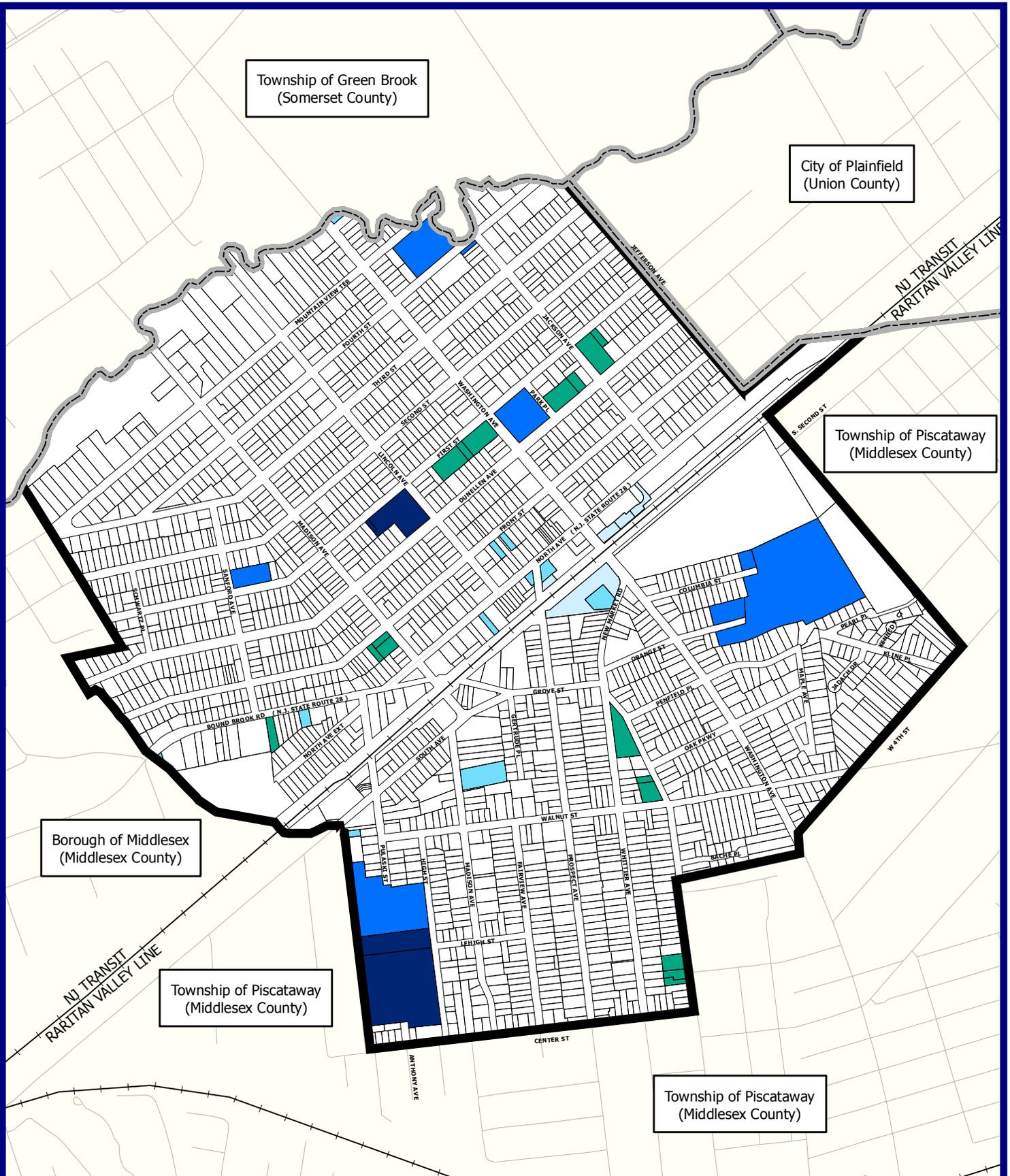
Vacant land in Dunellen is scarce. There are a total of 34 vacant parcels throughout the Borough, of which 11 are privately owned. The majority of the private vacant parcels are small irregular parcels intertwined within residential neighborhoods. Some private land is situated along the Green Brook that Dunellen should consider purchasing for conservation / passive open space purposes. The largest vacant parcel in the Borough is situated behind Columbia Park and is owned by the Board of Education; it is primarily wetlands. **Figure LU9** shows the locations of all vacant parcels in Dunellen.

## PROPOSED LAND USE CHANGES

### Residential Neighborhoods

A high percentage of the residential dwellings in Dunellen predate the 1940's and may have historic qualities. It is important for the Borough to protect the architectural significance of residential





Township of Green Brook  
(Somerset County)

City of Plainfield  
(Union County)

Township of Piscataway  
(Middlesex County)

Borough of Middlesex  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

**Legend**

-  County Boundary
-  DUNELLEN BORO
-  BUILDINGS AND INSTITUTIONS
-  CHURCHES
-  PARKING
-  PUBLIC BUILDINGS
-  PARKS
-  PUBLIC SCHOOLS

Borough of Dunellen, Middlesex County, New Jersey

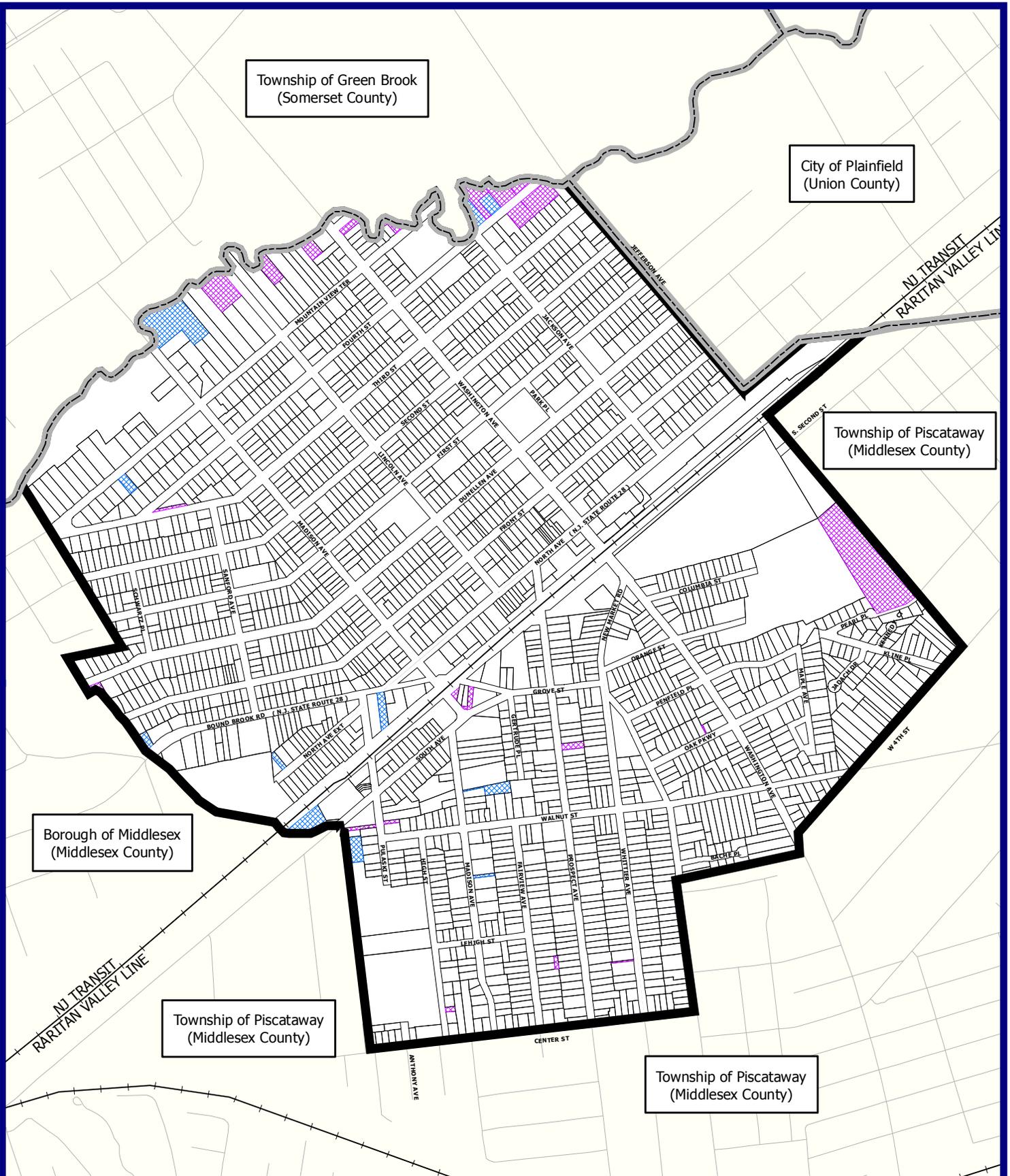
**Dunellen Master Plan**  
Public and Quasi Public Land Uses

Figure LU8



Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.





Township of Green Brook  
(Somerset County)

City of Plainfield  
(Union County)

Township of Piscataway  
(Middlesex County)

Borough of Middlesex  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

**Legend**

-  County Boundary
-  DUNELLEN BORO
-  PRIVATE VACANT LAND
-  PUBLIC VACANT LAND

Borough of Dunellen, Middlesex County, New Jersey

**Dunellen Master Plan**  
Vacant Land Uses

Figure LU9



Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.





structures that may be rehabilitated or reconstructed. Residential neighborhoods in Dunellen that may not have historic characteristics are also well maintained and exemplify the home-town feel and character for which Dunellen is known. In regards to keeping both the historic character and home-town feel within the residential neighborhoods, the Borough should review the design standards for residential development to assure that the standards are consistent with the desirable Borough character. Property maintenance regulations should also be reviewed, revised and enforced for residential neighborhoods.

Dunellen believes in the importance of street trees and promotes the general welfare residents by providing for the protection, regulation, selection, planting and cutting of trees in such a way as to protect and preserve the environment and the quality of life. The Dunellen Shade Tree Commission is entrusted with the regulation, planting, care, and control of shade tree and ornamental trees and shrubbery upon and in the streets, highways, public places, parks, parkways, and vacant lots of the Borough of Dunellen.

### **Downtown Residential**

As identified in the Dunellen Downtown Redevelopment Plan Phase I, residential uses should be incorporated into the downtown revitalization efforts. Residential units above retail uses are essential for an active and successful downtown because they will help support the retail and service uses and potentially create demand for more business.

### **Commercial Uses**

The revitalization of the Dunellen downtown is of priority for the Borough, including the development of mixed-use structures with retail services on the street level, and upper stories of office space and residential units. Dunellen has already adopted a Downtown Redevelopment Plan – Phase I that incorporates land use requirements for the downtown redevelopment area in its entirety. Efforts to attract new businesses desired for the downtown should be addressed in the creation of a revitalization strategy including economic development initiatives.

The Dunellen Zoning Ordinance permits full-service restaurants in the B (Business) Zone as conditional uses. However, no conditional use requirements are established in the ordinance. The Borough must create and adopt conditional use standards for these two conditional uses in order to fully regulate these land uses in the B Zone or list full-service restaurants as a permitted use in the B Zone.

### **Industrial Uses**

Dunellen has removed the standards for the Industrial Zone District from the adopted Zoning Ordinance. However, there are four existing industrial uses adjacent to the Borough of Dunellen that overlap into the Borough boundaries at four separate parcels in the town. These parcels are still identified on the official Zoning Map as located in the Industrial Zone. Dunellen needs to revise the Borough Zoning Ordinance to re-incorporate the Industrial (I District) with related regulations.



## Public Uses

The Borough Zoning Ordinance identifies a Municipal (M District), however the zone has not been designated on the zoning map. The Borough should review its current zoning map and determine where the municipal zone should be applied, and then revise the zoning map accordingly and incorporate standards for the M Zone District into the Zoning Ordinance.

## LAND USE PLAN

**Figure LU10** identifies the proposed Land Use Plan for the Borough of Dunellen.

## PROPOSED LAND DEVELOPMENT ORDINANCE AND ZONING CHANGES

In addition to the zoning changes and ordinance revisions involved in the proposed land use changes discussed above, the Borough of Dunellen should also consider the land development ordinance and zoning changes discussed below.

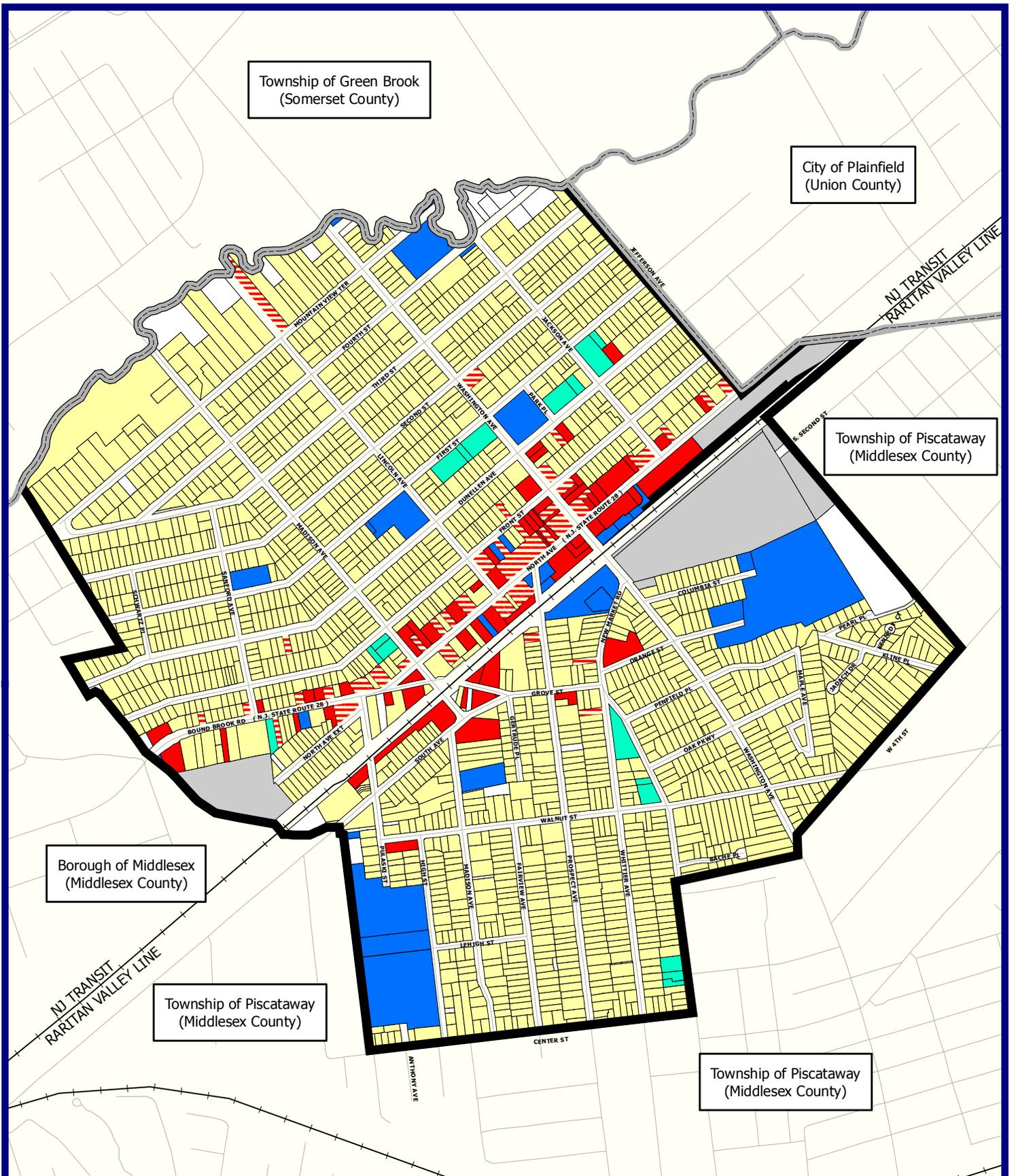
### Residential/Professional Office Zone

The Washington Avenue North corridor from Dunellen Avenue to Third Street consists of large residential structures that in some instances incorporate home-offices. Given the architectural design of the buildings, the width of this County-owned collector road, the existing mix of residential uses and home-offices in this corridor, its proximity to the downtown district, and the fact that the corridor is a gateway into the Borough, this area of the Borough should be considered for the establishment of a Residential/Professional Office Zone. The intent of a Residential/Professional Office Zone is to encourage conversions of residences to office use. The zone will also allow single-family and two-family as well as apartments above the office uses, if desired. **Figure LU11** identifies the area proposed to be re-zoned to Residential/Professional Office. The area is presently zoned as Single Family Residential (RA).

In conjunction with the creation of a new Residential/Professional Office Zone District, design standards must be adopted for this area. Design standards for this Residential/Professional Office Zone should be established to minimize disruption of the Victorian residential character in the neighborhood. Standards should require that front facades and yards remain consistent with the residential character of the surrounding properties and that all parking and other accessory systems be located at the rear of the properties.

### Residential Lots in Northwest Corner of Borough

A lot frontage analysis was conducted for the entire Borough in an attempt to validate the current lot size requirements throughout the Borough. The analysis showed that the residential neighborhood located at the northwest corner of the Borough presently has a lower density than is typical throughout the Borough. The average lot size in this area is 75 x 100, with a handful of lots having larger frontages. This is the only area in town that has an average density lower than that of the Borough

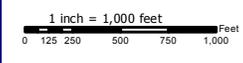


**Legend**

- |                         |                |                 |
|-------------------------|----------------|-----------------|
| <b>Land Use</b>         | QUASI PUBLIC   | DUNELLEN BORO   |
| RESIDENTIAL             | FRATERNAL      | County Boundary |
| BUSINESS AND COMMERCIAL | MIXED USE      |                 |
| INDUSTRIAL              | TRANSPORTATION |                 |
| PUBLIC                  | VACANT LAND    |                 |

Borough of Dunellen, Middlesex County, New Jersey Figure LU10

**Dunellen Master Plan**  
Land Use Plan



Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.







overall. Given that fact, and in order to preserve the lower density of this area, it is suggested that Dunellen adopt a new zone (RA-75) that maintains the same standards that the Borough wants to see in the RA zone, but increases the minimum lot size to 75 x100. The net effect of such an effort would eliminate the consolidation of lots and razing of homes to accommodate higher density in an area of town that does not warrant such density increase given neighborhood character and distance to rail station. **Figure LU12** identifies the area that is being considered for re-zoning to an RA-75 zone district.

### Corner Lots

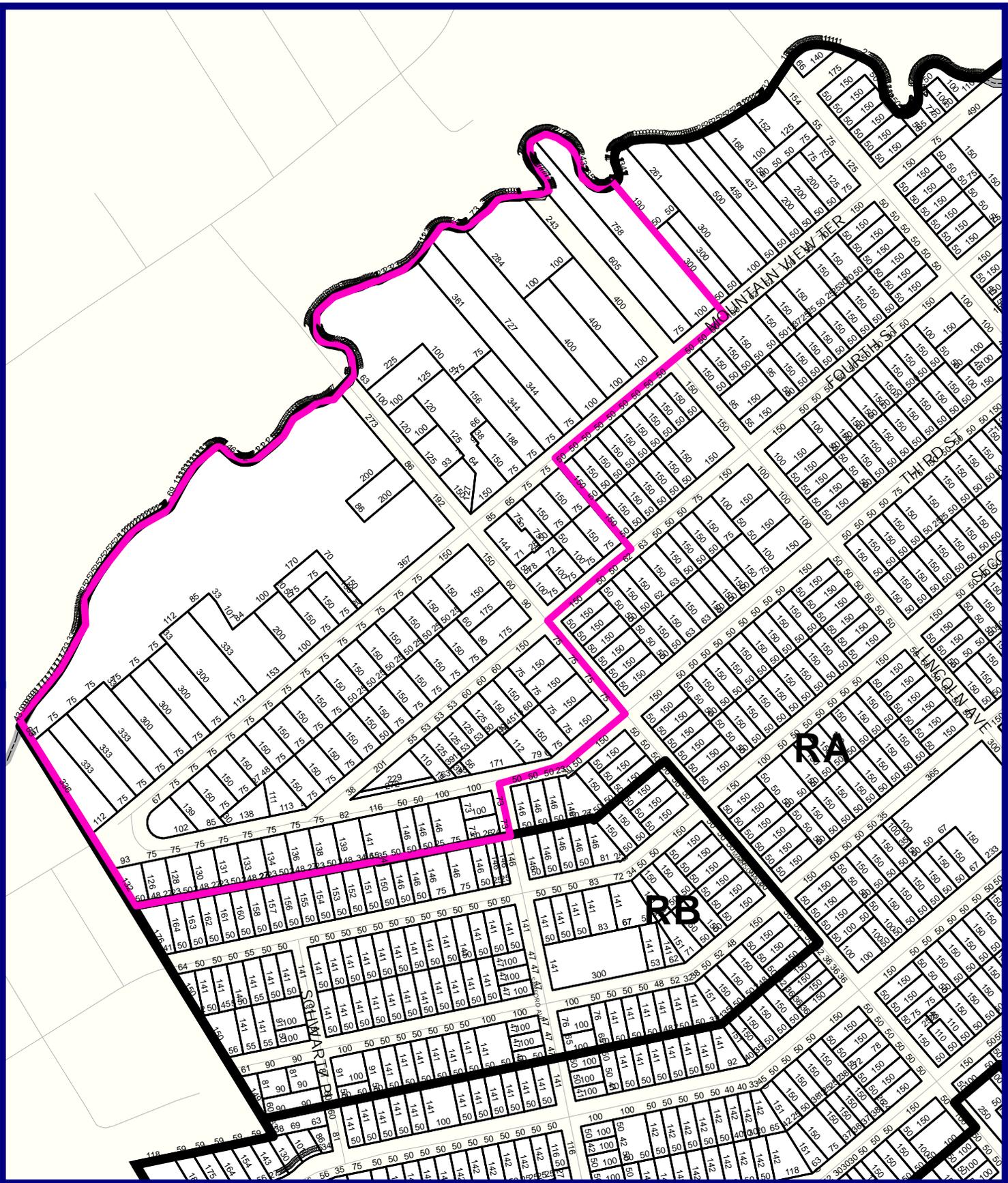
It is a typical planning standard to specify that lot size requirements for corner lots in be larger than mid-block lots due to sight view issues that affect vehicular traffic safety as well as pedestrian safety. The current Dunellen land use ordinance does not specify a lot larger lot size requirement for corner lots. As a consequence the Borough has found itself confronted with land developers subdividing corner lots according to zoning regulations thus causing greater density throughout the town in areas where such density increases are not always warranted, and adding to the sight view issues faced by motorists attempting to navigate safely through intersections. It is proposed that Dunellen amend its land use and zoning ordinance to include a stipulation that corner lots throughout the Borough be larger than the adjoining mid-block parcels with appropriate setbacks from the intersecting streets.

### Other

The Borough currently does not have a cellular communication tower ordinance. It is recommended that the Borough adopt a cellular communication tower ordinance.

The Municipal Zone in the Borough Ordinance does not have any specified criteria and no zone designation for the Municipal Zone has been identified on the Zoning Map. It is recommended that the Borough eliminate the Municipal Zone.

Industrial Zone standards do not presently appear in the Borough Ordinance. It is strongly recommended that standards be adopted for the two Industrial Zone areas in the Borough.



**Legend**

-  Zoning
-  County Boundary
-  DUNELLEN BORO
-  Proposed RA-75 Zone Boundary

Borough of Dunellen, Middlesex County, New Jersey

Figure LU12

# Dunellen Master Plan

Proposed RA-75 Zone District



Source: This map was developed using NJDEP digital GISdata and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.





## SECTION IV ECONOMIC PLAN ELEMENT

This Economic Plan Element considers all aspects of economic development and sustained economic vitality. Included is typically a comparison of the types of employment expected to be provided by the economic development being promoted given the characteristics of the labor pool resident in the municipality and nearby areas, and an analysis of the stability and diversity of the economic development envisioned.

### EXISTING CONDITIONS

#### Education, Income and Employment

The existing economic characteristics for the Borough of Dunellen can be analyzed through the review of Census demographic data. **Table E1** below shows the educational attainment level for the Dunellen residents compared to the County of Middlesex. Approximately 86% of Dunellen residents have at least a high school degree and 50% of residents have some level of college education. The educational attainment of Borough residents basically parallel's those of residents throughout the county with 84% of county residents having earned at least a high school degree and 55% having some level of college education.

**Table E1 - 2000 Educational Attainment (Population 25 years and over)**

Educational Attainment	Dunellen		Middlesex County		New Jersey	
	Number	Percent	Number	Percent	Number	Percent
Less than 9th grade	143	3.0	31,015	6.2	373,429	6.6
9th to 12th grade, no diploma	515	10.9	47,449	9.5	641,048	11.3
High school graduate (includes equivalency)	1,689	35.8	145,657	29.0	1,661,493	29.4
Some college, no degree	977	20.7	84,865	16.9	998,872	17.6
Associate degree	342	7.3	27,033	5.4	298,096	5.3
Bachelor's degree	755	16.0	102,750	20.5	1,063,665	18.8
Graduate or professional degree	294	6.2	62,783	12.5	621,196	11.0

Source: Census2000

As identified in **Table E2** next page, the median household income in the Borough according to the 2000 Census is \$59,205, which is only slightly below the median income for Middlesex County overall of \$61,446. 24% Percent of the population in Dunellen earns between \$50,000 and \$74,999, a percentage higher than that of Middlesex County's at 21.6%. The population of people earning less than \$10,000 is minimal in Dunellen at 2.3%. This is compared to the 4.9% in the County as a whole. Overall, Dunellen is a middle class community of educated individuals.



1999 Income	Dunellen		Middlesex County		New Jersey	
	Number	Percent	Number	Percent	Number	Percent
Less than \$10,000	56	2.3	13,102	4.9	213,939	7.0
\$10,000 to \$14,999	89	3.6	9,965	3.7	143,783	4.7
\$15,000 to \$24,999	245	10	20,603	7.7	288,606	9.4
\$25,000 to \$34,999	161	6.6	24,398	9.2	305,449	10.0
\$35,000 to \$49,999	413	16.9	37,097	14.0	437,373	14.2
\$50,000 to \$74,999	596	24.4	57,308	21.6	608,244	19.8
\$75,000 to \$99,999	457	18.7	42,599	16	413,928	13.5
\$100,000 to \$149,999	320	13.1	40,544	15.2	391,123	12.7
\$150,000 to \$199,999	60	2.5	11,823	4.4	130,492	4.3
\$200,000 or more	44	1.8	8,459	3.2	132,837	4.3
Median household income (dollars)	59,205	x	61,446	x	55,146	x

Source: Census 2000

Based on the 2000 Census, 70.6% of the residents in the Borough are actively in the labor force. This is higher than the 66.1% in Middlesex County overall. The employment status of Borough residents indicates that Dunellen is a town with stably employed individuals. **Table E3** identifies the employment status according to the 2000 Census.

Employment Status	Dunellen		Middlesex County		New Jersey	
	Number	Percent	Number	Percent	Number	Percent
In labor force	3,779	70.6	391,203	66.1	4,204,393	64.2
Not in labor force	1,572	29.4	200,250	33.9	2,341,762	35.8

Source: Census 2000

The place of work for the labor force population within Dunellen is primarily outside of the Borough, with 91% of the labor force working outside of the Borough and 9% working within the town. **Table E4** shows the place of work for workers 16 years and over in Dunellen, Middlesex County and New Jersey.

	Dunellen		Middlesex County		New Jersey	
	Number	Percentage	Number	Percentage	Number	Percentage
Total	3,419	100%	363,176	100%	3,876,433	100%
Worked in place of residence	315	9%	51,478	14%	521,346	13%
Worked outside place of residence	3,104	91%	256,577	71%	2,204,256	57%

Source: Census 2000

Of the population 16 years and over that are in the labor force, the majority drive alone to work - 75.2%. Slightly higher than the 74.4% of people that drive alone county-wide. This statistic is important to the circulation analysis because it shows that there are many vehicles on the streets of Dunellen that need to safely navigate through the road network. **Table E5** shows the commuting patterns of the labor force in Dunellen and Middlesex County. This driving to work alone statistic is very common in New Jersey and is a phenomenon that needs to be addressed through public transportation networks.



**Table E5 - 2000 Commuting To Work (Workers 16 years and over)**

Commuting Pattern	Dunellen		Middlesex County		New Jersey	
	Number	Percent	Number	Percent	Number	Percent
Drove alone	2,572	75.2	270,256	74.4	2,828,303	73.0
Carpooled	368	10.8	40,402	11.1	412,299	10.6
Public transportation	220	6.4	31,419	8.7	371,514	9.6
Walked	105	3.1	10,115	2.8	121,305	3.1
Other means	36	1.1	3,294	0.9	25,484	0.7
Worked at home	118	3.5	7,690	2.1	106,556	2.7
Mean travel time to work	28.5	x	31.5	x	30	x

Source: Census 2000

As illustrated in **Table E6**, the Dunellen population (16 years and over) actively in the labor force is primarily employed in the educational, health and social services industry with 17.5% of the active labor force population employment by this industry grouping. Employment in the health industry is a common trend in Middlesex County with 18.6% of the labor force in the health industry. Dunellen varies slightly from the County however in that the second highest employment industry is retail trade versus manufacturing for residents county-wide.

**Table E6 - 2000 Employment by Industry (Population 16 years and over)**

Industry	Dunellen		Middlesex County		New Jersey	
	Number	Percent	Number	Percent	Number	Percent
Agriculture, forestry, fishing and hunting, and mining	0	0	441	0.1	12,618	0.3
Construction	197	5.7	16,784	4.5	220,817	5.6
Manufacturing	482	13.8	50,728	13.7	472,684	12.0
Wholesale trade	124	3.6	17,900	4.8	173,166	4.4
Retail trade	495	14.2	41,175	11.1	447,346	11.3
Transportation and warehousing, and utilities	206	5.9	24,672	6.7	234,801	5.9
Information	249	7.1	19,426	5.2	173,865	4.4
Finance, insurance, real estate, and rental and leasing	224	6.4	35,229	9.5	352,722	8.9
Professional, scientific, management, administrative, and waste management services	399	11.5	48,150	13.0	453,842	11.5
Educational, health and social services	608	17.5	68,930	18.6	783,137	19.8
Arts, entertainment, recreation, accommodation and food services	205	5.9	20,289	5.5	271,864	6.9
Other services (except public administration)	174	5.0	14,044	3.8	173,686	4.4
Public Administration	121	3.5	13,049	3.5	179,481	4.5

Source: Census 2000

The overall employment forecast for Dunellen that has been prepared by NJTPA is identified below in **Table E7** to the year 2030. The employment forecasts for the Borough and the County are projected to continually increase.



**Table E7 - NJTPA Employment Forecast (2000 - 2030)**

	2000	2005	2010	2015	2020	2025	2030
Dunellen	1,720	1,750	1,800	1,910	2,030	2,030	2,050
Middlesex County	406,200	428,900	452,100	477,900	507,900	524,600	553,900
13 NJTPA Counties	3,006,700	3,094,300	3,215,700	3,332,800	3,492,100	3,607,200	3,778,900

Source: NJTPA

**Downtown Commercial Corridor**

As was identified in the Land Use Plan Element, the majority of the Borough’s commercial land uses are located along Route 28 (North Avenue). A field “windshield” survey was conducted to identify the existing land uses along North Avenue. The purpose of the survey was to identify the types and mix of uses within the North Avenue commercial corridor. Within the downtown, there are a mix of commercial and retail services establishments including restaurants, banks, specialty stores and personal services such as dry cleaners and nail salons. Given the vision of the downtown expressed by Borough administration and residents, there should be a greater emphasis on more traditional retail uses in the downtown, such as stores and restaurants and a greater diversity of retail mix. The Borough should consider the creation of an economic incentive program for new business owners to locate in the downtown and for existing business owners to improve the façade and appearance of their existing retail spaces.

**ECONOMIC DEVELOPMENT PLANNING**

A major component of this economic development plan is to identify opportunities for Dunellen to strengthen commercial revitalization within its downtown. This will require programs and incentives for business and property owners and may take years to implement and realize the level of success envisioned.

**RECOMMENDATIONS**

In order for a downtown economic revitalization plan to be effective, the Borough will need to focus on aesthetics, marketing and incentives.

First, a marketing plan for the attraction and retention of business into the community should be a mandatory process for Dunellen to self-impose.

Second, incentive programs would help the Borough attract the business owners that it wants and maintain current businesses in the best possible conditions both economically and aesthetically. Dunellen should consider the implementation of programs that provide façade improvement grants, access to non-residential rehabilitation funds, information about locating businesses in the Borough, and community outreach regarding the revitalization efforts of the downtown.

Third, streetscape elements must be addressed to create a visually attractive environment that will attract businesses and consumers. Dunellen understands the importance of streetscape and as such has incorporated streetscape standards into the Redevelopment Plan Phase 1 report and has included an Urban Design Element in this Master Plan.



## SECTION V SUMMARY OF HOUSING ELEMENT AND FAIR SHARE PLAN

In December of 2005, the Dunellen Land Use Board adopted a Housing Element and Fair Share Plan. The plan states that “Dunellen currently does not have any low and moderate income housing units that are deed restricted and occupied by income eligible households.” However, the Borough did prepare a Housing Element and Fair Share Plan in anticipation of meeting the low and moderate income housing requirements established by COAH.

Based on the 2005 Housing Element and Fair Share Plan, 40.9% of the housing units in Dunellen were built in 1939 or earlier. This figure is significant because the age of housing units is highly correlated with substandard housing indicators utilized by COAH to determine a municipality’s rehabilitation share. Other housing demographics identified in the 2005 plan include:

- Of the 2,451 housing units in the Borough, 2,426 have 1.01 to 1.50 persons per bedroom
- 69% of the housing units in Dunellen are owner-occupied
- Of all owner-occupied units, 58% are valued at \$125,000 to \$175,000
- Of the 757 renter-occupied units in the Borough, 366 have contract rents between \$650 and \$999

The 2005 Housing Element and Fair Share Plan was prepared in conformance with COAH Third Round regulations at that time and determined that the Borough’s low and moderate income housing obligations were as follows:

Rehabilitation Share:	9 Units
Prior Round Obligation:	4 Units
Projected Growth Share:	30 Units

COAH Third Round regulations were since revised and became effective on June 2, 2008 with amendments through October 20, 2008. Based on their new Third Round regulations, COAH determined that the Borough of Dunellen presently has the following low and moderate income housing obligations:

Rehabilitation Share:	39 Units
Prior Round Obligation:	0 Units
Projected Growth Share:	0 Units

According to Dunellen’s 2005 Plan, the town “has been a participant in Middlesex County’s Housing Preservation Program, which provides for the rehabilitation of substandard dwelling units. It is anticipated that the Borough’s rehabilitation share will be fulfilled by its continued participation in this program.” Furthermore, although the projected growth share for the Borough is zero, the realization of the redevelopment efforts in the downtown will equate to low and moderate income housing obligations that will need to be addressed. Based on the redevelopment efforts, the 2005 plan estimates that “the Borough’s growth share obligation may be as high as 30 affordable units.”

The Borough of Dunellen should revise their Housing Element and Fair Share plan for consistency with the updated COAH regulations.



## SECTION VI CIRCULATION PLAN ELEMENT

The Circulation Plan Element identifies the location and types of facilities for all modes of transportation of people and goods into, about and through the Borough. The element takes into account the functional highway classification system and the types, locations, conditions and availability of existing and proposed transportation facilities.

### EXISTING CONDITIONS

Dunellen is a compact, walkable community served by automobile, rail and bus. The Borough is traversed by State Route 28 from east to west and Middlesex County Route 529 (Washington Avenue) from north to south, providing convenient access to U.S. Route 22 and Interstate 287. The existing roadway network makes the Borough highly accessible by automobile. The Borough is also easily accessible by rail via the New Jersey Transit Raritan Valley Line giving access to Newark and New York and by bus via four NJ Transit bus routes. The coordination of the multiple modes of transportation in the Borough is essential for the safe and effective circulation of people and goods.

### Roadway Network

The roadway network for the Borough of Dunellen consists of roads classified into the following four categories based on the Federal Highway Administration Functional Road Classification System: Urban Principal Arterial, Urban Minor Arterial, Urban Collector, and Urban Local road types. **Table C1** below describes the functional road classification for the Borough roadways.

Urban Principal arterials	The principal arterial system should carry the major portion of trips entering and leaving the urban area.
Urban Minor arterial roads	Distributes travel to geographic areas smaller than those of the principal arterials. Contains facilities that place more emphasis on land access and offer a lower level of traffic mobility.
Urban Collector roads	The collector street system provides both land access, service and traffic circulation within residential neighborhoods, commercial and industrial areas. Also collects traffic from local streets in residential neighborhoods and channels it into the arterial system.
Urban Local roads	Serves primarily to provide direct access to abutting land and access to the higher order systems. It offers the lowest level of mobility and usually contains no bus routes. Service to through traffic movement is deliberately discouraged.

The Urban Arterial road network in Dunellen consists of State Route 28 locally known as North Avenue and Bound Brook Road (principal arterial) and the southern portion of County Route 529 locally known as Washington Avenue (minor arterial). The Urban Collector road network comprised of the northern portion of Washington Avenue, Third Street, Sanford Avenue, South Avenue leading into and including Grove Street, County Route 665 locally known as New Market Road and the eastern



portion of County Route 678 locally known as Walnut Street. The remaining roads in the Borough are classified as Urban Local roads. **Figure C1** shows the location and functional classification of the Dunellen road network.

Roadway jurisdiction impacts the development and improvements of roadway networks. Besides local jurisdiction exercised by Dunellen for all local roads, there are two other governmental jurisdictions with authority over roadways in the Borough including the State of New Jersey with jurisdiction over North Avenue (State Route 28) and the County of Middlesex County with jurisdiction over Washington Avenue (Route 529), New Market Road (Route 665), and Walnut Street (Route 678) east of Prospect Avenue. **Figure C2** identifies the roadway jurisdictions in Dunellen.

**Reported Accidents**

**Table C2** identifies the reported vehicle accidents, bicyclists and pedestrians struck by motor vehicles and fatalities in Dunellen. The Dunellen Police Department suggests forming a new traffic pattern at Washington Avenue and North Avenue (Route 28) such as a dedicated turning lane and delayed light for turning lane only.

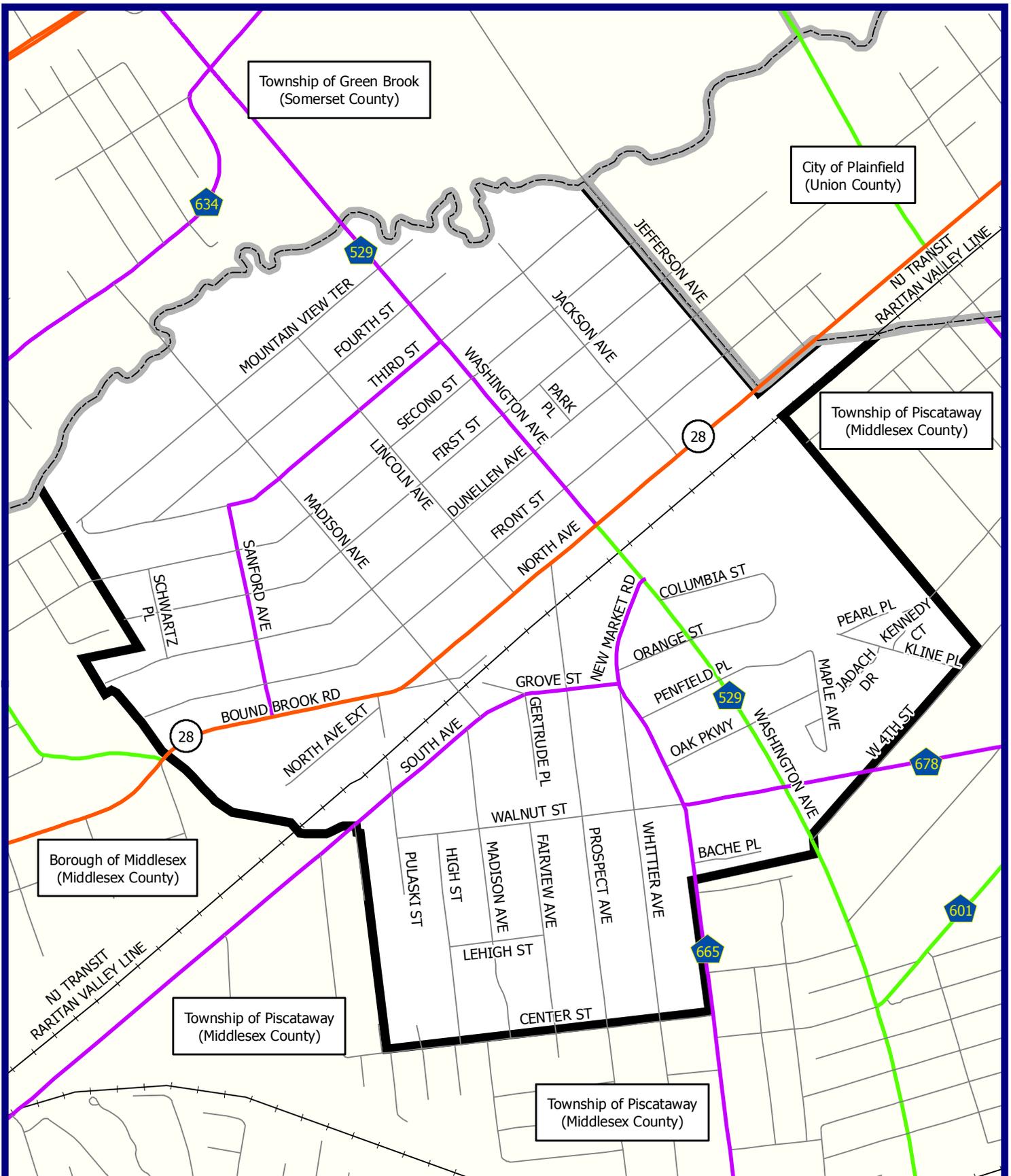
	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008<sup>†</sup></b>
<b>Vehicle Accidents</b>	227	235	296	291	163
<b>Bicyclist Struck</b>	3	6	2	4	1
<b>Pedestrian Struck</b>	5	6	3	6	3
<b>Fatalities</b>	0	1	0	1	0

<sup>†</sup> Statistics for 2008 through 9-30-08

**Transit**

There are four New Jersey Transit Bus Routes that serve the Borough of Dunellen including Routes 59, 65, 113, and 114.

- #59 Plainfield to Newark originates in Dunellen with stops in Plainfield, Scotch Plains, Westfield, Garwood, Cranford, Union County College, Roselle, Elizabeth, Hillside and terminates on Broad Street at Washington Park in Newark.
- #65/66 Somerville/Mountainside to Newark originates at Bridgewater Commons in Bridgewater with stops in Somerville, Bound Brook, Dunellen, Plainfield, North Plainfield, Scotch Plains, Cranford, Mountainside, Springfield, Union, Hillside and terminates on Broad Street at Washington Park in Newark. Sunday service (#66) runs from Mountainside to Newark, with stops in Springfield, Union and Hillside in between.
- #113 Dunellen to New York originates in Dunellen with stops in Plainfield, Fanwood, Westfield, Cranford, Roselle Park, Union, Hillside, Elizabeth and terminated at the Port Authority Bus Terminal on 42<sup>nd</sup> Street in New York City.



**Legend**

-  DUNELLEN BORO Functional Classification
-  County Boundary
-  Urban Principal Arterial
-  Urban Minor Arterial
-  Urban Collector
-  Urban Local

Borough of Dunellen, Middlesex County, New Jersey

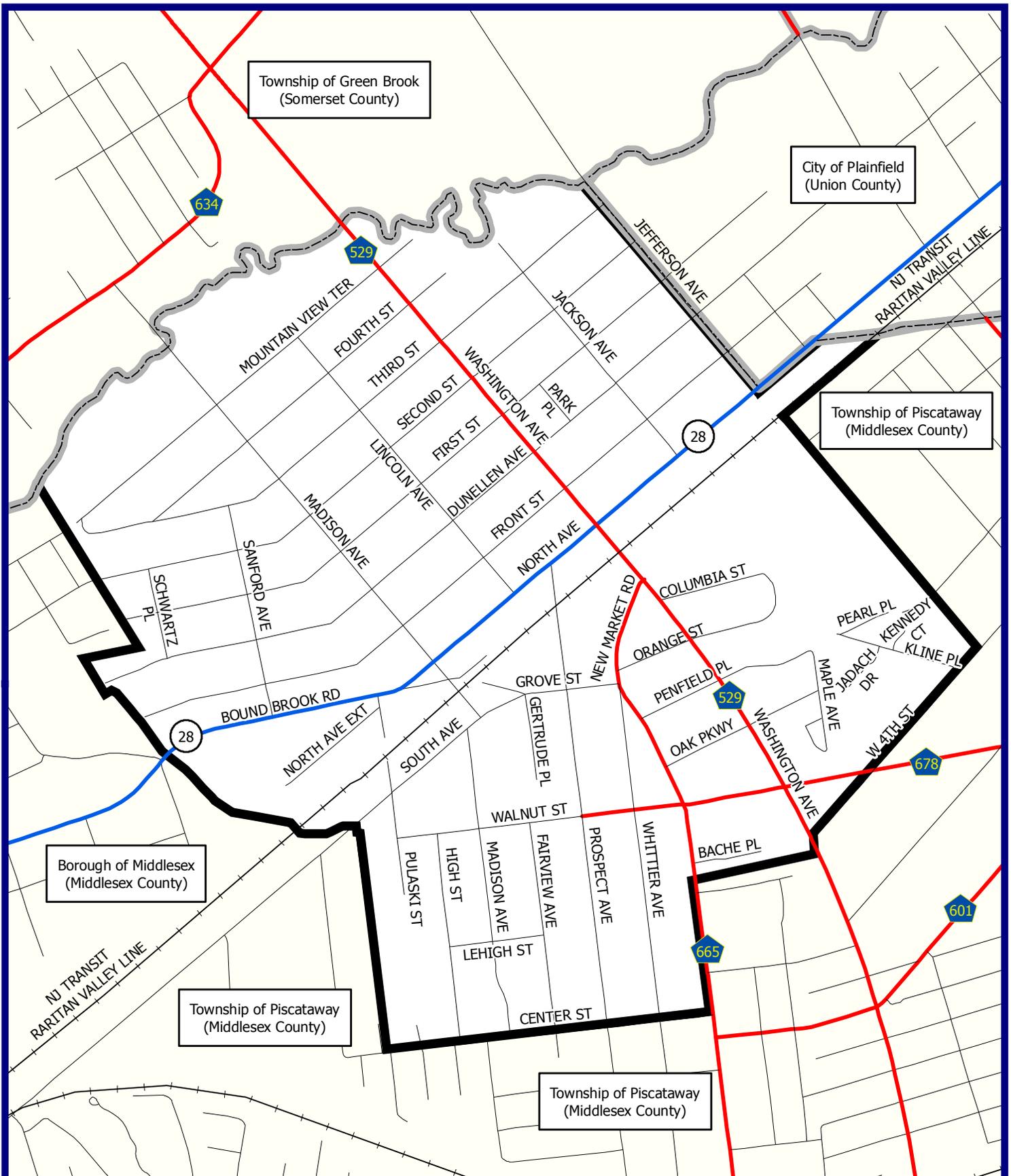
**Dunellen Master Plan**  
Roadway Classification Map

Figure C1



Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.





**Legend**

- Roadway Jurisdiction**
- State Road
  - County Road
  - Local Road
  - DUNELLEN BORO
  - County Boundary

Borough of Dunellen, Middlesex County, New Jersey

**Dunellen Master Plan**  
Roadway Jurisdiction Map

Figure C2



Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.





- #114 Bridgewater to New York runs from Bridgewater Commons shopping mall in Bridgewater, with stops in Somerville, Dunellen, Bound Brook, North Plainfield, Plainfield, Scotch Plains, Mountainside, Springfield, Union, Hillside and terminated at the Port Authority Bus Terminal on 42<sup>nd</sup> Street in New York City.

Routes 114 and 65 both originate west of the Borough through Middlesex and enter Dunellen via Bound Brook Road. The routes make their way down Madison Avenue to South Avenue / Grove Street to New Market Road where they exit the Borough into Piscataway. Routes 113 and 59 originate in Dunellen at the corner of Washington Avenue and North Avenue. Route 59 continues through Washington Avenue to Prospect Avenue and circles around the train station back to North Avenue where it exits back towards the City of Plainfield. **Figure C3** illustrates the four bus routes that serve the Borough of Dunellen.

Dunellen is proudly known as the Railroad Town because of its train station, known as Skinner Plaza, at the center of the Borough. The Raritan Valley Line's rail stops, span from High Bridge to Newark, with connecting service at Newark to New York Penn Station and the PATH trains.

### **Pedestrians and Bikeways**

There are three designated bikeways existing in Dunellen located along the entire length of Washington Avenue, the entire length of New Market Road and the portion of Walnut Street east of Washington Avenue. Bike racks are located outside of the train station along North Avenue. **Figure C4** illustrates the location of the existing designated bikeways and the location of the bike racks within the Borough.

Greenways are linear open spaces that link recreational facilities throughout the county. Middlesex County has proposed a Green Brook Linkage adjacent to the Green Brook spanning the entire length of Dunellen's northern border. **Figure C4** shows the location of the proposed greenway.

The Borough of Dunellen advocates the goals and recommendations for pedestrian and bikeway accommodations established by the County of Middlesex in both the Middlesex County Bicycle/Pedestrian Plan and the Middlesex County Open Space and Recreation Plan including the following:

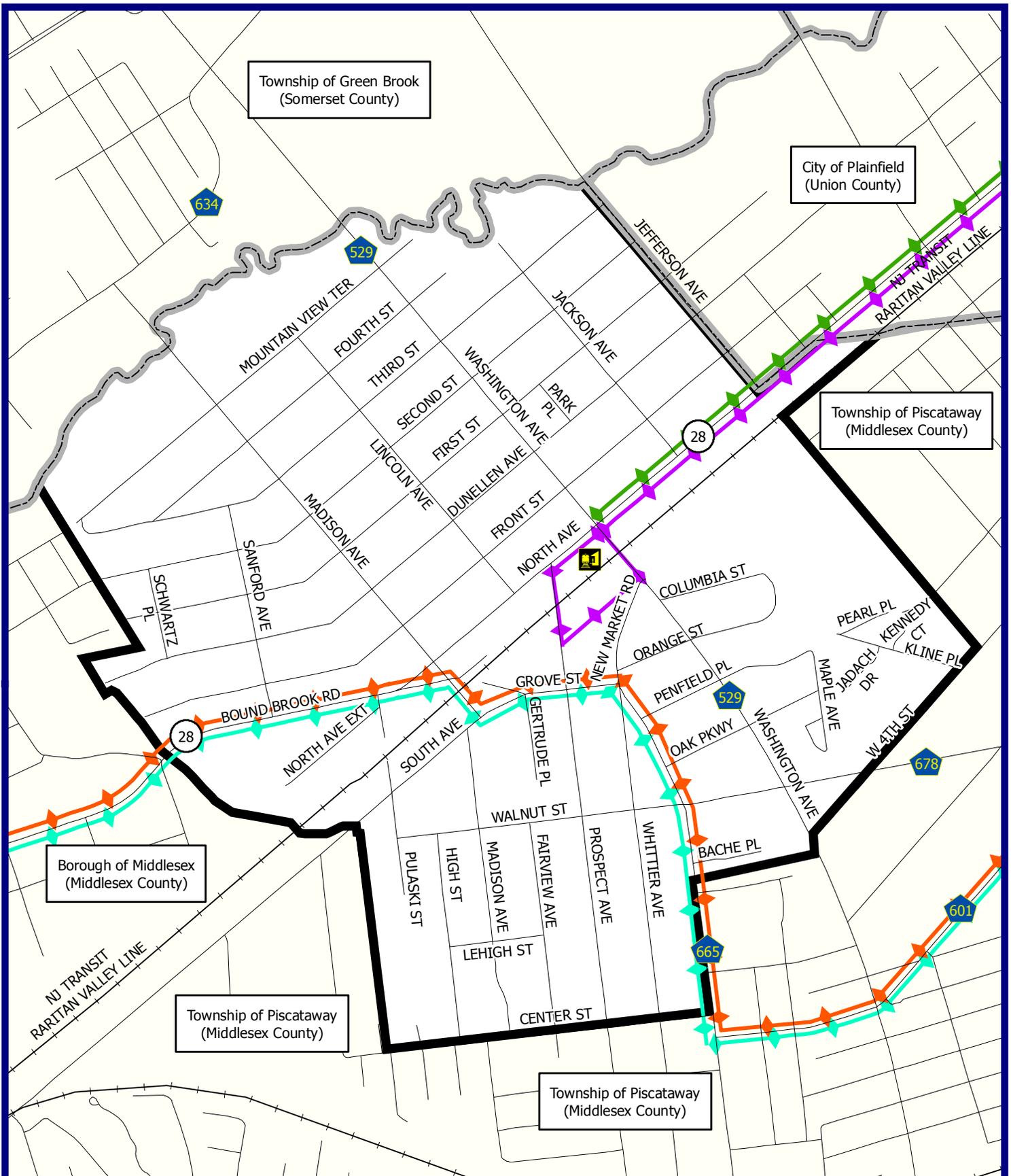
#### Middlesex County Bicycle / Pedestrian Plan

##### Goals:

- County-wide bicycle and pedestrian network
- Develop policies, practices and procedures that promote and generate actions that enhance bicycling and walking accommodation
- Facilitate implementation of bicycle and pedestrian improvements
- Promote public awareness and acceptance of bicycling and walking

##### Recommendations:

- Encourage people to cycle and walk
- Educating motorists, pedestrians and cyclists to share the road
- Encouraging employers, schools, community officials and police to promote cycling and walking and provide safety information
- Installing secure bicycle storage facilities
- Installing adequate lighting



Township of Green Brook  
(Somerset County)

City of Plainfield  
(Union County)

Township of Piscataway  
(Middlesex County)

Borough of Middlesex  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

Township of Piscataway  
(Middlesex County)

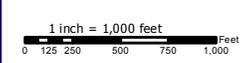
**Legend**

- Bus Routes
  - 114
  - 113
  - 65
  - 59
- Train Station
- DUNELLEN BORO
- County Boundary

Borough of Dunellen, Middlesex County, New Jersey Figure C3

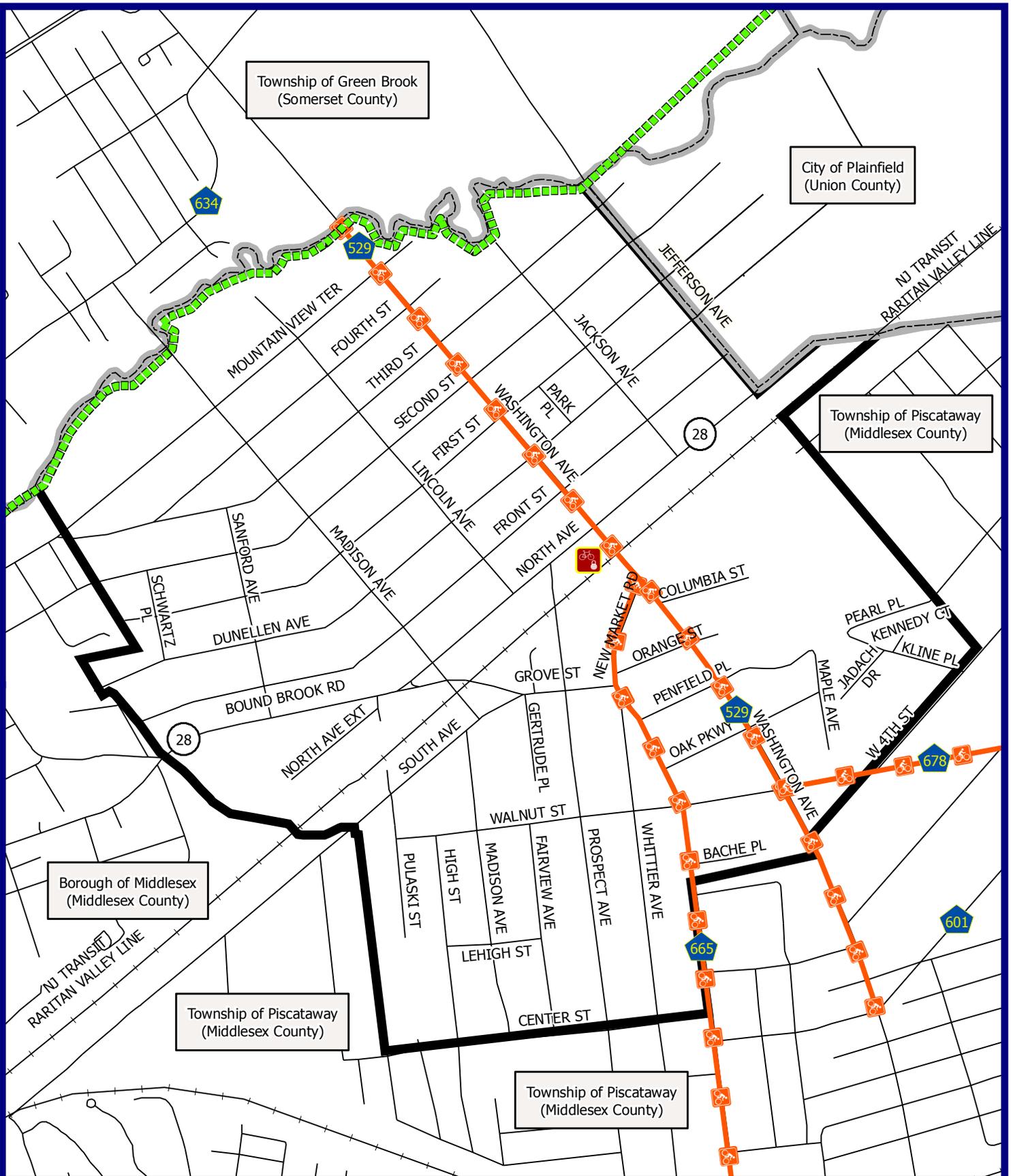
# Dunellen Master Plan

## Public Transportation Map



Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.





**Legend**

-  Green Brook Linkage (Proposed)
-  DUNELLEN BORO
-  Bikeways (Existing)
-  County Boundary
-  Bike Racks / Lockers (Existing)

Borough of Dunellen, Middlesex County, New Jersey

Figure C4

**Dunellen Master Plan**  
Greenways and Bikeways Map



Source: This map was developed using NJDEP digital GIS data and CME digital GIS data. This map was not verified or authorized by the State. Product is for visual representation purposes only, not suitable for engineering analysis.





- Providing marked crosswalks, signage and barrier free curbs
- Enforcing laws
- Eliminating hazards such as unsafe sewer grates
- Encouraging cooperation between neighboring municipalities

### Middlesex County Open Space and Recreation Plan

#### Goals:

- Provide a public system of major parks and open spaces that forever preserves sufficient land to accommodate a variety of recreational activities, conserve scenic, historic, cultural, and environmental features to enhance the quality of life for residents of Middlesex County
- Assure that adequate recreational facilities are available to meet the needs of the residents
- Provide programs and facilities to assure opportunities for cultural and heritage appreciation

#### Recommendations:

- Green Brook Linkage – to establish a linkage on the Middlesex County side of the Green Brook to link with the Raritan River Linkage and the Green Brook in the city of Plainfield

### Parking

On-street parking is permitted on all streets throughout the Borough, with metered parking along North Avenue. Off-Street Parking has a large presence in the Dunellen downtown landscape including lots controlled by the Parking Authority.

### ISSUES AND RECOMMENDATIONS

The Transportation Improvement Plan (TIP) is prepared by the North Jersey Transportation Planning Authority (NJTPA). TIP is an annually updated and contains a 4-year agenda of transportation improvement projects throughout the region under the NJTPA's jurisdiction. The current TIP covers fiscal years (FYs) 2010 through 2013, and went into effect on October 1, 2009. There are no projects proposed for the Borough of Dunellen.

### Roadway Network

Traffic congestion is a problem along Washington Avenue and North Avenue. Congestion may increase the effects of air pollution and may encourage motorists to cut through local residential streets therefore compromising the function of the existing road network. The Borough should coordinate with the State and the County to examine the feasibility of installing dedicated turning lanes and associated signalization at the intersection of Washington and North Avenues.

### Transit

Although there are several bus routes that offer transportation in and out of the Borough, the bus stop locations are not interconnected and the bus time schedules are not coordinated with the train time schedules. Dunellen should coordinate with NJ Transit regarding the creation of a sheltered bus stop transportation hub with posted bus schedules adjacent to Skinner Plaza.



The Dunellen train station and ticket window has limited hours (Monday-Friday only 4:45am-10:15am, Closed Saturday, Closed Sunday) thus creating an inconvenience for transit riders. Also, there are a limited amount of bicycle racks and storage lockers at the station. Rental of the NJ Transit bike storage lockers at the Dunellen Train Station is administered by Keep Middlesex Moving (732) 745-5903. The Borough should coordinate with NJ Transit regarding additional bike racks and storage lockers at Skinner Plaza.

### **Pedestrians and Bikeways**

Pedestrian crossings in the downtown need to be provided where none exist and upgraded where they are in existence. Pedestrian indicators should be installed at traffic signals along with "Turning Vehicles Yield to Pedestrians" signs and the public made aware that the Dunellen Police Department enforces the law against vehicles not yielding to pedestrians at crosswalks. Furthermore, pedestrian crossings within walking distances to schools should also be installed or upgraded. State funding advocating children safety is available for the construction and improvement of crosswalks to schools.

Signage identifying bikeways should be installed and made more visible to motorist traffic. As with pedestrians, public should be made aware that the Dunellen Police Department enforces the law against vehicles not yielding to bicyclists at intersections.

### **Parking**

Redevelopment Phase 1 efforts for the downtown anticipate construction of a parking deck to be located adjacent to the Train Station. It is anticipated that a combination of permit parking, hourly fee, and shared-parking system would be incorporated to fund this infrastructure. The Dunellen Parking Authority is encouraged to develop surface parking on the south side of Front Street, between Washington Avenue and Madison Avenue in order to service the businesses and consumers in the downtown.



## SECTION VII

### URBAN DESIGN PLAN ELEMENT

Urban design enhances the visual image and quality of an area by providing a design framework for development focusing on three-dimensional aspects of the built environment such as buildings, streets, sidewalks, parks, neighborhoods, public space and landscape. This element includes goals and policies established for the design and coordination of development in Dunellen, particularly with regard to all redevelopment rehabilitation areas of the community and in particular those areas along North Avenue and Washington Avenue.

#### GOALS

- To create an attractive and lively community for residents and visitors.
- To develop public and semi-public spaces that are attractive and usable.
- To give visual prominence to pedestrian facilities and environments.
- To develop a functional and aesthetically pleasing downtown.
- To soften new development where it adjoins less intensive uses.
- To soften the visual impact of the automobile throughout the Borough.

#### POLICIES

- UD1: Encourage high quality, attractive, architecturally appealing designs and materials that foster a Railroad Town feel.
- UD2: Ensure that developments maintain uniform design qualities such as landscaping, pedestrian connections and similar building scale, materials and massing. Comparable attributes improve the overall urban design of the area.
- UD3: Encourage accessible, attractive pedestrian areas that offer pleasant seating, adequate lighting, rain cover and aesthetically pleasing landscaping.
- UD4: Ensure that the design of buildings adjacent to pedestrian areas enrich the appearance of the space and encourage people to use them.
- UD5: Encourage developers to include artwork in public areas.
- UD6: Ensure that screening of mechanical equipment on rooftops is visually appealing and harmonious with the building design.
- UD7: Ensure the use of pedestrian friendly site design, landscaping, and lighting of parking areas.
- UD8: Encourage development that takes advantage of natural lighting.
- UD9: Ensure the use of native plantings ranging in seasonal colors in public and semi-public areas.
- UD10: Encourage water conservation in landscape designs.



- UD11: Ensure continuous and ample sidewalks along streets that include landscaping, and pedestrian amenities.
- UD12: Ensure that sidewalks and walkways are furnished with lighting, seating, landscaping, street trees, trash receptacles, bike racks, handicap access, and rain cover.
- UD13: Provide clear and identifiable streetscape design for intersections that create entry points into the Borough through aligned building façades, signs, markings, and landscaping.
- UD14: Work closely with NJ Transit in the planning and design of improvements to the train station and bus route facilities to ensure Borough design policies are reflected.
- UD15: Ensure site and building designs that support and connect with the train station and bus routes.
- UD16: Allow buildings to be sited at or near the public sidewalk as long as the full potential of the sidewalk is not diminished.
- UD17: Assure that more intense development is compatible with adjacent less intense development.
- UD18: Discourage signs at upper levels of buildings.
- UD19: Encourage the establishment of a palette of colors that can be referenced whenever businesses decide to improve the exterior appearance of their buildings.
- UD20: Encourage the green character of existing residential neighborhoods.
- UD21: Ensure urban design principles and building orientations that foster sustainability, environmental quality, preservation and energy conservation.



## SECTION VIII

### UTILITY SERVICE PLAN ELEMENT

The Utility Service Plan Element analyzes the current status and adequacy of water supply and distribution facilities, drainage and flood control facilities, sewerage and waste treatment, solid waste disposal, and the storm water management plan.

#### **PUBLIC WATER SUPPLY**

The Elizabethtown Water Company District of New Jersey American Water provides public water to the Borough of Dunellen. Elizabethtown Water Company District supplies several municipalities in Middlesex County, most of Somerset County and a portion of Hunterdon County. The source of Elizabethtown's raw water supply before treatment, serving Dunellen is both surface and groundwater sources; surface water sources including the Raritan River. Finished water from Elizabethtown serving Dunellen is processed at the Franklin Township Canal Road treatment plant and the Raritan-Millstone treatment plant in Bridgewater. The present water supply system adequately serves the Borough.

#### **STORMWATER MANAGEMENT AND FLOOD CONTROL**

The Municipal Stormwater Management Plan (MSWMP), created pursuant to N.J.A.C. 7:14A-25 Municipal Stormwater Regulations, documents the strategy for the Borough of Dunellen to address stormwater-related impacts. The plan addresses groundwater recharge, stormwater quantity, and stormwater quality impacts by incorporating stormwater design and performance standards for new major development, generally defined as projects that disturb one or more acre of land. These standards are intended to minimize the adverse impact of stormwater runoff on water quality, water quantity and the loss of groundwater recharge that provides base-flow in receiving water bodies.

The plan addresses long-term operation and maintenance measures for existing and future stormwater facilities. The final component of this plan is a mitigation strategy for when a variance or exemption of the design and performance standards is sought. As part of the mitigation section of the stormwater plan, specific stormwater management measures are identified to lessen the impact of existing development.

The MSWMP was prepared by the Borough Engineer and is dated April 2005, revised through October 2005. The plan was adopted by the Planning Board as an element of the Master Plan.

The goals of the MSWMP are to:

- 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 runoff 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;
- Protect public safety through the proper design and operation of stormwater basins; and
- Promote public education and involvement, via the Stormwater Pollution Prevention Plan (SPPP)

In order to implement the MSWMP, the Borough has adopted or identified a comprehensive list of ordinances including Ordinance #06-10, "Stormwater Regulation of the Borough of Dunellen" on June 19, 2006. The purpose of the ordinance is to establish minimum stormwater management requirements and controls for major development as derived in the ordinance.

The plan element addresses the goals of the statewide basic requirements that have been implemented by the Borough per the Tier A Municipal Stormwater Master General Permit (NJPDES # NJG0150649 PIID# 201968).

The Borough of Dunellen continues to be affected by the backwater from the Greenbrook which inundates and affects the flow in the Bonygut Brook. The Green Brook Flood Control Commission and the Army Corps of Engineers continue to work towards a solution to the flooding concerns within the Greenbrook Basin; however, progress is hampered by the significant costs associated with the required improvements.

Drainage flows from the southside of the railroad embankment are restricted by a railroad culvert along the Bonygut Brook in the vicinity of South Avenue. The Borough intends to install an additional culvert at this location with partial funding through the State Dam of Safety and Flood Control grant process. This project is intended as an initial flood control improvement for the Bonygut Brook in the Borough.

### **SEWERAGE AND WASTE TREATMENT**

The Borough of Dunellen owns, operates and maintains a sanitary sewerage system consisting of approximately 87,000 lineal feet of sewage collection lines, 335 manholes and three force mains totaling 8,100 lineal feet which discharge into the Plainfield Regional Sewerage Authority System.

As with most aging sewage conveyance systems, infiltration and inflow continue to be a concern. The Borough continually performs monthly inspections and preventative maintenance on the system; and has initiated a program of replacement manhole castings with locking and/or watertight lids and devices in floodprone areas.

As the system ages, monitoring is necessary to determine the need for improvements to or replacement of sewers and components to address stormwater deficiencies, inflow and infiltration.



The Borough has adopted the “Dunellen Downtown Redevelopment Plan, Phase 1” which designates the redevelopment area and provides proposed land use and building requirements; and design standards. It is anticipated that the redeveloper, when designated, will need to provide for the analyses and improvements necessary for the system to support the improvements in the redevelopment area.

**SOLID WASTE DISPOSAL**

The Borough of Dunellen does not provide municipal refuse disposal. All businesses and residents in the Borough are responsible for their own refuse disposal via the use of private waste haulers.

According to the Middlesex County Division of Solid Waste Management, the Borough of Dunellen disposes primarily Type 10 and Type 13 solid waste. **Table US1** identifies the waste disposed by Dunellen from 2002 to 2006.

	2002	2003	2004	2005	2006
Type 10 - Municipal Waste (household, commercial, institutional)	2055.84	2950.4	3192.54	3419.88	2854.57
Type 13 - Bulky Waste	1108.37	1278.97	1349.63	1575.22	1723.16
Total	3164.21	4229.37	4542.17	4995.1	4577.73

Source: Middlesex County Division of Solid Waste Management (Waste disposed as reported by Middlesex County Landfill and other solid waste facilities - and adjusted by NJ DEP)

**STORM WATER MANAGEMENT PLAN**

The Borough of Dunellen’s Stormwater Management Plan was completed in October of 2005 and addressed the following issues:

- According to an Ambient Biomonitoring Network (AMNET) Study performed by the NJ Department of Environmental Protection, the Green Brook is moderately impaired in terms of its New Jersey Impairment Score (NJIS) based upon the closest AMNET site located in North Plainfield.
- The New Jersey Integrated Water Quality Monitoring and Assessment Report has identified the Green Brook on Sublist 5, which means the water is impaired or threatened by pollutants.
- Green Brook and Bonygut Brook chronically flood due to undersized culverts at road crossings.

The Borough’s Stormwater Management Plan presented the following goals in an effort to address the issues represented.

- 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 runoff 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.
- Protect public safety through the property design and operation of stormwater basins.
- Promote public education and involvement, via the Stormwater Pollution Prevention Plan (SPPP) as adopted by the Borough as of April 1, 2005.



## SECTION IX RECYCLING PLAN ELEMENT

### RECYCLING

The New Jersey Statewide Mandatory Source Separation and Recycling Act of 1987 mandates recycling in the residential, commercial and institutional sectors within the state. The Recycling Act requires counties to develop recycling plans and municipalities to adopt recycling ordinances based upon the county plan. In conformance with the Recycling Act, Dunellen adopted a recycling ordinance on March 15, 2003.

In accordance with the Statewide Source Separation and Recycling Act, the Dunellen Department of Public Works is responsible for collection of recyclable materials for the Borough's residents. The Borough, under contract for curbside collection with the Middlesex County Improvement Authority (MCIA), maintains curbside and drop-off recycling services for its residents. Businesses located in the Borough are responsible for their own recycling.

Middlesex County offers curbside pickup to its residents on the 2<sup>nd</sup> and 4<sup>th</sup> Monday of every month. Materials that are collected include the following:

- Metal: tin, steel, aluminum & bimetal cans
- Glass: bottles & jars of all colors
- Plastic: #1 PETE and #2 HDPE containers
- Newspaper: clean newspaper and inserts no higher than 12" bundles
- Mixed paper: magazines, junk mail, cereal boxes, and other non-wax covered food boxes, greeting cards, gift boxes, brown paper bags, office records, telephone books, file folders, and books without covers
- Corrugated cardboard: layered cardboard with center shaped into ridges or grooves, maximum stack of 24" square
- Textiles: clean, dry clothing or fabric, shoes, belts, and handbags no higher than 12" square bundles

Leaves are collected weekly from October through December and April through May. Leaves must be bagged in paper leaf bags that are available at the Recycling Center during normal business hours.

Tree limbs are collected only during the months of March, April and September. Limbs should be no more than six inches in diameter and should be in bundles no longer than four feet.

Metal will be picked up by appointment only on the third Wednesday of the month. White goods / appliances, except for refrigerators and air conditioners, are also collected by appointment only.

The Borough also offers drop-off services at the DPW Recycling Center located on Hall Street. All items collected curbside are accepted at the Recycling Center, as well as paint and paint-related products, white goods / appliances, scrap metal, auto batteries, auto motor oil, dry cell batteries, hard cover books, leaves, grass and brush.



Clippings, yard waste and grass must be brought to the Recycling Center either loose or bagged in paper or plastic bags and emptied into the specific dumpsters. Paint drop off only occurs on the second Saturday of every month.

Hazardous Waste can only be dropped off at the following locations based on their rules and specifications:

- Woodbridge Public Works
- Middlesex County Road Department
- Middlesex County College
- Old Bridge Public Works

The Borough of Dunellen reports its recycling tonnage on a monthly basis to Middlesex County and on a yearly basis to the State of New Jersey. **Table R1** shows the annual recycling tonnage reported to the State of New Jersey as identified by the Middlesex County Division of Solid Waste Management.

<b>Table R1 - Dunellen Annual Recycling Tonnage</b>					
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Cardboard	104.79	179.83	64.52	815.07	477.05
Office Paper	0.2	271.24	254.54	4.68	39.51
Newspaper	260.79	240.25	251.41	221.41	240.70
Other Paper	274.4	4.12	0	6.50	3.74
Glass Cont.	208.93	218.01	192.15	187.66	215.23
Aluminum Cont.	13.93	13.62	13.72	13.41	15.36
Steel Cans	41.78	13.62	27.45	26.81	30.75
Plastic Cont.	13.93	27.24	41.25	40.22	46.11
Heavy Iron	464.02	457.78	703.11	494.77	451.33
Non Ferrous	32.02	9.77	76.58	31.18	533.52
White Goods	212.93	183.18	515.45	432.68	309.65
Antifreeze	1.58	1.57	0	0.00	1.14
Batteries	0.67	0	3.82	2.55	0.39
Scrap Auto	243.13	239.59	344.16	271.94	172.35
Tires	4.85	4.45	5.08	75.93	92.04
Oil	49.35	49.35	0.06	13.91	10.06
Brush/Tree	384.98	195.3	454.59	309.73	1,380.85
Grass	185	0	43.83	122.22	75.05
Leaves	712.56	50.4	715.17	612.36	1,004.49
Stumps	60.1	25.2	16	0.00	0.00
Household Battery	0	0	0	0.18	0.49
Concrete/Asph.	1429.47	3056.34	2235.41	4339.25	5,139.58
Food Scraps	1.03	0	0	0.69	1.35
Electronics	n/a	n/a	n/a	n/a	1.26
Miscellaneous	9.26	8.57	77.87	33.46	21.65
Other Glass	0	0	0	0.00	0.00
Other Plastic	0.8	0	0	0.00	0.00
Petroleum Soil	1278.3	222.96	0	62.15	243.00
Process Residue	0	0	0	0.00	0.00
Textiles	0	0	0	0.00	0.00
Wood Scraps	40.93	10.8	829	2154.20	1,553.24
<b>Recy. Total</b>	<b>6029.73</b>	<b>5483.19</b>	<b>6865.17</b>	<b>10272.96</b>	<b>12,059.89</b>

Source: Middlesex County Division of Solid Waste Management (taken from Recycling Tonnage Grant Reporting Form submitted and reviewed by NJ DEP)



## RECOMMENDATIONS

- The Borough should review its recycling programs annually and make any adjustments necessary to meet changing conditions.
- The Borough should consider provisions for the recycling of electronic equipment such as computers, monitors, keyboards, cell phones, and other electronics.



## SECTION X COMMUNITY FACILITIES PLAN ELEMENT

### MUNICIPAL SERVICES

Dunellen’s Municipal Building is located at the corner of North Avenue and Prospect Avenue, across the street from the Dunellen Train Station. The municipal building is home to the Borough administrative offices, the police department, the court and the recreation department. There are no expansion proposed for the current building, however the space that houses all of the listed municipal services is inadequate. The Dunellen Downtown Redevelopment, Phase 1, adopted by the Borough in July 2004 calls for the construction of “a full service municipal complex envisioning municipal offices including all police functions, library relocation and other ‘Towne Center’ amenities” on the site across Prospect Avenue adjacent to the Dunellen Train Station.

### POLICE

The Dunellen Police Department is located in the municipal building at the corner of North and Prospect Avenues. According to the 1996 Master Plan Amendment, the police department area of the municipal hall underwent internal renovations including the upgrading of its communication facilities. In addition to their basic patrol functions, the police department also provides community policing, codes enforcement, radar traffic enforcement and foot, bike, motorcycle patrol. Currently the police department has a 16 member force with divisions including Traffic Safety, Juvenile / D.A.R.E., Narcotics, Firearms, Community Policing / Neighborhood Watch Program, Discoveries, Arson Investigations, and Internal Affairs. **Table CF1** below identifies the police employee data.

Table CF1 - Police Employee Data		
Division	Employees	
Superior Officers	1 Chief 1 Lieutenant	
Alpha Squad	1 Sergeant 2 Patrolman	& 1 Shared Patrolman
Bravo Squad	1 Sergeant 2 Patrolman	
Charlie Squad	1 Sergeant 2 Patrolman	& 1 Shared
Delta Squad	1 Sergeant 2 Patrolman	Patrolman
Dispatchers	being addressed by Officers	
<b>Total</b>	<b>16 Police Employees</b>	



### FIRE

The Dunellen Volunteer Fire Department is located at 231 South Madison Avenue and maintains six officers including a Chief, Deputy Chief, two Captains, and two Lieutenants. The Borough of Dunellen is approximately one square mile in size and all residences are located within the standard response time service for adequate fire protection. Dunellen has in place, Fire mutual aid agreements with surrounding communities to ensure back-up service. The Fire Department currently owns several firefighting apparatus including:

- **Engine 3** – a 2006 Pierce Enforcer Rescue Pumper that is capable of flowing up to 1500 gallons per minute of water and has a 35 gallon foam storage tank for instant foam
- **Engine 2** – a 1984 Pirsh pumper capable of flowing up to 1000 gallons per minute of water and has a 35 gallon foam storage tank
- **Reserve Engine 3** – a 1974 Hahn pumper capable of flowing 1000 gallons per minute of water
- **Truck 1** – a 1993 Simon-Lti ladder tower that has an 85' ladder and bucket and a pump capable of flowing 1500 gallons per minute
- **Fire Rescue** – a 1999 Salusbury / International rescue truck that carries firefighting equipment including the jaws of life, air bags, hand tools, first aid and other equipment
- **Car 1** – a 2002 Ford Expedition utilized as a command vehicle
- **Old Engine 1** – a 1934 Ward La France Pumper that is maintained as an antique and used for parades
- **Truck, Pick-up** – a 2010 model year

### RESCUE SQUAD

The rescue squad supplies emergency medical services to the Borough and also serves as a backup to surrounding communities. The squad provides services such as transportation to and from nursing homes, hospitals and residences, as well as the loaning of crutches and wheelchairs to Borough residents.

### LIBRARY

The Arnold A. Schwartz Memorial Library (the Dunellen public library) is located at 100 New Market Road and has approximately 6,000 square feet of floor space. The library circulated over 34,000 items to Dunellen residents and neighboring patrons as of December 2008. It has continued its Large Print, Audio Book Collection on CD and DVD and has begun circulating playaways (audio books that are small enough to be listened to while walking or exercising). The library also continues to be an active member of the Libraries of Middlesex Automation Consortium (LMxAC) that allows residents to borrow items from any of the LMxAC member libraries via the Internet.

The library provided over 420 programs for adults, children and teens such as book clubs, travel clubs and movie showings, and has over 2,000 registered library card holders.

The library has nine public use computers that provide internet access, five in the adult section and four in the children's section. In addition to Internet access, the four computers in the children's section contain word processing software, and the five adult computers have word processing, spreadsheet, database and publishing software.



The Dunellen Public Library has established "The Disabilities Resource Center" where library patrons, disabled persons and their caregivers, and other members of the public can access a wide range of disabilities related resources.

Relocation of the library is to be incorporated into the downtown redevelopment and construction of a new municipal complex.

### **SCHOOLS**

Dunellen is home to 3 public schools including Faber Elementary School, Lincoln Middle School and Dunellen High School. Faber Elementary School is located in the Southwestern portion of the Borough on High Street and serves grades K-5. Recent improvements to the included a new kitchen, a new roof, new windows, new fire sprinkler system, boilers, and a new large pick-up / drop-off area.

Lincoln Middle School is located near the center of town, at the corner of Dunellen Ave. and Lincoln Ave, adjacent to Dunellen High School and accommodates grades 6, 7 and 8. Recent improvements included a new cafetorium. Dunellen High School is located adjacent to Lincoln Middle School and serves 9-12 graders. The high school renovations included a renovated gym and fire sprinkler system throughout the building, a new roof and renovations to the bathrooms, HVAC system, electrical panels and science labs.

Athletic fields for Borough students are located at Columbia Park in the southeastern section of the Borough.

A private school in the Borough is the New Life Christian School located in the old Whittier School building at New Market Road and Whittier Ave.

The public schools in Dunellen have undergone major renovations in recent years, according to the Comprehensive Facilities Plan prepared by the Board of Education in accordance with New Jersey Department of Education requirements.

### **RECOMMENDATIONS**

Based on the review of the community facilities in the Borough, the following recommendations have been established:

- Continue the downtown redevelopment efforts for the creation of a new municipal complex
- Develop a maintenance plan for all facilities



## SECTION XI RECREATION PLAN ELEMENT

### INTRODUCTION

The Borough of Dunellen understands that the quality of life of its residents depends in part on availability and access to parks, open space and recreation. The quantity of open space and recreation necessary for any municipality depends on current and future demand. The purpose of this Open Space and Recreation Plan (OSRP) is to evaluate the existing parks, open space and recreation available in the Borough and recommend solutions to address resident needs, as well as evaluate goals, data and objectives.

Although the opportunities for open space acquisition are limited in Dunellen because the Borough is predominately built-out, the potential for redevelopment may present opportunities for new open space and recreation in the Borough. The upgrade and maintenance of existing facilities are also issues to be addressed.

### GOALS AND POLICIES

A goal is a general and timeless statement towards an end in which effort is directed. A policy is a direction statement that guides actions in determining present and future decisions used to reach the adopted goals. Goals and policies established by the Borough reflect the physical land use characteristics of the area. The following goals and policies have been adopted by Dunellen regarding recreation and open space:

- ❖ Goals:
  - To provide adequate and diverse recreational opportunities and facilities to meet the needs of the Borough residents.
  - To upgrade existing deficient recreational facilities in the Borough.
  
- ❖ Policies:
  - Ensure that the needs and recreational interests of people of all social, age groups and abilities are considered to the fullest extent possible in developing recreational facilities.
  - Encourage the construction of pocket parks and plazas in association with Borough redevelopment efforts.
  - Encourage the creation and interconnection of bicycle and pedestrian trails.
  - Ensure proper access, security and maintenance for all parks and recreational facilities.

### INVENTORY

There are a total of 27.11 acres of open space and recreational land in the Borough. The total acreage includes both developed and undeveloped parcels. All public open space in Dunellen is



owned by the Borough or the Board of Education. There are no parcels owned by the Federal, State or County governments. A list of all parks and open space owned by the Borough is represented in **Table RC1**. **Figure RC1** shows the location of all existing Borough-owned parks and open space.

TABLE RC1 - Borough Owned Recreation and Open Space						
ID	Name	Location	Block	Lot	Acreage	Amenities
Developed Recreation & Open Space						
1	Columbia Park	Orange Street	83 84	16 and 17 15	14.22	Senior Center, Weight Room, Football Field, Track, Concession Stand, Playground Set (slides, jungle gym), 3 tennis courts, 2 baseball fields
2	Gavornik Park	High Street	55	10	5.54	1 baseball field, 1 basketball court, playground set (slides, jungle gym)
3	Morecraft Park	Sanford Avenue and First Street	37	12	0.97	Shed, circular object, 2 swing sets (no swings), playground set, basketball court (1 hoop)
4	McCoy Park	Fourth Street	14 12 15	8.01 1 15.01	2.75	1 baseball field, basketball court, concession stand, playground set
5	Washington Park	Washington Avenue, Park Place, First Street and Dunellen Avenue	27	1	2.10	Gazebo, benches, memorials
Undeveloped Recreation & Open Space						
A	Open Space	Mountainview Terrace & Lincoln Ave	18	2	1.05	Open Space
B	Open Space	820 N Washington Ave	15	1	0.2	Open Space
C	Open Space	Fourth Street - Rear	13	1.02	0.28	Open Space
					<b>27.11</b>	<b>Total Acreage</b>

- \$1.9M for Columbia Park improvements was fully funded by the County.

## NEEDS ANALYSIS

### Projected Need

#### *Balanced Land Use Model*

The Balanced Land Use Model is advocated by the NJDEP's Statewide Comprehensive Outdoor Recreation Plan (SCORP), was developed for recreational activities and identifies the percentages needed to be preserved by the different levels of government. At the municipal level 3% of the developed and developable area of the municipality is required for recreational open space purposes to meet recommended State standards. The model is based on the total municipal acres, environmentally sensitive areas, and federal, state and county owned lands.

According to the Balanced Land Use Model, the Borough of Dunellen needs 18 acres to meet its recreational and open space needs based upon town area and population. **Table RC2** below, shows





the analysis of recreational need in Dunellen based on the Balanced Land Use Model. Dunellen presently owns and maintains 27.11 acres of open space and recreational lands, resulting in 9 acres of land beyond the minimum area recommended.

<b>Table RC2 - Balanced Land Use Model</b>	
	<b>Acres</b>
Total Land Area	640*
Minus County Land	0
Minus State Land	0
Minus Federal Land	0
Minus Wetlands Area	47**
Remaining Borough Land Area	593
3% of Total Remaining Land Area: Acres required for active and passive open space	18
Existing Recreation Acreage (Active and Passive)	27.11
Deficiency, or <b>Surplus</b> under the Balanced Land Use Model	<b>9</b>
Acreages have been rounded off * Total Borough Area approximately one square mile ** Wetlands derived from NJDEP Digital GIS Data	

*Population Ratio Model*

The Population Projection Model is endorsed by the National Recreation and Park Association (NRPA) and is based on the assumption that recreational requirements relate to the number of people in the community. It specifies a unique number of acres per 1,000 people based on the park classification. The NRPA Standards for the Population Projection Model suggests a minimum of 6.25 acres per 1,000 persons.

According to the Population Ratio Model and based on population statistics, Dunellen currently has a deficiency of 16 acres and is projected to have a deficiency of 20 acres to the year 2030. **Table RC3** identifies the Population Ratio Model analysis.



<b>Table RC3 - Population Ratio Model</b>					
	<b>Existing Recreational Acres</b>	<b>Required Acres Based on 2000 Population: 6,823</b>	<b>Existing Deficiency</b>	<b>Required Acres Based on 2030 Population: 7,530</b>	<b>Projected Deficiency to 2030</b>
Minimum 6.25 acres per 1,000 people	27.11	43	16	47	20
2000 Population provided by U.S. Census, 2000 2030 Population Projection provided by Middlesex County Planning Department					

The differences in results attained from the above two needs analysis models, are primarily attributed to the fact that one model focuses on availability of land within a town while the other focuses on the population within that municipality. The Borough of Dunellen believes that goals addressing the open space system should not be restricted to a simplistic numerical standard, but rather based on land resources as well as resident recreation need. However, the results attained using these models will be considered in the goals and policies affecting the park system. These results are used as guidelines that vary based on real time factors such as park usage, resident opinions and overall actual Borough needs.

**Trends and Profiles**

The population profile for Dunellen provides an insight into the current and future recreational needs of Borough residents. Based on the Land Use Plan Element of this report, the largest concentration of persons in Dunellen are between the ages of 25 and 54 and the second highest cohort grouping are children age 14 and under. Traditionally, these two population groups are largely involved in recreational activities. When analyzing its recreational system Dunellen needs to take into consideration the physical capabilities and recreational preferences of the increasing senior population as its residents grow older. At the same time, the Borough needs to maintain activities and programs that serve the children of the Borough.

In addition to considering its population configuration, Dunellen believes that it is also helpful to review the recreational trends on a statewide level because it provides a snapshot of recreation activities enjoyed by New Jersey residents. According to the 2008-2012 New Jersey Statewide Comprehensive Outdoor Recreation Plan (NJSCORP) published by the NJDEP Green Acres Program, the most popular recreation activities in New Jersey include trails, field sports and court sports.

Based on an informal survey, the NJSCORP revealed that the use of trails is one of the most popular outdoor recreation activities in the State, and that:

- Trails are a four season phenomenon in New Jersey.
- The use of trails on foot (hiking, walking, jogging, backpacking) is the most popular use of trails with off road vehicles, including biking, being the second most popular activity for trails.
- The lack of trails and the quality of the facilities were identified as the most important trails concerns.



The NJ SCORP identifies that requests from local governments and conservation organizations also provide input into the recreational needs of state residents. The report identifies the Green Acres Recreation Facility Funding Requests from 2003 to 2006 and lists field sports, pathways, court sports and playgrounds as the top four recreational facility improvements for which funding was requested. Furthermore, the NJSCORP reveals the 2006 Top Ten New Jersey High School Sports from the New Jersey State Interscholastic Athletic Association as follows:

- Outdoor Track and Field
- Soccer
- Baseball / Softball
- Football
- Basketball
- Indoor Track and Field
- Lacrosse
- Tennis
- Cross Country
- Field Hockey

**SYSTEM CLASSIFICATION**

In addition to the results of the projected needs analysis and the examination of the trends and profiles in the Borough and Statewide, a system classification and analysis was conducted to gain insight into the condition and use of the existing recreation system within the Borough.

To help define the types of Active Recreational facilities available, the Borough has designated park classifications for its five existing parks. The parks are identified in **Table RC4** below.

<b>Park</b>	<b>Classification</b>	<b>Description</b>	<b>Service Area</b>
Columbia Park	Community Park	Large range of facilities, amenities, activities and programs for all ages	1 mile radius (borough-wide)
Washington Park	Community Park	Near downtown, used for Borough-wide activities such as Graduations, Holiday Celebrations and other Special Events	1 mile radius (borough-wide)
Gavornik Park	Neighborhood Park	Expanded facilities and activities for broader age group includes field, court and playground	1/2 mile radius
McCoy Park	Neighborhood Park	Expanded facilities and activities for broader age group includes field, court and playground	1/2 mile radius
Morecraft Park	Mini Park	Limited facilities and activities for a specific age group	1/4 mile radius

Dunellen currently has two parks classified as Community Parks, Columbia Park and Washington Park. Both parks are located near the Borough downtown and are intended to serve the entire community. Columbia Park contains a wide range of facilities and activities including a Senior Center, weight room, football field, baseball fields, track, concession stand, and playground set. Washington Park is predominantly a green space of lawn and trees, with a centerpiece gazebo, benches, and memorials, and it serves the entire Borough as a congregation space of special activities and celebrations – the Dunellen High School Graduation takes place in Washington Park every year.



There are also two neighborhood parks located on opposite ends of the Borough that serve a half mile radius thus an entire half of the Borough. Gavornik Park and McCoy Park are situated on the northeastern and southwestern ends of the Borough respectively. Both parks have facilities for a broad age range including ball fields, basketball courts and playgrounds.

The fifth park in the Borough, Morecraft Park, is classified as a mini park intended to serve a smaller one quarter mile radius, and it contains limited facilities including a playground and a basketball court. Morecraft Park is the only mini park in the Borough and has been identified as being in need of update and maintenance. The actual use of this park is reported to be very light. With proper maintenance, mini parks can be a great addition to the park system in Dunellen for our residential neighborhoods; the very limited vacant land opportunities in the Borough restrict purchase possibilities.

Overall, the parks in the Borough serve the entire population and are situated in all quadrants of the town. Besides the upgrading and continued maintenance of our existing parks, there are few opportunities for the development of new parks in the Borough, but it should be noted that additional new parks are not necessary to serve our residents. Redevelopment efforts however may allow for pocket parks and public green areas to be developed throughout the downtown, and should be encouraged.

### **Open Space**

Dunellen believes that conservation of open space benefits the Borough, surrounding communities and the environment overall. The Borough will strive to protect, conserve and preserve the natural areas situated along the Green Brook. The conservation of open space will include the designation of natural resource areas and greenways. Greenways serve to tie open spaces together to form a cohesive recreation and open space system, emphasize harmony with the natural environment and create resident desired trails opportunities.

### **MIDDLESEX COUNTY OPEN SPACE AND RECREATION PLAN 2003**

The Borough of Dunellen supports the goals and objectives set forth in the Middlesex County Open Space and Recreation Plan 2003, including the following:

#### Goals:

- Provide a public system of major parks and open spaces that forever preserves sufficient land to accommodate a variety of recreational activities, conserve scenic, historic, cultural, and environmental features to enhance the quality of life for residents of Middlesex County.
- Assure that adequate recreational facilities are available to meet the needs of the residents of Middlesex County.
- Provide programs and facilities to assure opportunities for cultural and heritage appreciation.

#### Linkage recommendation:

- Green Brook Linkage that would extend the Middlesex Greenway to the northwest through the Dismal Swamp area of Edison and South Plainfield.



**RESOURCE ASSESSMENT**

Dunellen is essentially developed to capacity therefore there are very few vacant areas that can be utilized for recreation acquisition. There is a limited amount of land adjacent to Green Brook that should be considered for open space acquisition due to the environmental issues with the area. Furthermore, consideration of the development of pocket parks within the downtown redevelopment efforts will also be a priority.

Parcels adjacent to the Green Brook that will be considered for open space acquisition are listed in **Table RC6**.

<b>Table RC6 - Potential Acquisitions</b>							
Parcel #	Location	Block	Lot	Zoning	Acres	Owner	Taxmap #
1	500 Mountainview Terrace	41	1.01	RA	7.51	Edelman and Penn Realty LLC	13
2	Madison Ave	18	8.05	RA	2.4	Fisher, Priscilla Estate	12
3	Fourth Street Rear	13	1.01	RA	0.45	Bayer, Joan M	3
4	Fourth Street Rear	13	2	RA	0.34	Crispo, James & Donna	3

**ACTION PLAN**

- Continue periodic inspections and maintenance of existing parks.
- Acquire lands adjacent to the Green Brook.
- Investigate the possibility of developing pocket parks in the redevelopment areas



## SECTION XII

### RELATIONSHIP TO OTHER PLANNING EFFORTS

The New Jersey Municipal Land Use Law (MLUL) requires the Borough to evaluate the relationship of our proposed development efforts and the planning efforts from the state, county and adjacent municipalities. In the creation of this Plan, Dunellen reviewed the following planning documents for uniformity to the Borough goals and objectives:

- The New Jersey State Development and Redevelopment Plan
- The Middlesex County Growth Management Strategy
- The Middlesex County Solid Waste Management Plan
- Borough of Middlesex Master Plan
- Township of Piscataway Master Plan
- Township of Green Brook Master Plan
- The Dunellen Downtown Redevelopment Plan Phase I

#### **STATE DEVELOPMENT AND REDEVELOPMENT PLAN**

The New Jersey State Development and Redevelopment Plan was adopted in 2001 as a result of the State Planning Act. The State Plan includes goals, policies and objectives to help guide State-level, regional and local development and redevelopment policy. In order to effectuate the State Plan to its fullest, the plan was reviewed and considered in the creation of the Dunellen Master Plan.

The Borough of Dunellen is located in the Metropolitan Planning Area (PA 1) of the New Jersey State Development and Redevelopment Plan. The Borough Master Plan is consistent with the Metropolitan Planning Area's planning objectives including:

- Providing for much of the state's future redevelopment;
- Revitalizing cities and towns;
- Redesigning areas of sprawl; and
- Protecting the character of existing stable communities.

Moreover, Dunellen Master Plan is consistent with the State Development and Redevelopment Plan's eight statewide goals:

- Revitalize the State's cities and towns.
- Conserve the State's natural resources and systems.
- Promote beneficial economic growth, development and renewal for all residents of New Jersey.
- Protect the environment, prevent and clean up pollution.
- Provide adequate public facilities and services at a reasonable cost.
- Provide adequate housing at a reasonable cost.
- Preserve and enhance areas with historic, cultural, scenic, open space, and recreational value.
- Ensure sound and integrated planning and implementation statewide.



### **MIDDLESEX COUNTY GROWTH MANAGEMENT STRATEGY**

Dunellen advocates the Middlesex County Growth Management Strategy. The plan is a three-phase document spanning from 1990 to 1995, created to address county infrastructure need, regional design and growth management strategies.

The first phase of the Middlesex County Growth Management Strategy deals primarily with county-wide infrastructure need by:

- Defining the facility needs in the County (infrastructure additions required to serve the population growth)
- Examining the capacity of sewer, stormwater, parks, roads and affordable housing with respect to anticipated growth
- Revealing that growth has created large public cost impacts - \$2.4B need in infrastructure improvements through 2010
- Explained that growth management should be a public policy goal – it balances the rate and amount of growth and the ability to implement infrastructure improvements

Phase 2 of the growth management strategy presents five planning area case studies, none of which deal with the Borough of Dunellen directly or indirectly. The studies are helpful in their general findings of County-wide needs including;

- Better coordination of growth among municipalities
- Preparation of regional designs to protect existing community character
- More efficient land use patterns to reduce infrastructure expansion costs and protect the environment

The final phase presents four additional planning area case studies that discuss:

- Inter-municipal coordination on planning, utility and transportation management issues
- More efficient mechanism for financing infrastructure improvements
- Update the Middlesex County Master Plan that balances growth and manages natural and economic resources

### **MIDDLESEX COUNTY SOLID WASTE MANAGEMENT PLAN**

Dunellen is in conformance with the Middlesex County Planning Department Division of Solid Waste Management Plan and promotes the plan's strategies. The Borough, under contract for curbside collection with the Middlesex County Improvement Authority (MCIA), maintains curbside and drop-off recycling services for its residents.

Moreover, the Borough of Dunellen promotes the Middlesex County Solid Waste Management Plan strategies including:

- "Leave it on the Lawn" campaign to convince residents to simply leave cut grass on the lawn;
- Education programs for reducing the amount of waste;
- Three collections per year of household hazardous waste;
- Programs for household batteries disposal; and



- Scheduled collection opportunities of e-waste generated by residents and businesses.

### **BOROUGH OF MIDDLESEX**

Middlesex Borough borders Dunellen to the southwest. Along the northern portion of the shared border, the Middlesex Borough Master Plan calls for single family residential land use, a land use consistent with the existing Dunellen land use and the recommendations provided in this plan.

In the area between Dunellen Avenue and Front Street, Middlesex Borough is zoned for and recommends multifamily residential development. Dunellen however maintains the area adjacent as single family residential. Despite the density difference, the uses in both Boroughs are residential in nature.

Further south along the border between Bound Brook Road and South Avenue, the Borough of Middlesex master plan identifies industrial land uses. The industrial land use is consistent on the Dunellen side with industrial uses that cross the municipal boundaries.

### **TOWNSHIP OF PISCATAWAY**

The Township of Piscataway shares the southern and eastern borders with Dunellen. The majority of the adjacent Piscataway land is designated for residential use and therefore consistent with the Dunellen single family residential zone. A small portion of the shared border perpendicular to South Second Street is zoned and utilized as light industrial property. Similar to the industrial use on the opposite side of the Borough, this light industrial use also crosses the municipal boundary to Dunellen and is likewise zoned Industrial on the Dunellen side. The master plans for both municipalities are therefore consistent.

### **CITY OF PLAINFIELD**

Dunellen shares its northeastern boundary with the City of Plainfield in Union County. The area adjacent to Dunellen in Plainfield is zoned primarily for Low-Density Residential with the southern portion of the shared border zoned for General Commercial. The zoning and land use designations in Dunellen parallel that of the City of Plainfield.

### **TOWNSHIP OF GREEN BROOK**

Along the “Green Brook” at the northwestern portion of the Borough, Dunellen shares its border with the Township of Green Brook in Somerset County. The entire area opposite the Green Brook in Somerset County is designated as Conservation Area in the Township of Green Brook Master Plan. The area adjacent to the Green Brook in Dunellen is designated single family residential. However, Dunellen owns several open space parcels adjacent to the Brook and proposes to acquire more vacant parcels in the area to be conserved as open space.