

Lakewood Smart Growth Plan

June 2013

Township of Lakewood,
Ocean County, New Jersey



Prepared by **T&M**
ASSOCIATES

Lakewood Smart Growth Plan

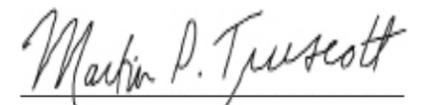
June 2013

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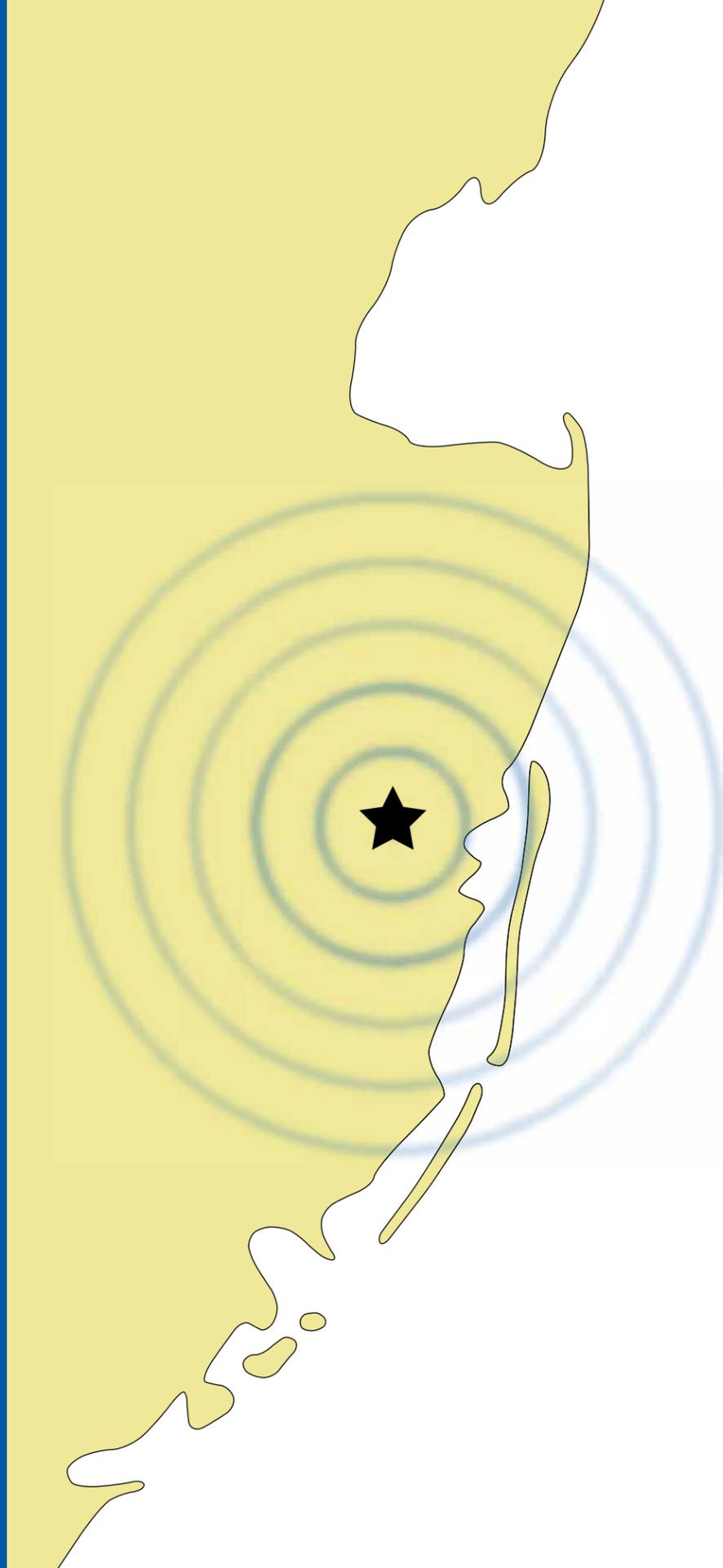
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The original of this document was signed and sealed in accordance with New Jersey Law.

**Adopted on June 19, 2013 by the
Lakewood Township Planning Board**

Previously adopted on November 19, 2009 by the Township Committee as the Township's Vision Plan



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Smart Future Grant Program

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1. Introduction and Planning Context

Introduction

Lakewood is at significant cross-roads in planning for its future growth and development. Specifically, the Township is facing critical choices in directing growth to appropriate areas, defining what that growth will be, and how it will be achieved while preserving the Township's natural resources. The Lakewood Smart Growth Plan builds on the Township's prior planning efforts, incorporates valuable community input, and presents a comprehensive vision for the Township that will guide Lakewood's future growth in a balanced and sustainable manner.

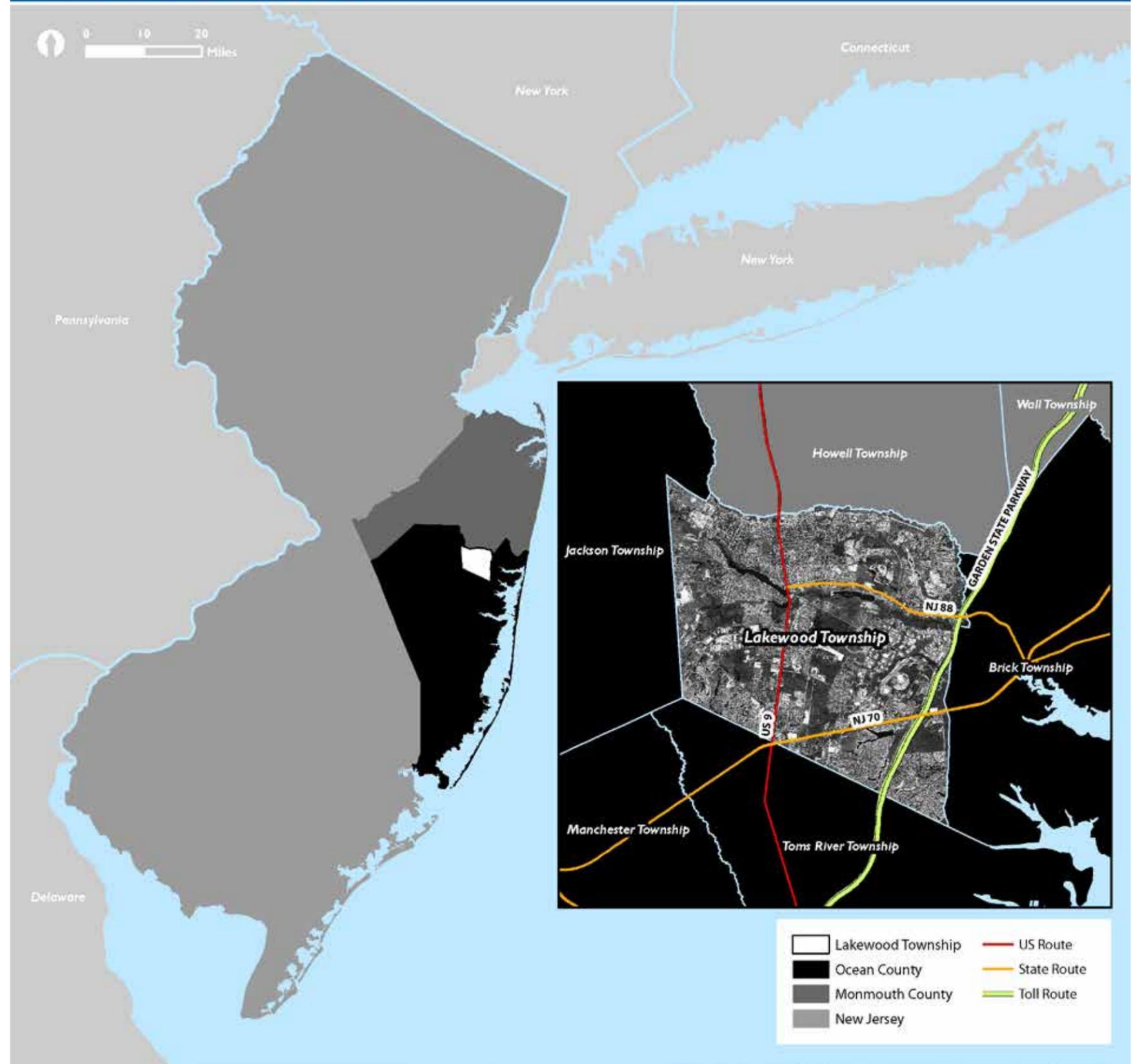
Lakewood is committed to smart growth and sustainability as guiding principles for future growth and development in the Township. Accordingly, this plan incorporates the principles of smart growth, which include:

- » A mix of land uses
- » Compact, clustered community design
- » Walkable neighborhoods
- » Distinctive, attractive communities offering a 'sense of place'
- » Open space, farmland, and scenic resource preservation
- » Future development strengthened and directed to existing communities using existing infrastructure
- » Transportation option variety
- » Community and stakeholder collaboration in development decision-making
- » Predictable, fair, and cost-effective development decisions
- » Range of housing choice and opportunity

Using these principles, and with input from the community obtained in four visioning workshops held in 2008 as well as two public hearings held in 2009, the Township crafted this vision statement, which was adopted by the Township Committee in November 2009. The vision for Lakewood balances growth and preservation strategies in a center-based approach to development.

Recognizing that this vision continues to be valid, the Lakewood Township Planning Board now adopts the Lakewood Smart Growth Plan as an amendment and supplement to the Land Use Plan Element of the Township's Master Plan. The Smart Growth Plan also amends and supplements the recommendations for rezoning contained in the 2007 Master Plan Reexamination Report.

Figure 1.1: Regional Location



Planning Context

The Township of Lakewood is located in northern Ocean County, and borders the Township of Howell, Monmouth County to the North, Township of Brick to the East, Township of Jackson to the West and Township of Toms River to the South. The Township is approximately 25 square miles in land area and includes major residential, commercial, and industrial areas.

Lakewood is situated at the confluence of several major roadways, including US Route 9, N.J. Route 70, N.J. Route 88, and the Garden State Parkway. Lakewood's downtown includes a regional bus station. In addition, Lakewood also is being considered for one or more transit stations on the proposed Monmouth-Ocean-Middlesex (MOM) passenger rail system.

Once a winter resort for New Yorkers and Philadelphians, the Township today serves as a regional economic and cultural center for the area, serving the employment, housing, shopping, recreational, and educational needs of the surrounding region.

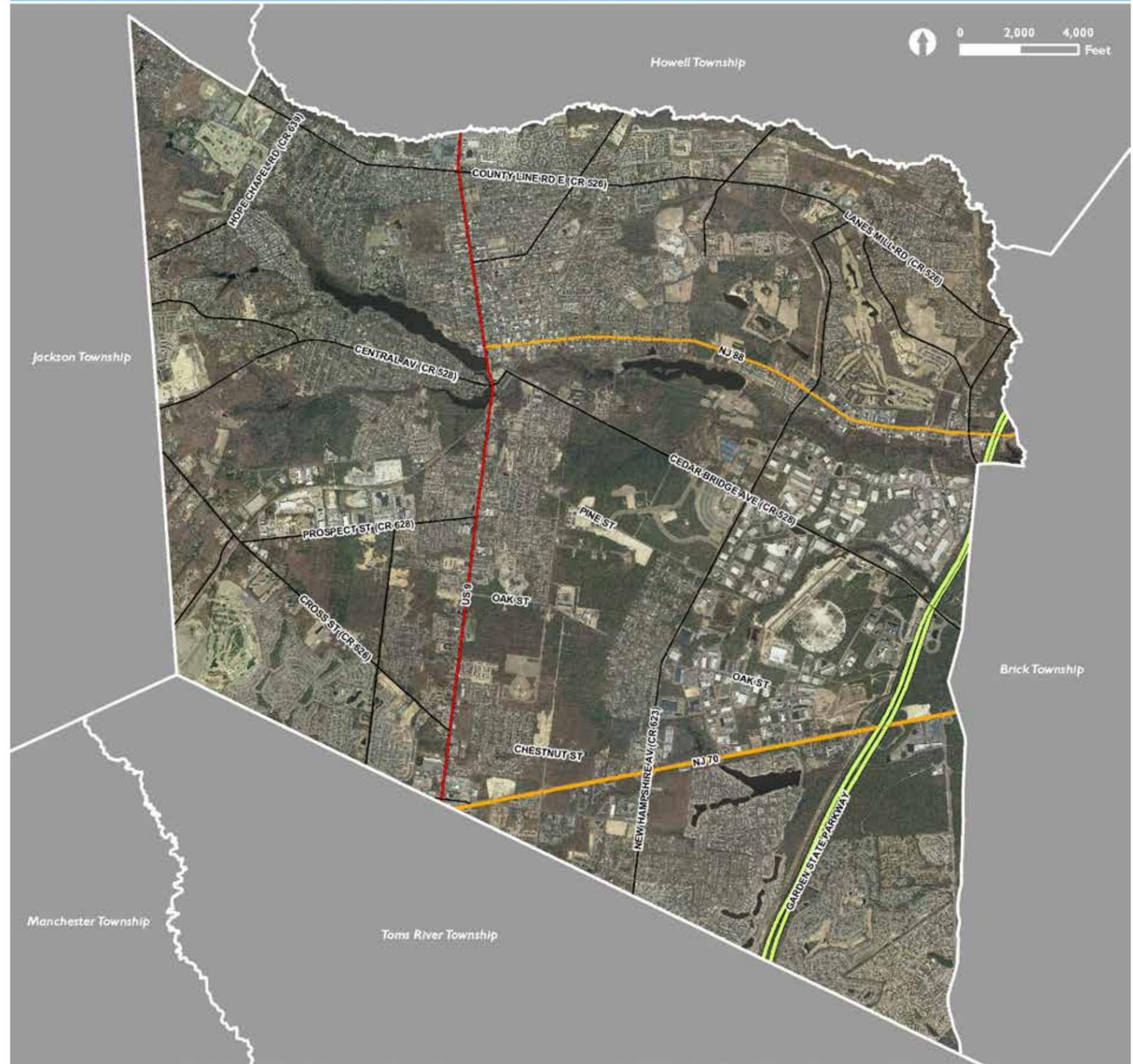
Lakewood businesses, industries, and institutions are major employers in the Monmouth and Ocean County region, with the Kimball Medical Center and the Lakewood Industrial Parks as two important employment centers. Lakewood has one of the largest Foreign Trade Zones and Urban Enterprise Zones in the State. The UEZ encompasses Lakewood's downtown, highway commercial corridors and its three large industrial parks. Lakewood's UEZ includes over several hundred businesses employing thousands of people from Lakewood and the surrounding region.

Lakewood's downtown has a recognized role as a regional cultural, shopping, and transportation hub. The downtown also serves as the center for two institutions of higher learning: Georgian Court University and Beth Medrash Govoha (BMG), as well as many other schools and yeshivas.

Lakewood provides regional cultural and recreational opportunities. Nearly a third of Lakewood's land uses are dedicated to regional open space and recreational facilities, including the Ocean County Park, Lake Shenandoah, and Lake Carasaljo. Lakewood hosts the Lakewood Blue Claws as well as the Strand Theater, which is listed on the New Jersey and National Registers of Historic Places.

The Township is recognized as part of New Jersey's coastal planning efforts, with the areas east of the Southern Branch Main Line under the jurisdiction of the

Figure 1.2: Township of Lakewood, Ocean County



New Jersey Department of Environmental Protection (NJDEP) Coastal Area Facility Review Act (CAFRA).

Based on its economic and cultural importance to the region and past population trends, the Township anticipates continued significant population growth in the coming decades. Lakewood's Smart Growth Plan recognizes the need for a pragmatic and sustainable approach to accommodate growth by supporting appropriate infill development and redevelopment opportunities while enhancing mobility, preserving open space, providing adequate recreation and community facilities, and a variety of housing choices to best accommodate this anticipated population growth.

The Smart Growth Plan promotes center-based development, which includes a series of centers, cores and nodes. This center-based approach is designed to revitalize Lakewood's downtown, sustain and support its existing regional employment centers, and provides new areas for mixed-use development in the Township. In addition, the Lakewood Smart Growth Plan provides for infill development and redevelopment based on smart growth principles in cores of development along the Township's regional highway corridors.

The Plan sets forth the Township's Environmental Preservation Strategy. This strategy is designed to protect the Township's natural resources, including Category I (C-1) waterways, wetlands, and critical habitat areas. It represents a comprehensive approach that links existing open space areas with new large contiguous tracts of land, protecting valuable natural resources and environmentally sensitive areas that otherwise would potentially be open to development without a Smart Growth Plan.

The Smart Growth Plan also includes a multi-modal Transportation Strategy to support vehicular, pedestrian and goods movements. The circulation plan recognizes that the improvement of Route 9 is a key transportation priority for Lakewood. The Township continues to work with NJDOT to improve circulation and safety along the Route 9 corridor. In addition, Lakewood is proposing alternate north-south routes to alleviate traffic along this busy corridor and a smart-growth land use strategy that creates walkable communities and promotes local transit use to lessen traffic in the Township. Finally, the Smart Growth Plan includes an Infrastructure Strategy to address current and future needs, including all aspects of the Township's community infrastructure.

The Township's overall Smart Growth vision and each of these components are described in detail in the following sections of this plan.

Figure 1.3: Coastal Area Facility Review Act (CAFRA) Boundary

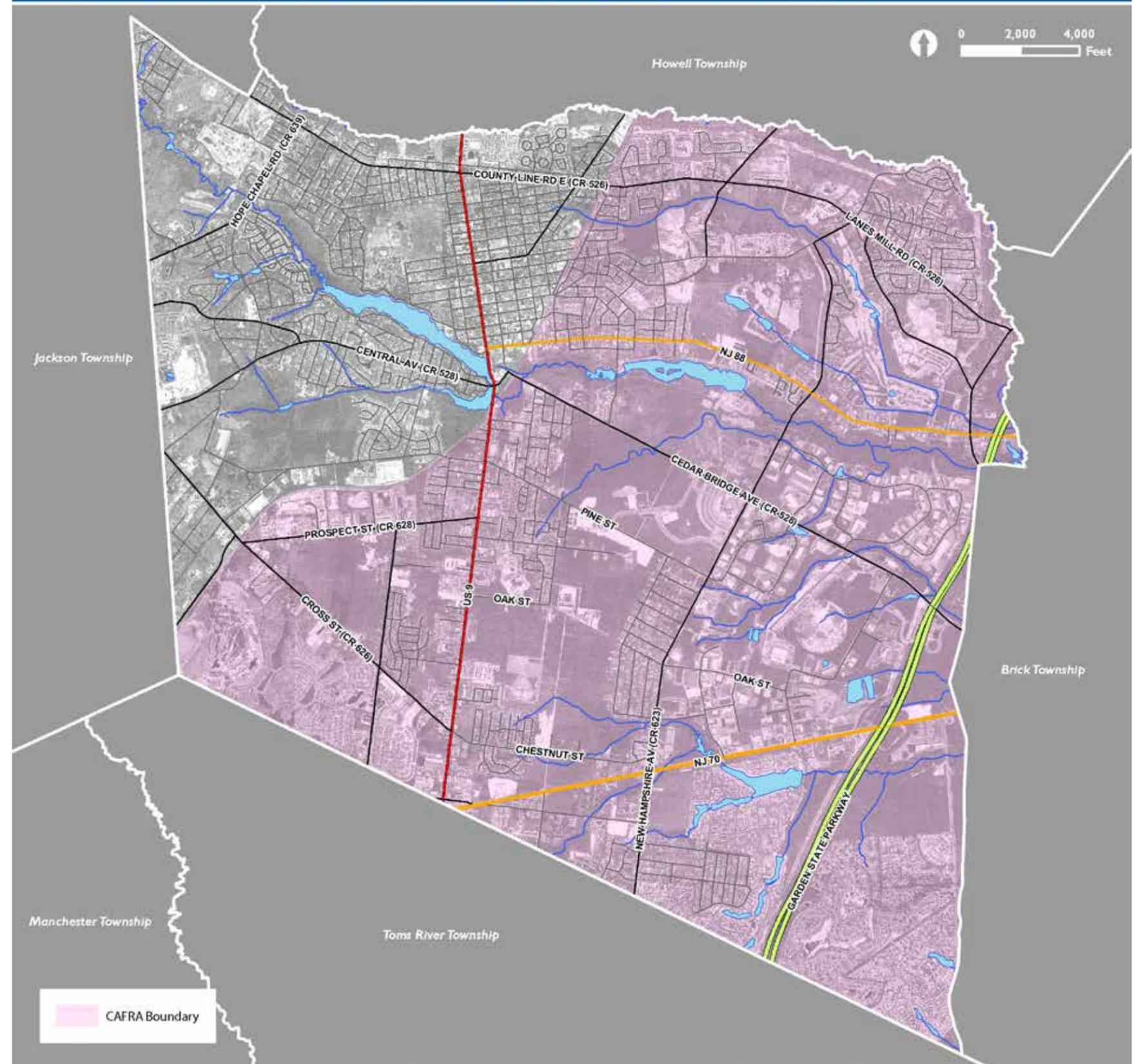
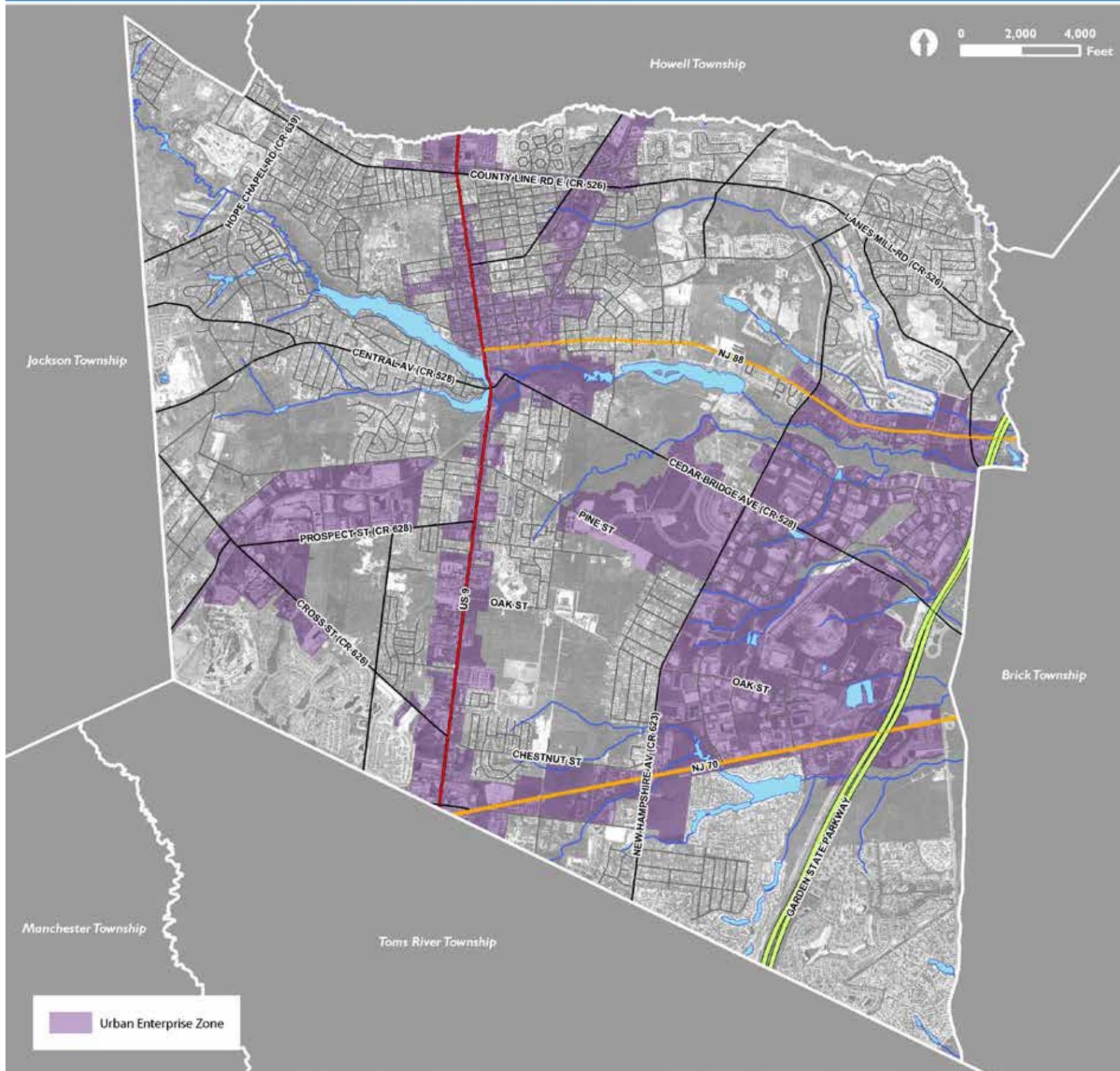


Figure 1.4: Urban Enterprise Zone Boundary



2. Existing Conditions and Trends

Population and Housing

Lakewood has and will continue to experience substantial population and housing growth. This will continue to be a key planning issue and driving force for growth and development in the coming decades. How Lakewood plans for and accommodates this growth will determine whether or not the Township is successful in implementing its smart growth vision. The primary question is and will continue to be how Lakewood accommodates this growth in a way that is sustainable and balances the need for housing, and corresponding community services and employment, with its efforts to protect important natural resources.

Table 2.1 shows current population and housing statistics in comparison with the County and the State. Of particular note, the Township's average household size and average family size are substantially greater than the County and the State. In addition, the Township's population density is more than four times that of Ocean County and over three times that of the State average.

Table 2.1: Township, County, and State by Comparison, 2010

	Lakewood Township	Ocean County	New Jersey
Land Area (Sq. Mi.)	25.05	636	7,417
Population	92,843	576,567	8,791,894
Population Density (Persons/Sq. Mi.)	3,706.3	906.6	1,185.4
Average Household Size	3.73	2.58	2.68
Average Family Size	4.49	3.16	3.22
Housing Units	26,337	278,052	3,553,562

Source: 2010 US Census

Over the last three decades, Lakewood's population has grown exponentially. From 1980 to 1990, Lakewood's population increased by approximately 6,500 persons. Between 1990 and 2000, Lakewood's population grew by 15,000, and, between 2000 and 2010, it grew by an additional 32,000. This corresponds to a population growth rate of more than 141 percent between 1980 and 2010.

Table 2.2 Population Trends, 1980-2010

	1980	1990	2000	2010	Δ 1980-2000	Δ 2000-2010
Lakewood Township	38,464	45,048	60,352	92,843	57%	54%
Ocean County	346,038	433,203	510,916	576,567	48%	13%

Source: 2010 US Census

Based upon historic trends and anticipated future growth, it is not unreasonable to expect, at a minimum, a continued high rate of growth in the coming two decades. Assuming a similar rate of growth in the next two decades, Lakewood’s population would be expected to increase by another 50,000 between 2010 and 2020 (approximately 5,000 per year) and yet another 80,000 between 2020 and 2030, for a total increase over the next two decades of 130,000 persons, resulting in a total population of 220,000 by 2030.

This population growth will fuel a continuing and growing demand for housing. For example, Lakewood’s current average family size in 2010 approximately 4.5 persons, and continues to increase with current estimates at 4.7 persons. This average includes the approximately 8,000 senior housing units in Lakewood, which suggests an even larger household size for the other existing non-age restricted housing units in Lakewood. Based on an estimated average household size of approximately five persons per household, Lakewood would need 26,000 new housing units to meet the needs of Lakewood’s increasing population based on a continuation of its current rate of population growth. This would represent almost a doubling of Lakewood’s existing housing stock over the next two decades.

In order to meet the growing need for new housing in the Township, the Smart Growth Plan proposes new residential development in the proposed mixed-use cores, highway cores, and within the Cedarbridge Town Center. Together it is estimated that over 10,500 new residential units can be created in the areas targeted for new growth and development. (See Table 2.3) While this is a significant amount of new housing, additional long-range planning efforts will be needed to ensure that a sufficient amount and variety of housing is available to meet the needs of Lakewood’s growing population. This may include redevelopment of

portions of the Township’s downtown or additional development in selected areas near any new transit station that may be created in Lakewood.

Table 2.3 Housing Projections, Smart Growth Plan Components

	2010 (Units)	2030 (Units)	Δ 2010-2030 (Units)
Downtown Regional Center	7,135	7,476	341
Cedar Bridge Town Center	1	1,736	1,735
Oak Street Neighborhood	600	3,354	2,754
Cross/Prospect Street Core	94	2,363	2,269
Highway Cores	738	2,234	1,496
Industrial Parks	92	92	-
Balance of Township	17,684	19,600	1,916
Totals	26,344	36,854	10,510

Source: T&M Associates

Lakewood realizes that there will ultimately be limits to how much it can grow. However, in the 20-year timeframe of this plan the key issue facing Lakewood is how to meet the growing need for housing while ensuring that its quality of life is maintained. In addition, the Township must make sure that adequate infrastructure and community facilities and services are available to meet the needs of its growing population. A more detailed discussion on infrastructure needs and issues is included in Sections 6 through 7 of the plan.

Existing Land Use

Lakewood’s existing land use pattern and the distribution of available developable land provide a framework for the planning of future growth and development in the Township. Existing land uses and remaining vacant areas are shown in Figure 2.1, Existing Generalized Land Use. Lakewood’s existing land uses can be categorized as follows:

Residential: Residential land uses in Lakewood are primarily single-family. However, more multi-family developments have been approved throughout the Township in recent years in areas

that have been zoned for multi-family development. In addition, a substantial portion of the southern area of the Township is developed with senior and age-restricted housing.

Overall, most of the higher density residential development is in the downtown. In addition, several sites have been identified for new affordable housing near Oak Street.

In total, residential uses represent almost a third of all land within the Township, and over half of its currently developed land.

Commercial: Commercial areas are centered in the downtown as well as clustered around major roads in the Township, such as U.S. Route 9, N.J. Route 70, N.J. Route 88 (Ocean Avenue), and County Line Road (County Route 526). These highway commercial areas also are located within in the Urban Enterprise Zone.

The downtown commercial district is located to the North of Lake Shenandoah and Lake Carasaljo and is the historic heart of the Township. The Ocean County Master Plan specifies that “Downtown Lakewood has the single largest concentration of retail, wholesale, service and professional establishments in the Ocean County area” (page 2-54). NJ Transit’s Lakewood Bus Terminal is located within close proximity to the downtown hub.

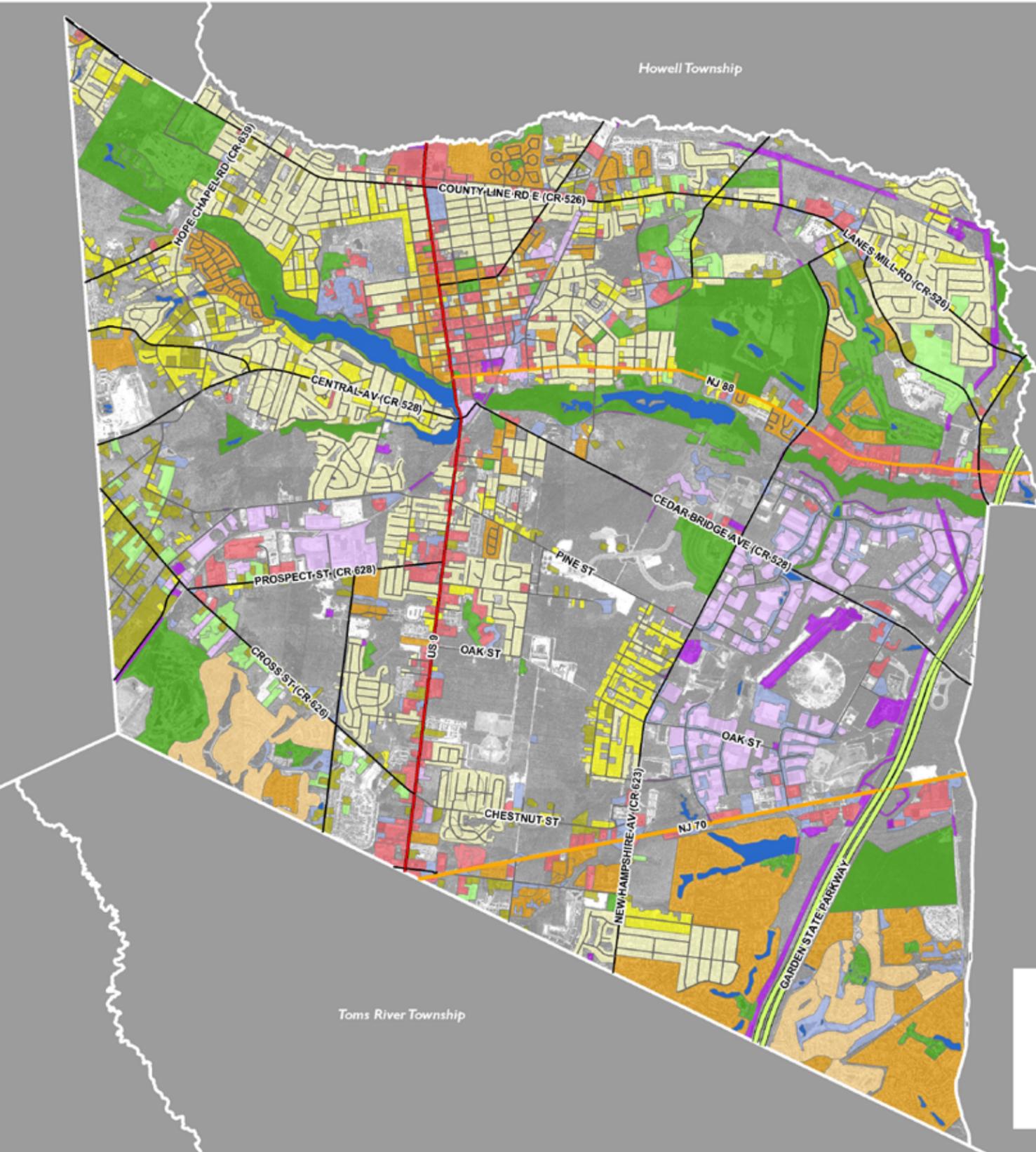
Industrial: Industrial uses are concentrated in the Lakewood Industrial Park on Route 70 and the Lakewood Industrial Campus, which are both in the southeast portion of the municipality, and the James/Prospect Streets Industrial Park, which has rail service.

Formed in the 1960s to retain local employees in the Township, the Lakewood Industrial Park complex contains 2,200 acres and approximately 350 businesses in 8.5 million square feet of developed buildings. The Lakewood Industrial Parks are part of a Foreign Trade Zone as well as the Township’s Urban Enterprise Zone. The businesses in the Park serve as a major employer for Ocean County, employing approximately 10,000 individuals.

The Lakewood Industrial Park also includes the Lakewood Airport, a commercial airport which provides air transportation to many businesses, as well as recreation opportunities for local aviators.

Figure 2.1: Existing Generalized Land Use

- Agriculture
- Commercial
- Industrial
- Recreation
- Residential, High Density, Multiple Dwelling
- Residential, Single Unit, High Density (1/8 to 1/5 acre lots)
- Residential, Single Unit, Medium Density (greater than 1/8 acre and up to and including 1/2 acre lot)
- Residential, Single Unit, Low Density (greater than 1/2 acre up to and including 1 acre lots)
- Residential, Rural, Single Unit (between 1 acre and up to and including 2 acre lots)
- Roadway and Open Land within Other Categories
- Transportation/Communications/Utilities
- Water



Wall Township

Howell Township

Brick Township

Manchester Township

Toms River Township

0 2,000 4,000 Feet

NOTE: Map reflects generalized 2002 land use/land cover data from the NJDEP, as corrected through interpretation of 2007 NJDEP aerial photography.

Uncolored areas shown on this map reflect vacant lands and new development as of 2007.

Community Facilities: Lakewood Township has a mix of public and private civic facilities uncommon to a municipality of its size. It has many public and private schools, two universities, and its own medical center. Maintaining the high quality of civic and municipal services is among the top priorities of Township residents.

Lakewood’s downtown area includes two institutions of higher education, Beth Medrash Govoha (BMG), which is the largest institute for the advanced study of the Talmud in the United States, and Georgian Court University (GCU). Students and their families comprise a significant component of Lakewood’s total population; the exponential growth of Beth Medrash Govoha over the past 15 years has directly fueled Lakewood’s substantial population growth while also serving as an engine that drives economic development in the Township. Approximately 80 percent of Beth Medrash Govoha’s students are married. These students come to Lakewood Township to study at Beth Medrash Govoha and subsequently marry and settle down to live, raise their families, and work in Lakewood.

Recreation and Open Space: The Metedeconk River and its associated tributaries provide both a natural border with the Township of Howell in Monmouth County and a framework for an integrated open space system of passive and active recreation areas, many of which are located in close proximity to Lakewood’s downtown. This system is discussed in further detail in the section on the Township’s environmental preservation strategy.

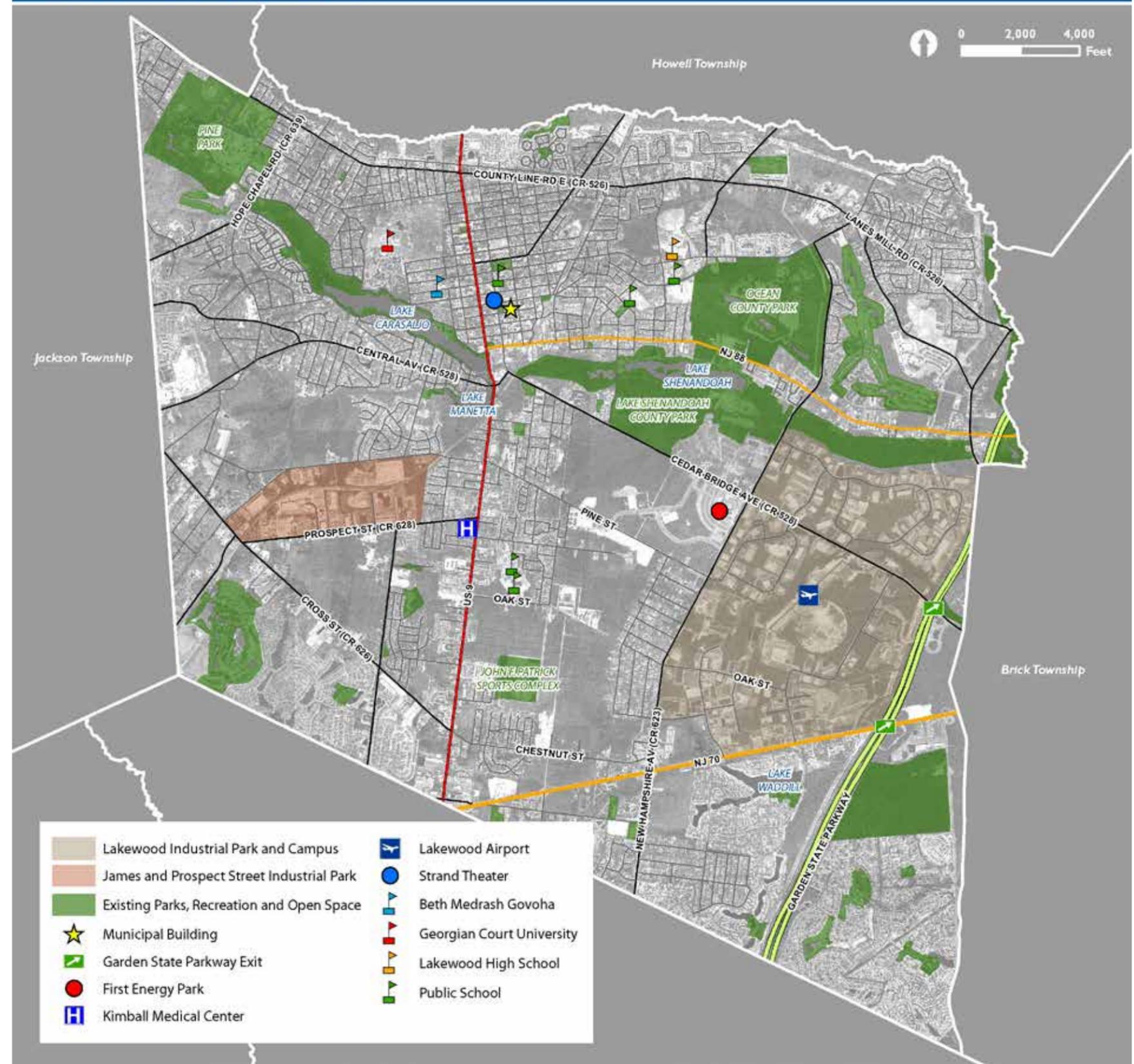
Lakewood has several County and local parks and recreation areas, including Lake Shenandoah and Lake Carasaljo and identified conservation areas, including the Crystal Lake Preserve and the Shorrock Open Space area as well as recreation areas at Pine Park and the John F. Patrick Sports Complex.

Future Potential Growth Areas

Several key observations regarding Lakewood’s existing land use character and current trends include:

- » Lakewood exhibits a generally built-out suburban character with a wide variety of land uses
- » Opportunities for further substantial infill development occur at only several key locations:
 - » Cedarbridge Redevelopment Area
 - » Areas north and south of Oak Street
 - » Cross and Prospect Street west of Massachusetts Avenue

Figure 2.2: Key Locations



- » Other remaining areas are environmentally sensitive or targeted for preservation in accordance with this plan
- » There are other areas, particularly in the downtown and along the highway corridors, that offer opportunities for infill and redevelopment

The key challenge is to provide sufficient opportunities for new growth and correctly using smart growth principles and sustainability as a foundation for its design, as well as protecting and preserving the character of existing low-density residential neighborhoods.

Local and regional infrastructure systems, including roads and transit, as well as water and sewer, must be available to support anticipated growth. Improvement of the Township's road network, particularly along Route 9 and key local routes to and from proposed centers, cores and nodes, must be a high priority. It is important to note that Lakewood's Smart Growth Plan is designed to be implemented over a twenty-year time frame. This should provide sufficient opportunity to plan for and phase in infrastructure improvements as needed.

Lakewood also recognizes that its Smart Growth Plan must consider not only roads, water and sewer, but the other aspects of a community's infrastructure necessary to support anticipated growth. This includes schools, public services, emergency services (police, fire, and first aid), parks and recreation, and facilities that address the social service needs of its residents. The need for these facilities will continue to be evaluated as the Smart Growth Plan is implemented and coordinated with each phase of development and redevelopment as proposed in the plan over time.

3. Vision

Community Vision

The community vision for the future development and preservation of the Lakewood was established following an extensive community outreach and public visioning process. This visioning process included the analysis of existing conditions and trends of the Township and a series of four community visioning workshops.

The community visioning workshops were attended by a variety of residents, business owners, and significant community stakeholders. At these workshops participants broke out into focus groups where they shared their interests, comments, and concerns regarding the future vision of the Township. Topics discussed included Lakewood's downtown, the Cedarbridge redevelopment area, opportunities for new development within the Oak Street Neighborhood and Cross and Prospect Street Core, the future of the industrial parks, township-wide circulation issues, downtown parking and circulation, open space and recreation needs, and affordable housing.

These workshops were used to develop the vision presented in the Lakewood Smart Growth Plan. In accordance with the community's vision for Lakewood, this plan promotes balanced growth that provides opportunities for new growth and development while protecting environmentally sensitive features and promoting their conservation for future generations. The plan incorporates the smart growth planning principles of the State Development and Redevelopment Plan as a foundation for future growth and development in Lakewood.

Based on the community visioning process, Lakewood also affirms and incorporates into this Plan the overall vision statement for the Township adopted by the Planning Board as part of the 2007 Master Plan Reexamination Report. This vision statement further confirms and defines the Township's smart growth planning approach as follows:

Encourage social, economic and cultural vitality through smart growth planning, well-designed and context-sensitive land development while preserving the urban, suburban, historic landscapes and open space of the Township. In order for Lakewood to continue to be a desirable place to live and work, the municipality should:

- » *Encourage growth and development in appropriate locations and consistent with established land uses*
- » *Encourage development and redevelopment based on smart growth planning principles, such as a balanced mix of land uses, pedestrian-friendly and transit-oriented environments with a sense of place*
- » *Work to improve the function and aesthetics of the Route 9 corridor through land use regulation, coordination with county, state and federal agencies, and cooperation with adjacent municipalities*
- » *Strengthen the downtown area as a center of commerce and community focus through encouragement of the continued development and redevelopment of the downtown*
- » *Provide sufficient educational, recreational, and community facilities to meet future needs*
- » *Provide, through zoning, areas for residential development to meet the need for housing, including affordable housing, and promote a variety of housing types*
- » *Promote the protection of the Township's natural resources*

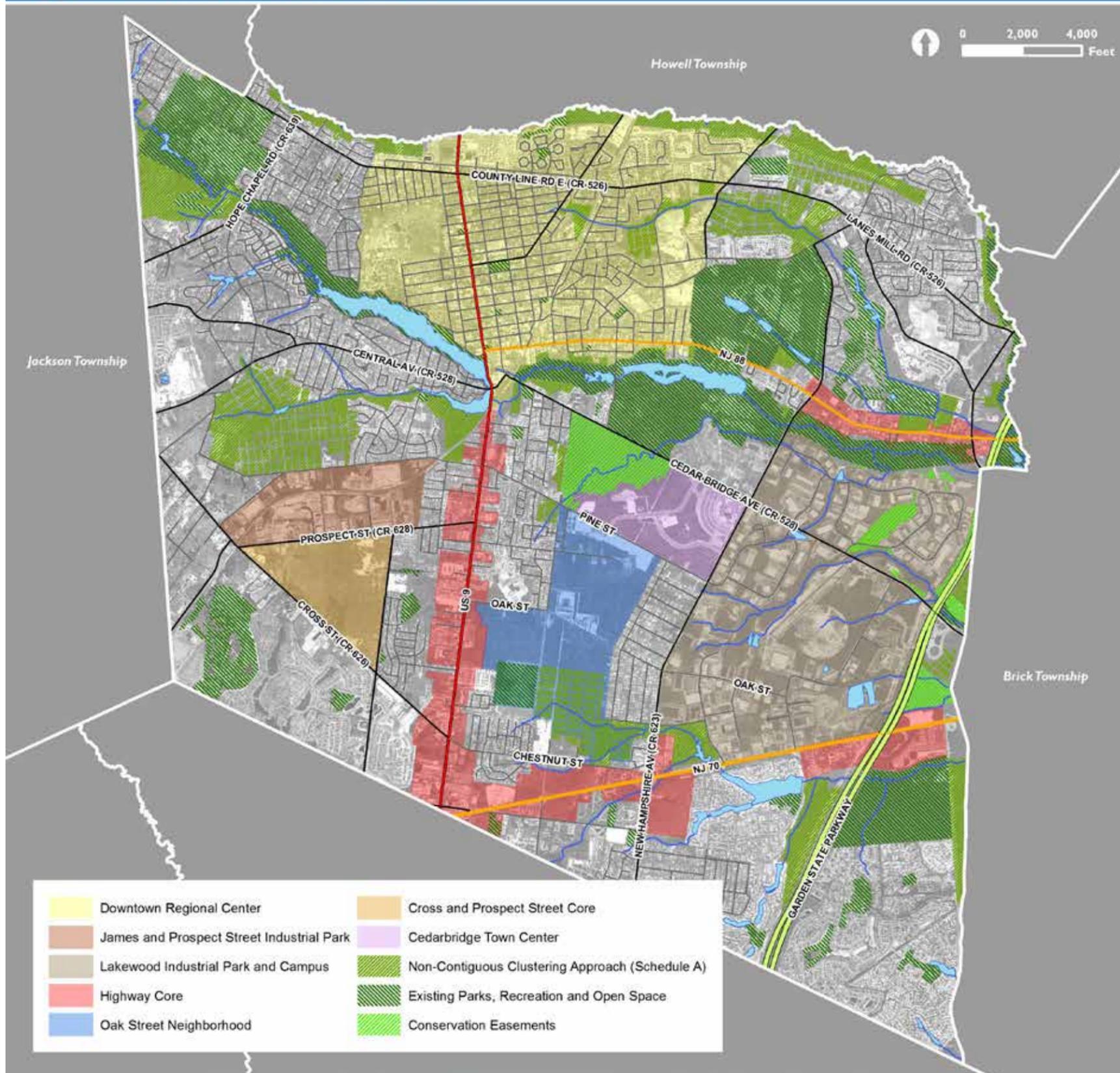
Consistent with this vision, Lakewood's Smart Growth Plan seeks to create an balance between growth and preservation strategies to improve communities, enhance transportation options, and create economic opportunity. The plan also strengthens community, promotes sustainable development policies, preserves open space and promotes environmental protection in a comprehensive planning framework.

Smart Growth Plan

Based on Lakewood's Community Vision to promote sustainable development, the Lakewood Township Smart Growth Plan creates a series of center-based development areas in the Township. These include:

- » A Regional Center encompassing the Township's existing downtown;

Figure 3.1: Smart Growth Plan



- » A proposed mixed-use Town Center at the Cedarbridge Redevelopment Area;
- » A new neighborhood in the areas north and south of Oak Street with affordable housing and schools;
- » A second mixed use “Core” between Cross and Prospect Streets west of Massachusetts Avenue;
- » Two Industrial Nodes recognizing the existing industrial parks in the Township; and
- » Four highway cores along the Township’s major transportation routes, including Routes 9, 70 and 88.

The use of centers, nodes, and cores to guide future development and redevelopment in Lakewood is consistent with the State Plan, which promotes a hierarchal, compact, and center based approach to development. In accordance with smart growth planning principles, the centers and cores will be compact walkable communities that provide a range of housing opportunities; a variety of transportation services; employment, shopping, and services proximate to residential uses; and open space and recreation amenities to serve the needs of the community. Highway cores will be designed to promote infill development and redevelopment consistent with smart growth planning principles. The elements of each of these plan components are described in detail in Section 4 of the Smart Growth Plan.

In addition, the Township proposes a comprehensive strategy to preserve and protect important open space areas throughout the Township, including the preservation of key habitat preservation areas, the adoption of a non-contiguous clustering ordinance to direct growth toward areas appropriate for growth and away from areas to be preserved, and a series of environment protection ordinances designed to protect critical natural resources.

Lakewood’s environmental preservation strategy includes the following:

- » Encourage preservation of open space through the application of a new non-contiguous clustering ordinance
- » Preserve key critical habitat areas and environmentally-sensitive areas within the Township.
- » Promote sustainable development practices through the adoption of environmental ordinances and conservation practices.

The Smart Growth Plan is economically sustainable. By providing opportunities for new commercial and industrial development and redevelopment the Plan will help Lakewood create a stronger tax base. Specifically, this Smart Growth Plan promotes economic revitalization and new investment in the downtown, provides new locations and opportunities for expanded retail and services in the proposed town center at Cedarbridge and in the Cross Street Core, and provides for the

growth and expansion of businesses in the industrial parks and highway cores.

State Plan Policy Map Changes

Lakewood is located largely within the Suburban Planning Area (PA2) on the State Plan Policy Map included in the 2001 State Plan, with two areas in the western portion of the Township delineated in the Fringe Planning Area (PA3), an Environmentally Sensitive Planning Area (PA5) along the Metedeconk River in the northern portion of the Township, and a Critical Environmental Site (CES) designation along the South Branch of the Metedeconk River, including Lake Carasaljo and Lake Shenendoah. (See Figure 3.2)

The State Plan envisions that localities within a PA2 will exemplify compact form of development, protect the character of existing stable communities, protect natural resources, redesign areas to prevent sprawl, and revitalize cities and towns. Lakewood's Smart Growth Plan is consistent with the general approach as described in the State Plan.

Lakewood has participated in the development of the State Plan goals, strategies and policies through the cross-acceptance process. Lakewood's Smart Growth Plan acknowledges that Lakewood will experience significant population growth in the coming decades and the need for a pragmatic and sustainable approach to address that growth through center-based development.

After examining the existing development patterns of the Township and anticipated future growth and development, Lakewood now seeks to include all areas in the proposed sewer service area in the Township as a PA2. All areas outside of the proposed sewer service area are proposed for PA5 or a CES designation. The proposed Centers, Cores, and Nodes as enumerated in this plan are also depicted on the State Plan Policy Map. (See Figure 3.3) Although not shown on Figure 3.3, existing parks and recreation sites will be identified on the State Plan Policy Map based on State Plan mapping criteria. The Township understands that the final State Plan Policy Map to be approved by the State Planning Commission will be the result of a dialogue between Lakewood and the Office of Planning Advocacy and relevant State agencies.

Figure 3.2: Existing State Planning Policy Areas

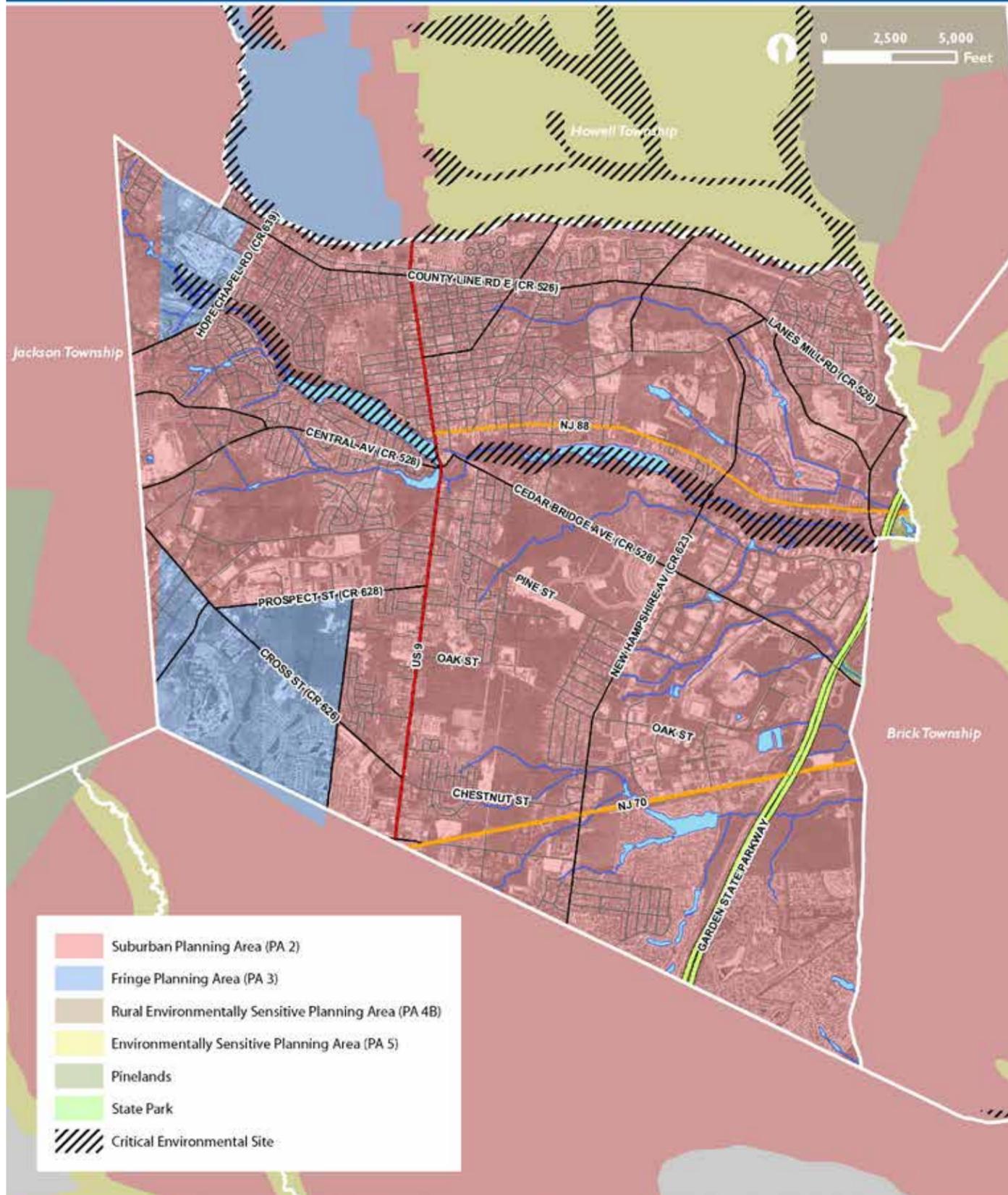
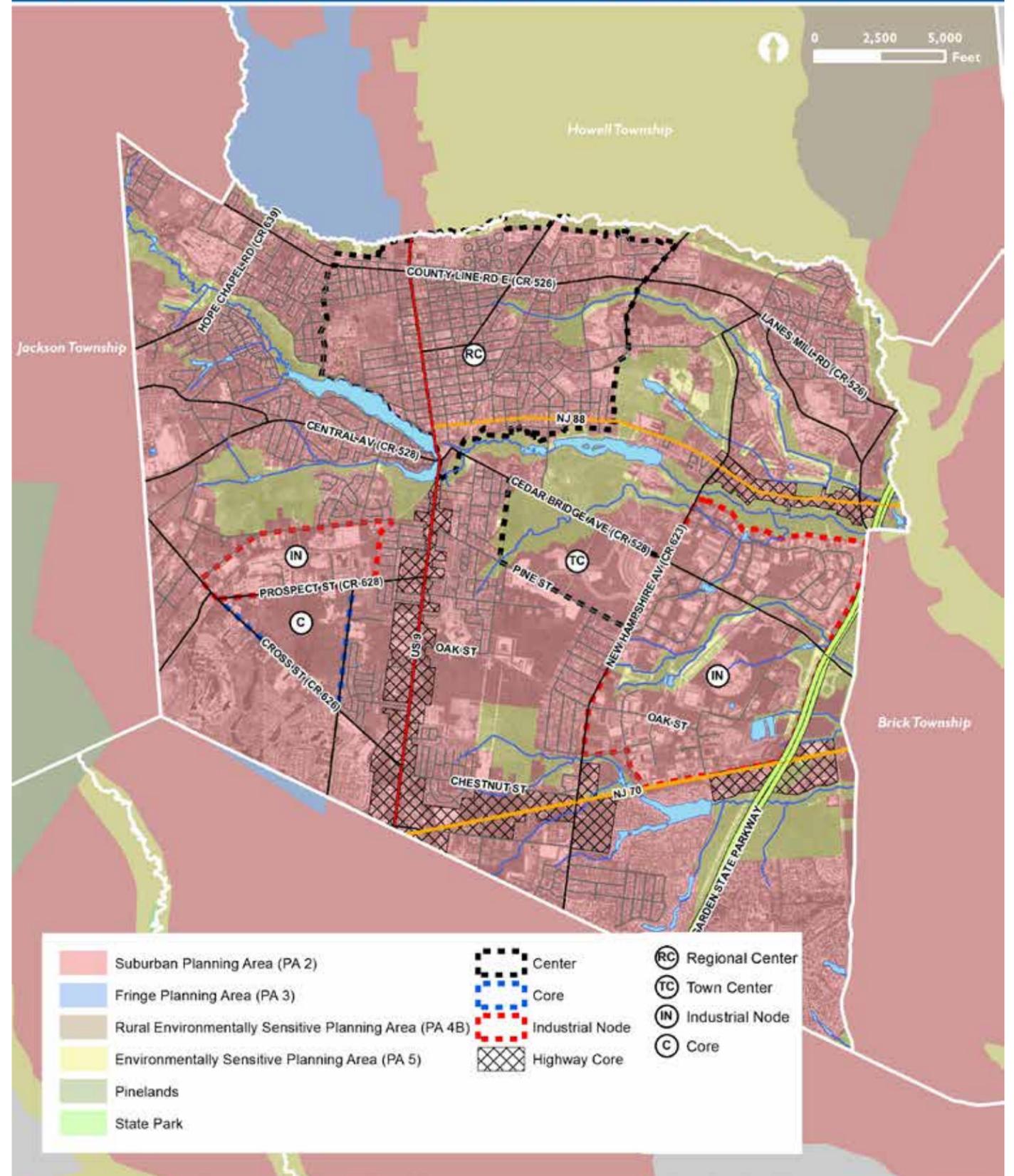


Figure 3.3: Proposed State Planning Policy Areas



4. Smart Growth Plan Components

Lakewood's Smart Growth Plan consists of a center-based development approach that concentrates future development into well-planned compact communities of place, promotes redevelopment and revitalization of Lakewood's traditional downtown, encourages new infill development and redevelopment along the Township's highway corridors, and protects critical environmental resources.

The Township proposes a series of centers, cores and nodes where most of Lakewood's anticipated growth will occur over the next two decades. These areas will be linked with a comprehensive transportation and bicycle and pedestrian network that will be designed to reduce congestion on the Township's road network and provide a variety of local and regional transportation options for Lakewood's residents. The plan also provides for a variety of community facilities, including new parks, located throughout the Township, as well as sufficient affordable housing to meet Lakewood's existing and future needs. The proposed development pattern, including proposed new center-based development, will be based on the principles of smart growth and characterized by walkability, a range of housing options, available transportation choices, and environmental sustainability.

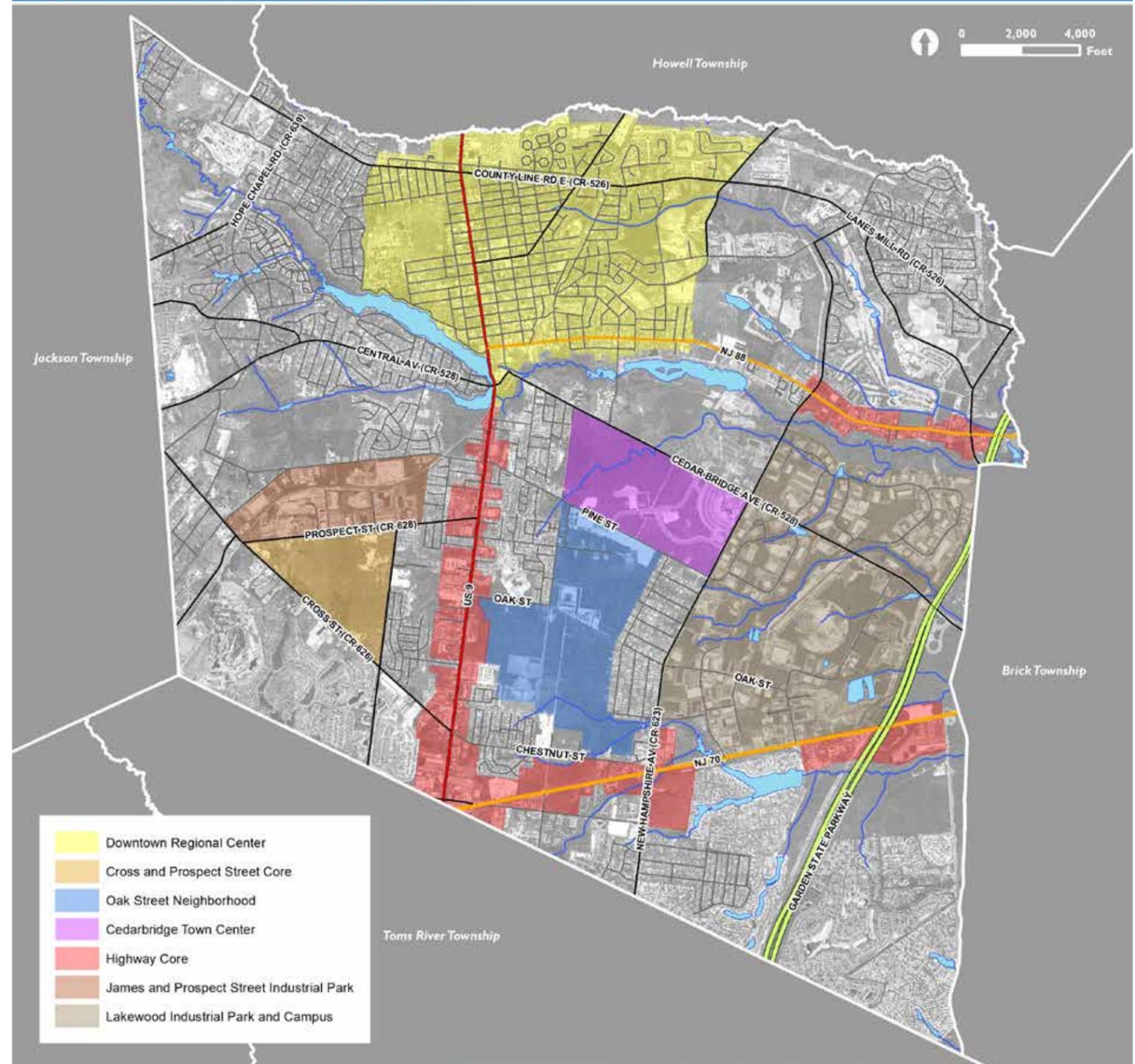
The Smart Growth plan components include the following:

- » Downtown Regional Center
- » Cedarbridge Town Center
- » Oak Street Neighborhood
- » Cross and Prospect Streets Core
- » Industrial Nodes
- » Highway Cores

The following sections describe each component in further detail and highlights key features of each.

This plan sets forth the community's vision for its future growth and development through 2030. This vision is based on promoting both smart growth and sustainability. As the Township shapes its smart growth planning future, Lakewood will continue to review and evaluate each plan component to ensure that it is effectively implementing this community vision. The Township also will work with the Office of Planning Advocacy and relevant State agencies, including the New Jersey Departments of Transportation and Environmental Protection in a partnership to implement the plan and promote the highest quality of design and sustainability for each of the plan components.

Figure 4.0: Plan Components



Downtown Regional Center

Lakewood's downtown is the historic heart of the Township and contains an identifiable commercial district surrounded by high to moderate density residential neighborhoods. Lakewood's downtown has historically served as the cultural, service, and employment center in the region. The downtown is supported by institutional, civic, recreational and other uses, including the municipal building, the post office, two institutions of higher education, a performing arts theater, and other community focal points.

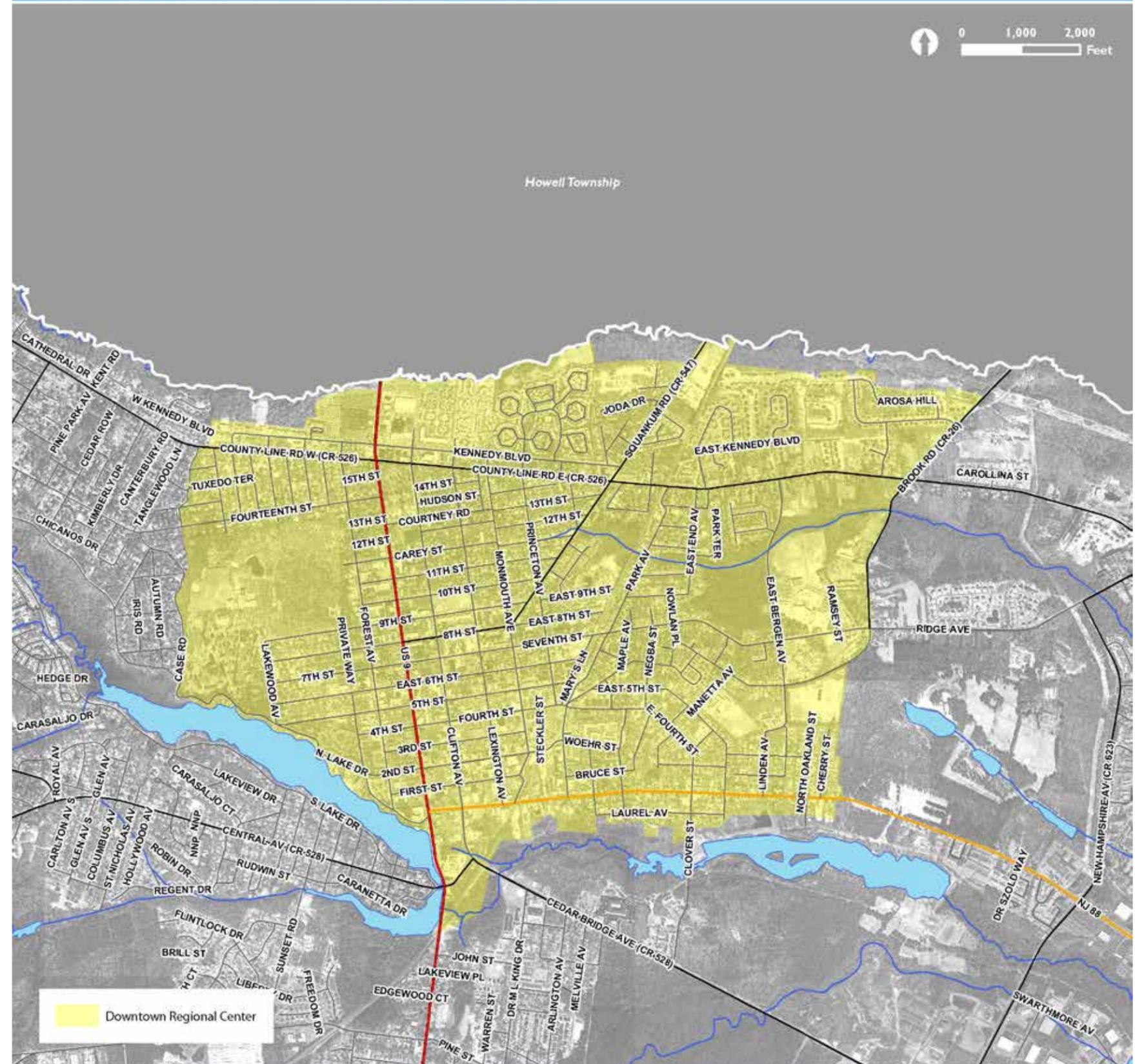
The general goals and objectives for the Downtown Regional Center are to promote continued revitalization and redevelopment of the downtown, provide sufficient parking, and enhance pedestrian circulation and safety. The main design approach for the Downtown Regional Center is to maintain the historic character of downtown through high-quality building design and ensure that it remains pedestrian-friendly through circulation and streetscape improvements.

Redevelopment and rehabilitation of the Township's downtown will include reclaiming brownfields for beneficial economic development, the adaptive reuse of existing developed sites, promoting infill development where appropriate, and by promoting smart growth planning principles.

The vision for the Downtown Regional Center includes:

- » A diversity of services, retail shops, and restaurants
- » A variety of housing types and range of affordability
- » A pedestrian-friendly downtown
- » Maintenance of the historic character of Lakewood's downtown
- » Improved pedestrian and bicycle connections
- » Traffic circulation improvements to improve mobility
- » Sufficient parking throughout the downtown to meet the needs of all users
- » A new multi-modal transportation center linking the regional and local bus transit network with a new passenger rail station
- » Ongoing redevelopment in the Franklin Street Redevelopment Area
- » Beautification of the commercial area in the northern portion of Route 9—a key gateway to the downtown
- » A comprehensive economic plan for the downtown commercial area
- » Coordination of traffic and parking improvements and new development with Georgian Court and BMG
- » Buffering of the railroad right-of-way
- » Sustainable design and green buildings practices for new buildings

Figure 4.1: Downtown Regional Center



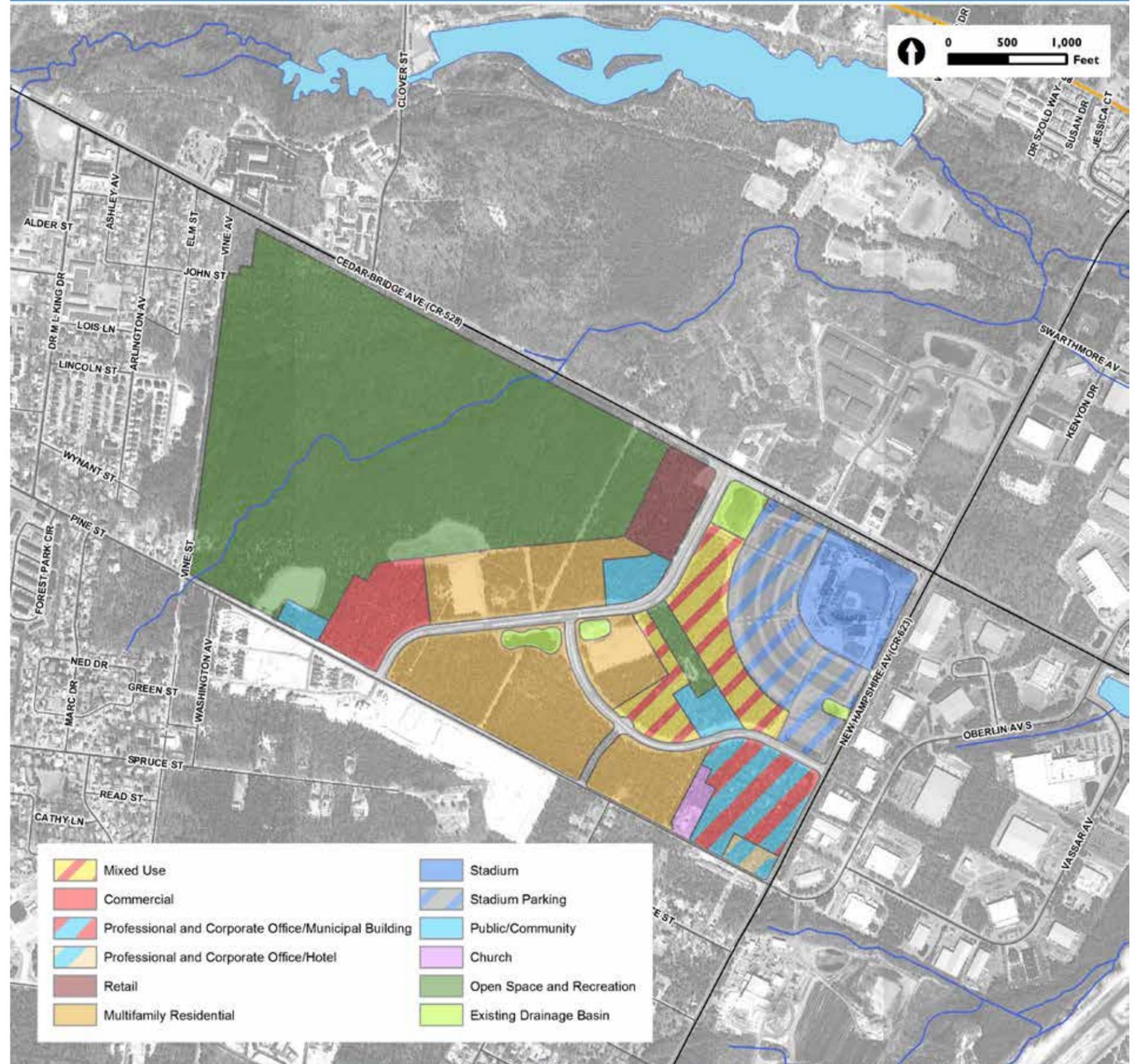
Cedarbridge Town Center

The Cedarbridge Town Center is bounded by Cedar Bridge Avenue to the North, New Hampshire Avenue to the East, Pine Street to the South, and Vine Street Avenue to the West. The area was previously designated in need of redevelopment by the Township. It incorporates the existing Blue Claws minor league baseball stadium and associated parking lot, as well as the two main collector roads. The area is located proximate to existing and planned residential neighborhoods, the Lakewood Industrial Park and Campus, the Lakewood Airport, planned retail commercial development to the North, and the Township's new Department of Public Works (DPW) facility. A substantial portion of the area has been preserved as open space.

Lakewood seeks to create a new mixed-use town center that will serve as a focal point for the community. The land use plan for the Cedarbridge Town Center includes:

- » A mix of residential, commercial, office, and public uses
- » A network of streets and roads that are pedestrian friendly and provide opportunities for bicycle transportation
- » A town green surrounded by mixed-use buildings and anchored by public and/or community buildings at each end to create a main street experience
- » A new boulevard and parkway linking the Cedarbridge Town Center to the Oak Street Neighborhood
- » Local transit stops providing connections to the rest of the Township
- » Commercial uses that serve the needs of Township residents as well as providing a regional commercial attraction
- » The preservation of substantial amount of open space for passive recreation and habitat protection
- » Sustainable design and green buildings
- » A new municipal complex to serve community needs
- » A range of housing types, including affordable housing

Figure 4.2: Cedarbridge Town Center



Oak Street Neighborhood

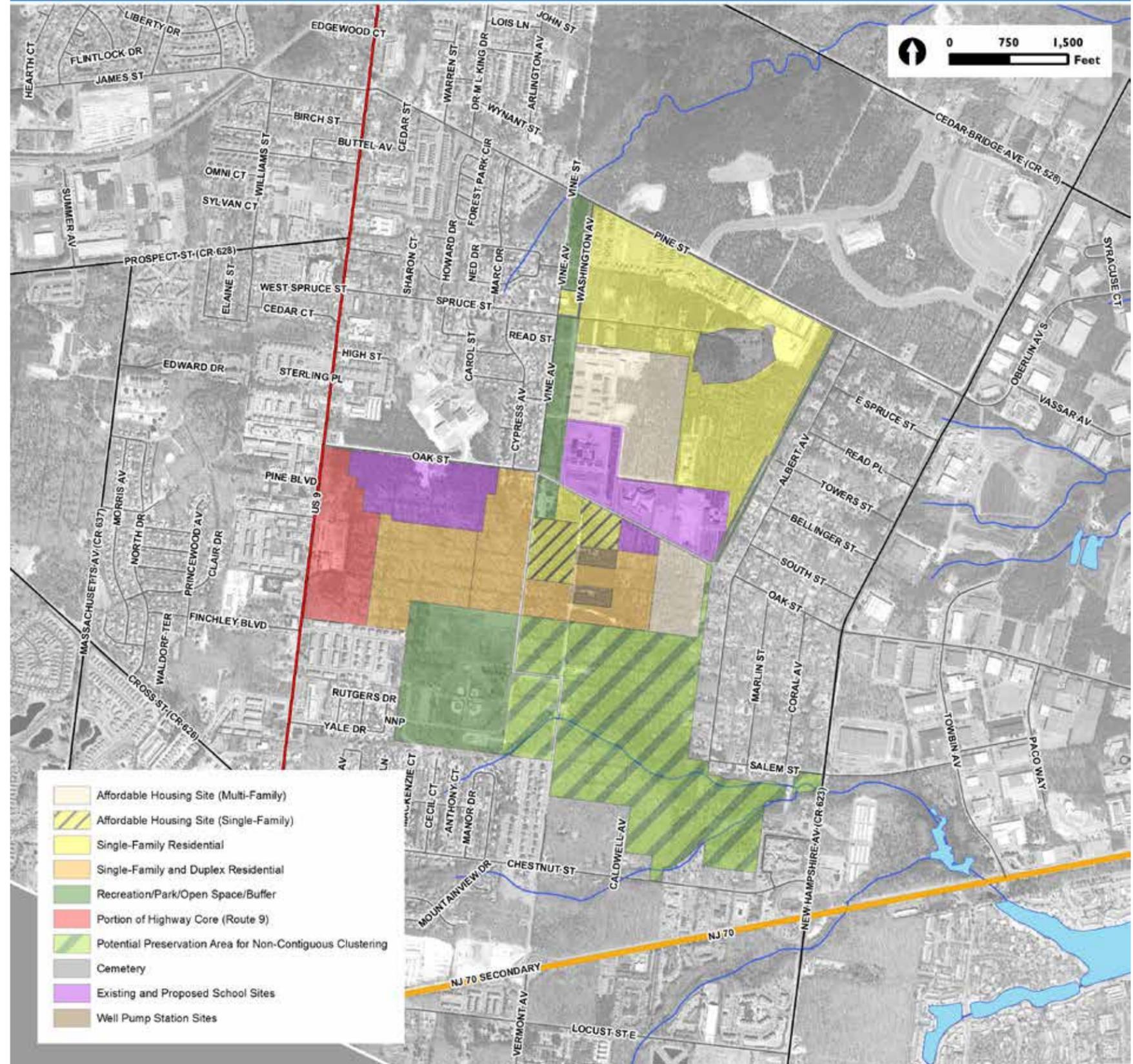
The Oak Street Neighborhood is located to the east of Route 9 in the south-central portion of Lakewood and is generally bounded by Pine Street to the North, and the Kettle Creek to the South. This area of the Township includes three affordable housing developments that have been approved by the Township, as well as several new schools and the recently opened John F. Patrick Sports Complex. A proposed habitat preservation area is located along and to the north of the Kettle Creek in the southern part of this area.

The intent is to incorporate existing and approved developments and community facilities into a comprehensive and coordinated neighborhood plan that promotes smart growth and sustainability. Proposed uses include a variety of new residential uses, including single-family housing and duplexes; affordable housing; a local park and recreation facility; neighborhood schools, and public amenities and services. The Oak Street Neighborhood will be linked to other portions of the Township through additional road improvements, pedestrian and bicycle linkages, and local transit stops. A new boulevard and parkway will link Oak Street to the Cedarbridge Town Center to the north. Proposed mixed-use areas in the Highway Core along Route 9 will include commercial development to meet the needs of the residents of the area.

The land use plan for the Oak Street Neighborhood includes:

- » A mix of residential and public uses
- » New residential neighborhoods to accommodate growth
- » A variety public uses
- » Areas reserved for new schools and related facilities
- » Streets and roads that accommodate vehicles, pedestrians and bicyclists
- » A new boulevard and parkway to the Cedarbridge Town Center
- » Local transit connections to the other areas of the Township
- » A substantial area proposed for preservation through the use of the Township's proposed non-contiguous cluster ordinance along and to the north of the Kettle Creek to preserve habitat and provide passive recreation opportunities
- » Sustainable design and green buildings
- » Affordable housing to meet future Township needs

Figure 4.3: Oak Street Neighborhood



Cross and Prospect Street Core

The Cross and Prospect Street Core is located in a triangular tract in the western portion of the Township formed by Prospect Street on the North, Cross Street on the South, and Massachusetts Avenue on the East. There are approved multi-family residential townhouse developments in the northeastern portion of the core, several light industrial uses in the western end of the core, and municipal uses (including a shooting range) adjoining Massachusetts Avenue.

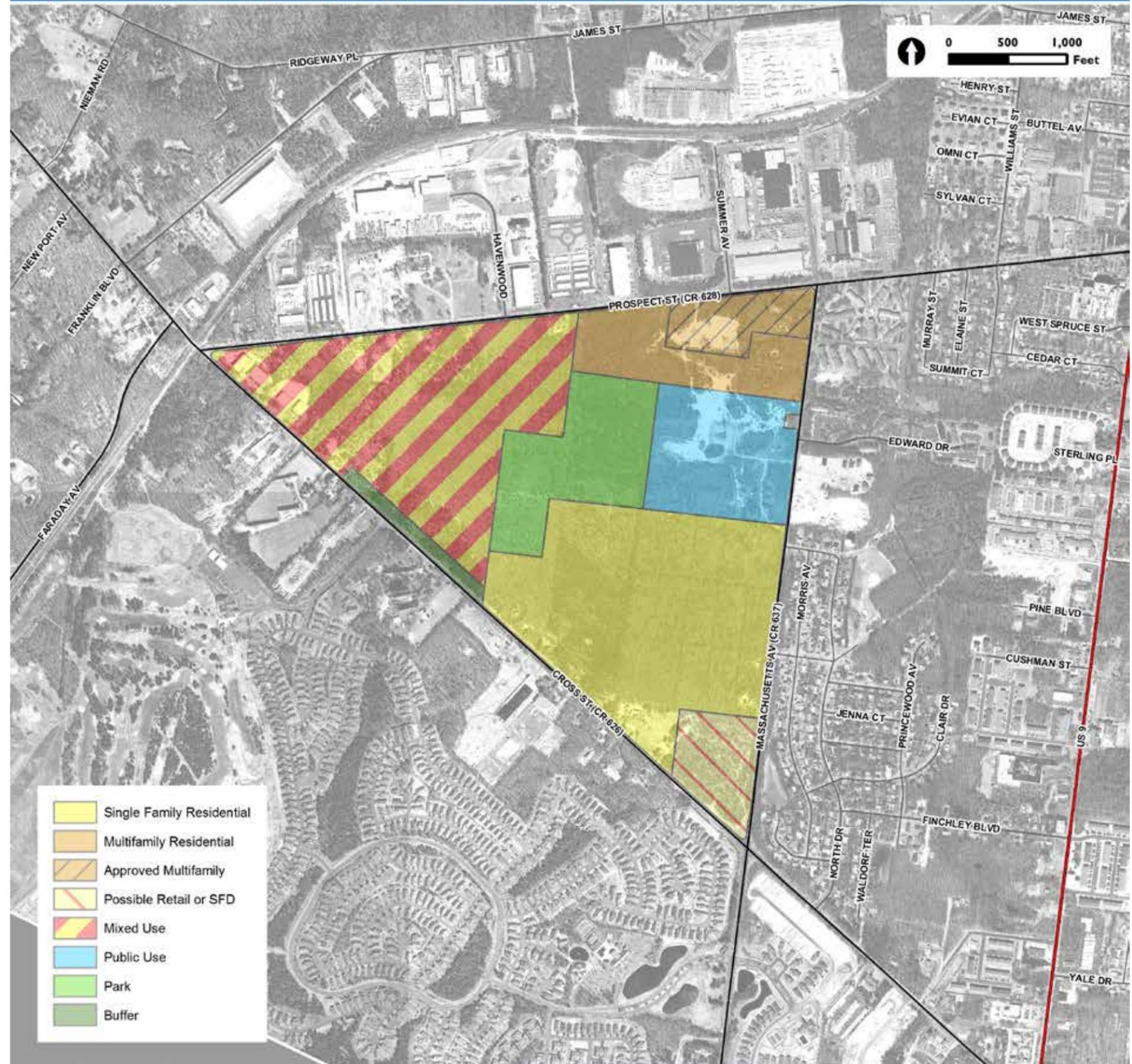
A portion of the core (not shown on the land use plan map) is located across Cross Street from the triangle area in the M-I Industrial District and Township UEZ. This area is proposed to remain in its industrial designation pending more long-term planning analysis and study of its future use and relationship to the proposed core and adjoining residential areas.

The intent is to create a new mixed-use core that incorporates the principles of smart growth and promotes sustainable development practices. The overall approach is to create a transition of densities and intensity of use, with buffers and lower densities to the south and east adjacent to adjoining neighborhoods and higher densities and mixed-use to the west and north along Prospect Street across from the existing industrial park. Proposed uses include a variety of new residential uses, including single and multi-family housing; a mixed-use area; a centrally-located new park serving the needs of the area; neighborhood commercial areas; and public amenities and services.

The land use plan for the Cross and Prospect Street Core includes:

- » A mix of residential, commercial, and public uses
- » A single-family residential neighborhood in the southeastern portion
- » Multi-family residential uses in the northwestern portion of the core
- » Mixed-use area in the western portion of the core
- » A new centrally-located neighborhood park
- » A potential neighborhood commercial area at the intersection of Cross Street and Massachusetts Avenue
- » Streets and roads that accommodate vehicles, pedestrians and bicyclists
- » Local transit connections to the other areas of the Township
- » Maintenance of a minimum 100 foot vegetative buffer along Cross Street, with potentially larger buffer areas to encourage further clustering of development away from the Cross Street area
- » Sustainable design and green buildings

Figure 4.4: Cross and Prospect Street Core



Based on questions and input during the public hearings, several changes and clarifications are proposed:

- » No new vehicular roads are proposed to be provided into the Core from Cross Street, particularly along the area designated for mixed-use. All future access into the mixed-use area is proposed from Prospect Street. Access to the single-family area is proposed from Massachusetts Avenue.
- » No bus station, transit center, or rail station is proposed within the Core. The Plan encourages local transit connections in site design, including bus shelters, bicycle racks, drop off areas and similar facilities. The Township's preferred alternative for a new rail station for the proposed MOM rail line is in the downtown proximate to the existing bus station. However, should the downtown site be deemed unfeasible or if long-term growth and ridership levels warrant, the Township may consider a future rail station in the industrial park area north of Prospect Street, but not within the boundaries of the Cross and Prospect Street Core.
- » The proposed buffer along Cross Street shall be a minimum of 100 feet in width. However, the buffer may be increased to encourage further clustering of development away from Cross Street toward Prospect. In addition, no roads are proposed through the buffer. However, a path may be developed through the buffer to provide pedestrian and bicycle access to the proposed park in the Core.

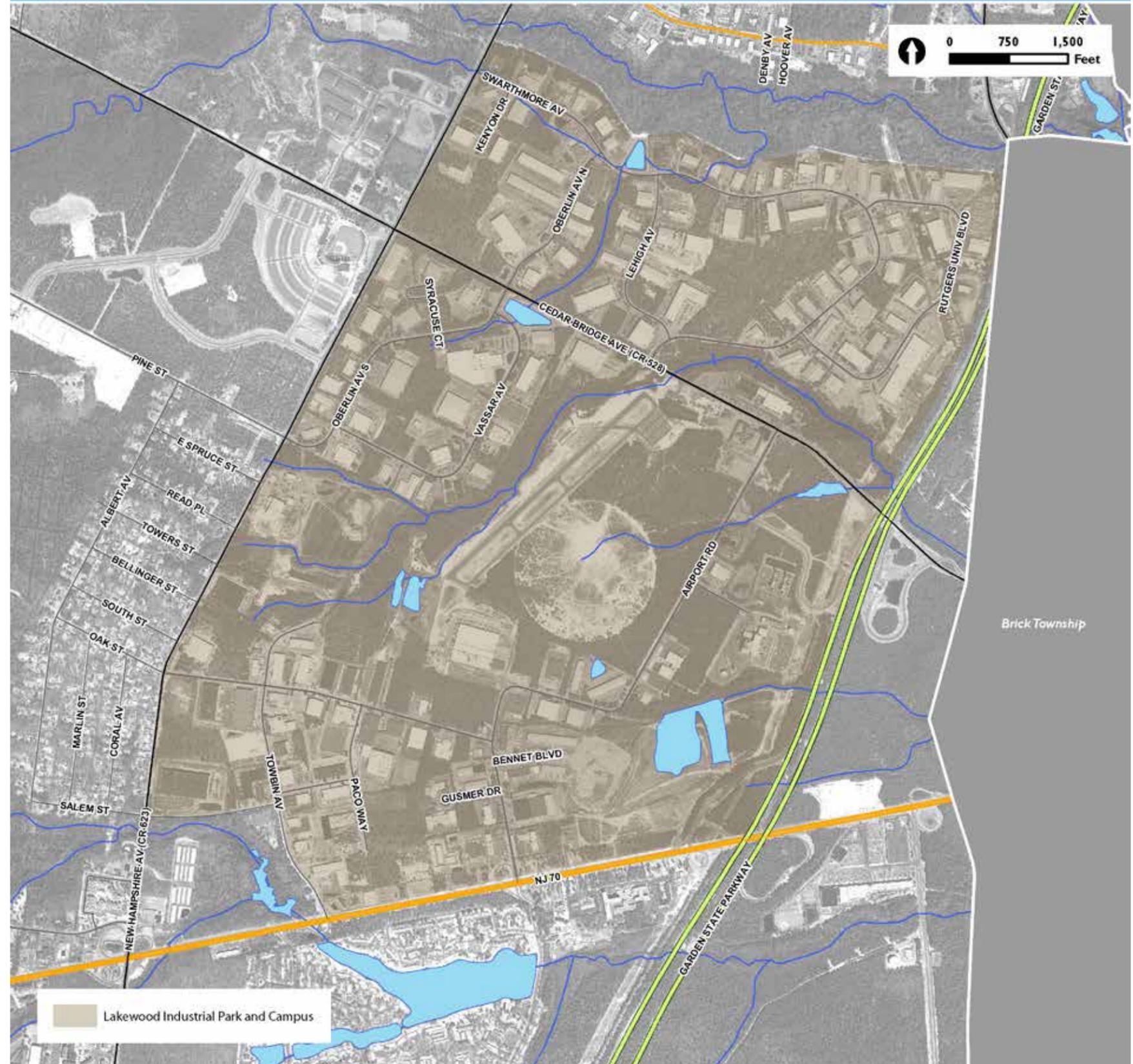
Industrial Nodes

Lakewood's Smart Growth Plan includes two Industrial Nodes corresponding to its current Industrial Parks.

The first of the two nodes includes the Lakewood Industrial Park and Campus, which also includes the Lakewood Airport. The second industrial node includes the James/Prospect Streets Industrial Park. As recognized Industrial Nodes in the State Plan, the industrial parks serve as a regional and local center of employment. The industrial parks are managed through a combination of the Lakewood Development Corporation, the Lakewood Industrial Commission, and the Lakewood Township Airport Authority. The industrial nodes are also located in the Township's Urban Enterprise Zones.

The State Plan recognizes that these nodes serve an important purpose for the state and regional economy by providing a significant source of employment and accordingly recommends that these uses be protected and supported. Consistent with the criteria of the State Plan, the two nodes are located within existing sanitary sewer areas and have water supply services. The James/Prospect Street

Figure 4.5: Lakewood Industrial Park and Campus

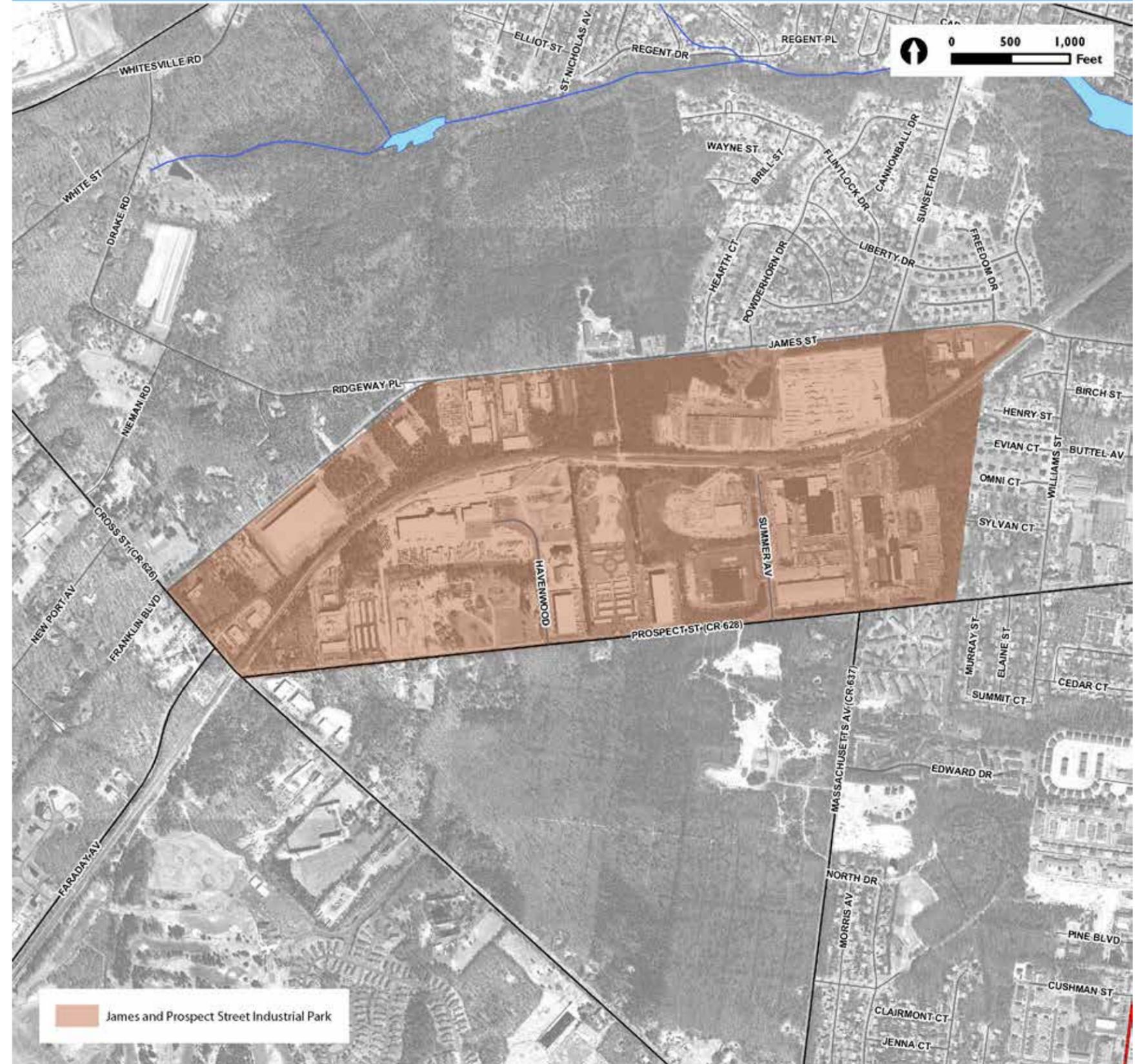


Industrial Park is served by freight rail to facilitate alternative methods of goods movement. Both nodes are located in close proximity to highway transportation corridors with access to the regional highway network.

Lakewood intends to retain and support its industrial nodes through the following actions:

- » Upgrade the entrances and roadways in the parks to facilitate circulation and improve the aesthetic appeal of the area
- » Promote Lakewood's industrial parks and UEZ through advertising
- » Explore the development of a "high-tech cluster" within the Lakewood Industrial Park or surrounding area to increase the vitality of the Township's economic base
- » Revise UEZ boundaries to include additional areas as necessary
- » Support multi-nodal connections to the area such as Bus/shuttle stops
- » Develop pedestrian and bicycle pathways where practical and support outdoor amenities for industrial park workers
- » Limit infiltration of non-business uses in the industrial parks
- » Promote tax ratables
- » Preserve habitat areas where appropriate
- » Promote development in a more environmentally-sensitive manner through green building techniques

Figure 4.6: James and Prospect Street Industrial Park



Highway Cores

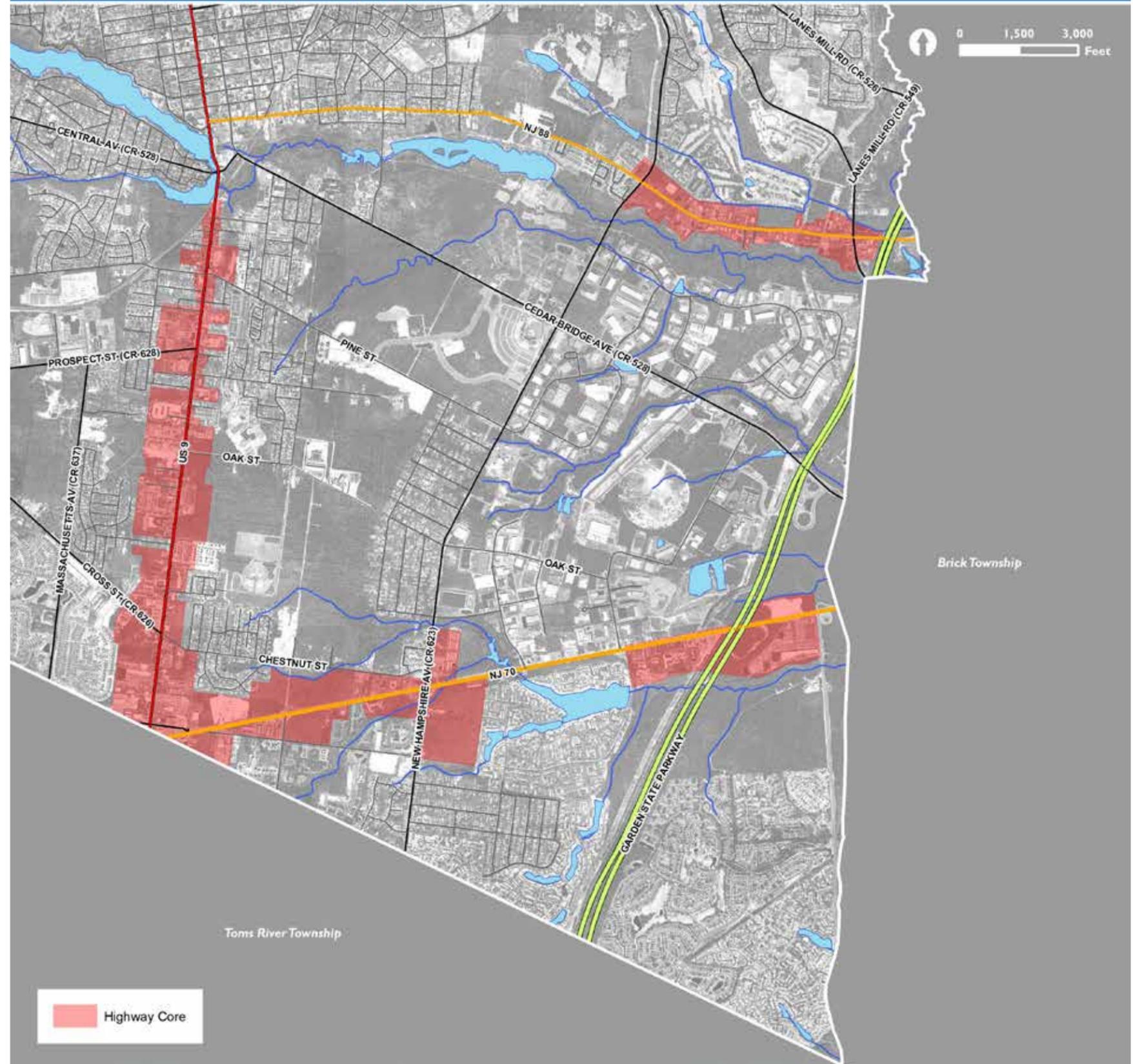
Lakewood's highway cores are situated along the major arterial roadways of the Township and are included in the Urban Enterprise Zone. They include portions of Route 9, Route 88, and Route 70 and form the primary highway access routes through the Township. They also link the Township's neighborhoods and commercial areas to other portions of the community. Along Route 9, the Kimball Medical Center is a local and regional employment center and service provider. A new hospital support zone is proposed for the area surrounding the medical center. Other smaller businesses and retail centers are located on this highway and are located in the proposed core. Route 70 includes a variety of commercial businesses that serve local and regional shopping needs. Two cores are proposed along Route 70. The transportation corridor along Route 88 includes a variety of auto dealers and the Ocean County Park and Lake Shenandoah. The commercial portion of this corridor is proposed as a core.

Lakewood envisions that these highway cores will be transformed through improved site design, as well as infill development and redevelopment that promotes smart growth and sustainability. The goal of the highway core design is to improve Lakewood's ability to provide housing and jobs to its residents, to protect and improve the environment, to promote transit and transportation opportunities, and to improve the quality of life for Lakewood's population.

Specific recommendations for the highway cores include:

- » Encourage smart growth consistency and sustainability in the design of new development
- » Employ gateway treatments to improve the aesthetic character of the core and provide a welcoming experience to Lakewood
- » Create connections to adjoining local neighborhoods that promote walking and bicycle uses
- » Promote redevelopment opportunities where appropriate
- » Promote transit use in the cores through land use development and site design that provide opportunities for transit
- » Provide areas for mixed use development including residential and commercial uses
- » Adopt context sensitive design standards
- » Implement access management techniques and design consistent with State regulatory requirements
- » Improve the design of the roadways to increase their aesthetic appeal
- » Attract professional offices and medical/health support facilities surrounding the Kimball Medical Center

Figure 4.7: Highway Cores

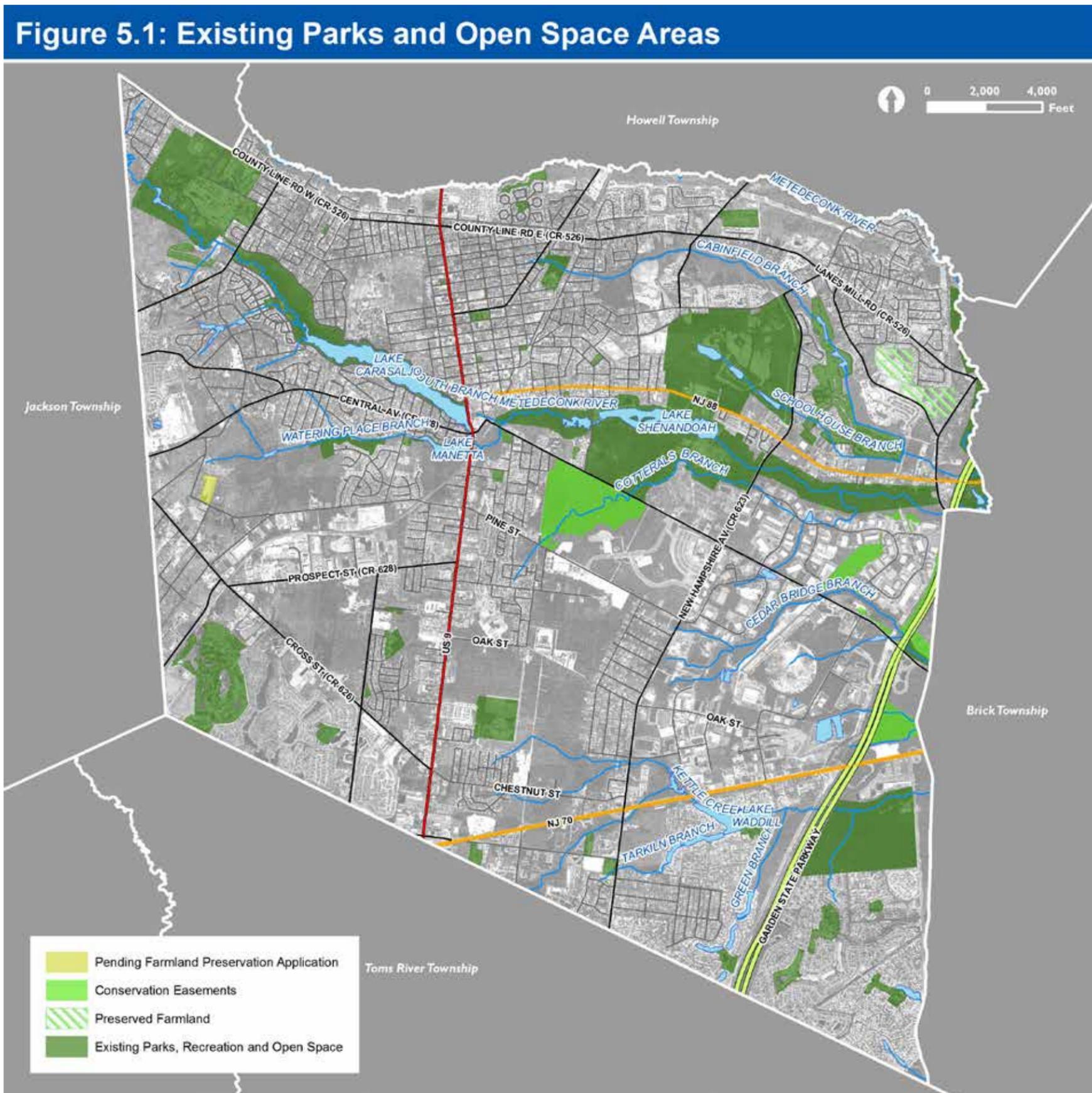


5. Environmental Preservation Strategy

Lakewood’s environmental preservation strategy presents a framework for planning and zoning decisions that protect natural resources while at the same time promoting sustainable development. This community-based environmental preservation strategy was developed using the Township’s adopted Natural Resource Inventory and through technical assistance from the New Jersey Department of Environmental Protection (NJDEP).

Existing Parks and Open Space

Nearly one third of Lakewood’s land area is dedicated for recreation and open space. To serve the needs of the Township residents, Lakewood will continue to protect and preserve its existing open space and maintain and improve where needed its existing recreation areas. Lakewood will list all existing Township-owned parks and open space on Lakewood’s Recreation and Open Space Inventory.



Proposed Environmental Preservation Strategy

To enhance and expand its open space and recreation resources, the Township proposes a comprehensive environmental preservation strategy that includes new parks to serve the recreational needs of the current and future residents of Lakewood and the preservation of large contiguous areas of open space to support wildlife and vegetative species habitat. Based on the Township's proposal, over a thousand new acres of open space will be preserved in the Township and a variety of new active recreation areas and parks will be added to the Township's inventory.

Areas proposed for preservation include:

- » Lands along Kettle Creek near Route 70 and in the proposed Oak Street Neighborhood
- » Crystal Lake Preserve Area
- » Wetlands and wooded areas in the Cedarbridge redevelopment area
- » Areas within Lake Shenandoah Park adjoining Cedarbridge Avenue
- » Wetlands north of Cedarbridge Avenue in the Lakewood Industrial Park
- » Undeveloped areas along Shorrock Street to be combined with existing Green Acres preserved land
- » Lands east of the Parkway adjoining the Township boundary with Brick Township
- » A portion of the former Department of Public Works site along the Cabinfield Branch

In addition, new public park facilities are proposed in the Oak Street Neighborhood and the Cross and Prospect Street Core.

As part of the overall preservation strategy, a new non-contiguous clustering ordinance is proposed to provide additional private incentives to direct growth to appropriate locations and prioritize the preservation of open space in areas where such preservation is most beneficial. This is described in detail in the following section of this plan.

Figure 5.2: Comprehensive Environmental Strategy



Non-Contiguous Clustering Approach

To assist in the implementation of the Township’s preservation strategy, Lakewood will adopt a new non-contiguous clustering ordinance to direct development to areas identified for future growth in the Township’s Smart Growth Plan and preserve open space areas prioritized for preservation. Lakewood’s non-contiguous clustering approach is intended to provide a mechanism in which key habitat preservation areas and open space areas are preserved in large contiguous tracts.

Non-contiguous clustering is permitted under the Municipal Land Use Law (MLUL). Non-contiguous clustering does not transfer development rights from one property to another, but identifies areas to be developed and preserved in a planned approach on two non-contiguous parcels that are developed as a “single entity.” In both contiguous and non-contiguous clustering permitted development is shifted to and concentrated in one area of the tract, with the remaining areas preserved as open space. While the overall gross residential density or amount of non-residential development remains the same, the net density or intensity is increased in the area where the development is concentrated. Simply put, a contiguous and non-contiguous cluster works in the same way, with the exception that a non-contiguous cluster will include a tract with one or more non-contiguous properties.

The non-contiguous clustering ordinance will be adopted by the Township Committee as part of local Unified Development Ordinance (UDO) creating a new planned development district that permits and establishes the criteria for reviewing the non-contiguous cluster development.

Where appropriate in areas under CAFRA jurisdiction, the open space component of the non-contiguous cluster could be used for tree save and habitat protection pursuant to CAFRA review and approval. In addition, parcels will be considered as one tract in the application before the Planning Board and under CAFRA review. The ordinance will contain “reasonable criteria” to fully evaluate the proposed non-contiguous clustering approach including areas that are preferable for designating as the open space and development components of the planned development.

This non-contiguous clustering ordinance will identify proposed “Schedule A” and “Schedule B” areas and specify the criteria by which proposals for planned development using non-contiguous clustering can be evaluated. Schedule A and B properties are categorized as follows:

“Schedule A” Properties Include:	“Schedule B” Properties Include:
<ul style="list-style-type: none"> » Large contiguous open space areas, » Areas identified for future preservation (e.g., Crystal Lake Preserve), » Potential habitat areas, » Large undeveloped woodland tracts, » Watersheds, headwaters, and stream corridors » Properties adjoining other environmentally sensitive areas, preserved open space, or parks. » Both Township-owned and privately-owned properties 	<ul style="list-style-type: none"> » Properties located in the Oak Street Neighborhood and Cross/Prospect Street Core » Properties located in the highway cores (Route 9, 70 and 88) » Other areas in Suburban Planning Area (PA2): <ul style="list-style-type: none"> – Undeveloped or underutilized with development potential – Development must promote smart-growth principles – Within a sewer service area

Wetlands, environmentally sensitive, or otherwise environmentally constrained land should not be included as Schedule A properties.

To use the non-contiguous cluster option in the Core or Node the area proposed for development must be developed in accordance with smart growth principles enumerated in the ordinance or the center-based development approach permitted in the respective areas.

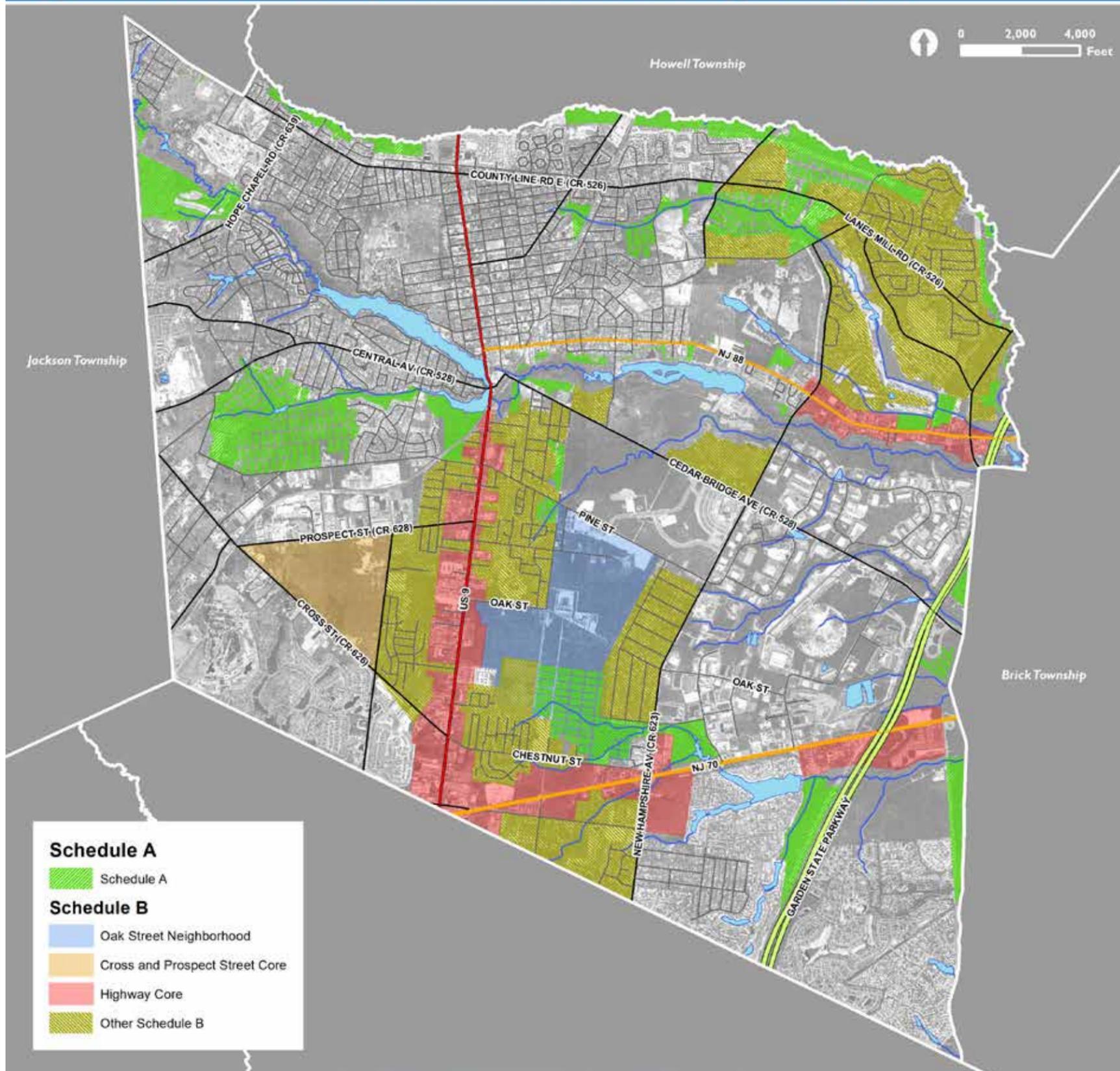
Other Environmental Preservation Strategies

The Township seeks to promote its environmental preservation strategy through the creation of sustainable development practices. Accordingly, Lakewood will adopt the following additional plans and ordinances:

- » Open Space and Recreation Plan Element
- » Riparian Corridor Protection Plan and Ordinance
- » Water Conservation Plan and Ordinance
- » Wellhead Protection Plan and Ordinance

Lastly, Lakewood will consider how to better utilize nationally accepted Green Building Standards in its design standards, particularly in the new Centers, Cores, and Nodes, and review of development within the Township.

Figure 5.3: Proposed Non-Contiguous Clustering Approach



6. Transportation Strategy

The intent of the Transportation Strategy is to improve the road network throughout Lakewood to facilitate and disperse vehicular movements within the Township and reduce congestion by reducing the need to access Route 9 or the other major highways. This will include extending and connecting the existing road network at key locations as specified in this plan. This strategy also will include the development of mixed-use cores and satellite retail and service areas as part of smart growth development strategy that provides shopping and service opportunities proximate to existing and planned residential neighborhoods, including the Township’s proposed affordable housing sites.

The Township will further emphasize multi-modal transportation alternatives, such as park and ride facilities, mass-transit, pedestrian linkages, and bikeways. The plans for the centers, cores, and nodes will encourage local transit connections in site design through bus shelters, bicycle racks, drop-off areas and similar facilities. Transit opportunities to be explored include expansion of existing bus services and routes within the Township, local jitneys or van and shuttle services, and the location of a new train station in Lakewood’s downtown in association with the proposed MOM rail line. Transit-oriented development opportunities, including residential and mixed-use development and redevelopment proximate to the train station will be explored.

Lakewood Township performed two major transportation and circulation-related studies in 2008 to address circulation issues. The Downtown Circulation and Pedestrian Study focused on short and long term improvements in the downtown center to improve vehicle and pedestrian circulation. The second study targeted parking needs and recommendations for increase downtown parking facilities. Improvements to Route 9 are a key Township priority. Lakewood will continue to work with the NJDOT to implement a strategy to improve circulation and safety along this corridor.

Figure 6.1 (Traffic Count Locations and Volumes) illustrates key available traffic information related to the existing roadway network. The existing traffic volumes were compiled from both NJDOT and Ocean County databases covering the most recent 3-year period. It is noted that the existing traffic volumes follow a typical hierarchy, with the State highways carrying larger amounts of regional traffic compared to the County Roads. The anticipated future trip generation related to the various redevelopment areas associated with the Smart Growth Plan are also identified to illustrate the relative intensity of development and the associated traffic demand. It is noted that the majority of anticipated traffic is contained within the Oak Street Neighborhood, Cross

Figure 6.1 Traffic Count Locations and Volumes Township of Lakewood Ocean County New Jersey

Legend

- OCEAN COUNTY ADT COUNT
- OCEAN COUNTY INTERSECTION COUNT
- NJDOT ADT COUNT
- NJDOT INTERSECTION COUNT
- CEDARBRIDGE TOWN CENTER
- CROSS AND PROSPECT STREET CORE
- DOWNTOWN REGIONAL CENTER
- HIGHWAY NODE
- JAMES AND PROSPECT STREET INDUSTRIAL PARK
- LAKEWOOD INDUSTRIAL PARK AND CAMPUS
- OAK STREET NEIGHBORHOOD

ADT: 3,024 NEW TRIPS GENERATED BY DEVELOPMENT

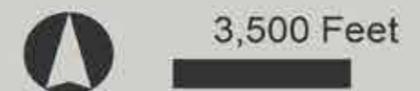
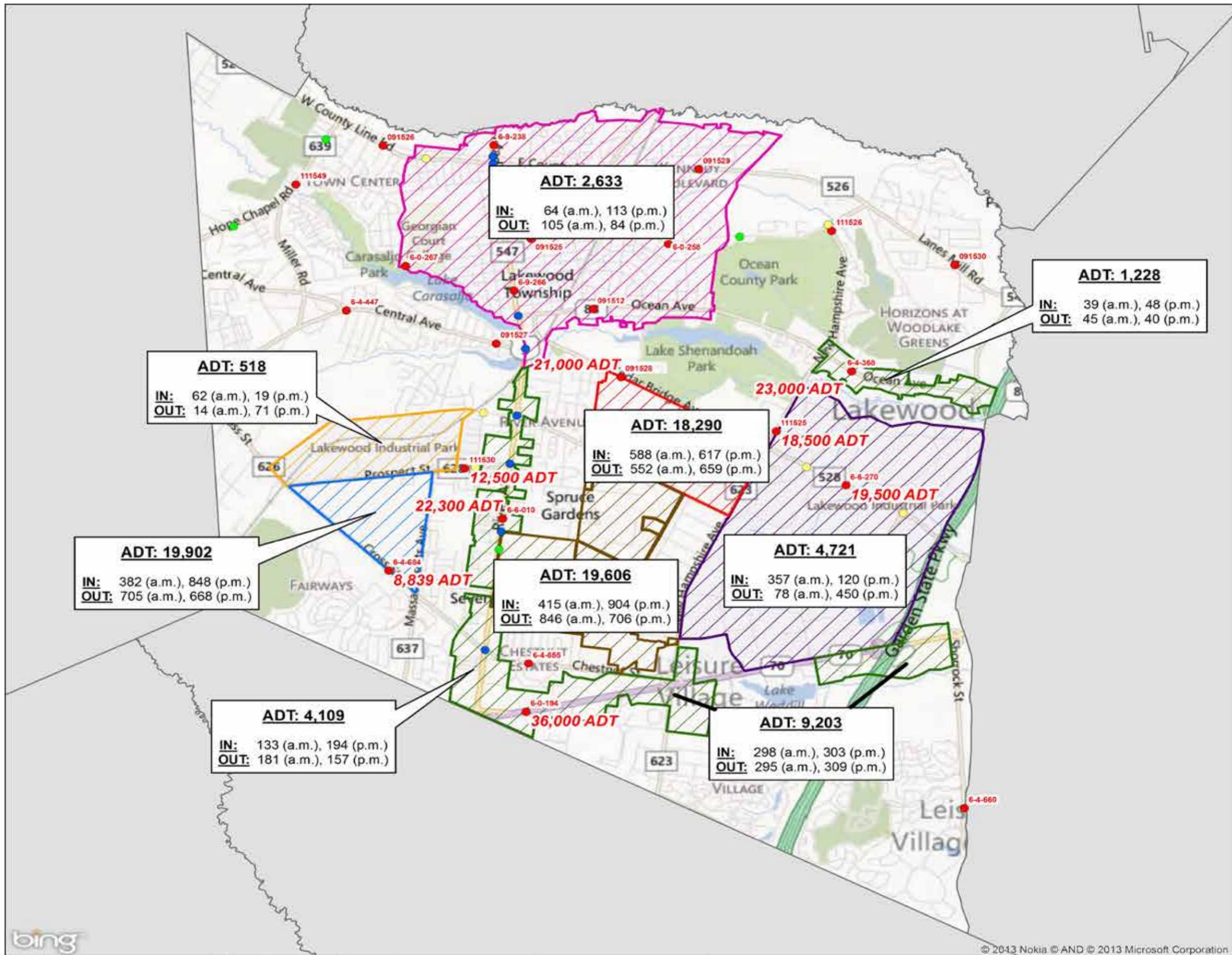
IN: 113 (a.m.), 146 (p.m.)

OUT: 137 (a.m.), 123 (p.m.)

19,500 ADT NJDOT TRAFFIC COUNT LABEL

6-4-143 NJDOT TRAFFIC COUNT IDENTIFIER LABEL

*ADT = Average Daily Traffic



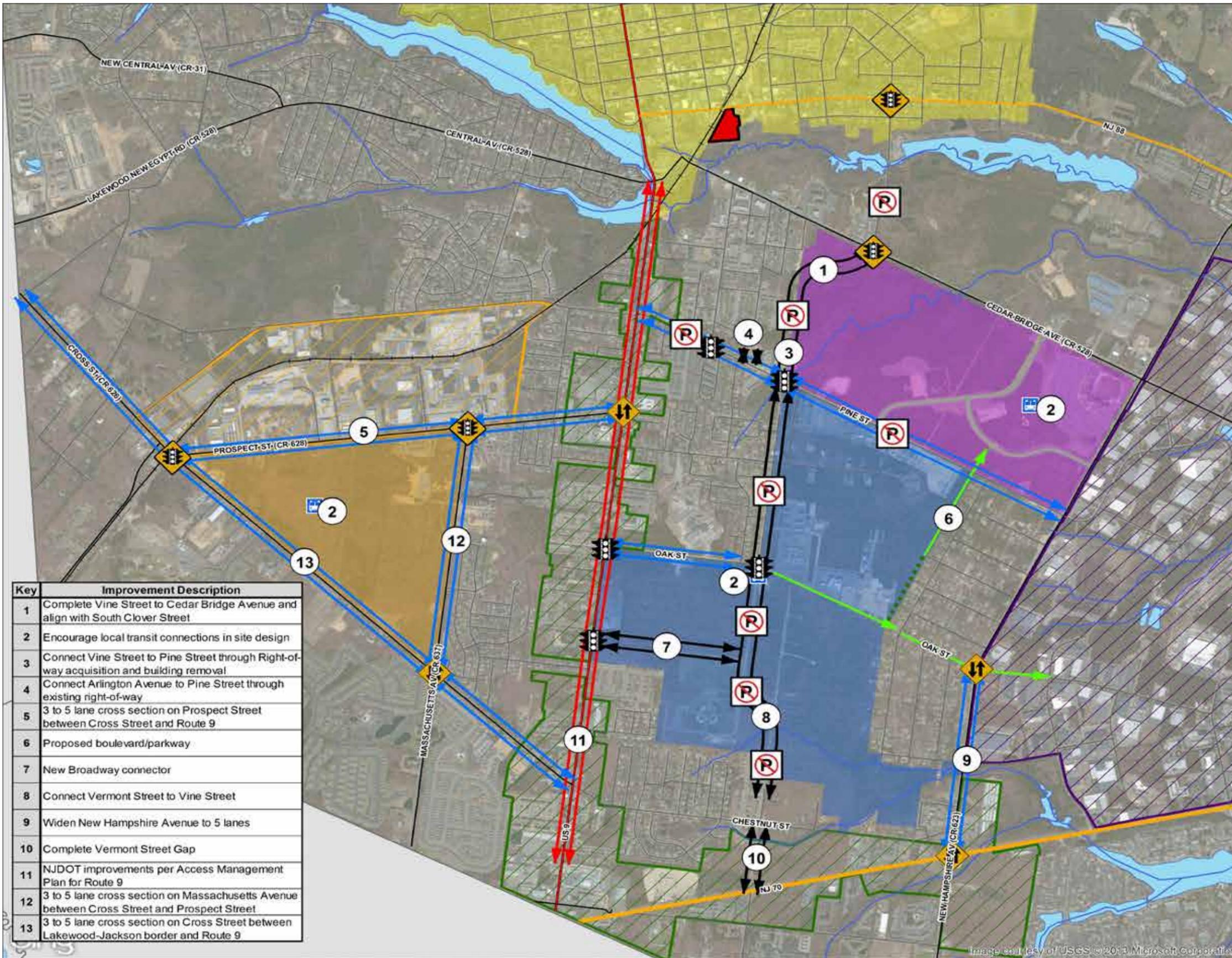
T&M
ASSOCIATES

11 Tindall Road
Middletown, NJ 07748-2792
Phone: 732-671-6400
Fax: 732-671-7365

NOTE: This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State authorized.

Prepared by: ARR, 10/1/2013
Source: NJGIN, NJDEP, NJDOT, Ocean County, Lakewood Township
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**Figure 6.2
Township Wide
Circulation
Improvements
Township of Lakewood
Ocean County
New Jersey**



Key	Improvement Description
1	Complete Vine Street to Cedar Bridge Avenue and align with South Clover Street
2	Encourage local transit connections in site design
3	Connect Vine Street to Pine Street through Right-of-way acquisition and building removal
4	Connect Arlington Avenue to Pine Street through existing right-of-way
5	3 to 5 lane cross section on Prospect Street between Cross Street and Route 9
6	Proposed boulevard/parkway
7	New Broadway connector
8	Connect Vermont Street to Vine Street
9	Widen New Hampshire Avenue to 5 lanes
10	Complete Vermont Street Gap
11	NJDOT improvements per Access Management Plan for Route 9
12	3 to 5 lane cross section on Massachusetts Avenue between Cross Street and Prospect Street
13	3 to 5 lane cross section on Cross Street between Lakewood-Jackson border and Route 9

- Legend**
- Transit Hub
 - Parkway Interchange
 - Capacity Improvement
 - New Signal
 - Capacity Improvement and New Signal
 - No On-Street Parking
 - Road Widening
 - New or Realigned Roadway
 - Access Improvements
 - Boulevard
 - Greenway
 - Potential Monmouth-Ocean-Middlesex Railroad Station Location
 - Southern Main Branch Line
 - Downtown Regional Center
 - Oak Street Neighborhood
 - Cross and Prospect Street Core
 - Cedarbridge Town Center
 - Highway Core
 - James and Prospect Street Industrial Park
 - Lakewood Industrial Park and Campus
 - Water Body
 - U.S. Route
 - State Route
 - Toll Route
 - County Route
 - Local Roads
 - Stream

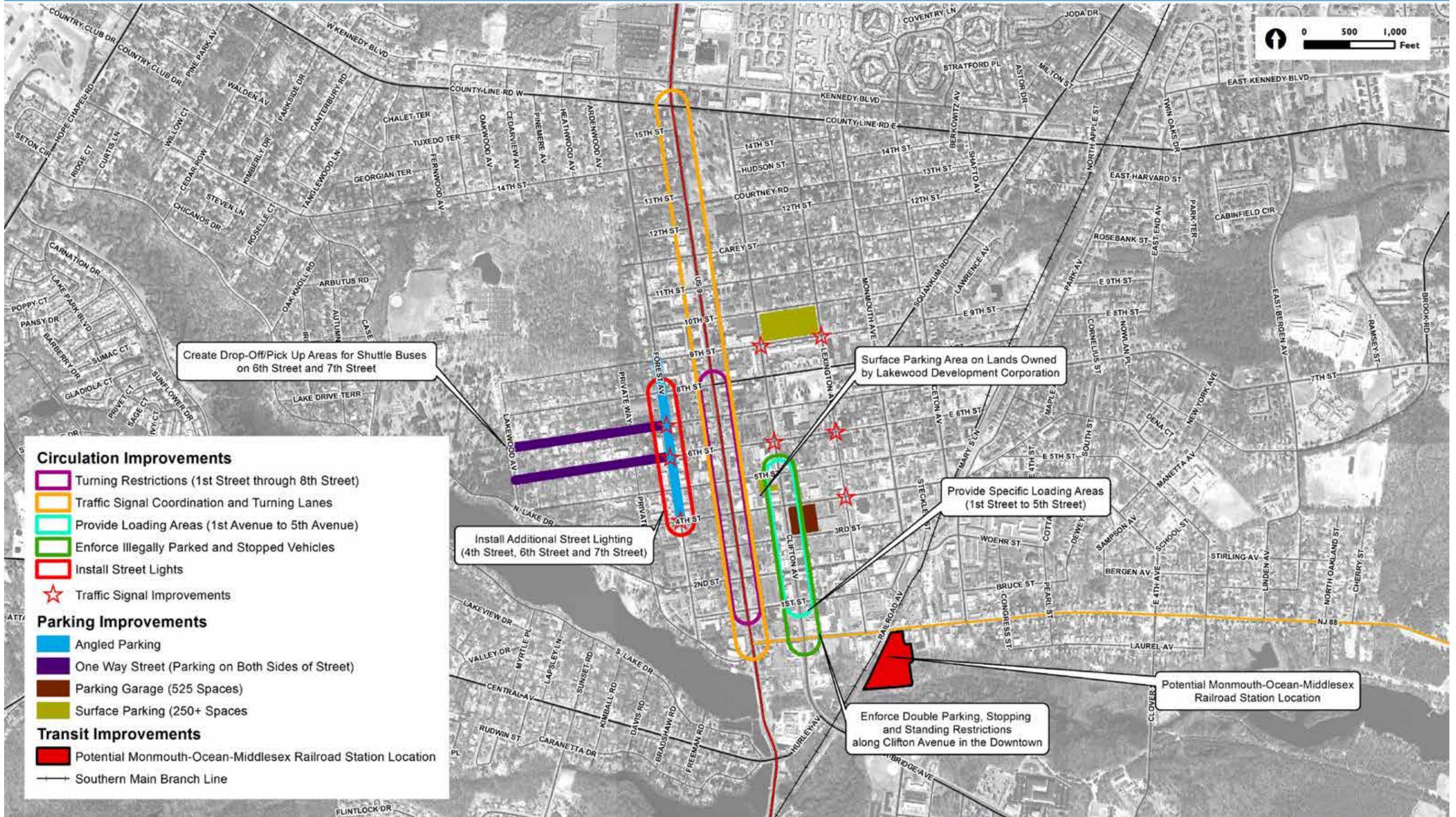
1,500 Feet

T&M
ASSOCIATES

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Prepared by: ARR, 10/1/2013
Source: NJGIN, NJDEP, NJDOT, Ocean County, Lakewood Township
H:\GIS\Geodata\Municipal\Lakewood\2013 Smart Growth Plan Amendment - Post PB Hearing Revisions\Lakewood Mapping\Traffic\ Fig 6-2_VINE CROSS AND PROSPECT DETAILS_Less Labels_Tabloid.mxd

Figure 6.3: Downtown Traffic and Pedestrian Circulation and Parking Improvements



and Prospect Street Core, and Cedar Bridge Town Center. The Cross and Prospect Street Core and Cedar Bridge Town Center are anticipated to each generate between 18,000 and 20,000 daily trips to the surrounding roadway network, and an additional 19,600 trips are expected to be generated by the Oak Street Neighborhood. Based on the combination of existing traffic and roadway conditions, along with the anticipated future traffic generation, several roadway network infrastructure improvements have been identified.

Figure 6.2 (Circulation Improvements) identifies recommended improvements that are designed to improve roadway connections, minimize congestion and delays and enhance public transit in conjunction with the development proposed in the Smart Growth Plan.

Proposed measures include road widening of the existing local street connections between the proposed centers and cores, the extension of a north/south route (Vermont/Vine Street) between Route 70 and Route 88, new traffic signals, intersection improvements, and locating transit hubs within each proposed center and core, and planning for the Monmouth Ocean Middlesex rail stations within the municipality. Recommendations for the traffic and pedestrian circulation and parking in the downtown are illustrated in Figure 6.3. These were adopted previously by the Township Committee as part of its comprehensive downtown circulation and parking strategy and are currently being implemented.

Impact Fees

The infrastructure improvements identified in this plan shall be funded through impact fees charged for new development. Impact fees shall be applied to all types of development without any exception, including all residential and non-residential development, non-profit development, affordable housing, and schools to the extent permitted by applicable law. Fees collected shall be used exclusively to defray the cost of infrastructure and not used for any other purpose. Priority should be given to the road and intersection improvements identified in this plan.

Overall Township Transportation Strategy

Lakewood's overall Transportation Strategy to promote smart growth is as follows:

- » Work with NJDOT to implement improvements to Route 9
- » Transportation infrastructure such as streets, pedestrian and bicycle accommodations as well as mass transit options must be provided in the core redevelopment and development areas
- » Provide a bus shuttle system with multi-modal facilities to reduce vehicular trips and reduce parking demands
- » Construct a bicycle and pedestrian network to connect different parts of the Township. These pedestrian and bicycle enhancements will provide an alternative to the single passenger vehicle and relieved congestion on the road network
- » Explore and promote local transit connections in site design within each center and core area, and along highway corridors to provide public transportation options to the single passenger car throughout the Township
- » A Monmouth-Ocean-Middlesex Railroad Station should be located in the downtown near the existing bus depot. Other more long-term options may be explored depending on Township-wide growth and ridership levels, or if the downtown site is determined not to be a feasible option
- » "Complete" streets providing the capacity and accommodations for pedestrians, bicycles, parking, mass transit as well as vehicles.
- » Widen major corridors (as identified in Figure 6.2) and improve existing traffic signal capacity
- » Install new traffic signals at the intersection of Oak Street with Route 9, Broadway with Route 9, Prospect Street with Cross Street, Prospect Street with Massachusetts Avenue, Vine Street with Clover Street, Martin Luther King Drive with Pine Street, and Oak Street with Vine Street
- » Complete Broadway between Route 9 and Vine Street
- » Improve access to and from the Garden State Parkway through improvements to existing interchanges
- » Complete the "gaps" in local streets such as Vermont & Vine Street
- » Improve West Cross Street, west of the Prospect Street intersection
- » Connect and improve Arlington Avenue to Pine Street
- » Improve intersection at Clover Street and Route 88

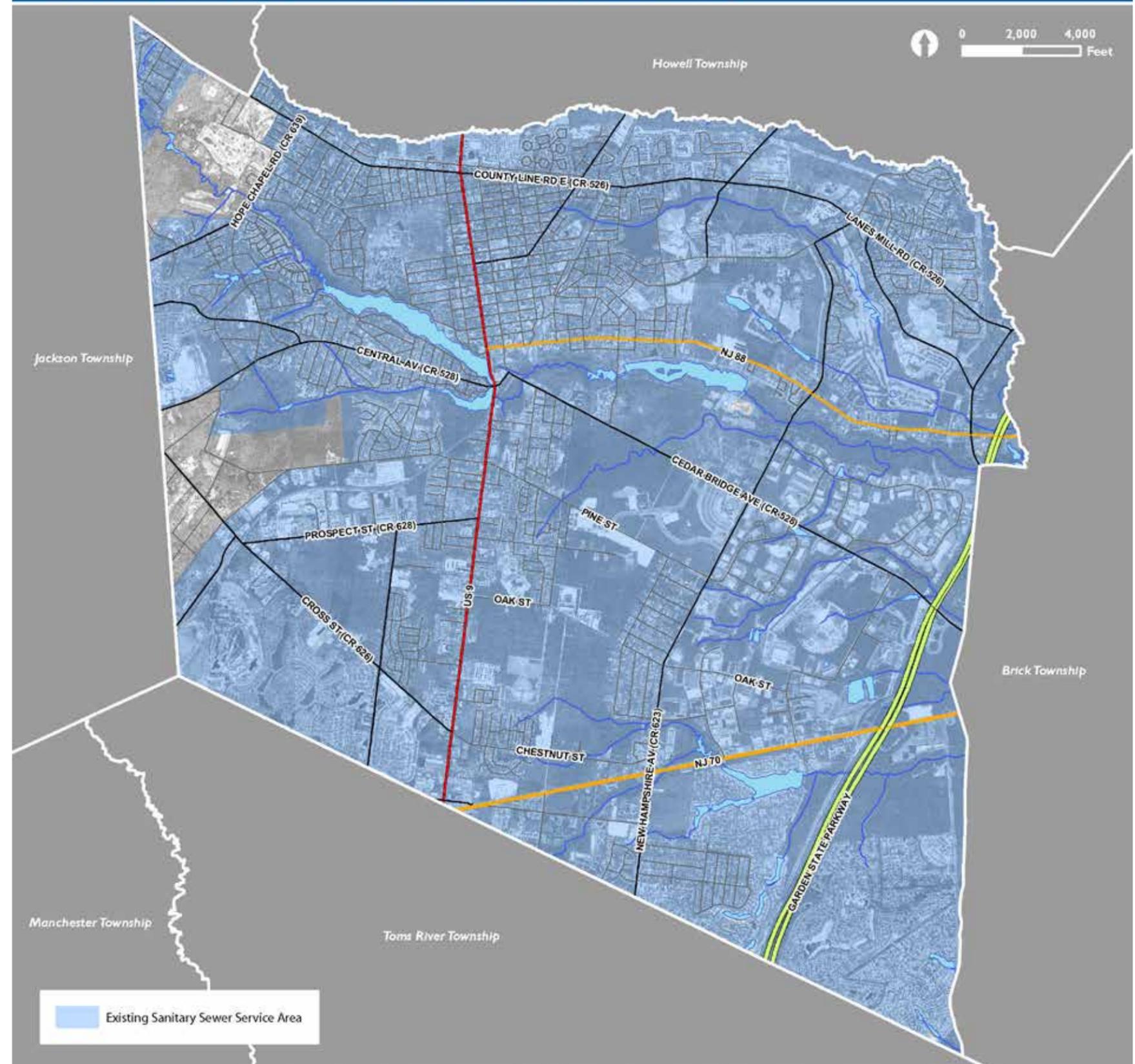
- » Restrict on-street parking along Pine Street, Vine Street, and Clover Street.

Downtown Traffic and Pedestrian Circulation and Parking Recommendations

Within the Downtown, there are several recommendations that address traffic, pedestrians, transit and parking issues. These have incorporated in previous transportation planning efforts by the Township and include:

- » Locate the Monmouth-Ocean-Middlesex railroad station in the downtown
- » Vehicular circulation should be improved by restricting certain turning movements that impede traffic flow, such as left turns from side streets onto Route 9. Such turns and crossing movements should be accommodated at signalized intersections
- » Wayfinding signage must be provided to direct motorists to signalized intersections as well as direct motorists to parking facilities, transit services and other points of interest, such as BMG and Georgian Court University
- » Work with the NJDOT to design left turn lanes at all intersections along Route 9 between Main Street and County Line Road
- » Develop a one-way street pair on 6th and 7th Streets between Lakewood Avenue and Forest Avenue to increase on-street parking and promote safer more efficient drop-off/pick-up for the BMG school, and reorient the parking ingress to Kingscote and Hamilton Halls at Georgian Court University to ensure adequate access
- » Install traffic signals, when warranted, at intersections along Forest Avenue, Clifton Avenue and Lexington Avenue.
- » Provide on-street loading spaces to remove double parking vehicles that block traffic flow. Enforce double-parking regulations
- » Increase the parking supply at strategic locations to serve commuters, shoppers, employees and students
- » Adopt buffer design guidelines for development along the proposed MOM line

Figure 7.1: Existing Sanitary Sewer Service Area Map



7. Infrastructure Strategy

Water

Public water service in Lakewood is provided by both the Lakewood Township Municipal Utilities Authority (LTMUA) and the New Jersey American Water Company (NJAWC).

The Lakewood Township Municipal Utilities Authority (LTMUA) service area is approximately eleven square miles in area and serves primarily the eastern portion of the Township. The potable water facilities include:

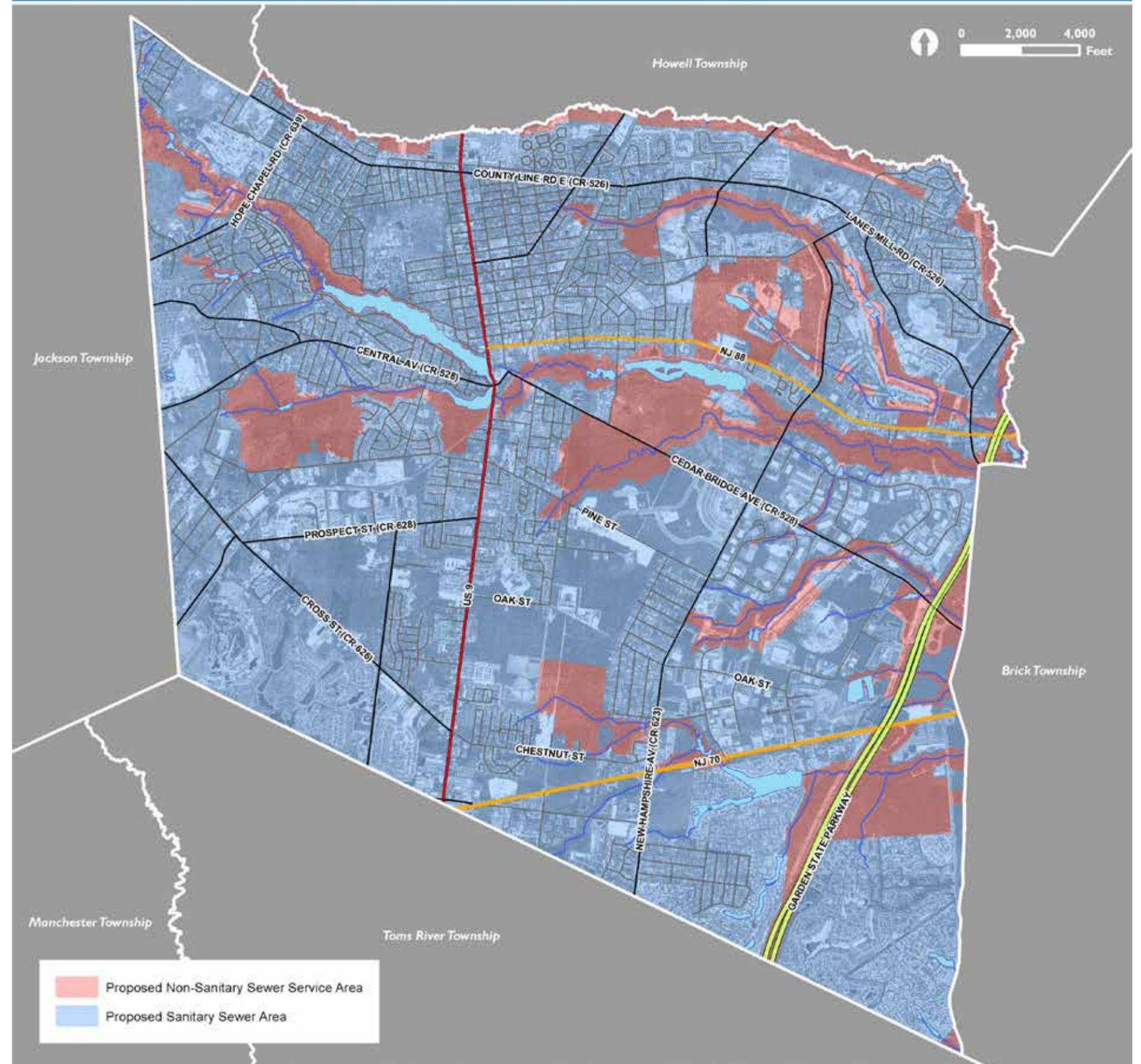
- » 85 miles of water mains
- » Two water treatment plants on Shorrock Street and New Hampshire Avenue
- » Five water storage tanks with an effective storage of 5.8 to 6.0 million gallons
- » Eleven wells drawing water from the Englishtown, Raritan and Cohanseay Aquifers.
- » Two of the existing LTMUA wells are equipped for use as Aquifer Storage and Recovery facilities
- » LTMUA is in the process of bringing three more wells on-line.

The LTMUA is currently in the midst of completing an interconnection with the Brick Township Municipal Utilities Authority (BTMUA). The newly created interconnection will have the capacity to supply the LTMUA with 1.0 MGD. Based on its review of the Smart Growth Plan and anticipated development, LTMUA has determined that is well poised to meet current and immediate future demands in its service area and is taking further steps to increase its capacity to meet future needs. Current projects include new wells and expansion of the New Hampshire water treatment facility, among other projects designed to improve capacity and performance of the system.

The NJAWC franchise area is located in the western portion of the Township and is included in NJAWC's Coastal North regional public water system which supplies water to 36 municipalities throughout Monmouth and Ocean Counties. The potable water facilities include:

- » 1,650 miles of water mains
- » Three surface water treatment plants
- » Twenty-eight storage facilities
- » Twenty-four wells drawing water from the Englishtown, Raritan and Cohanseay Aquifers. Ten of the twenty-four wells are located within Lakewood Township.

Figure 7.2: Proposed Sanitary Sewer Service Area Map



Both water purveyors have indicated to Lakewood Township that potable water supply would not be a limitation to growth based on the levels of population increase forecast in this Plan.

Sanitary Sewer

The Ocean County Utilities Authority (OCUA) is the regional wastewater treatment plant and interceptor agency for Lakewood Township. The OCUA operates the Northern Water Pollution Control Facility located in Brick Township. The facility treats wastewater from Lakewood and Brick Townships and several other municipalities in northeastern Ocean County and southern Monmouth County.

The Northern Plant has a current average flow of 26 million gallons per day (MGD). The current permitted capacity of the plant is 32 MGD. However, the plant has a potential maximum capacity, subject to physical plant improvements and NJDEP approval, of 36 MGD, which would allow for 10 MGD of future growth. Remaining treatment capacity is provided on a first come first serve basis.

Given that significant growth is not anticipated in the other communities served by the Northern Plant, Lakewood expects that there will be sufficient sewer capacity during the next 15 to 20 years to serve projected growth in the Township. In the long term, wastewater treatment capacity should be monitored and evaluated relative to projected future growth.

Through its Smart Growth Plan, Lakewood Township also will promote green and sustainable technologies in building and site design and related conservation efforts to reduce wastewater flows and ensure that sufficient regional treatment plant capacity is available for the long term.

The Lakewood Township Municipal Utilities Authority (LTMUA) operates 43 major collector lines to the Ocean County Utilities Authority (OCUA) system and two (2) sewage pump stations in the eastern portion of the Township. The New Jersey American Water Company (NJAWC) operates ninety (90) miles of sanitary sewer main in the western section of the Township and thirteen (13) sanitary lift stations.

Figure 7.1 Existing Sanitary Sewer Service Area Map identifies the previously approved sewer service area (Water Quality Management Plan or WQMP) for Lakewood Township. With the exception of two areas in the western sector of the municipality, the entire Township is located within a previously approved sewer service area.

Water Quality Management Plan Amendments

NJDEP has proposed revisions to the previously approved sanitary sewer service area maps for Lakewood and other communities throughout New Jersey. The Township has been working with the Ocean County Planning Board to address NJDEP's proposed changes in the WQMP.

Lakewood's proposed sanitary sewer service area, as presented in the Ocean County Wastewater Management Plan, is shown in Figure 7.2. Lakewood proposes that the entire Township be located in a sewer service area with the exception of the environmentally sensitive area at Crystal Lake Preserve, the freshwater wetlands and designated preservation area at Cedarbridge Redevelopment area, a portion of the Kettle Creek watershed north of NJ State Highway Route 70, as well as along various stream corridors and previously preserved open space tracts.

In addition to the proposed modifications to the WQMP, Lakewood proposes the following actions to ensure that the Township will continue to have an efficient and effective water and sewer system that meets the future infrastructure needs of the Township:

- » Encourage compact development in appropriate locations to minimize infrastructure costs
- » Encourage redevelopment and infill development to reduce the need to extend water and sewer services.
- » Research innovative finance solutions for new facilities and maintenance to lessen local public costs
- » Adopt green building standards for new construction and neighborhoods to increase energy efficiency and reduce infrastructure load

- » Consider the adoption of a Water Conservation Plan that promotes water conservation and addresses future demand and supply issues

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