



MASTER PLAN 2020

CITY OF PLAINFIELD, NEW JERSEY



Adopted by the City of Plainfield Planning Board on August 20, 2020



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City of Plainfield

Master Plan 2020



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Adrian O. Mapp
Mayor

July 6, 2020

Dear Residents of Plainfield:

I am proud to present Plainfield's, Master Plan. This ambitious but practical document outlines how the City will move forward during the next ten years. We acknowledge that our City and the rest of the world face many unknowns as we begin the long process of recovery from the pandemic and look ahead to positive social change. Yet we are confident that this plan will serve us well even in a time of uncertainty, providing us with carefully researched, actionable steps that will enhance our residents' quality of life.

The development and adoption of a Master Plan is required every ten years under New Jersey law. The creation of a master plan offers an opportunity to review past achievements and set guidelines for future accomplishments. It is also an important way of creating accountability for residents, businesses, and other stakeholders.

This plan showcases our City's strengths, including a diverse, growing population; attractive neighborhoods with a range of housing options; and multiple transportation options. It also demonstrates how we can capitalize on these strengths and where we must do a better job.


We began the process of developing our master plan approximately one year ago. City employees provided perspective and data that formed the core of this document. The opinions and ideas of residents, gathered during public meetings and a citywide survey, were also captured throughout the process.

Plainfield is a resilient city, filled with residents who are proud to call it home and have strong feelings about how it can improve. You told us what was on your mind, what you liked about our City and where you thought there was room for improvement, and we listened. Participant responses are reflected throughout the plan. We believe we have a plan that provides tangible guidance that will help us work toward making Plainfield even better.

We selected the planning professionals at Nishuane Group to lead this important project. Their team brought years of knowledge and experience to their analysis of Plainfield's land use, housing, economy, circulation systems, environment, and other areas critical to a healthy, thriving city.

We have achieved a great deal over the past six (6) years, and this Master Plan illustrates how we can do more. I look forward to working with all of you to make Plainfield the City we deserve, one that will provide you and your families with an exceptional quality of life filled with abundant opportunities.

Yours in Service,


Adrian O. Mapp
Mayor

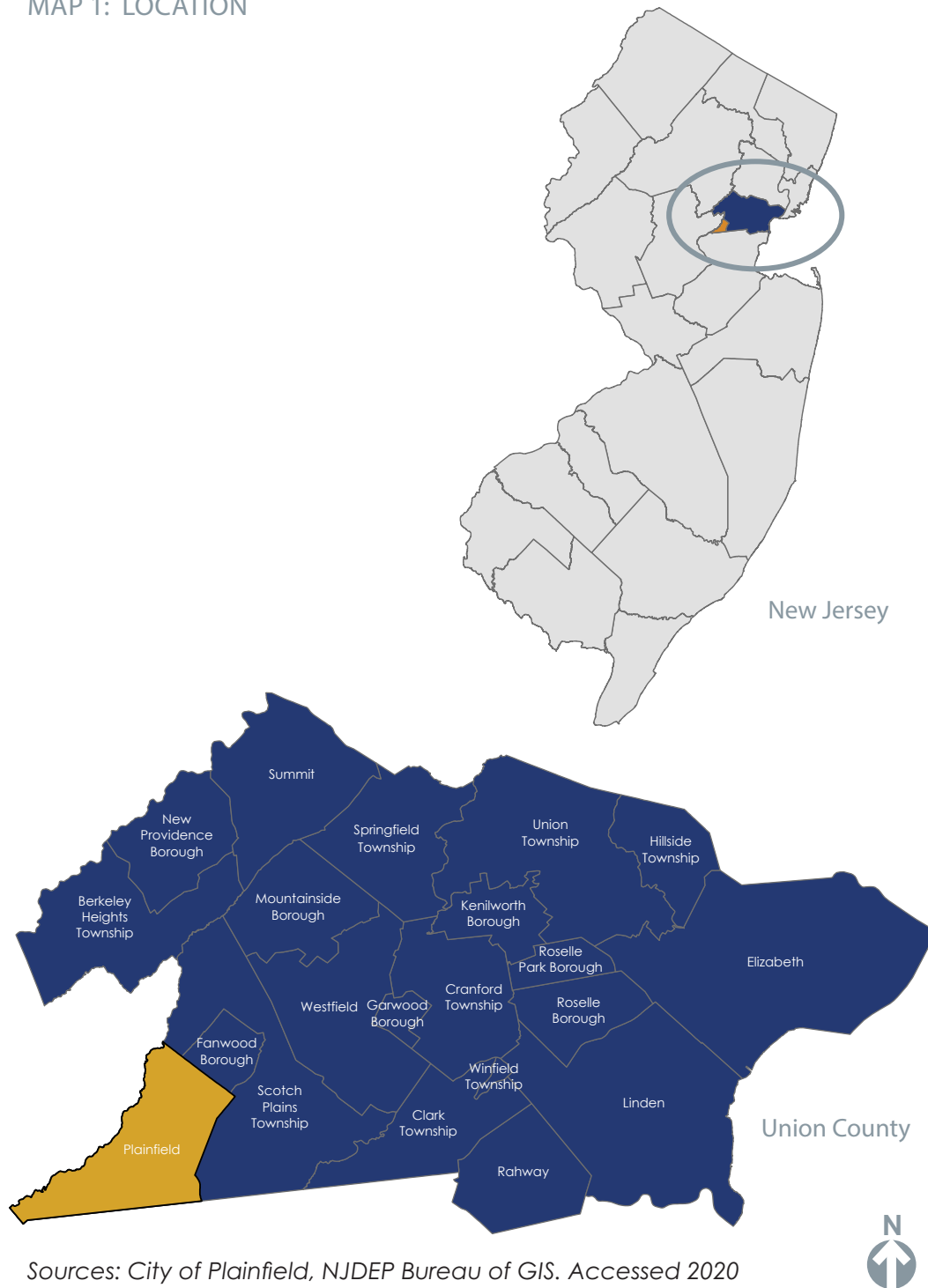
Message from the Mayor

INTRODUCTION

“By far the greatest and most admirable form of wisdom is that needed to plan and beautify cities and human communities.”

- *Socrates*

MAP 1: LOCATION



Sources: City of Plainfield, NJDEP Bureau of GIS. Accessed 2020

INTRODUCTION

The City of Plainfield is filled with promise grounded in its strengths, including a diverse and growing population, transportation options, a burgeoning medical/healthcare presence, attractive, architecturally interesting neighborhoods and an enviable inventory of cultural assets.

The City also has an engaged population with thoughtful opinions about Plainfield's future and ways to enhance its livability and attractiveness as a hometown and destination. Resident and stakeholder viewpoints helped shape this plan and are discussed in the next section.

This 2020 Master Plan will serve as a blueprint for building the Plainfield of the next 10 years. The Plan includes detailed Elements, each focused on a critical building block of urban life and offering a strategic vision and the steps necessary to achieve it. The heart of the plan is land use. A City must understand its properties, whether commercial, residential or recreational, before decisions are made about housing, retail, community and open space, zoning, development, quality of life.

This Plan is being developed at a time when we are about to embark on what is widely referred to as “the new normal.” Over the coming years we will see changes in our communities and how we interact with each other. While no one can begin to calculate the shape and impact of these changes, this Master Plan should serve as a guide that is realistic and flexible. The City of Plainfield is ready to proceed with well-managed, sensible growth that addresses the needs and aspirations of those who live, work, visit and invest in the city.

DEMOGRAPHICS

DEMOGRAPHIC OVERVIEW

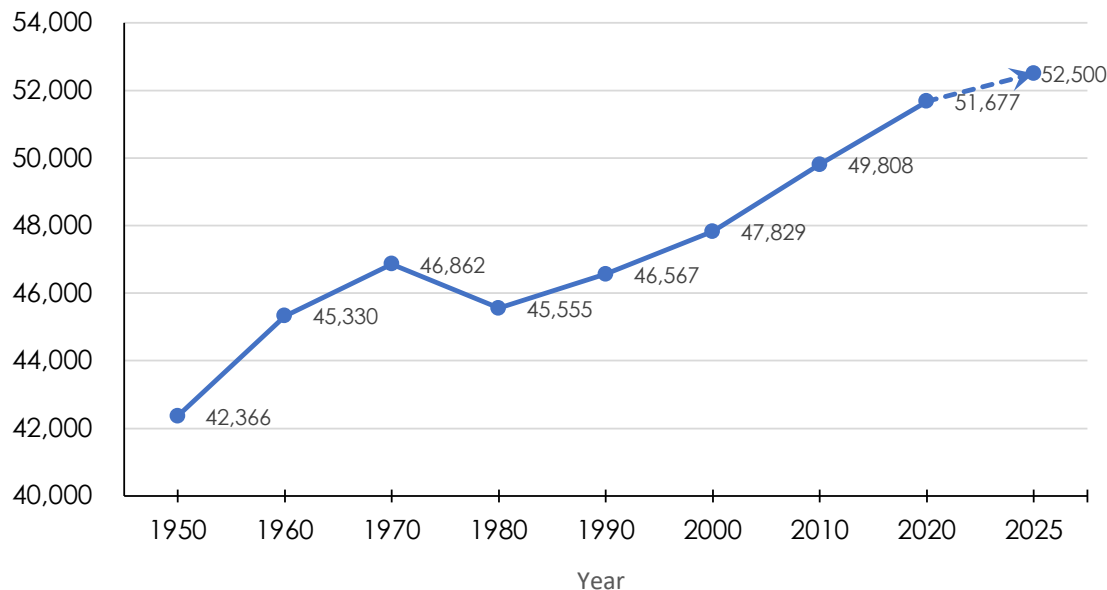
In 2020, the City of Plainfield's population was estimated to be 51,677 residents. This population level represents the continuation of the ongoing trend that traces back seven decades of steady population growth. Between 1950 and 1970, the City added approximately 4,500 new residents before experiencing a short-lived decline between 1970 and 1980. From then the population has grown steadily through 2020. Projections through 2025 indicate that the City's growth trend is expected to continue, with a projected increase to 52,500. This growth trend was generally mirrored by both Union

County and the State of New Jersey.

It should be noted, however, that despite the steady growth, the rate of growth has recently been declining. Between 2000 and 2010 the City's population grew at a rate of 4.32%. Between 2010 and 2020, the growth is estimated to be 3.75%. Between 2020 and 2025 the rate is expected to be in the range of 1.5%. (See Chart 1.)

Based on the 2010 U.S Census, Plainfield was the 3rd most populated municipality in Union County, behind the City of Elizabeth and Union Township. The City, however, ranks 4th in population density, with just over 8,000 residents per square mile. At 6.02 square miles, Plainfield ranks as the 7th largest among Union County municipalities, based on land area.

CHART 1: POPULATION GROWTH
1950 - 2022



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau



Color Guard



Community Float



Children Perform at Month of The Child Celebration

RACIAL AND ETHNIC COMPOSITION

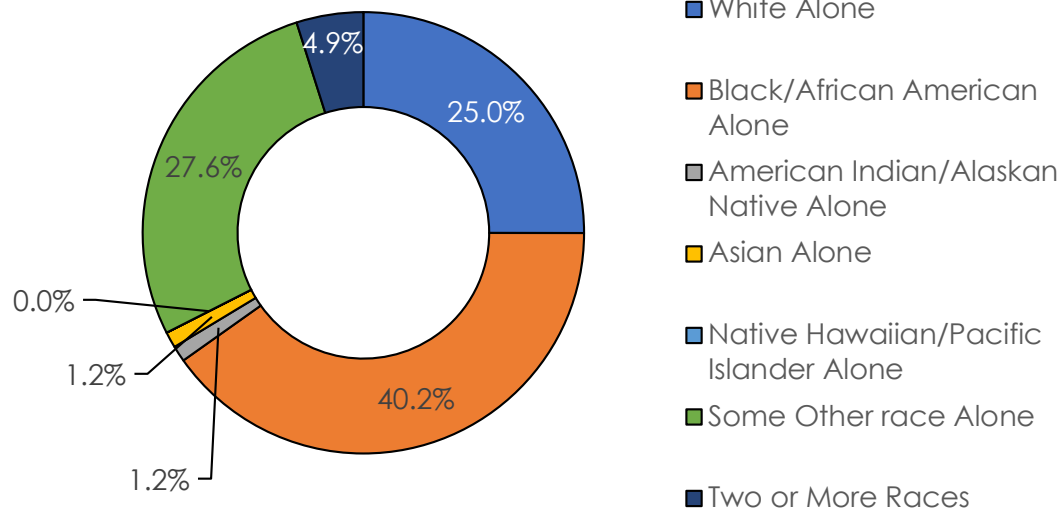
The racial composition of Plainfield is predominantly Black or African American, accounting for approximately 40% of the City's estimated population in 2020. This was followed by the segment of the population who identified themselves as being of "Some Other Race" (27.6%) This population segment is made up of residents who identified with a race other than the standard categories of Black/African American, White, Native American, Asian or Native Hawaiian. This was followed by residents who identified as being White, accounting for 25% of the City's population. (See Chart 2.)

The population composition has seen some shifts across racial classifications between the 2010 U.S. Census and the

2020 estimate. During this period, the Black/African American segment decreased by approximately 10%, while the White population increased by approximately 1.5%. The residents who identified as being "Some Other Race" also saw an increase of approximately 7.5%.

Looking at the ethnic composition of Plainfield, approximately 52.4% of the City's population in 2020 is estimated to be of Hispanic Origin or Latino. (Hispanic Origin is an ethnic and not a racial classification. Thus, an individual can be both Black or White and Hispanic at the same time). This represents an estimated 12% increase from the 2010 level. Among the City's Hispanic residents in 2020, an estimated 9% identified themselves as being of Puerto Rican origin, 8% Mexican and 1% Cuban. The remaining 82% identified themselves as being from other regions.

CHART 2: RACIAL COMPOSITION - 2020



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau



RESIDENT BREAKDOWN

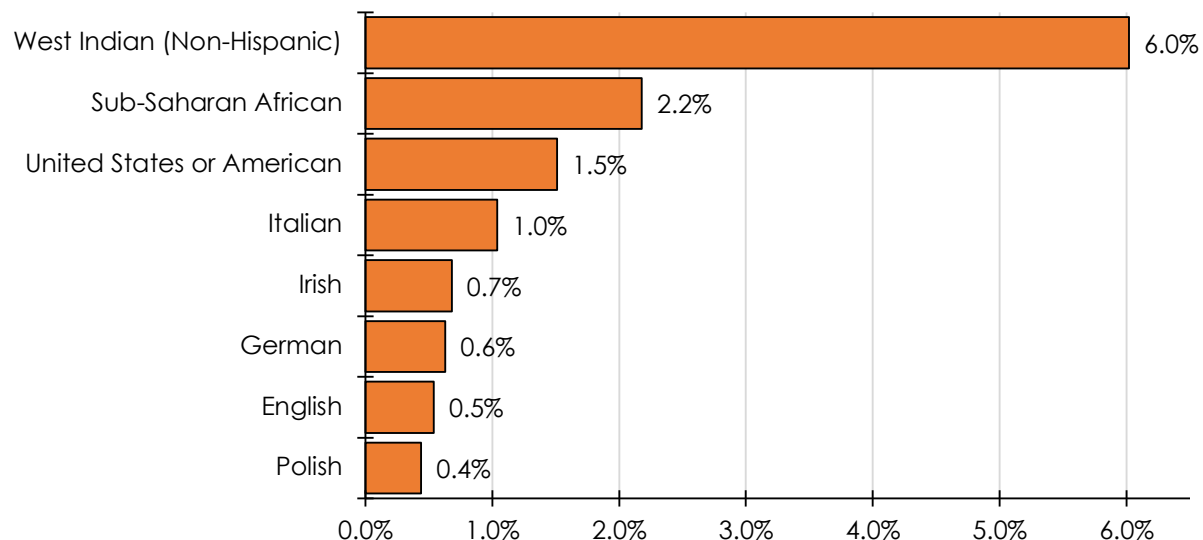
While race and ethnicity speak to the broader social group to which individuals belong, their ancestry speaks to their heritage and their ancestors' place of birth before arriving in the United States. In most instances it is the individual's ancestry that forms the basis of cultural identity and the customs and rituals to which they ascribe.

In the U.S. Census, Ancestry is a self-reported measure based on the nationality with which the individual respondent identifies. In a number of instances, individuals identified their ancestry as "American" or "United States" and did not identify with any ancestral origins prior to coming to the United States.

Among Plainfield residents, West Indian was the single largest ancestry group, accounting for an estimated 6% of residents in 2020. This was followed by Sub-Saharan African (2.2%), American and Italian (1%). (See Chart 3.)

Related to ancestry is the number of residents that are foreign born. Based on the U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, the vast majority of residents who reported being foreign born were from Latin America, including islands of the Caribbean. Of these, the majority came from the Dominican Republic, Jamaica, Trinidad and Tobago and Haiti. (See Table 1.)

CHART 3: LARGEST SINGLE ANCESTRY GROUPS (REPORTED)



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

TABLE 1: PLACE OF BIRTH - 2017

Foreign Born Population	19,846	100%
Europe	410	2.10%
Asia	413	2.10%
Africa	493	2.50%
Oceania	25	0.10%
Latin America	18,495	93.20%
Northern America	10	0.10%

Source: 2013-2017 American Community Survey 5-Year Estimates

AGE AND GENDER DISTRIBUTION

In 2020, the median age of Plainfield's population is estimated to be 35.98, an increase from the 2010 median age of 33.46. This is an indicator of the local population continuing to mature. Despite the estimated increase, Plainfield's population remained relatively younger than the population of Union County and the state as a whole.

Across genders, male residents outnumbered female residents modestly from birth through 54 years old. From age 55 onward, female residents outnumbered males. The greatest disparity was in the 25-34 age segment, when males outnumbered females by over 500.

The age distribution has implications within the county in a variety of ways. One of the most powerful is the dependency ratio within the City. This is a measure of the relative size of the "dependent" segment of the population, represented by children aged 0-14 years old, and the senior population, represented by residents aged 65 years and over. These two groups represent the segment of the population that is generally not in the workforce and is dependent on the working segment of the population, represented by the residents 15-64 years old.

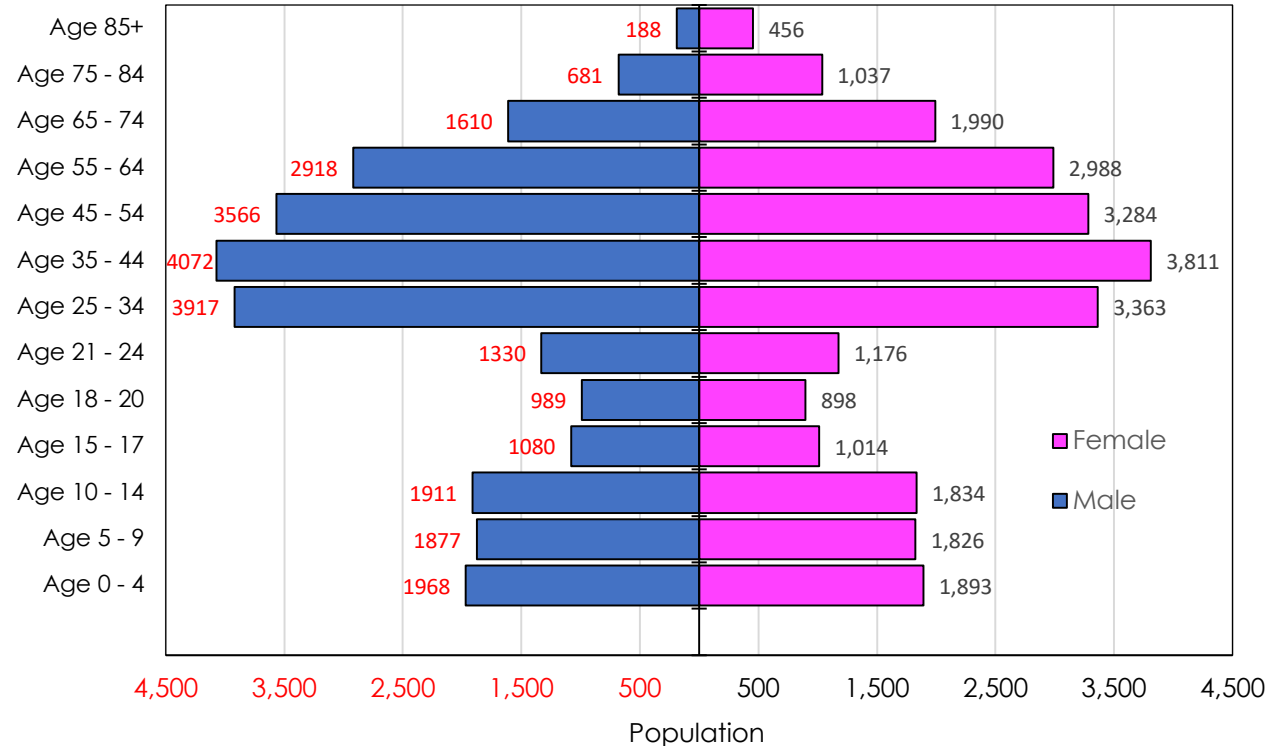
The dependency ratio is a relatively simplistic measure of assessing the portion of the population that is in the workforce and those that are not. This ratio has an impact on the level of economic activity that would be anticipated to take place within the community. As the percentage

of nonworking citizens rises, those who are working are likely subject to increased taxes to compensate for the larger dependent population.

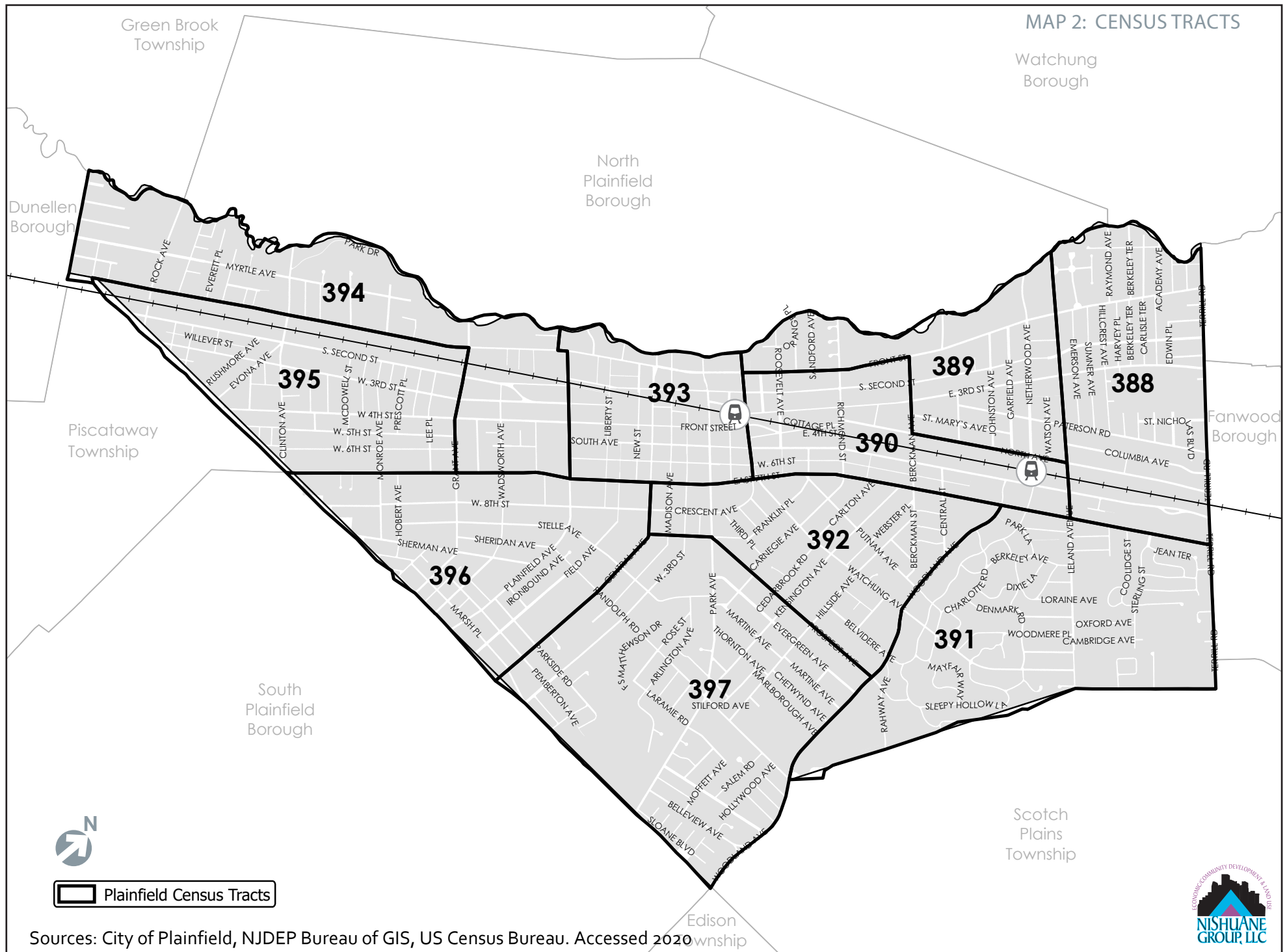
The age dependency ratio of Plainfield based on 2020 estimates is 50.20. This indicates that there were approximately 50 "dependent" residents for every 100 residents in the working age segment of the population. This

represents an increase in the magnitude of this indicator over the 2010 level when, based on U.S. Census figures, the dependency ratio was 45.38. This increase is due in part to the aging of the City's population. While 9.47% of residents in 2010 were aged 65 and over, in 2020 they accounted for approximately 12% of the population. Both the 0-14 aged population and working aged population remained relatively static over that period.

CHART 4: AGE/SEX PYRAMID - 2020



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau



MAP 3: WARDS

Green Brook Township
Dunellen Borough
Piscataway Township
North Plainfield Borough
Watchung Borough
Fanwood Borough
South Plainfield Borough
Edison Township
Scotch Plains Township

Wards

- 1st Ward
- 2nd Ward
- 3rd Ward
- 4th Ward

Sources: City of Plainfield, NJDEP Bureau of GIS. Accessed 2020

NISHUANE GROUP, LLC

Sources: City of Plainfield, NJDEP Bureau of GIS. Accessed 2020

COMMUNITY ENGAGEMENT

COMMUNITY ENGAGEMENT AND PUBLIC PARTICIPATION

The Master Plan cannot be written, no recommendations made without input from the people who live and work in the City of Plainfield. Without public input, this document will not accurately represent the wants and needs of City of Plainfield residents. Throughout the nearly year-long Master Plan process, the City and the Master Plan Team (consultants: Nishuane Group, H2MandTimHaahs) gathered ideas, opinions and concerns using community workshops and online engagement. This collaborative approach provides community insight on the future of the City of Plainfield.

Advisory Committee

At the launch of the project, a Master Plan Advisory Committee comprised of City of Plainfield professionals, local officials, community leaders and project consultants was formed to frame the outline for the development of the Master Plan, and to generate discussion on specific topic areas. These topics included:

- Land Use
- Circulation / Sustainability
- Economic Development
- Housing
- Education and Community Facilities

These roundtable meetings were an opportunity to develop a snapshot of the issues the City faces from different perspectives and to discuss how to move forward.



Advisory Committee Meeting

Come to Community Workshops for the NEW Plainfield Master Plan!

"One Plainfield, One Future"

Find out more & take the survey!
www.PublicInput.com/Plainfield

The City of Plainfield is developing a new Master Plan, and we want to hear from you! Share your vision for the City's future land use, development, housing, transportation, sustainability, parks, and other important topics. In addition, there will be an urban planning for kids table, so no need for a babysitter!

Join us at any time between 6:00-8:00pm at one of the following workshops. There will be a brief presentation at the start of each workshop.

October 8th 4 th Ward Clinton School 1302 W 4 th St	October 22nd 2 nd Ward Cook School 739 Leland Ave	November 12th 1 st Ward Emerson School 305 Emerson Ave	December 3rd 3 rd Ward Washington School 427 Darrow Ave
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¡Ven a los talleres comunitarios para el NUEVO plan maestro de Plainfield!

"Un Plainfield, Un Futuro"

¡Descubra más y responda la encuesta!
www.PublicInput.com/Plainfield

La Ciudad de Plainfield está desarrollando un nuevo Plan Maestro, ¡y queremos saber de usted! Comparta su visión sobre el uso futuro de la tierra, el desarrollo, la vivienda, el transporte, la sostenibilidad, los parques y otros temas importantes de la Ciudad. Además, habrá una mesa de planificación urbana para niños, ¡así que no hay necesidad de una niñera!

Únase a nosotros en cualquier momento entre las 6:00-8:00pm en uno de los siguientes talleres. Habrá una breve presentación al comienzo de cada taller.

8 de Octubre 4 th Ward Clinton School 1302 W 4 th St	22 de Octubre 2 nd Ward Cook School 739 Leland Ave	14 de Noviembre 1 st Ward Emerson School 305 Emerson Ave	3 de Diciembre 3 rd Ward Washington School 427 Darrow Ave
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WHAT WAS SAID

Through community meetings, focus groups and an online survey, hundreds of Plainfield residents gave their time and shared thoughts and ideas on how to make their City better. They spoke about what they liked and what could be improved about their neighborhoods, downtown, parks, shopping and stormwater infrastructure. Each Element of the Master Plan will include relevant findings from the community engagement initiatives, including quotes from participants.

Master Plan Workshop on October 8th

This past Tuesday the City's Economic Development Department hosted the first in a series of meetings about the City's Master Plan. Each ward will host an event with Tuesday's taking place at the Clinton School in the 4th ward.



Post in Mayor's Newsletter

Logistics of Gathering Community Input

Online Engagement

The Master Plan Team established an online presence of the Master Plan through a project-specific webpage (www.PublicInput.com/Plainfield). The website contained a wide range of information regarding the project, frequently asked questions, workshop dates, summary reports of the workshops, and links to an online survey. The City of Plainfield also promoted workshops through several mentions in the Mayor's Weekly Events Newsletter and on social media platforms.

Survey

To gain valuable feedback in the most convenient format for project participants, a Master Plan survey was developed both for online and in hard copy format. Survey responses were collected for approximately six months. Hard copy versions of the survey were provided at the community workshops and at key City facilities such as City Hall and the library. Capitalizing on the State of New Jersey's Stay at Home Order in the age of Covid-19, the survey was promoted as a Facebook ad targeted at City of Plainfield residents, running for two weeks from March 28 to April 10, 2020. In total, 115 respondents completed the survey with nearly 400 comments.



Survey Results

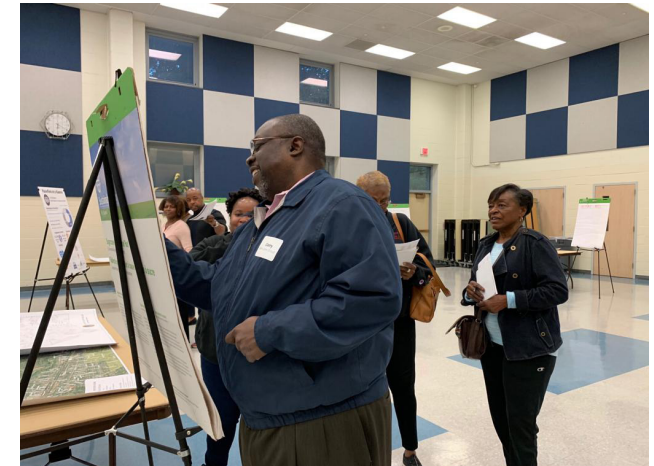
Workshops & Focus Groups

The Master Plan Team held a series of workshops and focus group sessions at different stages of the project in order to collect public input. All community workshop and focus group summaries were posted online at the project website for public viewing. These summaries contain a detailed explanation of all workshop formats, associated presentations, other materials and comments received.

Public Workshops

The Master Plan Team hosted four community workshops beginning in early October through early December 2019. The Team engaged with approximately 100 workshop attendees collectively over the course of the four meetings. All meetings were held from 6 p.m. to 8 p.m. These workshops included:

- 4th Ward Community Workshop
Tuesday October 8, 2019
Clinton School
- 2nd Ward Community Workshop
Tuesday October 22, 2019
Cook School
- 1st Ward Community Workshop
Thursday November 14, 2019
Emerson School
- 3rd Ward Community Workshop
Tuesday December 3, 2019
Washington School



Photos: Public Workshops

Focus Groups

In addition to the four public workshops planned for the beginning of the project, the Master Plan Team hosted two focus group workshops for seniors and Plainfield's Hispanic population, two harder-to-reach population groups due to mobility constraints, language barriers or other reasons. The Team engaged with focus group workshop attendees. These focus group sessions included:

- Seniors Focus Group Workshop
Thursday January 22, 2020, 10:30 a.m. to 12 p.m.
Senior Center
- Hispanic Focus Group Workshop
Thursday February 13, 2020, 7 p.m. to 9 p.m.
St. Mary's Auditorium



City of Plainfield, NJ - The Queen City

November 14, 2019 · 🌐

Reminder - We look forward to seeing you at tonight's Community Workshop for Plainfield's New Master Plan. Come share your ideas and suggestions as we continue to work together to move this city forward.



City of Plainfield, NJ - The Queen City

November 7, 2019 · 🌐

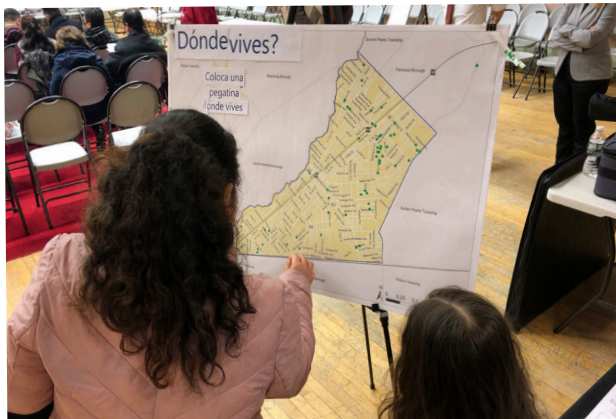
Join us for the Master Plan Community Event for the 1st Ward on **Thursday, November 14th beginning at 6:00pm** at Emerson School. Bring your concerns and questions so we can **work together to move the Queen City forward**.



City of Plainfield, NJ - The Queen City

February 12 · 🌐

Reminder: Tomorrow Thursday, February 13th from 7:00pm to 9:00pm in Saint Mary's Parish School Auditorium at 513 West Sixth Street, the Plainfield Master Plan team will hold its sixth public Master Plan Workshop meeting **specifically for the Hispanic community**. Interpreters will be present to translate the initial presentations as well as to ensure that questions and concerns are properly translated and recorded.



Hispanic Focus Group Workshop



Seniors Focus Group Workshop



LAND USE ELEMENT

“Good fortune is what happens when opportunity meets with planning.”

- Thomas Edison

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How We Get There

Continue to further the goals from the 2009 Master Plan

- Revitalize/redevelop underutilized areas.
- Provide desired land use areas that support jobs and other economic opportunities.
- Restore stability in "transitional areas".
- Maintain character and density of established neighborhoods and support comparable values in new developments.

Review zoning-related issues

- Review, evaluate and reclassify current zoning as needs are identified, including for open spaces, schools, institutional uses, commercial recreational facilities and other businesses.
- Rezone or eliminate zones that aren't achieving desired goals.
- Ensure all changes are reflected in zoning ordinances and map.

Explore a range of related development and quality of life opportunities

- Work with Union County College to coordinate its expansion plans and collaborate with South Plainfield on the feasibility of a river walkway, work with Union County to use underutilized parking deck in the Park-Madison development to provide more parking for TOD development in the area.
- Evaluate regulations for mixed-use zones.
- Adopt already approved streetscape guidelines, undertake a Parks Master Plan.
- Develop a plan to reconcile flood hazard zones in redevelopment areas.

Strategic Vision

The City of Plainfield will continue to direct land use decisions in ways that benefit its residents and strengthen the City's future, while protecting the intangibles of community and diversity. The City will continue Transit-Oriented Development in the downtown area, while also focusing on other parts of the City that would benefit from targeted development. Protection and enhancement of open spaces will also play an important role in land use decisions.



INTRODUCTION

If a master plan has a nucleus, it is Land Use. This discipline provides the guidelines for all major decisions that affect a city's future, including economic development, zoning regulations, housing, traffic and open spaces. And these are topics that interest and animate residents of Plainfield.

In community engagement sessions held prior to creation of this plan, residents spoke of the need for better code enforcement, transformation of abandoned spaces into buildings that meet public needs, more housing options for the under-served, greatly improved shopping options – all while preserving the sense of community and diversity that keeps residents and businesses in the City, and attracts new ones.

The City of Plainfield has seen a significant increase in its development activity over the past several years. Much of this development has been focused around the City's Netherwood Train Station and in the downtown area, along the NJ Transit Raritan Valley Line, which received designation as a Transit Village in 2014 under NJ Transit's Transit Village Initiative. This designation, along with the start of Midtown Direct service into New York City, which Plainfield residents can access through a transfer at Newark Penn Station, has been the impetus for continued planned development along the corridor. Much of the older existing development that is related to the City's industrial past is being replaced by proposed mixed-use development.

While development activity has been

MUNICIPAL LAND USE LAW

"A land use plan element:

(a) taking into account and stating its relationship to the statement provided for in paragraph (1) hereof, and other master plan elements provided for in paragraphs (3) through (14) hereof and natural conditions, including, but not necessarily limited to, topography, soil conditions, water supply, drainage, flood plain areas, marshes, and woodlands;

(b) showing the existing and proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational, open space, educational and other public and private purposes or combination of purposes including any provisions for cluster development; and stating the relationship thereof to the existing and any proposed zone plan and zoning ordinance;

(c) showing the existing and proposed location of any airports and the boundaries of any airport safety zones delineated pursuant to the "Air Safety and Zoning Act of 1983," P.L.1983, c.260 (C.6:1-80 et al.);

(d) including a statement of the standards of population density and development intensity recommended for the municipality;

(e) showing the existing and proposed location of military facilities and incorporating strategies to minimize undue encroachment upon, and conflicts with, military facilities, including but not limited to: limiting heights of buildings and structures nearby flight paths or sight lines of aircraft; buffering residential areas from noise associated with a military facility; and allowing for the potential expansion of military facilities; and

(f) including, for any land use element adopted after the effective date of P.L.2017, c.275, a statement of strategy concerning:

- (i) smart growth which, in part, shall consider potential locations for the installation of electric vehicle charging stations,*
- (ii) storm resiliency with respect to energy supply, flood-prone areas, and environmental infrastructure, and*
- (iii) environmental sustainability "*

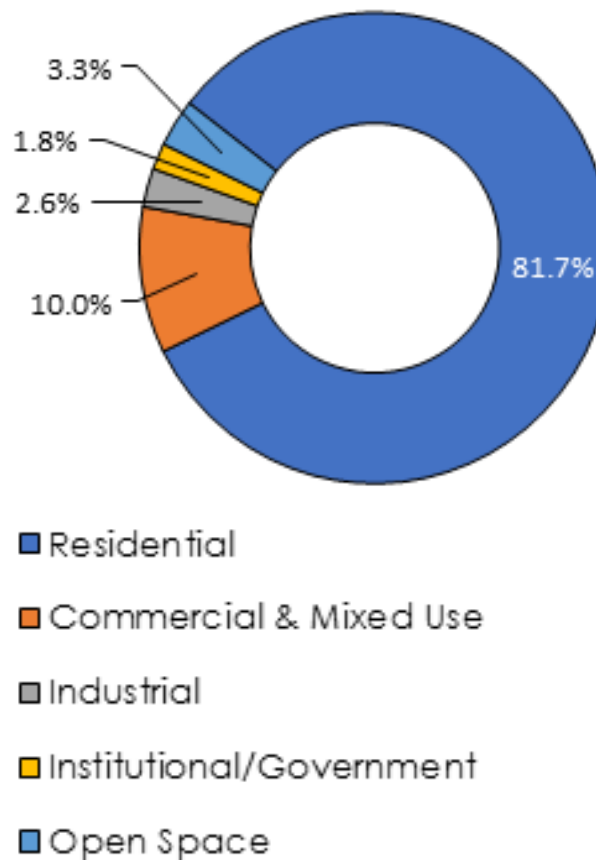
heightened in this area, development in other parts of the City has been generally strategic and focused in targeted areas within specific neighborhoods.

This Element provides an overview of land use, including: land categories, zoning and regulations, issues and opportunities, continuity, and a framework for decisions that will affect its residents, businesses and visitors now and in the years ahead.

EXISTING LAND USE

The City of Plainfield encompasses an area of just over six square miles and has a density of approximately 8,270 residents per square mile. Consistent with the predominantly suburban character of the City, over 82% of its land area is utilized for residential purposes. Approximately 10% is dedicated to commercial and mixed use and 3% to open space. (See Chart 1)

CHART 1: DISTRIBUTION OF LAND USES



Residential Uses

As indicated above, the majority of the City's land is dedicated to residential use with single-family detached homes the predominant type of dwelling. Most of the lower and moderate-density housing is located toward the southern and eastern areas of the City, abutting the South Plainfield and Scotch Plains borders. This type of housing is also adjacent to six of the City's Historic Districts, which are generally concentrated in the central area of the City. The housing located within the Historic Districts is predominantly single-family detached on larger lots. Most of the Historic Districts have their own zoning with accompanying bulk and design standards.

To the north is predominantly moderate to high density development flanking the NJ Transit right of way (ROW.) Four-family dwellings dominate. However, there are areas of two and three-family dwellings located throughout the northern region of the City where development is generally more compact.

Following the adoption of the 1998 Master Plan, the City's Land Use Ordinance (LUO) was amended to reduce the permitted density and increase minimum lot sizes for development. This was in response to the 1998 recommendation that neighborhood character be maintained. In 2005 this direction was modified with another amendment to the LUO to decrease the minimum permitted lot sizes in the more restrictive zone districts (R-2 and R-3). Even with these actions, this has resulted in creating a significant number of non-conforming lots and areas where the



House in the West End

permitted densities were inconsistent with the existing development patterns. While this has protected existing residential densities, it has also had the effect of suppressing residential redevelopment, especially in those neighborhoods that have a high incidence of vacancy and abandonment.

The 2009 Plan recommended the consideration of changes in specific areas to allow for residential development more consistent with the existing residential character, while protecting existing and desired densities. This situation remains in areas throughout the City and the 2009 recommendation remains valid.

Also as recommended in the 2009 Master Plan, Transit Oriented Development (TOD) has been aggressively pursued and implemented in the areas surrounding the Downtown Train Station and extending eastward to the Netherwood Station.

This development pattern leverages the transportation assets in this area of the City to develop new residential and mixed-use projects. This strategy will effectively allow for the targeted growth of the City in a way that will have relatively little direct impact on the City's existing neighborhoods.

While TOD development has been largely concentrated in the area surrounding the City's two active train stations, development is occurring throughout the City. Developments like the Station at Grant Street, which is in the final stages of construction and accepting rental applications, is reflective of some of the other development now taking place or being planned in other areas of the City.

In response to recommendations made in the 1998 Master Plan and reinforced again in the 2009 Plan, the City has utilized the Local Redevelopment and Housing Law (N.J.S.A. 40A:12A-1) extensively in this area to designate most of the older industrial and commercial parcels on North and South Avenues as "areas in need of redevelopment" and has formulated redevelopment plans targeted specifically to further transit-oriented development. This development pattern has seen an increase in density in the areas around and between the City's two active train stations.

Now that TOD development has taken hold, the landscape in this area of the City continues to change. Hundreds of dwelling units in mixed-use areas will now dominate the landscape, particularly along South Avenue. Many of these developments are located in individual redevelopment areas. While each individual redevelopment plan

has been generally designed to complement each other, attention now shifts to putting the necessary framework in place to ensure that there is appropriate connectivity between these areas and the developments within them, creating a cohesive sense of place.

Commercial Uses

Commercial and mixed-uses are primarily concentrated in and around the Central Business District (CBD.) This area continues to be developed as the City's Downtown, following recommendations in the 2009 Master Plan and in this one. Development has continued to take place at an accelerated rate throughout the CBD, with a mix of commercial, residential and mixed-use developments occurring throughout. Much of the activity has involved the rehabilitation and adaptive reuse of existing structures. Mixed-use zones to the south of the CBD provide a transition to the medium density residential areas extending on either side of the railroad ROW to the municipal border.

As redevelopment activity continues in and around both train stations, commercial uses



South Avenue Storefronts

will keep extending along North and South Avenue on either side of the railroad ROW. This is in keeping with the recommendations of the 1998 and 2009 Master Plans.

The development of the area surrounding the Netherwood Station continues to progress with many of the older vacant properties abutting the railroad ROW being developed as commercial/retail land uses. Recent activity has included groundbreaking for a new Wawa convenience retail and gas facility on South Avenue and construction of The Quinn development, which will include over 200 residential dwelling units.

The 2009 Master Plan acknowledged that Neighborhood Commercial (NC) nodes developed in several areas of the City have declined in usage. Subsequently many retail businesses in these neighborhood centers have closed or moved out of the City. This is in part due to overall decline in brick and mortar retail affecting the retail industry nationwide. But the effect of these losses is especially difficult for the City, which, with the closing of Giovanni's, lacks a four-star or fine dining establishment. Areas of the city also continues to need NC centers to provide for its residents.

While several of the NC zones throughout the City have generally held their own, the zone located on East Second Street has not fared well. This area is located in a flood zone, which has limited development. Additionally, the adequacy of the surrounding NC zones to serve the southern area of the City west of Park Street is in question. This area should be assessed, and consideration given for the expansion of one of the surrounding NC

zones, or designation of a new one.

The nationwide trend of declining physical outlets and the long-time void of shopping options has left many residents in a retail desert. Access to the grocery or convenience store requires traveling some distance and usually out of town. The lack of other services, including banks, restaurants and entertainment was a frequently expressed as a concern by residents who want and need viable neighborhood commercial areas, especially located in the City's western part.

Industrial Uses

As is the case in many other communities that have transitioned from a significantly industrial economy, the City has targeted for development many of the older industrial and commercial properties, which have been sitting vacant or underutilized. The advent of NJ Transit service to midtown Manhattan has helped spur development in proximity of both of the City's train stations. Since the 2009 Plan, this development has brought about the planned transition of former industrial spaces on both North and South Avenues. The TOD Downtown and TOD Netherwood redevelopment areas encourage growth in and around the Downtown and on North and South Avenues, in the area surrounding the Netherwood Train Station. The TODN North Avenue Redevelopment Area is unfortunately also in a designated flood zone, which has hampered its transition to a mixed use development.

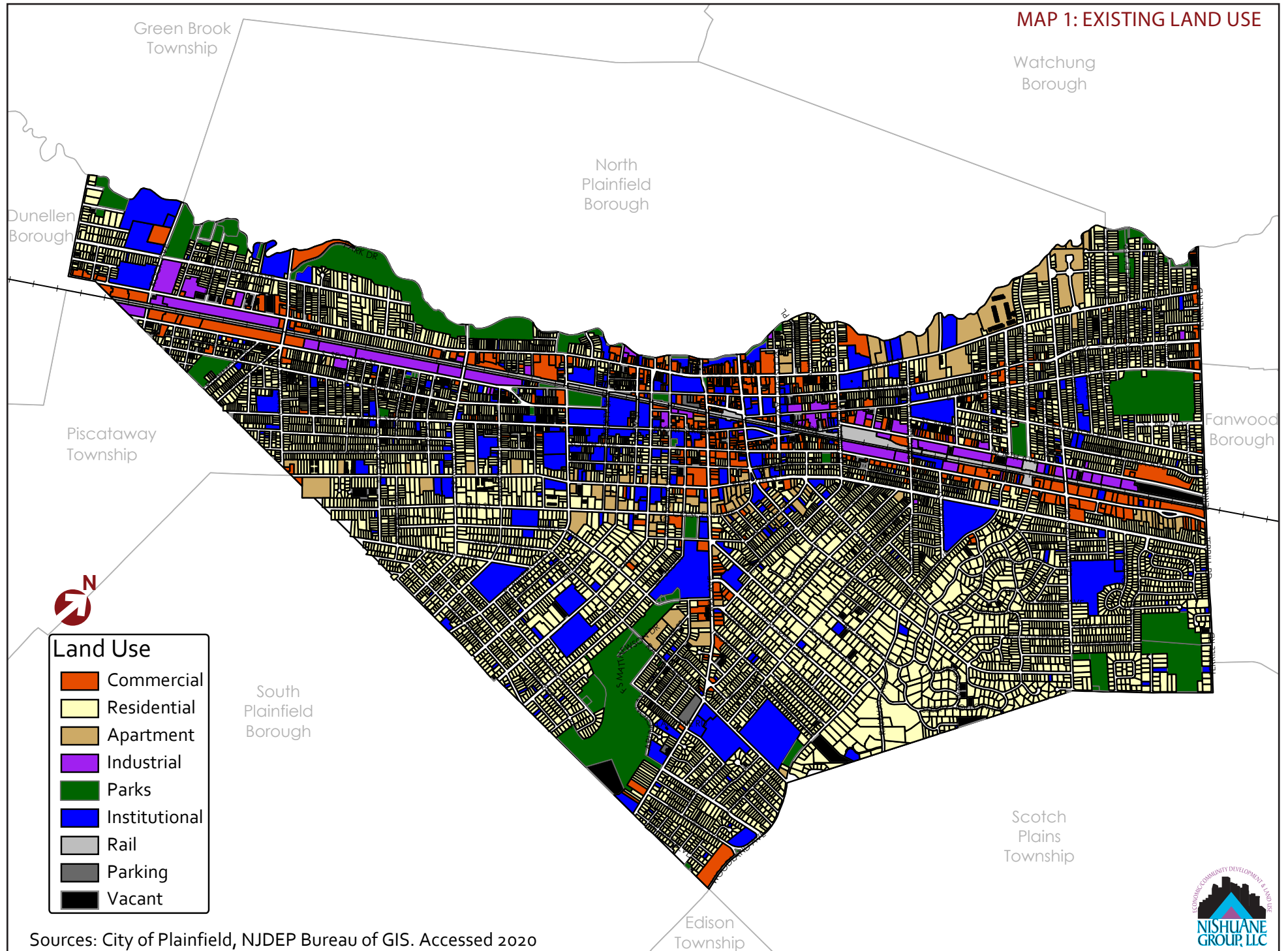
Despite the ongoing transition, there are several areas along the railroad ROW where light industry remains viable. This includes

the northeastern ends of the City, on North Avenue south of Terrill Road and on the southwestern end at West Front Street between the Piscataway and Dunellen municipal border and Clinton Avenue and South Second Street to Grant/West End Avenues. The latter is being looked at for targeted revitalization, with an innovative mixed use industrial/educational light manufacturing facility at the core.



Industrial Property on North Avenue

MAP 1: EXISTING LAND USE



Sources: City of Plainfield, NJDEP Bureau of GIS. Accessed 2020

EXISTING ZONING & LAND USE REGULATIONS

The City of Plainfield's existing land use regulations include 13 distinct zone districts, 10 Historic Districts and 16 redevelopment areas. This represents a total of 39 separate districts or categories, each of which has its own use, bulk and design regulations. Additionally, the Historic Districts themselves have their own zoning districts within them, which regulate properties within the District. This situation has created a relatively complex and at times burdensome land use regulation process.

However, reducing the number of regulated districts is not something that is easily achieved, without compromising the integrity of the zone plan. An analysis of the existing zoning, however, identified two instances where the zone plan can be improved through the elimination of an existing zone. This plan recommends the elimination of the existing R-5 zone. This zone designation currently exists in two relatively small areas of the City, where their elimination and incorporation into the surrounding zone would be consistent with the existing development pattern and makes sense (This recommendation is detailed in the Issues and Recommendations section at the end of this Element).

This plan also recommends the review of the existing PO-1 zone, which incorporates the former Muhlenberg Hospital site and extends northwards along Park Avenue. A second designated area for this zone is a small area located to the south of the CBD.

It is not clear how viable these areas are for the professional office use for which they were intended.

It should be noted here, that the total elimination of a zone is a significant step that effectively removes the ability to treat a group of properties in a specific way that is different from properties located in another zone. The impact of an elimination should be studied carefully to ensure that the original intent in establishing the zone, is not inadvertently lost.

Another area of concern is with the number of individual redevelopment plans that have been established within the designated development areas in and around the CBD, Downtown and Netherwood Train Station areas.

While redevelopment area designation is a part of an established and viable revitalization strategy, the number of independent redevelopment areas designated in a relatively small area/plans is problematic. This plan recommends the consolidation of the following redevelopment plans into a single plan: TODN-North, TODN-South, South Avenue East and South Avenue Corridor. This will help to ensure that development in this area does not occur in a piecemeal or disjointed manner.

Additionally, this plan recommends the consolidation of the Muhlenberg and Park Avenue Gateway Redevelopment Plan and the PO-1 zone, into a single area with a single Redevelopment Plan.

Existing Zoning Districts:

- R-1 - Very Low Density Residential
- R-2 - Low Density Residential
- R-3 - Low/Moderate Density Residential
- R-4 - Moderate Density Residential
- R-5 - Medium Density Residential
- R-6 - Medium/High Density Residential
- R-7 - High Density Residential
- NC - Neighborhood Commercial
- CBD - Central Business District
- PO - Professional Office
- GC - General Commercial
- MU - Mixed Use
- LI - Light Industrial

R-1 - Very Low-Density Residential District

This is the lowest density residential development within the City and permits one single-family dwelling on a minimum lot size of one acre. This type of residential development is targeted for an area generally bounded on the west by Woodland Avenue, on the north by Oakland and Prospect avenues, and on the east by Plainfield's border with Scotch Plains.

R-2 - Low Density Residential District

This low-density residential land use pattern calls for a dwelling unit density of two single family dwellings per acre and encompasses the southern portion of the city that roughly corresponds to the neighborhood referred to as Sleepy Hollow and historic districts, as well as the northeastern and northwestern borders of the City.

R-3 – Low/Moderate Density Residential District

This land use category provides for a density of 3.5 dwelling units per acre. Most R-3 – low/moderate density residential zones are concentrated in the south and southeastern areas of the City. While the majority of this zone is located to the south of the railroad ROW, there is a small area of the City zoned R-3 that is located to the north of the railroad ROW. This northernmost area of the City abuts then Watchung and North Plainfield borders.

R-4 – Moderate Density Residential District

This pattern allows a density of 5.8 units per acre for single-family homes and 8.7 units per acre for two-family units, and is intended for expansive areas on both sides of the railroad in the northwestern and northeastern portions of the city, and also in the south central portion of the city close to Park Avenue.

R-5 – Medium Density Residential District

The medium density residential development pattern allows a density of 7.2 units per acre for single-family houses and 8.7 units per acre for two-family dwellings and is located in pockets bordering commercial land uses in the northern-central part of the City.

R-6 – Medium/High Density Residential District

This type of development provides for a density of 7.2-12 units per acre (dependent on the type of dwelling unit) and is located along Park Avenue south of the CBD, and in the north central and northeastern areas of the city. It buffers residential from commercial land use patterns.

R-7 – High Density Residential District

This approach calls for a density of 8.7-11.6 units per acre (dependent on the type of dwelling unit) and includes the multi-family apartment development in the northeastern section of the City (abutting North Plainfield border) along East Front and Second streets.

NC – Neighborhood Commercial District

The NC land use pattern is composed of uses that principally serve the specific surrounding neighborhoods. Neighborhood commercial development is intended to permit uses necessary to meet daily needs of residents, such as personal services, grocery stores, drug stores and convenience stores that primarily serve neighborhoods nearby. Higher intensity commercial uses are not permitted. The scale and intensity of development should not intrude into but rather complement the character of the residential neighborhoods they serve. Neighborhood commercial land use patterns are principally designated to serve the South Avenue, East Second Street, Plainfield Avenue and Clinton Avenue neighborhoods.

The NC zone on South Avenue has not seen much development since it was created in the 1998 plan. This is in large part due to its position in a flood zone. The continued viability of this zone in this location should be reassessed.

The area south of West Seventh Street and west of Park Avenue should be considered for an NC Zone. This area includes an expanse of residential development not currently served by convenience retail outlets. Expansion of the existing Neighborhood Commercial zone located at or on Plainfield Avenue and Clinton Avenue may serve this purpose.

CBD – Central Business District

The City's Central Business District (CBD) is located in the northern central area of the city and was intended to be the downtown retail center as well as serving a broader population of Plainfield residents and the surrounding region. The city has targeted the CBD as such a center because of its proximity to the Downtown Train Station. This area should continue as a priority for the City's primary retail and business center. To help facilitate this development, the City should seek strategic partnerships with Union County College, which has a substantial presence in the District.

MU – Mixed Use Professional, Commercial and Residential District

The City intends for this type of land use to act as a buffer district between lower-density residential areas and areas with

higher concentrations of commercial uses. Mixed use areas are intended for retail or other commercial uses on first floors and apartments above, as well as stand-alone structures. These areas are targeted in close proximity to the railroad line and around the CBD. As TOD-related development takes place along North and South avenues and areas surrounding both train stations, economic development activity can be expected to expand beyond the CBD

PO – Professional Office District

This type of pattern is intended principally towards the central-southern portion along Park Avenue emanating from Muhlenberg Regional Medical Center. Development in this district is intended primarily as an extension of existing office space with additional permitted conversions of existing residential uses. The extent to which this type of development will be attracted remains in question and should be reassessed.

GC – General Commercial District

This designation applies specifically to the commercially developed area at the western end of West Front Street along the border with Dunellen. This is the only area within the City where this zone exists. Recommended land uses include those traditionally associated with high volume roadways. Much of the zone is now occupied by automobile-related businesses, including sales and service establishments.

I – Light Industrial District

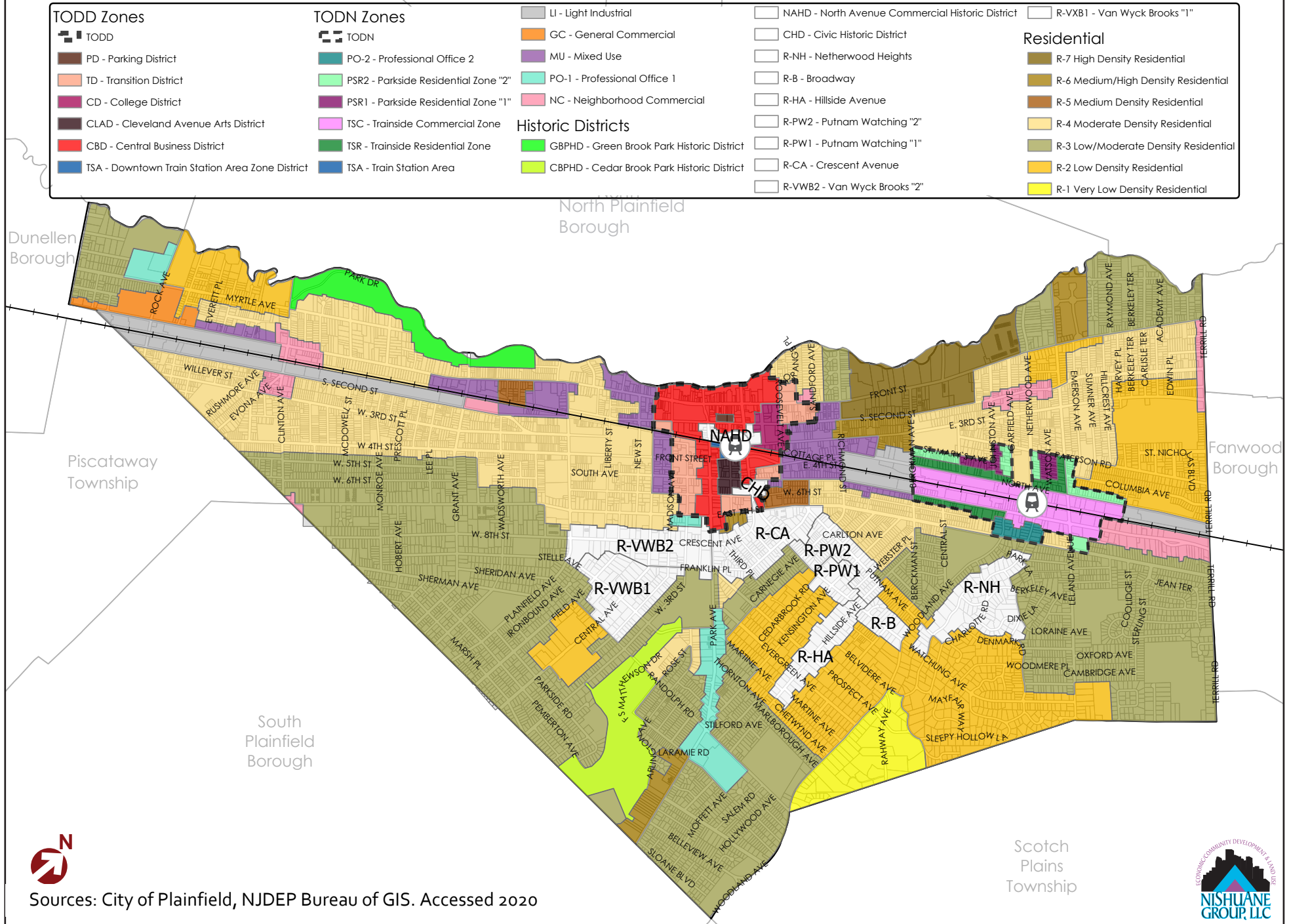
Land categorized as industrial is located along both sides of the rail line west of Grant Avenue and east of Richmond Street. The City has targeted such land for uses requiring rail access and uses that are otherwise incompatible in residential and mixed-use areas.

As mentioned earlier, the existing industrial areas, which offer a good opportunity for continued industrial use, should be assessed to ensure that they remain viable. Notwithstanding this, however, the City recently received an Innovation Grant to implement an initiative that would revitalize and re-purpose the West End Industrial Corridor located in the western end of the City abutting the railroad ROW.



Front Street

MAP 2: EXISTING ZONING



REDEVELOPMENT AREAS/PLANS

The City of Plainfield currently has a total of 16 redevelopment areas, each of which has been designated as in need of redevelopment and/or rehabilitation. Tables 1 and 2 list the redevelopment areas currently in effect within the City.

The process for designation of such an area begins with a detailed analysis to determine if the proposed area meets the required criteria to be declared "an area in need of redevelopment or rehabilitation." If the area meets the required criteria for declaration, the City Council may instruct the City's Planning Board to prepare a redevelopment/rehabilitation plan for the specific area. This plan regulates the permitted uses and bulk and design standards for the redevelopment area it governs, superseding the underlying zoning that would otherwise be applicable.

In addition to the adopted redevelopment plans listed above, there are currently four areas for which redevelopment/rehabilitation analyses were completed and an area in need of redevelopment or rehabilitation declaration made, but no Plan has been adopted (see Table 3). In such a case, the underlying zoning will remain in effect within the redevelopment area.

TABLE 1: REDEVELOPMENT PLANS/AREAS IN PLAINFIELD (SINCE 2009 MASTER PLAN)

Area Name	Year Plan Initially Adopted	Year(s) Amended
TODD South	2019	--
TODN South Avenue (Netherwood)	2017	2020
TODN North Avenue (Netherwood)	2016	2019
TODD West	2017	2020
Muhlenberg Campus/Tract	2017	--
Park Avenue Gateway	2019	--
Plainfield Avenue	2017	--
Scattered Sites 197A Plan	2000 (?)	2016 (4th Amendment)
North Avenue (Historic District)	2001	2019
Marino's Tract	2000	2019
South Avenue East	2018	2019
East Third and Richmond Street	2006	2019
Elmwood Gardens	2015	--
South Avenue Gateway	2014	--

TABLE 2: REDEVELOPMENT PLANS/AREAS ADOPTED PRIOR TO 2009 MASTER PLAN

Area Name	Year Plan Initially Adopted	Year(s) Amended
Teppers' Tract	2000	2005
Park-Madison	2000	--

TABLE 3: REDEVELOPMENT STUDIES PREPARED AND ADOPTED; BUT NO PLAN ADOPTED

Area Name	Year Plan Initially Adopted	Year(s) Amended
Scattered City-Owned Parking Lots	Study adopted in 2020	
South Avenue Corridor	Study adopted in 2020	
East Second Street Commercial Corridor	Study adopted in 2017	
534-536 South Avenue/	2000	--
500-502 Scott Avenue	Study adopted in 2005	
South Second Street Youth Center		
E-Paul Building	Preliminary study conducted in 2016	

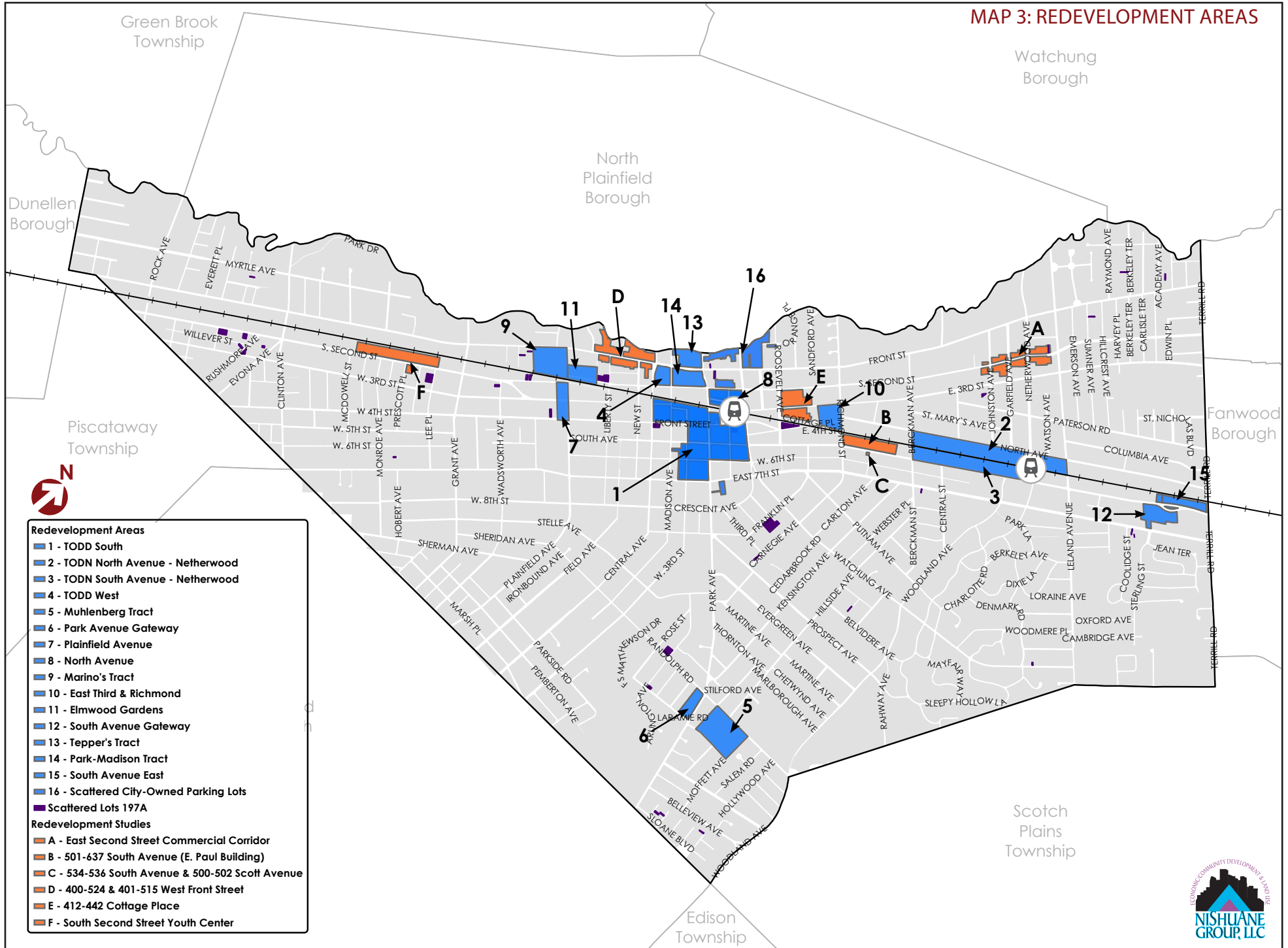
Redevelopment Policy

The 2009 Master Plan articulated a policy for the use of Redevelopment Planning as a strategy and mechanism to facilitate growth and ameliorate blighting influences that have impeded private sector investment in and around the City's Downtown and areas surrounding the two train stations. This policy remains generally appropriate and applicable.

To assist in the evaluation and administration of redevelopment planning, policy guidance recommendations include:

- Zoning classification and existing conditions of land and improvements immediately adjacent to the NJT Raritan Valley Line corridor should be evaluated to identify detrimental conditions and impediments to development for inclusion in a comprehensive corridor vision plan.
- Development and redevelopment planning should capitalize on existing mass transit systems and promote TODs close to multi-modal mixed use transportation areas around the Downtown and Netherwood Stations, possibly the former train stops at Clinton and Grant avenues and city bus routes.
- Subsequent to City Council declarations of areas in need of redevelopment, plans for these areas should be prepared as soon as possible following designation.
- Plans written for redevelopment areas should be contextually appropriate and generally fit into the fabric of the surrounding area and facilitate the creation of an environment that is conducive to a pleasant pedestrian experience.

MAP 3: REDEVELOPMENT AREAS

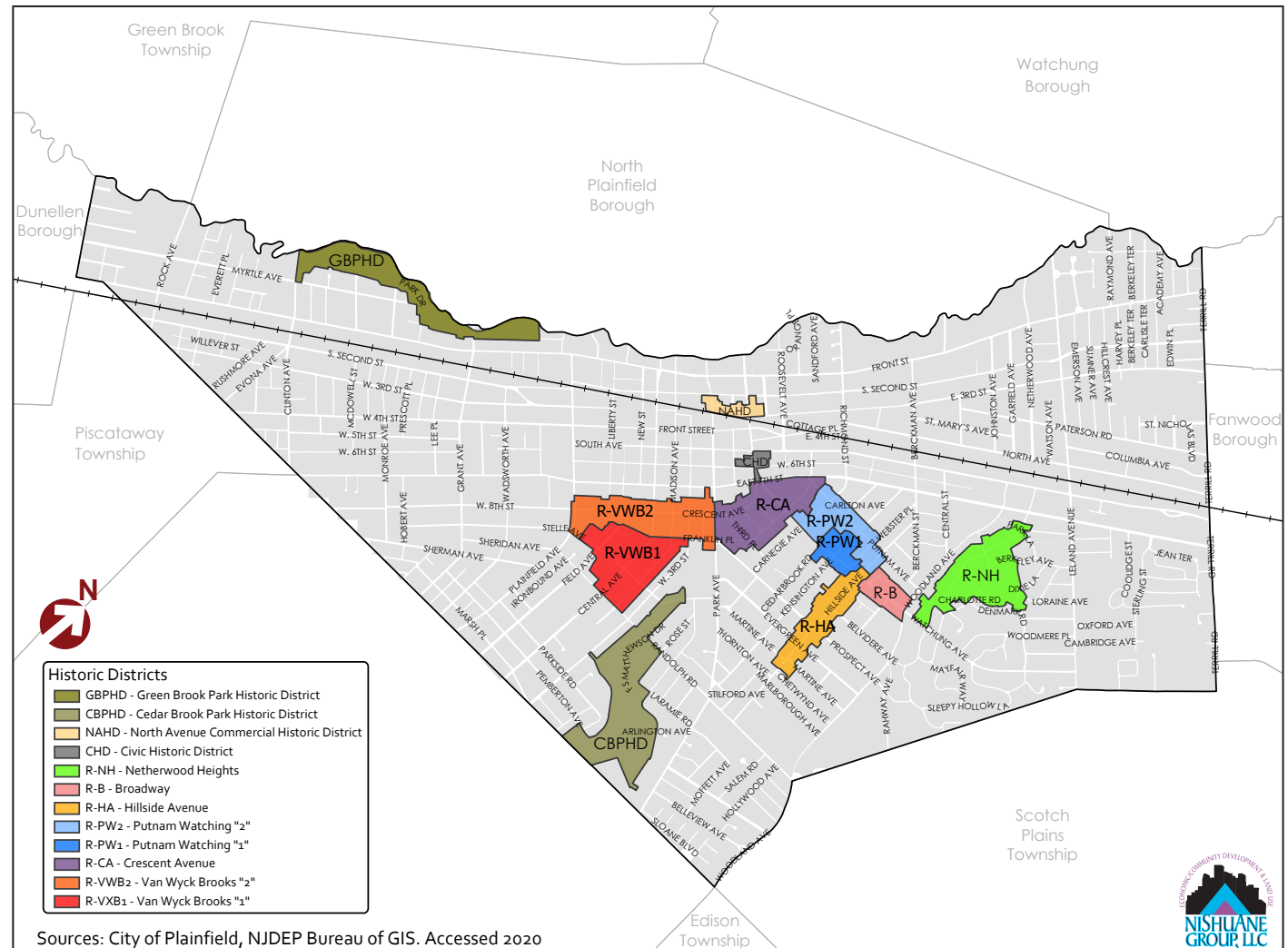


HISTORIC DISTRICTS

- Crescent Area Historic District
- Hillside Avenue Historic District
- North Avenue Historic District
- Van Wyck Brooks Historic District
- Putnam-Watchung Historic District
- Netherwood Heights Historic District
- Broadway Historic District
- Civic Historic District
- Cedar Brook Park Historic District
- Green Brook Park Historic District

There are a total of 10 historic districts designated in the City of Plainfield. Within each Historic District there are specific zoning regulations specific to that area and district. Eight districts were established prior to the adoption of the City's 2009 Master Plan. Both the Cedar Brook Park and Green Brook Park Historical District were designated in 2010.

MAP 4: HISTORIC DISTRICTS



NEW DEVELOPMENT

As discussed earlier, there continues to be a substantial amount of development occurring within the City of Plainfield. Much is taking place in the vicinity of the City's two train stations, along North and South avenues, where the transit-oriented development (TOD) strategy has taken hold.

Supported by recommendations to pursue TOD development in both the 1998 and 2009 Master Plans and the "transit village" designation in the area surrounding the Downtown Railroad Station, the transit-oriented development concept of high-density, compact, mixed-use, pedestrian-friendly development proximate to a transit hub is the centerpiece of the vast majority of development currently underway and planned within the City.

Development at some level is targeted within each of the City's four wards. An example of this are the ABC Supply commercial establishment, the Second Street Youth Center and the Station at Grant Avenue, a 90-unit affordable housing development, all located in the 4th Ward.

Development is also taking place and proposed throughout the Central Business District, along Watchung Avenue and East and West Fourth and Fifth Streets and on West Front Street to the southwest. Additionally, development is also targeted along Park Avenue, extending northward from the former Muhlenberg site toward the CBD.

Most of this development is spurred by the numerous redevelopment areas already

established throughout the targeted areas of the City, which has provided incentives for such growth.

While development in the City is concentrated primarily in the Downtown area and around the two train stations, the remainder of the City, primarily residential neighborhoods, is relatively stable. However, there are areas throughout the residential neighborhoods where development is targeted. Many of these are identified by area in need of redevelopment/rehabilitation designations and redevelopment plans are underway. These sites are concentrated in the southern area of the City, south of Park Avenue.



The Station at Grant Avenue

TABLE 4: CURRENT AND PROPOSED DEVELOPMENT

Key	Street Address	Project Name	Project Type	Residential Units	Commercial Square Footage
1	219-225 Central Avenue	Carts Food Equipment	Commercial		37,000
2	401-429 Cleveland Avenue	Cleveland East			
3	123-129 East Fifth Street		Mixed Use	18	3,000
4	201-233 East Front Street	Parking Lot 1			
5	347-435 East Third Street	East Third & Richmond	Mixed Use	189	7,000
6	West Front Street	Marino's Tract	Mixed Use	300	25,000
7	1250-1336 Randolph Road	Muhlenberg	Medical Offices	120	187,000
8	10 North Avenue		Retail	11	2,500
9	537 North Avenue				6,000
10	768-900 North Avenue			230	
11	1000 North Avenue			120	
12	200-212 Park Avenue 214-224 Park Avenue 226-232 Park Avenue				
13	700 Park Avenue			14	5,000
14	1204-1248 Park Avenue	Park Avenue Gateway	Drug Store		
15	1340-1426 South Avenue	Quinn		212	
16	803 South Avenue				
17	829 South Avenue		Mixed Use	70	4,400
18	1225 South Avenue	Fig Tree			
19	1369 South Avenue		Mixed Use	24	1,600
20	1405-79 South Avenue	Fine Fare			
21	736-758 South Second Street			90	
22	301-327 West Front Street	TODD West	Mixed Use	358	23,269
23	306-316 Watchung Avenue	Watchung Avenue & East 4th Street	Mixed Use	70	6,000
24	1444-1470 South Avenue	Wawa	Retail		5,000
25	216-232 West Front Street		Adult Day Care		27,000
26	719-731 West Front Street		Retail	20	9,000
27	518-578 West Second Street	Elmwood Gardens	Residential	58	

Watchung
Borough



Maintaining Older Neighborhoods

Despite the relative stability of most of the City's residential neighborhoods, there are some areas where numerous structures that show signs of deferred maintenance remain. As detailed in the Housing Element, a substantial number of the City's housing units (36%) were located in structures that are just over 80 years old (built in 1939 or earlier). This indicates the need for increased maintenance and repair, which does not happen as regularly as needed.

This issue was discussed in the 1998 Master Plan, where the concept of "transitional areas" was used to identify otherwise stable residential neighborhoods that were beginning to exhibit a general trend of disinvestment. Poor housing conditions evident in these areas included peeling exterior paint, sagging porches, missing roof shingles, broken sidewalks and curbs in a state of disrepair. To address these conditions, the 1998 Plan recommended code enforcement intervention and increased police, fire department and public works monitoring to forestall further decline. This objective was reiterated again in the 2009 Plan.

In an effort to address these conditions in the affected neighborhoods, the City has put together a multi-department taskforce including members from code enforcement, zoning, health and law enforcement, to work together in canvassing neighborhoods to address and eradicate the negative conditions. Dubbed the Quality of Life Taskforce, its purpose is to bring the full force of the City's enforcement apparatus to

bear against property owners, particularly the owners of problem properties where conditions have become so egregious that their impact on the surrounding properties and neighborhood is substantial.

In addition to the enforcement efforts being undertaken by the Quality of Life Taskforce, the City should look into expanding existing rehabilitation programs or establishing a new one that will assist residents in property maintenance and repair.

Residential Development

Most of the residential development in the City is allocated for Downtown, in proximity to the City's two train stations. This development follows the TOD pattern, with higher densities and mixed-use (commercial/residential) structures. The unit types include primarily one and two-bedroom units which, for the most part, are market rate.



New Residential Development on South Avenue

Access to more diverse and affordable

housing within the City was a concern raised by residents at community workshops. Many residents saw Plainfield's economic diversity as something that they loved about the City yet feared that it would be lost with the new development taking place Downtown, which would bring higher income residents to the City.

As recommended in the Housing Element, policies and strategies aimed at achieving the goal of affordability should be explored. One such strategy would be to weigh the possibility of increasing the permitted density in neighborhoods where appropriate to allow for the development of affordable housing.

The Housing Authority of Plainfield (HAP) has continued to move toward development that employs a lower-density model. This approach would be more appropriate for neighborhoods where the density is lower and more in line with the existing development. Other non-profit affordable housing developers have expressed difficulty in acquiring property within the City for development, a significant barrier to their ability to create affordable housing in the City.

Commercial Development

As discussed earlier, much of the commercial activity planned or currently taking place within the City, around the two train stations. It is centered on numerous redevelopment areas that have been established on parcels along the Raritan Valley Line ROW that were previously occupied by commercial and industrial uses. The City has relied heavily

on redevelopment planning to meet its revitalization goals through both financial incentives provided by the redevelopment process and carefully managing the scope of development to be undertaken.

In the 2009 Master Plan, substantial emphasis was placed on the use of TOD development in the downtown area surrounding the train stations. Much of the development underway and planned is focused on higher density residential and mixed-use structures with residential units over commercial/retail.

Each of these areas requires a specific scope of development and design guidelines. Many of the residential and mixed-use developments include amenities for residents, such as gyms and lounges. As development flourishes here, however, it is critical that efforts be made to integrate residents to businesses and services located throughout the rest of the City, so that commercial activity throughout Plainfield benefits.

Beyond the concentration in the wider Downtown area, commercial development in other parts of the City is limited. The City has focused limited development in the southern end of the City, at the former Muhlenberg Hospital site, where a mixed use medical/commercial/residential development is proposed. Professional office uses are also planned along Park Avenue, emanating from the Muhlenberg site and extending northward to Evergreen Avenue. This area has been zoned as Professional Office (PO-1). It has not performed as anticipated and its viability in attracting this use should be reassessed.

The proliferation of neighborhood commercial zones throughout the City should also be reevaluated for their continued viability. Neighborhood commercial zones like the one located on East Second Street (between Leland and Johnston avenues), has not seen the level of development anticipated, primarily due to its location within a flood zone. The viability of the NC zone designation in this area, under current conditions, will remain limited. Alternately, the City should continue to work with the Green Brook Flood Control Commission and the appropriate county and state agencies to ameliorate this flood condition, as well as the larger flood designations in the City.

Additionally, the need for and potential viability of additional neighborhood commercial nodes should also be considered across the City. As stated earlier, an area within the larger area south of West Seventh Street and west of Park Avenue, should be considered for a Neighborhood Commercial Zone. This area is characterized by an expanse of residential development. Its only retail/commercial areas are located at the intersection of Clinton and West Second streets and Clinton and West Seventh Street.

During the preparation of the 2009 master plan, the Plainfield Organized for West End Revitalization (POWER) group identified increased retail and commercial areas in this area as critical to meeting residents' needs for more shopping and job options. The Planning Board concurred. However, there has been very little private or public investment in the area.

There is a need for a degree of public intervention in the West End area to help spur private investment. One possible strategy is the creation of a redevelopment or rehabilitation plan that would encompass the properties in the area. This action would allow for the use of tax incentives that accompany an area in need of redevelopment or rehabilitation designation, encouraging development within the area. This approach would also help address the issues related to deterioration of residential properties described earlier. The creation of sub-district(s) within the redevelopment area would allow for zoning regulations specifically targeted to areas within the neighborhood.

Industrial Development

As discussed earlier, limited industrial areas remain viable in the traditional locations for such businesses. One of these areas is the LI zone located in the West End of the City. This industrial zone, also known as the West End Industrial Corridor, would feature as its centerpiece a potential light manufacturing facility that would leverage high speed communication technologies (HSCT) to revitalize the West End Industrial Corridor and the surrounding neighborhood. The City was awarded an Innovative Challenge Grant by the New Jersey Economic Development Authority to develop this initiative. The revitalization of the West End Industrial Corridor is anticipated to have a positive impact in this neighborhood and surrounding area, creating employment, educational and economic development opportunities.

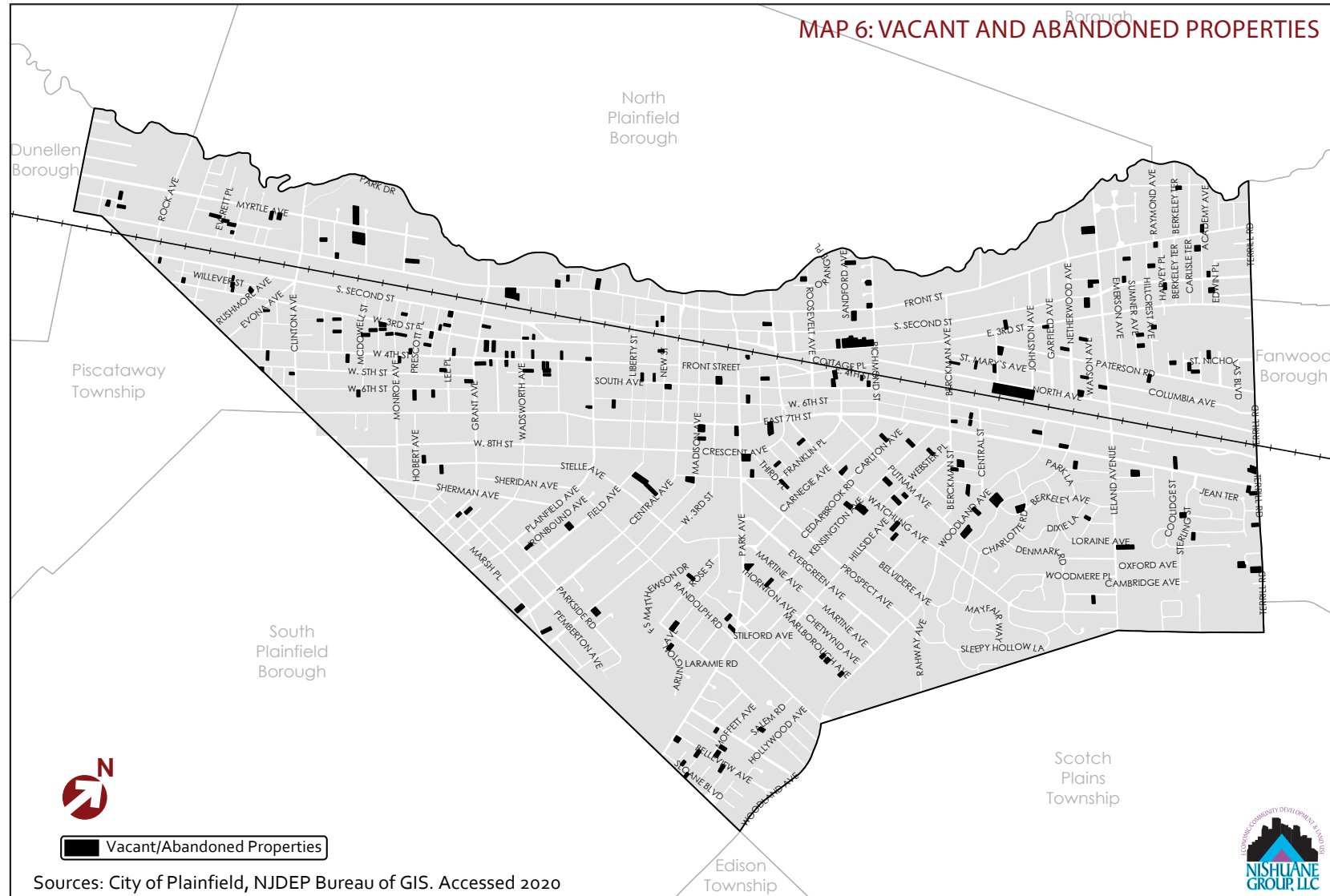
VACANT & ABANDONED PROPERTIES

The City of Plainfield maintains an active inventory in the Vacant and Abandoned property list, with just over 240 individual lots. As evident in Map 6, vacant and abandoned

lots are fairly well dispersed throughout the City. However, there is a concentration of these properties in the southwestern region, between South Second and West 6th Streets, south and west of Plainfield Avenue.

The City's vacant and abandoned properties strategy is to ensure that property owners

maintain and/or put their properties back into productive use. The City does not want these properties to become city owned.



ISSUES AND RECOMMENDATIONS

Among the stated goals of the 2009 Master Plan were to:

- Revitalize and redevelop existing underutilized industrial and commercial areas into productive and exciting mixed-use areas through the TOD concept.
- Provide areas for necessary land uses, jobs and economic opportunities for city residents at appropriate locations.
- Restore residential transitional areas to stable neighborhoods.
- Protect the existing neighborhood character and density of historic and non-historic residential patterns of stable residential development.

While the City has made substantial strides in all areas, work remains. In all instances the progress made must be continued, especially efforts to bring proposed development projects to fruition.

The proposed mixed-use development in the wider Downtown area also holds the promise of increased employment and economic opportunities. Additionally, the increase in the number of residents, especially in the downtown area, will help attract national chain restaurants and entertainment establishments, both of which have been identified as significant needs.

With the exception of proposed changes in specific zones and locations throughout the City, much of the overarching direction recommended by the 2009, remain relevant. A list of recommended changes to the zone plan is presented below.

Recommended Changes to Zoning and Land Use Regulations

- Consolidate Existing Redevelopment Areas/Plans.

1. This plan recommends the consolidation of the following redevelopment plans into a single plan: TODN-North, TODN-South, South Avenue East and South Avenue Corridor.
2. This plan recommends the consolidation of the Muhlenberg and Park Avenue Gateway Redevelopment Plan and the PO-1 zone, into a single area with a single Redevelopment Plan.

- Eliminate the R-5 zone throughout the City.

There are currently only two areas of the City that are zoned R-5. This plan recommends:

1. The area encompassed by West Front, Oxford and Lafayette streets be reviewed for incorporation into the MU (Mixed Use) zone located to the north and south.
2. The area of East Seventh and East Fifth streets and Putman Avenue should be reviewed for incorporation into the adjacent R-4 zone.

- Review the zoning for parcels fronting on Terrill Road, between East Front Street and the Watchung municipal boundary for possible change to commercial zone.

This area is currently zoned R-3. However, the majority of parcels here are non-conforming, containing primarily single-family dwellings. With the high volume of vehicular traffic coming from Route 22, these parcels are not appropriate for the existing residential use. This plan recommends that this area be rezoned to commercial use.

- The R2 zone along Terrill Road, and Columbia, George streets should be rezoned to an R3 zone.

This plan calls for a review of lot sizes and determine if R-3 designation is more appropriate.

- Review West Seventh Street from Irving Place/John Street for possible reclassification.

This area west to the South Plainfield municipal boundary is in a Low-Moderate Density Residential development pattern and is zoned R-3. This designation permits only single-family dwellings on 12,500 sq. ft. lots, yet the majority of the large structures in this area are not single family, and there are pressures to permit higher densities as the lots are extremely deep. The Zoning Board of Adjustments (ZBA) has granted approvals allowing higher density townhouse /single family development.

This plan calls for further study in order to determine if classification permitting a higher density is appropriate.

- *Reviewing area centered on Plainfield Avenue, West Fourth Street, Central Avenue and the NJ Transit tracks.*

The majority of uses in this area are apartment complexes at a much higher density than the pattern or zone calls for. This plan recommends the designation of a higher density land use pattern.

- *Add all redevelopment areas with adopted redevelopment plans to the Zoning Ordinance and Map.*

This Plan calls for the inclusion of Redevelopment Areas with governing plans in the City's Zoning Ordinance and for the updating of the Zoning Map to indicate areas of the City where redevelopment plans have been adopted and where alternate zoning that supersedes the underlying zoning is in place.

- *Update Zoning Map to reflect 197 Scattered Site Redevelopment Plan changes.*

This plan calls for the updating of the Zoning Map to reflect the amendment of the 197 Scattered Site Plan, which is now reduced to 38 sites.

- *Rezone the parcel adjacent to Cedar*

Brook Park on the South Plainfield border.

This plan recommends the rezoning of the parcel (Block 731, Lot 15) abutting Cedar Brook Park to the south from the existing R-3 zone to a newly created Open Space Zone (see previous recommendation). This will restrict any development, which could potentially adversely impact Cedar Brook Park.

- *Ensure Cedar Brook Park is shown properly on the zone map.*

There is a section of the park fronting on Parkside Road (Block 733, Lot 22), which should be included in the park area. Both Cedar Brook Park and the adjacent lot are Recreation and Open Space Inventory (ROSI) declared properties on the Union County ROSI (Recreation and Open Space Inventory). This plan recommends that these lots should be shown as open space on the Zoning Map.

- *1229-1253 Cushing Road (The Peterson Farm.)*

This plan recommends that 1229-1253 Cushing Road – the Peterson Farm (Block 922, Lots 55 and 56), which is on the Union County ROSI, should be indicated on the land use map as open space.

- *Add Commercial Recreation Facilities as a permitted use in the CBD zone.*

This plan recommends the addition of "Commercial Recreation Facilities" as a

permitted use in the CBD. This and similar uses reflect the ongoing transformation of the CBD and the surrounding Downtown area, where both longtime and new residents will require establishments like this.

- *How should the city address institutional uses (PMUA transfer stations, post offices, etc.)?*

This plan calls for inclusion of "Institutional Uses" as a defined term in the land use ordinance. This will help to eliminate existing confusion about this use.

- *Inclusion of schools as a permitted use in any zone.*

Currently schools are not a permitted use in any zone. This plan recommends that schools be considered a permitted or conditional use in appropriate zones throughout the City. This action should be a part of a wider discussion between the City and the Board of Education as to the most appropriate locations for school facilities throughout Plainfield.

- *Inclusion of funeral homes as a permitted use in additional commercial zone.*

Funeral homes are currently limited to a few commercial zones. This plan recommends that this use be permitted in a greater cross-section of commercial zones.

- *Resolve differences between repair*

facilities/auto repair/auto body uses and multi-family uses.

This plan calls for the update of the ordinance to define how these businesses differ. Conduct a study of all auto repair and auto body uses and determine site suitability and conflicts with issuing certificates of occupancy.

- *Establish group home policy.*

Pursuant to the NJ Municipal Land Use Law, (MLUL), group homes are to be a permitted use in all zones. The City currently has 45 group homes operated by both non-profit and for-profit organizations. This plan recommends that a policy be developed to address the conditions under which such facilities should be sited.

- *Establish a policy governing micro-breweries, distillers and brew pubs.*

Determine how they should be treated under the City's land use ordinance.

- *Develop standards for treatment of solar facilities (both on roof tops and as stand-alone facilities.)*

This plan recommends the development of uniform standards to address installations of solar facilities (both rooftop and stand-alone) throughout the City, with specific attention to rooftop panels in the Historic Districts

- *Consider that the following be permitted or conditional uses in appropriate zones throughout the City.*

1. Self-storage facilities.
2. Adult Day Care Centers.
3. Hotels and Motels – develop policy to include in TOD area.
4. Social Clubs.
5. Marijuana Dispensary/Sales.
6. Live Animal Sales.
7. Backyard Chicken Husbandry.

- *Create new zone categories*

1. Open Space Zone

This plan recommends the creation of a new "Open Space Zone" category that will apply only to publicly owned lands, with the exception of the property surrounded by Cedar Brook Park, which is owned by the Middlesex Water Company as a groundwater recharge area. ROSI lands that serve as municipal parks will need to be looked at on a site by site basis for designation under this zone category.

2. Conservation Zone

This plan recommends the creation of a new "Conservation Zone" category. This zone designation would include ROSI protected lands, such as the Cushing Road and Milt Campbell Field detention basins, as well as the forested lands along the Green Brook in the West End that are either wetlands, forested, contain steep slopes, or are natural areas.

3. Cemetery Zone

This plan recommends the creation of a new "Cemetery Zone" category which would include existing cemeteries (which are not likely to change). It is not the intent to create or to designate any new cemeteries. In such a district, cemeteries would be a permitted use, which would allow for their improvement or expansion where appropriate and possible.

- *Develop GIS and Mapping Capability*

This Plan recommends that the City investigate the development of its own in-house GIS (Geographic Information System) and mapping capability. This will allow for the efficient and timely creation/modification of the various spatially based maps and similar documents. This capability is particularly crucial for updating the City's parcel map, which is currently not consistent with the City's tax maps.

Other Recommendations

- As development continues place in the Downtown area, this plan recommends that the City work with Union County College to coordinate anticipated expansion plans in this area.
- The Neighborhood Commercial (NC) zone located on East Second Street (between Leland and Johnston avenues) has not seen the level of development anticipated, primarily due to its being located within a flood zone. This plan recommends that the City continue to work with the Green Brook Flood Zone

Commission and the appropriate county and state agencies, to ameliorate the flood condition.

- The streetscape guidelines that were previously developed were never formally adopted by the City Council. This plan recommends that the Council adopt these guidelines so that they may be properly applied.
- This plan recommends that a Parks Master Plan be undertaken by the City for an in-depth assessment of the City's open space and recreation facilities and their adequacy in meeting the needs of the City's residents.
- This plan recommends that the City work with South Plainfield to explore the creation of a walkway alongside Cedar Brook. Such a walkway could connect with Spring Lake Park in South Plainfield and ultimately become a part of the East Coast Greenway, which extends from Maine to Florida, connecting 15 States and 450 cities and towns.
- This plan recommends that Cedar Brook and Green Brook parks should be formally designated as Plainfield Historic Landmarks. They are both already designated on the state and national historic registers.
- The Park-Madison Development, which included a parking deck, was completed. However, the parking deck has been underutilized. This plan recommends that the City work with Union County to allow use of the deck to facilitate the TOD development in the area.
- There is a need for some level of public intervention in the West End neighborhood, to help spur private investment. This plan recommends that the City have the West End neighborhood designated as an area in need of redevelopment or rehabilitation, and subsequently create a redevelopment or rehabilitation plan that would encompass the properties in the West End. This would allow for the use of the tax incentives that accompany an "area in need of redevelopment or rehabilitation" designation to incentivize development within the area. This approach would help in addressing the issues related to the deterioration of properties. The creation of sub-district(s) within the redevelopment area would allow for zoning regulations specifically targeted to areas within the neighborhood.
- This plan recommends the strategic use of "areas in need of rehabilitation" designation throughout the City, as an incentive for property rehabilitation.
- This plan recommends the City working collaboratively with neighboring municipalities to address common issues and concerns, including the extension of the Green Brook Trail, flooding that extends across municipal boundaries and advocating for a "one seat ride" into Manhattan.
- This plan recommends that the City continue to develop flood mitigation strategies, secure funding for flood mitigation and revisit redevelopment plans in the flood plain areas.

For more information see:

Housing Element

- Recommendations

Economic Plan Element

- Redevelopment in the City
- Recommendations
-

Community Facilities Element

- Survey of Plainfield's Existing Community Facilities
- Proposed Community Facilities Improvements, Growth Plans and Needs Assessment.
- Issues and Opportunities

Community Input

Sampling of comments from Community Workshops

- More neighborhood based retail/commercial/not enough mix.
- Development concentrated in Downtown.
- Density around Train Station ½-mile radius.
- Desirable businesses around station.
- Why WAWA in middle of transit area?
- Improve signage.
- Enforcement needs to be improved.
- Utilize abandoned buildings for public purposes like recreation, etc.
- Concern about impact of Muhlenberg Hospital development – outpatient component of project – traffic.

From the Master Plan Survey

In the survey, 71% said yes when asked if there areas of the City of Plainfield you would like to see preserved/enhanced/restored? If yes, please specify where.

- Many historic homes in Plainfield that are at risk and that should be incorporated into existing or new Historic Districts, important to the appearance and feel of the City.
- No Wawas, where viable businesses thrived.
- DOWNTOWN... with a reason for people to want to go there and patronize businesses...Downtown Front Street Corridor.

- Enhance North Avenue.
- 4th Ward. Particularly West of Plainfield Avenue.
- Parks/all of the parks.
- Plainfield Avenue pool.
- Muhlenberg hospital.
- The library.
- West end - Front St. warehouses. Clean up and put in viable stores.
- Adaptive re-use of old buildings and not demolition of old buildings. Green Brook could be developed into a waterway area.
- The urban/pedestrian character of downtown and Netherwood transit areas must be preserved and developed.
- Instead of sprinkling resources across a myriad of issues/needs, conduct an intense review of priorities, identifying the opportunities that will have the most impact.
- Fewer but better comprehensive and attainable master plan goals should be put to action.
- There is much distrust due to a lack of transparency regarding proposed major developments - community input for specific actual developments is not actively sought - when residents have serious concerns they are ignored.

HOUSING ELEMENT

"I long, as does every human being, to be at home wherever I find myself. "
- *Maya Angelou*

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How We Get There

Diversify Housing Options

- Identify areas that could be rezoned to allow for alternate housing types.
- Create partnerships with developers of specialty housing for targeted populations.
- Establish a luxury residential rental market, providing housing opportunities for new residents and those seeking to downsize yet remain in Plainfield.
- Modify zoning to accommodate multi-generational housing.
- Continue to explore revitalization and adaptive reuse of dilapidated, abandoned and underutilized commercial properties.
- Expand funding of the Comprehensive Housing Assistance Program (CHAP).

Make Home Ownership the Goal

- Establish a redeveloper fund financed by developer contributions, to fund affordable housing and other community needs.
- Explore ways to provide assistance to those who have homes and mortgages but are adversely affected by the current economic downturn.
- Focus programs on lower and moderate income households.
- Give non-profit housing developers first dibs before properties are taken to auction.

Educate and Inform

- Establish a Housing Resource Center where residents can receive help on housing and related issues.
- Expand existing homebuyer training programs.
- Continue sharing information on availability of mortgage financing available through state and other sources.
- Expand financial literacy programs.

Strategic Vision

The City of Plainfield will take a holistic approach to housing, providing diverse housing stock for home ownership or rental that encompasses market rate, affordable, senior and age-restricted options.



Source: www.freepik.com

INTRODUCTION

Housing is more than simple shelter from the elements. It is the roof over all of our lives – where children are raised, older generations continue to live comfortably, where dreams are born, plans made, people flourish. The concept is simple; achieving it is not.

Although the City has a number of demographic challenges that play a role in its approach to Housing (state's highest rate of female-headed households, an at-risk group; nearly one-third of residents receiving public assistance; the cost-burden factor), it must focus on Housing overall, for everyone. That includes a major issue facing not only Plainfield but the country as a whole – an aging population that will require specific kinds of residences and services.

demographics, housing options, financial impacts and services available to owners and renters are all included. Recommendations based on research and findings are presented.



Homes on West Third Street

The 2009 Master Plan addressed many issues that are reiterated in this plan – the aggressive elimination of vacant and boarded-up inventory and the revitalization and adaptive use of older homes and commercial buildings. These are some of the topics that surfaced in public workshops held to gain residents' perspective and their viewpoints are included in this plan. Participants spoke of the desire for greater variety in available housing including more affordable and middle income options; reuse of abandoned homes; concerns about density and the congestion it can bring; and better enforcement.

The Housing Element examines major issues related to housing in the City. Household

MUNICIPAL LAND USE LAW

"A housing plan element pursuant to section 10 of P.L.1985, c.222 (C.52:27D-310), including, but not limited to, residential standards and proposals for the construction and improvement of housing."

HOUSEHOLD AND FAMILIES

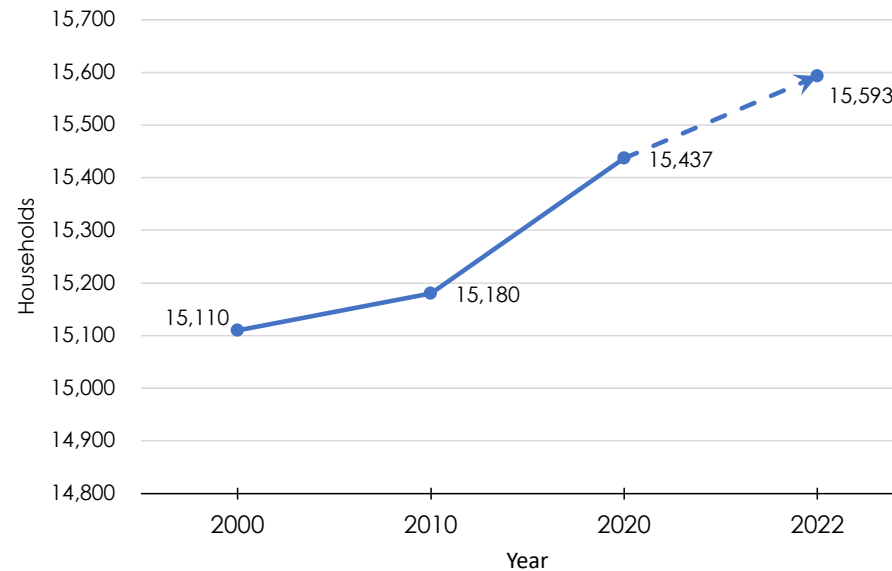
In 2020 there were an estimated 15,437 households in the City of Plainfield. This represents a 2% increase over the 2000 level, when there were 15,110 households. This trend is expected to continue, with 15,593 households projected in 2023. (See Chart 1)

The rate of growth varies across New Jersey. Between the 2000 and 2010 census, the City's population grew at a rate of 4.32%, surpassing the Union County rate of 2.69% but just under the state at 4.49%. Between 2020 and 2025, the City's rate of growth is projected to be around 1.5%. (See Chart 2.) With the ongoing and planned development within the City, growth may exceed this projection, as Plainfield continues to attract residents in defined growth areas.

Looking at the sizes of households, based on 2020 estimates compiled by Claritas, Inc., the average household size in the City of Plainfield was 3.30 residents. This is up slightly from 3.02 in 2010. Most households in the City (24%) were comprised of two-person households, followed by one person and three person households. Between 2010 and 2020 the overall numbers remained the same, despite very modest decreases in the number of smaller sized households and increases in larger sized households (including 5, 6 and 7-person households.) (See Chart 3.)

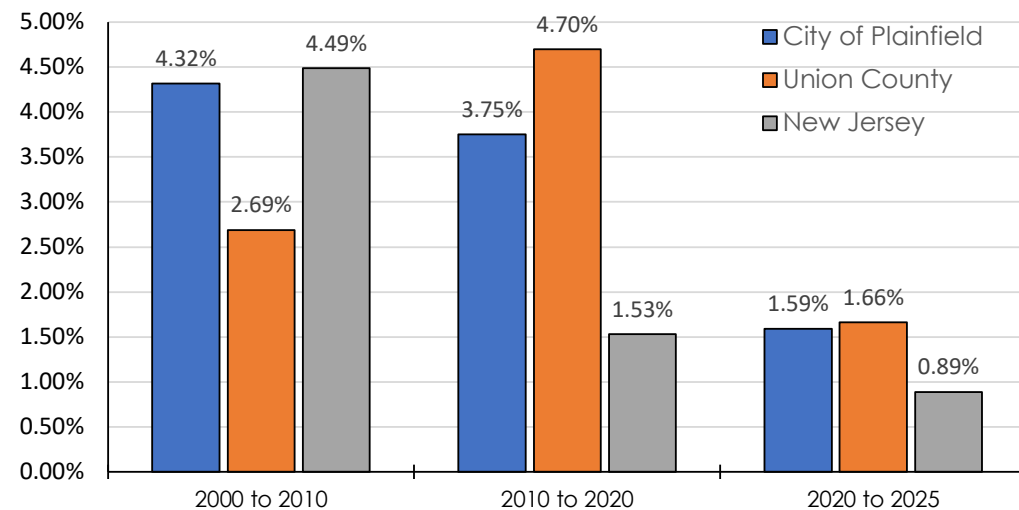
There are two types of households: Families, which consists of related individuals living under the same roof and Non-Family,

CHART 1: HOUSEHOLDS (2000 - 2022)



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

CHART 2: HOUSEHOLD CHANGE (2000 - 2025)



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

consisting of unrelated individuals living under the same roof. Based on Claritas 2020 estimates, approximately 72% of households in Plainfield are Family and 28% Non-Family. These percentages remained the same from the 2010 U.S. Census, despite modest increases in the actual number of families.

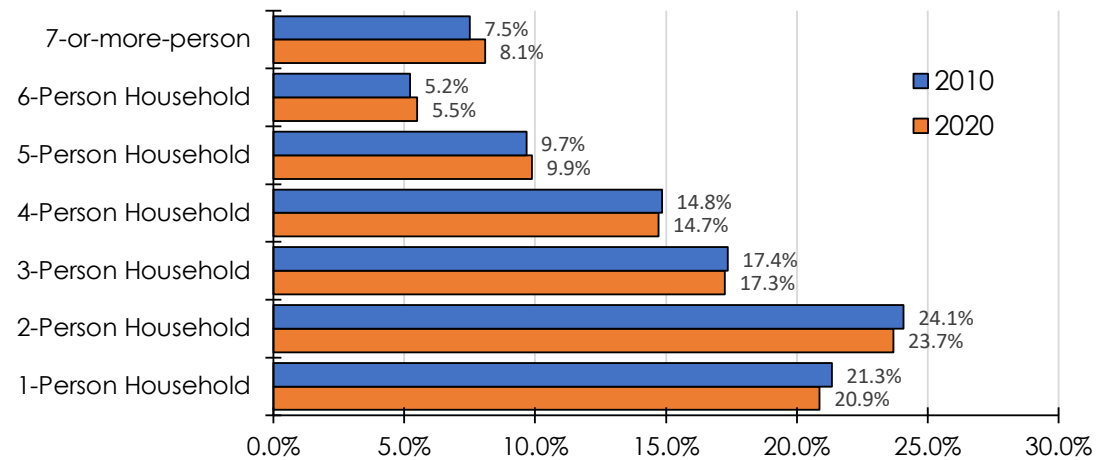
Among Family households, approximately 53% were made up of married couples, with 26% having children. Approximately 33.5% of households were female-headed households, approximately 17% of which had children. (See Chart 4.) The number of female-headed households with children is an important socioeconomic indicator, as this segment of the local population is usually considered “at-risk.” This can signify the need for policies and services to support these residents. The size of the female-headed household segment of the City’s population was greater in Plainfield than in the county and state as a whole.

Household Characteristics

Based on Claritas estimates, in 2020 the median household income for Plainfield residents was approximately \$64,613. Over 60% of households had incomes over \$50,000, with just over 30% earning over \$100,000. Approximately 30% of households had incomes under \$25,000. (See Chart 5.)

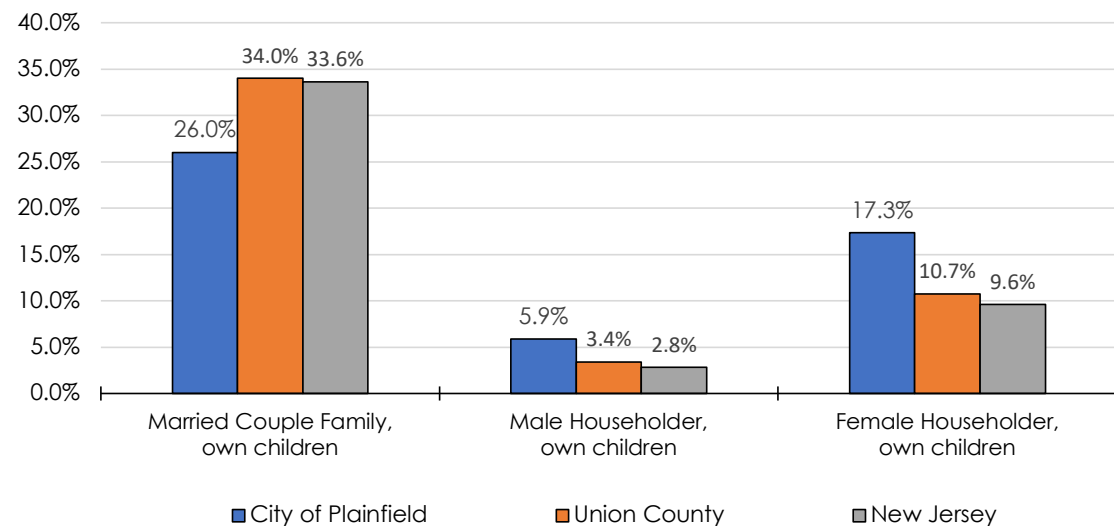
While most household income came from earnings (81.4%), others had incomes from a variety of other sources. This includes Social Security for approximately 29% of households and Retirement Income for 15%. The number of households receiving Retirement and

CHART 3: HOUSEHOLDS BY HOUSEHOLD SIZE (2010 - 2020)



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

CHART 4: FAMILY TYPE BY PRESENCE OF OWN CHILDREN - 2020



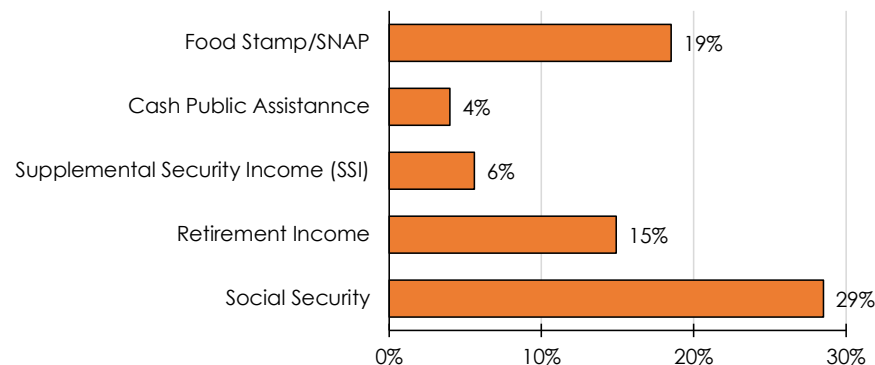
Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

Social Security Income together accounted for just over 44% of households, suggesting that a large number of Plainfield's households include older retired members. (See Chart 6.)

Approximately 29% of households are receiving some form of public assistance. An estimated 19% of households reported receiving SNAP (Supplemental Nutrition Assistance Program), or Food Stamps as it is more commonly known. SNAP is a federal program that helps millions of low-income Americans put food on the table.

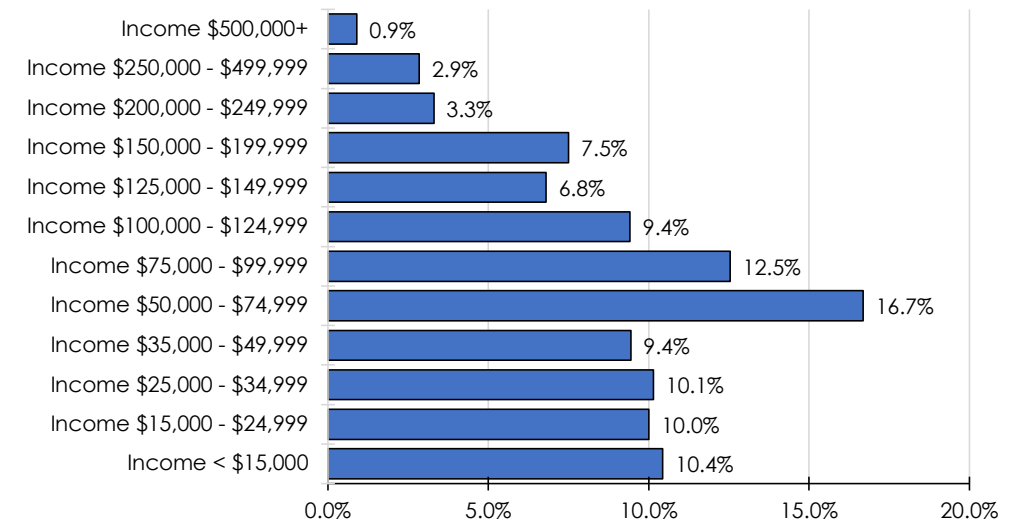
Related to household income is the level of poverty being experienced by families within the City. Based on the Claritas estimates, in 2020 approximately 15% of families of the City's families had incomes below the federally defined poverty level. This was substantially higher than the level for both Union County and New Jersey as a whole. The same was true for families with children whose income fell below the poverty level, at almost double that of the county and state as a whole. (See Chart 7.)

CHART 6: HOUSEHOLD INCOME BY TYPE - 2017



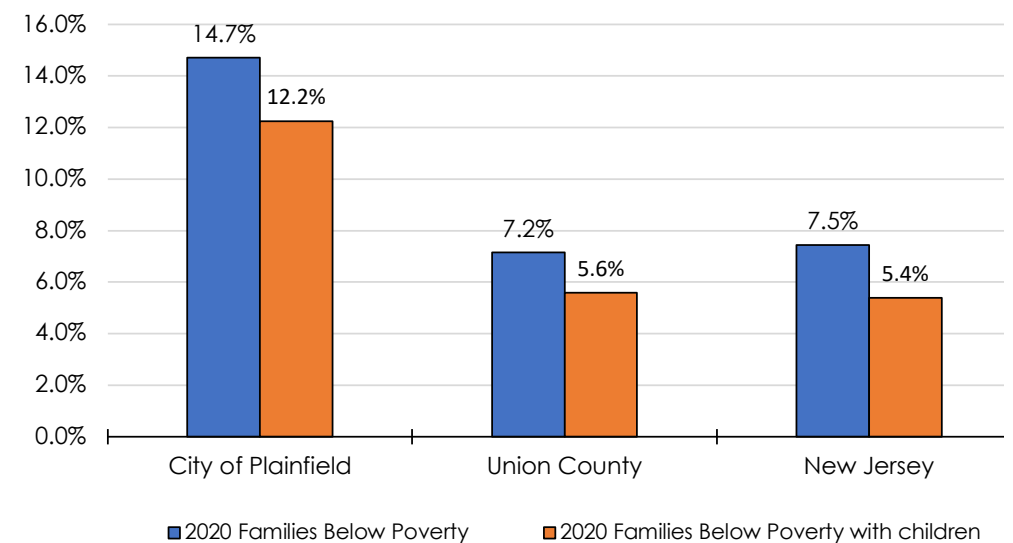
Source: U.S. Census Bureau, 2013-2017 American Community Survey, 5-Year Estimates

CHART 5: HOUSEHOLDS BY HOUSEHOLD INCOME - 2020



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

CHART 7: FAMILIES BELOW THE POVERTY LEVEL - 2020



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

HOUSING CHARACTERISTICS

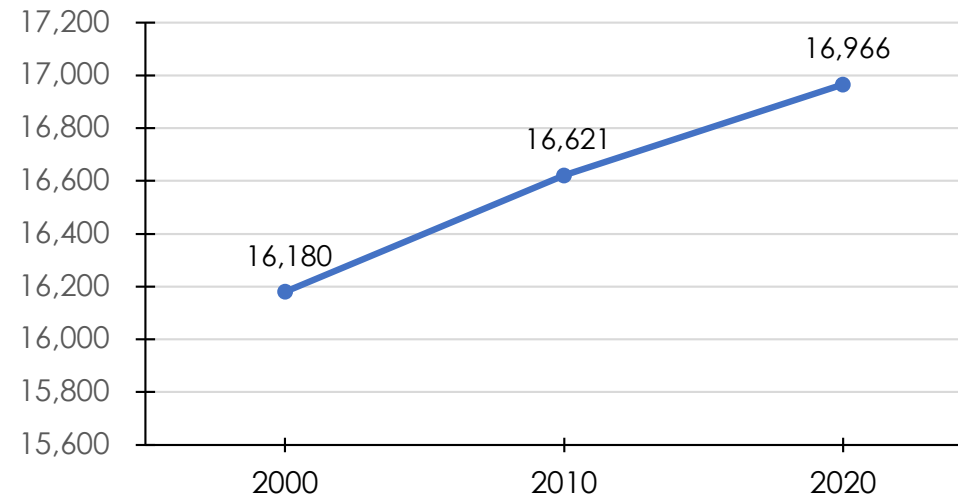
According to 2020 estimates compiled by Claritas, there are approximately 16,966 housing units (up from 16,800 in 2000) in the City of Plainfield. Throughout the period the vast majority of housing units were occupied. In 2000, 94% of housing units were occupied, declining to approximately 91% in 2020. Here again, the ongoing and anticipated development within the City, particularly around the train stations, is expected to increase substantially the number of dwelling units over the coming decade. (See Chart 8)

Plainfield's occupied housing units are evenly split between owner occupied and renter occupied. This is not consistent with the owner/renter occupied ratio for Union County and the State of New Jersey as a whole, where owner-occupied units were more prevalent than renter-occupied units. (See Chart 9.)

With the recent and planned development in the downtown and other areas around the City, the disparity between owner and renter-occupied units will likely widen, with the number of renter-occupied units increasing. Much of the planned development is predominantly smaller, studio, one and two-bedroom rental units.

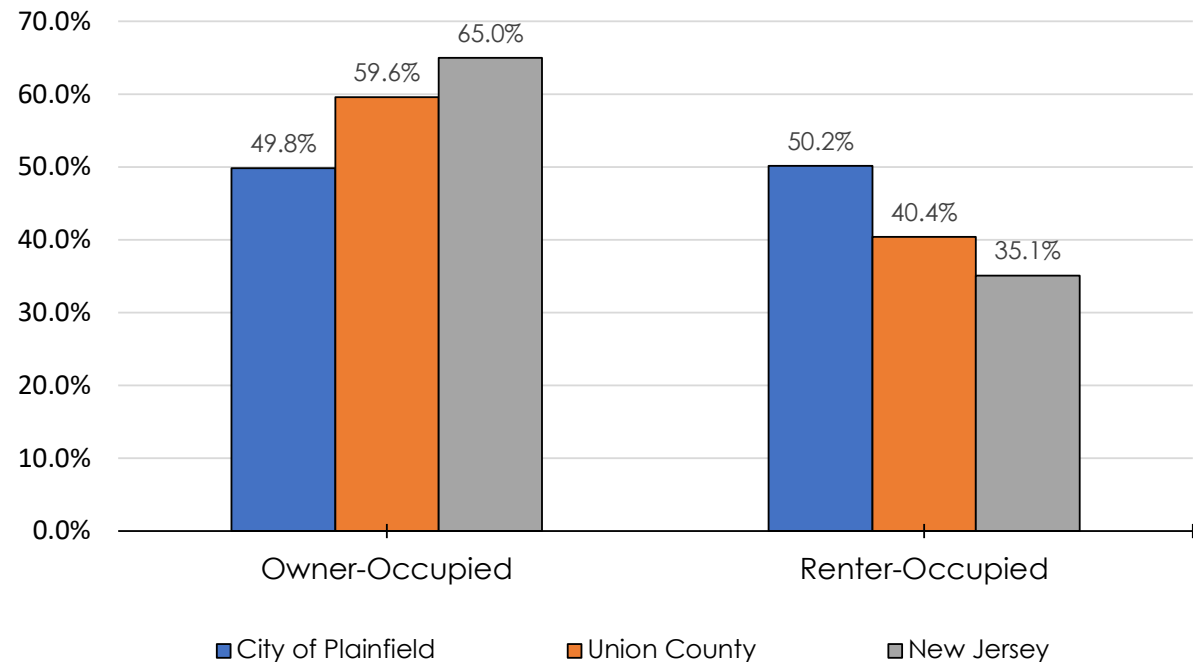
Related to occupancy is the number of individuals that occupy each housing unit. This is a good indicator of the incidence of "overcrowding," where more than the optimal number of individuals live within the housing unit. A generally accepted standard for this indicator is having more than one person per room. Based on

CHART 8: TOTAL HOUSING UNITS (2000 - 2020)



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

CHART 9: OCCUPIED HOUSING UNITS BY TENURE - 2020



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

the 2018 American Community Survey, approximately 11% of the City's housing units had more than one person per room, thereby defining them as overcrowded. Of these units, approximately 4% had over 1.51 persons per room. This is down from the level in 2000 where the U.S. Census found approximately 13% of housing units with more than one person per room.

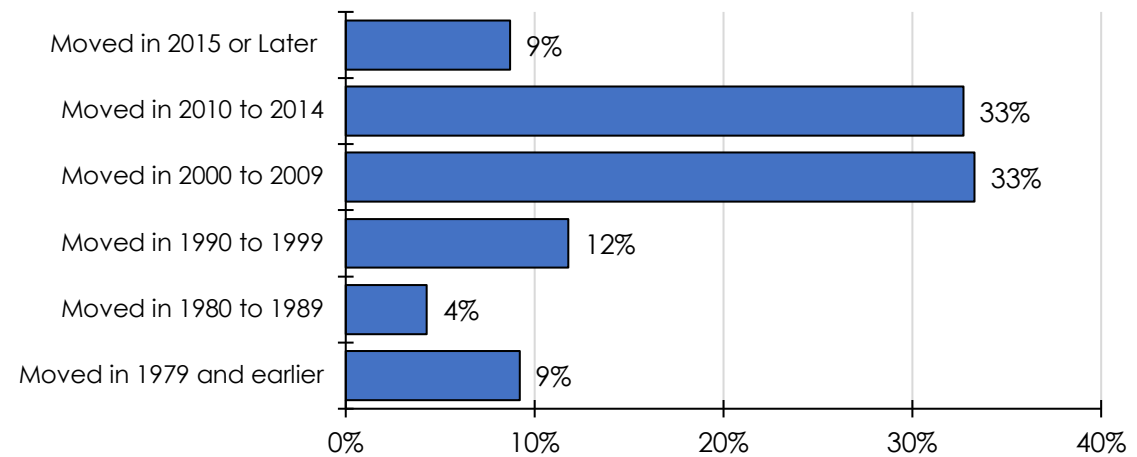
Despite the disparity in unit tenure across the city, county and state, there appears to be little impact on the average length of stay in a residence. For owner occupied units, the average length of residency was approximately 19 years across all three jurisdictions, while the average length of residency for renter-occupied units was approximately 7.5 years.

Based on the 2017 American Community Survey, over 75% of Plainfield's housing units were occupied by households that moved into them in 2000 or earlier. (See Chart 10.)

Most of the rental units within the City are generally located in buildings with multiple units. Looking at a breakdown of housing by the units in the structure, based on 2020 estimates compiled by Claritas, Inc., the vast majority of units (45%), were located in single-family detached homes. This was followed closely by two-family, which accounted for 17% of all units, and three and four-family homes, in which 10.5% of housing units were located. Structures with five or more dwelling units in them accounted for just under a quarter of the all housing units. (See Chart 11.)

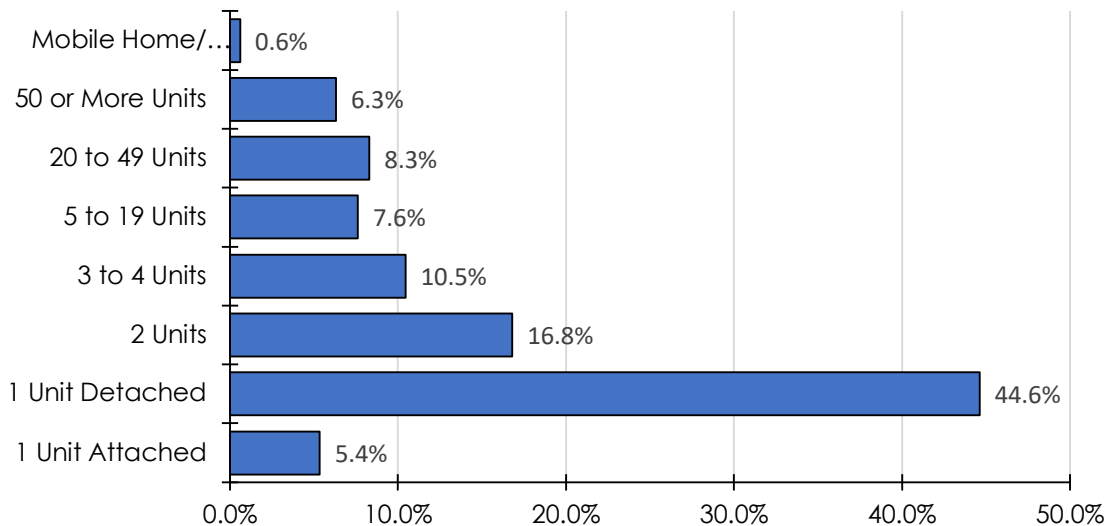
Beyond the number of dwelling units in each

**CHART 10: YEAR HOUSEHOLDER MOVED INTO UNIT 2017
(OCCUPIED HOUSING UNITS)**



Source: U.S. Census Bureau, 2013-2017 American Community Survey, 5-Year Estimates

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Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

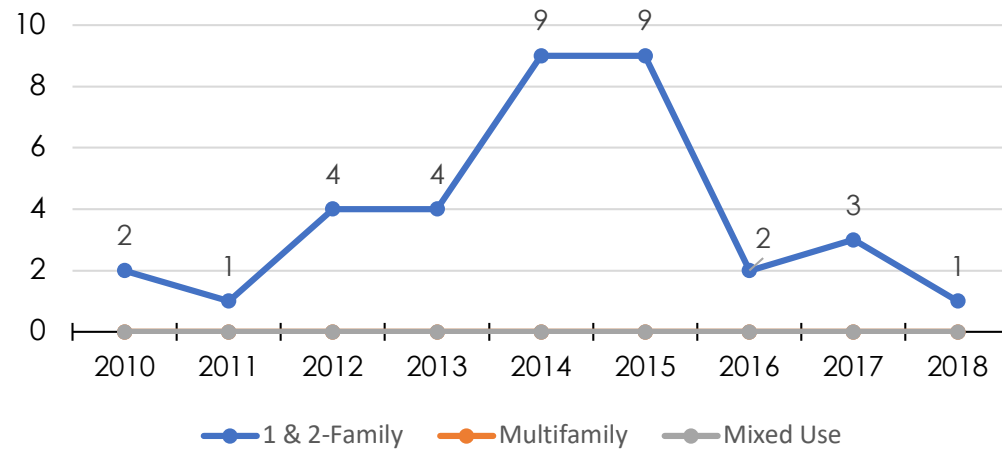
structure, the size of the dwelling unit itself is of interest. Based on U.S. Census Bureau, 2013-2017 American Community Survey, 5-Year Estimates, approximately 60% of housing units in the City had two or three bedrooms. Studio units were the least prevalent type of dwelling unit in the City, accounting for 2.5% of all units. Over the next three to five years, demand for smaller units will continue to increase and will be met by the ongoing and anticipated development in and around the train stations that will be largely studio, one and two-bedrooms,

Looking at development activity within the City over the past decade, we find that activity has generally been flat, with the exception of activity in the one and two-family housing unit category. Between 2010 and 2018, based on data compiled by the N.J. Department of Community Affairs, there were a total of 35 demolition permits issued. In all instances, these permits were for the demolition of one and two-family structures. The peak of this demolition activity was in 2014 and 2015, when nine demolition permits were issued in each year. From then, the number of permits declined to just one permit issued in 2018. (See Chart 12.)

During the same period, there were a total of 58 certificates of occupancy (COs) issued. These peaked in 2015, when a total of 29 COs were issued, including 19 for one and two-family structures and 10 issued for multifamily structures. From then on the number of COs issued declined. (See Chart 13.)

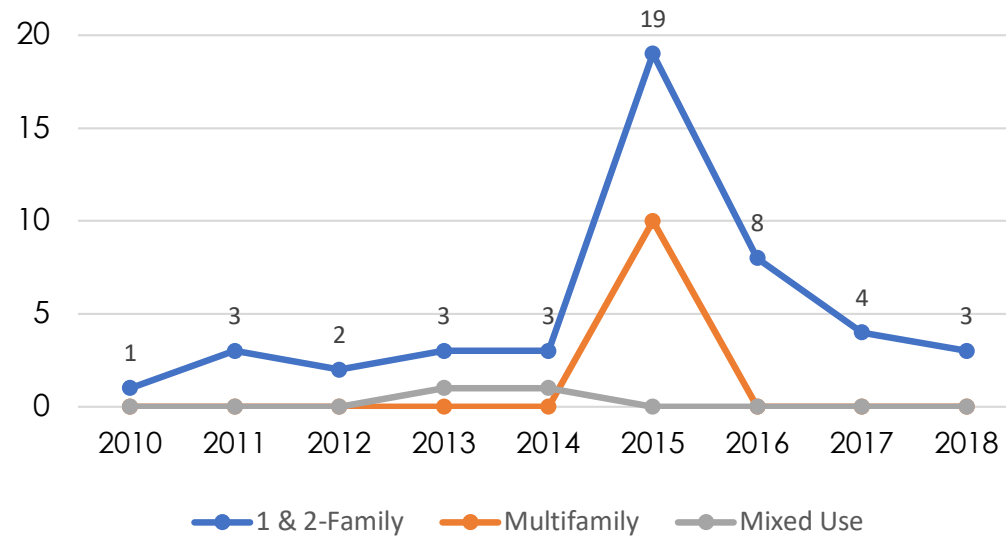
The chart of New Privately-Owned Residential Housing Units Authorized To Be Built between 2000 and 2018 indicates a fairly flat period

CHART 12: DEMOLITION PERMITS (2010 - 2018)



Source: N.J. Department of Consumer Affairs

CHART 13: CERTIFICATE OF OCCUPANCY (2010 - 2018)



Source: N.J. Department of Consumer Affairs

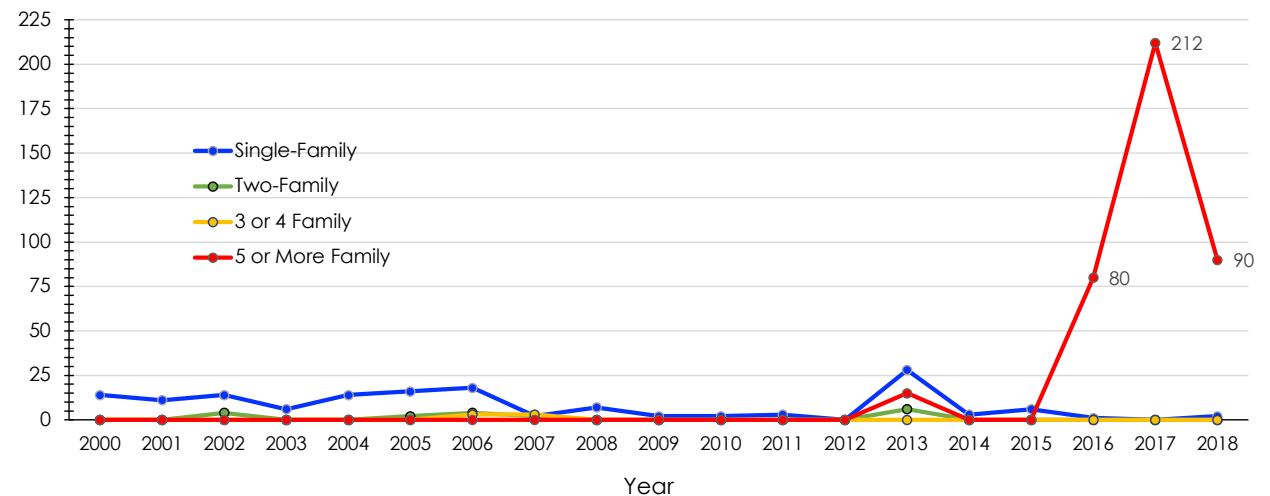
between 2000 and 2015. Then, the number of building permits issued for the construction of buildings with five or more dwelling units increased substantially between 2015 and 2017 to a high of 212 permits. Between 2017 and 2018 the number of permits decreased to 90. Once again, with the recent and ongoing development within the City, the number of building permits can be expected to increase, especially for the structures with five or more units. (See Chart 14.)

The age of the City's housing stock is a significant indicator that speaks to issues of housing condition. This is of particular relevance throughout Plainfield's Historic Districts, where deferred maintenance can be a serious concern.

Based on 2020 estimates compiled by Claritas, a substantial number of the City's housing units (36%) were located in structures just over 80 years old (built in 1939 or earlier). The City's housing stock is relatively older than that of Union County and the state as a whole, with 22% and 17% respectively of their housing units being located in buildings over 80 years old. The data also shows fewer housing units (6%) in buildings constructed within the past 20 years. Of special note here are the number of housing units located in buildings constructed between 2010 and 2013, which accounts for less than 1% of the City's housing units. (See Chart 15.)

Despite the age of the local housing stock, it holds substantial value. Based on 2020 Claritas estimates, the median value of an owner-occupied home in Plainfield was \$290,096. This is below the median housing value for Union County and the State of

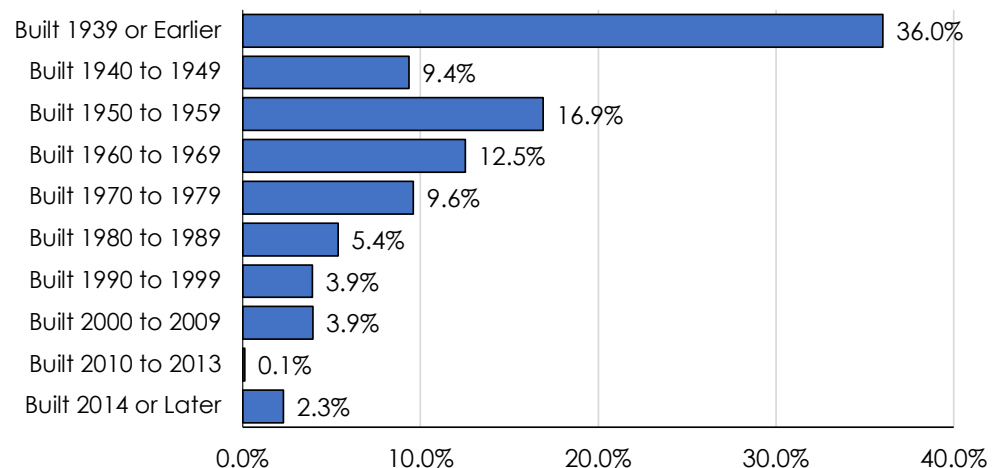
CHART 14: NEW PRIVATELY OWNED RESIDENTIAL HOUSING UNITS AUTHORIZED TO BE BUILT (2000 - 2018)



Source: US Bureau of the Census, Manufacturing & Construction Division

Prepared by: New Jersey Department of Labor & Workforce Development, July 2019

CHART 15: HOUSING UNITS BY YEAR STRUCTURE BUILT - 2020



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

New Jersey, which in 2020 is estimated to be \$390,538 and \$354,222 respectively.

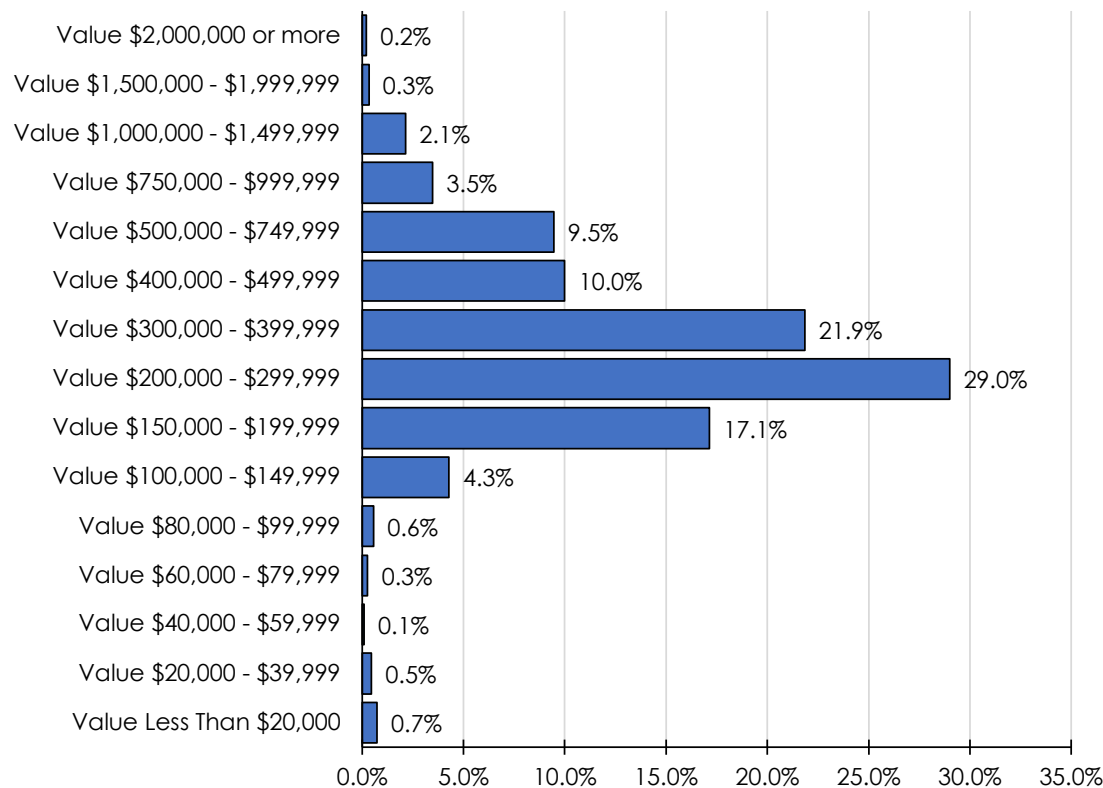
Just over 60% of owner-occupied housing units in Plainfield were valued at between \$200,000 and \$499,999. Sixteen percent were valued at \$500,000 or higher and 24% valued at \$150,000 or less. Approximately 6.5% were valued at under \$100,000, while at the other end of the spectrum, approximately 3% of homes were valued at over \$1 million. (See Chart 16.)

The 2009 Plan also recommended that "... the City should pursue the revitalization, and adaptive reuse, of dilapidated, obsolete, and underutilized commercial and industrial buildings for the production of new housing units where deemed appropriate by the land use element." This strategy is currently being implemented within the TOD areas as well, where older industrial and commercial properties along North and South Avenue are being adaptively reused or demolished and replaced by new mixed use and higher density housing development.

As outlined in the Land Use Element of this Plan, the City's inventory of vacant and abandoned properties, especially those located in proximity to existing residential neighborhoods, provides a good opportunity for development of affordable housing. However, this would require revisiting the permitted densities in some areas, where lower densities render some affordable development not feasible.

New housing development should be required to employ green building practices. As recommended in the 2009 Plan and in the Green Building and Sustainability Element of this Plan, green building techniques, including the use of sustainable materials, should be required in all new and rehabilitation projects, where feasible.

CHART 16: OWNER OCCUPIED HOUSING UNITS BY VALUE - 2020



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

New Housing Development

In the 2009 Master Plan, there was significant emphasis placed on maintaining the existing density of neighborhoods throughout the City. The plan recommended that new housing development be targeted to the TOD area surrounding the City's train stations. However, much of the development planned or taking place in this area is for the most, market rate.

Housing Affordability

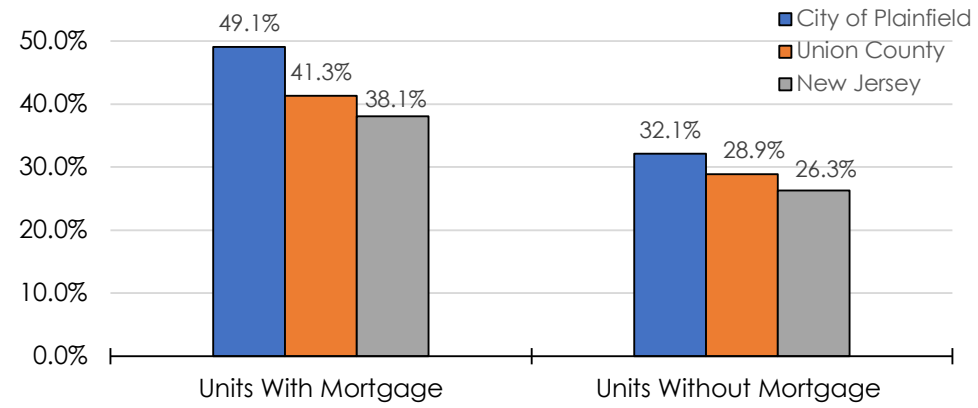
In the City of Plainfield, the Housing Authority of Plainfield, non-profit and private entities offer affordable housing options to residents. These organizations help residents find housing that is right for them and allows them to thrive.

Another critical link in achieving housing affordability is the importance of job/skill development which can lead to more job opportunities, higher salaries and better housing.

As detailed earlier, a substantial number of residents in the City of Plainfield live below the poverty level. This situation is further compounded by the cost of housing within the City. A key indicator of the relative cost of housing within a community is how “burdened” residents are by their monthly housing costs. The U.S. Department of Housing and Urban Development (HUD) uses a generally accepted measure of housing affordability in which no more than 30% of a household’s gross income is spent on housing. This includes mortgage, rent, taxes and insurance. A household or family spending more than 30% of income on housing is said to be “cost burdened.”

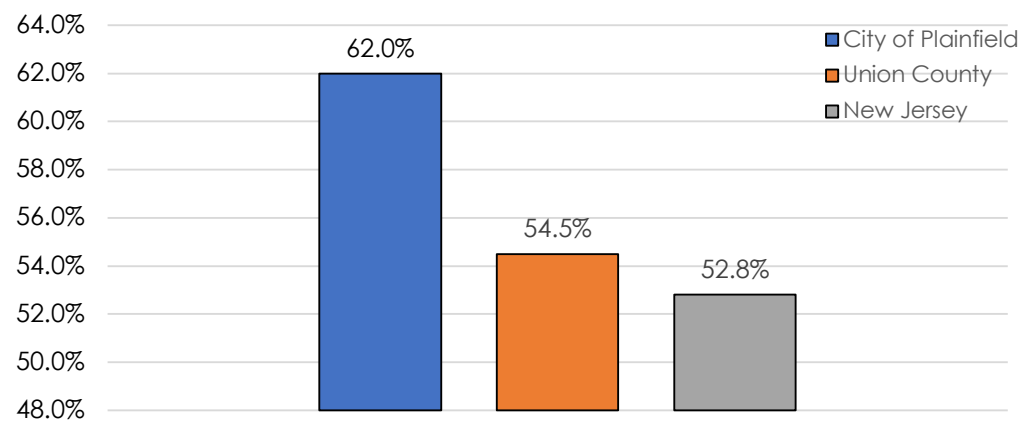
The number of Plainfield households that are cost burdened is a significant concern, as households are forgoing expenditures on other household necessities such as healthy food, healthcare and childcare in lieu of paying rent, mortgages and other housing related costs. These households are also at higher risk of foreclosure and eviction.

CHART 17: COST BURDENED OWNER-OCCUPIED HOUSEHOLDS - 2017
(MONTHLY HOUSING COST 30% AND OVER MONTHLY INCOME)



Source: U.S. Census Bureau, 2013-2017 American Community Survey, 5-Year Estimates

CHART 18: COST BURDENED RENTER-OCCUPIED HOUSING UNITS - 2017
(GROSS MONTHLY RENT 30% AND OVER MONTHLY INCOME)



Source: U.S. Census Bureau, 2013-2017 American Community Survey, 5-Year Estimates

Based on 2017 American Community Survey estimates, approximately 49% of Plainfield's owner-occupied housing units with a mortgage are cost burdened (compared to 26.6% in 2000), as are 32% of those without mortgages. In both instances, the number of cost burdened units in the City was greater than in Union County and the state. (See Chart 17.)

The picture for renters was similar, with over 60% of residents in rentals experiencing a burden in covering their housing costs, effectively spending more than 30% of their household income on rent each month, compared to 55% and 53% of residents respectively in Union County and the state overall. Here again this represents an increase from the 2000 level when it was 39%. (See Chart 18.)

The number of households that are spending substantially more of their monthly income on housing costs is an indication that the cost of housing in Plainfield is above the means of many residents. Based on the City's 2017 median household income of \$64,613 and on the HUD affordability measure of no more than 30% of the monthly household income allocated to rent and other housing costs, the average household in the City would be limited to spending up to \$1,615 on rent and other household costs.

Based on the Out of Reach 2019 report compiled by the National Low-Income Housing Coalition, in Union County, the average fair market rent (FMR) for a 2-bedroom apartment in 2019 was approximately \$1,447. According to the report, an annual household income of \$57,880 would be required to afford a

2-bedroom apartment, without spending more than 30% of the household's gross income on rent and related housing costs.

Specifically, in the City of Plainfield, with a 2018 median household income of \$57,334, up to \$1,433 per month is available for housing costs, which includes both rent and mortgage payments (including principal, interest and insurance). According to the 2018 American Community Survey, approximately 77% of the City's rental housing units are affordable to households at the City's median income.

For moderate income households (those earning 80% of the gross median household income), annual household income was \$45,867, of which \$1,147 per month is available for housing costs. Based on this data, approximately 30% of renter-occupied housing units are available to households at moderate income.

For low-income households, those earning up to 50% of the City's gross median income, an annual income of \$28,667 is required, allowing a housing budget of \$717 per month. Approximately 14% of renter-occupied housing units had rents affordable at the low-income level.

When placed against the backdrop of fair market rents, the lack of affordability becomes starker. For the purpose of comparison, "Small Area Fair Market Rents" (small area FMRs) were used. The U.S. Department of Housing and Urban Development (HUD) defines Small Areas using ZIP Codes within the metropolitan area, to provide more precision in determining applicable FMRs. Table 1 below provides a breakdown of the

FMRs with the three zip codes that fall within the City.

As evident from the table below, there is relatively little disparity between FMRs across the City. What is also evident is that the rent levels for any size are out of reach for low-income households and limited for the moderate income. This situation once again speaks to the need for affordable housing units within the City.

Fair Share Plan

The 2009 Master Plan encouraged the development of affordable housing through partnerships with non-profit housing development organizations. At that time, the State's Council on Affordable Housing (COHA) was responsible for ensuring that municipalities met their fair share of affordable housing. Today, certification of municipal affordable housing is under the purview of the courts. The City of Plainfield's last Fair Share Plan was completed for the period January 1, 2004 through December 31, 2018.



House in Historic District

HOUSING RESOURCES

Housing Authority of Plainfield

The Housing Authority of Plainfield (HAP) is a Public Housing Authority created under State and Federal Housing Laws as defined by State statute NJ S.A. 4A: 12A-1, et. Seq., the "Housing Authority Act." HAP is governed by a seven-member Board of Commissioners. The Board is essentially autonomous but is responsible to the U.S. Department of Housing and Urban Development (HUD) and the NJ Department of Community Affairs (DCA), for the sound and efficient operation the Authority's housing units and programs. The day-to-day operation of the Public Housing Agency (PHA) is undertaken by an executive director, who is appointed by the Board.

The HAP, like the other 3,000 plus housing authorities throughout the nation, operates low-rent housing programs administered by HUD, providing housing for eligible families under the U.S. Housing Act of 1937, as amended. The mission of the HAP is to continue to develop resources that support Plainfield's low-income community by collaborating with a network of community services providers and other public agencies to better serve the community and to enhance home ownership opportunities for income-eligible residents.

The HAP has over the past decade been moving towards diversifying its portfolio, moving from the traditional public housing units, located for the most part in older mid- and high-rise structures, towards lower density development. The strategy for the

development of the latter has been a primary goal achieved through the HAP partnering with private developers to create these units. One downside of this strategy, however, is that fewer units are produced.

The HAP envisions moving toward achieving a 30/70 mix of its portfolio, with 30% of its units being the traditional public housing units and 70% being the lower density partnership-developed units. One of the main reasons is that as funding for public housing continues to decrease, there has been an increased reliance on Housing Choice Vouchers (a federal program for assisting very low income families, the elderly and disabled in affording decent, safe housing) which supports the newer model of development.

Housing Authority of Plainfield Programs and Services

Public Housing Facilities

The HAP currently owns and manages a total of 353 housing units spread across two housing facilities, Richmond Towers and Joanne Hollis Gardens. In addition to these two existing facilities, the HAP is currently constructing a new housing development on the site of its former Elmwood Gardens, which was demolished. The new development will consist of 58 townhouse units. The new Elmwood Gardens represents the HAP's first project developed in partnership with a private developer, under its "new" lower density development model.

Richmond Towers

510 East Front Street Plainfield

Richmond Towers offers low income public housing for the elderly and the disabled. The facility has 225 units, including 135 efficiency and 90 one-bedroom units. A congregate housing program (CHSP) is offered. This program allows frail and elderly residents to remain in their apartments for as long as possible by offering housekeeping, personal assistance and a daily hot meal each evening.

Transportation is also provided for medical appointments as is assistance with laundry. On a monthly basis, a podiatrist, orthopedic specialist, health insurance counseling, and home health aide assistance are available. A medical doctor is also available (upon request) to make house calls. Residents have access to an all-around volunteer who also assists with completing paperwork.

Joanne Hollis Gardens (formerly West End Gardens)

Built in 1954, this facility consists of 128 (1, 2, 3, and 4 bedroom) units. It is for low income and very low-income residents.

Elmwood Gardens

*West Second Street and Elmwood Place,
Plainfield*

The former Elmwood Gardens low-income development is being replaced by a 58-unit town house development consisting of 15 three-bedroom and 43 two-bedroom units. The facility is scheduled to begin construction July 2020 and will be completed within 18-months.

This development is representative of the new strategy being used by the HAP, where the Agency partners with a private development entity to undertake the project.



Rendering of Elmwood Gardens Development

Housing Authority of Plainfield Programs

- Low-Rent Public Housing Program

The Low Rent Public Housing Program is designed to provide low-cost housing within the City of Plainfield. Under this program, the Department of Housing and Urban Development (HUD) provides funding via an annual contributions contract. These funds, combined with the rental income received from tenants, are available solely to meet the operating expenses of the program.

- Housing Choice Vouchers Program - Section 8

The Authority administers a program of rental assistance payments to private owners on behalf of eligible low-income families under Section 8 of the Housing and Urban Development Act of 1974. The program provides payments covering the difference between the maximum rental on a dwelling unit, as approved by HUD, and the amount of rent contribution by a participating family. The Agency currently administers 844 Housing Choice Vouchers..

- Public Housing Capital Fund Program

The purpose of the Capital Fund Program is to provide another source of funding to cover the cost of physical and management improvements and rehabilitation on existing low-income housing and improving the central office facilities. Funding for this program is provided by grants from HUD.

- Shelter Care

This program offers grants to states and local governments, public housing authorities (PHAs) and other entities to provide rental assistance to homeless persons with disabilities. Rental assistance grants must be matched in aggregate by supportive services that are equal in value to the rental assistance and appropriate to the needs of the population served. It is a tenant-based program.

- Congregate Housing Services Program

The Congregate Housing Services Program offers grants to states, units of general local government, PHAs, tribally designated housing entities, and local nonprofit housing sponsors to provide meals and other supportive services needed by frail elderly residents and residents with disabilities in federally subsidized housing. It is a project-based rather than a tenant-based program.

- Resident Opportunity and Supportive Service Program

The Resident Opportunity and Supportive Services (ROSS) grant provides funds for job training and supportive services to help residents of public housing transition from welfare to work. The program also provides funding to connect elderly/ disabled residents to critical services which help them continue to live independently.

- Shelter Plus Care Program

The Shelter Plus Care Program was created under the McKinney Homeless Assistance

Act. Shelter Plus Care is designed to promote permanent housing with supportive service to persons with disabilities coming from the streets and emergency shelters. Shelter Plus Care grants require a supportive service match equal to, or greater than, the rental assistance award.

HUD selects projects for Shelter Plus Care funding in a national competition based on regional and national homeless assistance goals. The Housing Authority partners with service providers. The Housing Authority has successfully competed for Shelter Plus Care Homeless Assistance funding since 1992 with 180 units awarded.

To be eligible for the program, a person must be homeless (see definition below) and have a disabling condition which is defined as:

A physical, mental or emotional impairment which

1. Is expected to be of long-continued and indefinite duration.
2. Substantially impedes an individual's ability to live independently.
3. Is of such a nature that such ability could be improved by more suitable housing conditions.

Or have a developmental disability as defined in 24 CFR 582.5.

Applicants must also be referred by a community-based organization that has a contract with the Housing Authority under the Shelter Plus Care program. Applications received from these agencies are reviewed for Shelter Plus Care eligibility.

The program is for the homeless individual or family who lacks a fixed, regular and adequate nighttime residence; and has a primary nighttime residence that is:

1. In places not meant for human habitation, such as cars, parks, sidewalks, and abandoned buildings.
2. In an emergency shelter.
3. In transitional or supportive housing (for homeless persons who originally came from the streets or emergency shelter).
4. In any of the above places but is spending a short time (up to 30 consecutive days) in a hospital or other institution.

The term "homeless" or "homeless individual" does not include any individual imprisoned or otherwise detained pursuant to an Act of Congress or a State law. If a participant or family head of household came from a psychiatric facility, substance abuse treatment facility, hospital, jail or prison, and they were there less than 30 days and were living in on the street or in an emergency shelter before entering the treatment facility, they are counted as homeless.

- Family Self Sufficiency (FSS) Program

The purpose of the FSS Program is to coordinate the use of housing assistance with public and private resources to assist families in becoming economically independent and self-sufficient, so that they no longer need social services.

Housing agencies work with welfare agencies, schools, businesses and other local partners to develop a program that

gives participating FSS families the skills and experience needed in order to obtain and maintain suitable employment.

Program participants are assisted with developing an "Individual Training and Service Plan", which outlines their goals and strategies for obtaining economic independence. The family must sign a five-year "Contract of Participation" which will include the goals established by them. The family will have up to five years to complete their specific goals. At the completion of the contract, the family is eligible to receive an escrow account that has been established in their name. In order to become eligible to receive the funds in escrow, the family must complete all goals and must be free of social service assistance for a period of (at least) one year prior to the completion of the contract.

Premier Community Development Corporation

Premier Community Development Corporation (a/k/a Plainfield Community Development Corporation) is a not-for-profit corporation formed in 2007 by the Housing Authority of Plainfield to pursue the promotion and development of low- and moderate-income housing in the City of Plainfield, New Jersey. As a 501(c)3 non-profit corporation, Premier Community Development Corporation is able to partner with private developers and access funding available to non-profits, to develop a variety of affordable housing products, as was the case of the Elmwood Gardens Project now being developed. Premier Community

Development Corporation is a crucial part of the HAP's new affordable housing development model.

Other Housing Resources

City of Plainfield

- Community Development Block Grant (CDBG)

The Community Development Block Grant Program is a Federally funded program which is administered by the Union County Community Development Block Grant Program. These grants are designed to:

1. Eliminate conditions detrimental to health, safety and public welfare.
2. Reconstruct, replace, rehabilitate, acquire or construct facilities, including street, water, sewer, fire protection, recreational, parking, neighborhood centers and barrier free facilities.
3. Conserve and expand the City's housing stock.
4. Assist in the conservation, expansion and construction of commercial and industrial facilities.

- Comprehensive Housing Assistance Program (CHAP)

The Comprehensive Housing Assistance Program provides financial assistance for the rehabilitation of owner-occupied one, two and three-family homes to assist residents in the removal of unsafe conditions in their dwellings, such as plumbing, heating/energy, electrical, lead-based paint, roofing,

structural, siding and wall masonry, exterior painting, interior improvements and premise repairs. Funding is provided under the local rehabilitation program through deferred, interest free, income-based loans.

- Safe Housing and Transportation Program (SHTP)

The Safe Housing & Transportation Program provides Qualifying Senior Citizens, aged 60 years of age and older, with a maximum grant of \$500.00 for minor health and/or safety repairs to their owner-occupied homes. This may include plumbing/electrical, grab bar installation etc.

- Relocation Assistance Program (RAP)

This program provides services to tenants whose apartments have been condemned by the City of Plainfield's Health Office, Division of Inspections, or as a result of damage caused by a recent fire which resulted in the need for relocation.



House on East 3rd Street

Union County

- Home Improvement & Senior Home Improvement Grant Programs

ISSUES AND RECOMMENDATIONS

The City of Plainfield has seen an increase in the number of housing units being developed or planned within the City, with many of the units following the NJ Transit line. As the City endeavors to capitalize and leverage its transportation asset, housing development within the City has picked up with a substantial number of units planned in designated development areas. Along with the anticipated increase in housing development, the City must address several issues and challenges related to increased diversity (both in housing type and affordability), density and sustainability.

Diversify the City's Housing

Across the City of Plainfield, there is a need for greater housing diversity. As the City's population continues to age and itself become more socially and economically diversified, there needs to be a greater variety of housing units to meet the specific needs of various strata of the community. Currently there are several categories of housing of which there are a very limited number of units available. These include townhouse/condominium units, senior and adult living housing units as well as housing units available at various economic levels.

Recent studies have shown that the aging baby boomer segment of the population, many of whom are also now empty-nesters,

have been trading in their larger and now empty suburban homes for apartments, with the amenities they are looking for as they age. This stratum of the housing market speaks to them. The millennials by contrast, who have also shown a propensity for downtown/urban apartment living, are drawn to the lower cost units.

- Identify existing areas of the City where changes in zoning is appropriate to allow for alternate housing types and zoning at increased densities. Alternate housing types may include examples like Cottage Housing Development¹.
- Facilitate partnerships with the developers of specialty housing, to develop housing units for targeted populations, including senior citizens and adult communities.
- Establish a market rate luxury residential rental market. While there is an existing and strong luxury homeownership market within the City, currently, the Quinn Sleepy Hollow residential development is the only luxury rental development in Plainfield. This segment of the rental market is an important component of City's housing market that will provide opportunities for both new and existing residents, especially older, "baby boomer" residents who are seeking to downsize from their larger homes, yet seek a higher end housing unit with accompanying amenities at a similar level.

- Modify existing zoning where appropriate, to allow for the creation of accessory apartments to house and care for an aging family member.
- The City should continue to pursue the revitalization, and adaptive reuse, of dilapidated, obsolete, and underutilized commercial and industrial buildings for the production of new housing units where appropriate.
- The City should seek expansion of funding for the Comprehensive Housing Assistance Program (CHAP) to encourage the rehabilitation of substandard structures and prioritize homeownership through its use.

Increase Affordable Home Ownership options

As indicated earlier, there is an approximate 50/50 split between owner and renter-occupied housing units in the City of Plainfield. The value of homeownership as a mechanism for both stabilizing neighborhoods and building wealth among low-income individuals and families has been well documented. However non-profit developers who develop affordable housing around the City are unable to compete with for-profit developers to acquire development sites.

The City should prioritize homeownership throughout the City with policies and

¹Cottage Housing Development Zoning is described as "...a form of residential development characterized by clusters of small, cottage-like houses, 800 to 1,200 square feet in size. Cottage clusters are compact, with 4 to 12 cottages per cluster on one acre of land or less. Units are arranged around a central common open space with the front facades of the houses facing the central courtyard, a space specifically designed to foster active social engagement and a tangible sense of community. The center of all clusters is reserved for pedestrian use. Vehicular traffic is restricted to the outer edges of each housing cluster, where streets and parking are screened from the cluster's pedestrian core." ~ Tamara Lee, AICP, PP, NJ Planning Officials Board of Planners, The New Jersey Planner, Volume 80, No. 3.

strategies that facilitate the movement of low-income residents from rental to ownership housing units.

- Allow access to the City's inventory of over 200 vacant and abandoned properties by non-profit housing developers, to develop for-sale affordable housing units.
- Establish a Redevelopment Fund that will require developers of market-rate units to contribute to the fund that can be used in part for the development of affordable housing units. This may be included as part of a community benefits agreement.

Prepare and Assist Current and Prospective Homeowners

Making the decision to buy a home has huge financial implications – for all income levels. The monthly payments, coupled with repairs and ongoing maintenance, can be a shock to anyone's budget. With the cost of housing continuing to inch out of reach for many families, the sustainability of homeownership has taken on a greater importance. It is becoming increasingly crucial that homeowners be properly prepared for home ownership. This includes understanding and adhering to sound financial management practices, like budgeting, banking and maintaining a good financial standing .

- Create a Housing Resource Center to serve as a “one-stop” for housing resources to help residents address housing and related issues. This Center would connect residents with various

local, state and federal resources to assist them with any problems being faced.

- Expand financial literacy programs throughout the City with the aim of preparing individuals to navigate the homebuying process and understanding the steps necessary to maintaining good financial standing.
- Increase existing homebuyer training programs within the City, including the Family Self Sufficiency (FSS) program being operated by the Housing Authority of Plainfield. Create workshops offered at various locations in Plainfield.
- Continue to disseminate information regarding availability of mortgage financing made available through the New Jersey Housing Mortgage Finance Agency (NJHMFA) and any other sources.
- The 2009 Master plan raised an issue that unfortunately is once again timely. The City may wish to explore ways to provide assistance to homeowners facing foreclosure as a result of job loss during the pandemic.

Collaborate to Develop Job/Skill Development Programs

As recommended in the Economic Development Element, there are a number of directions the City can take in helping residents prepare for the workplace and learn the skills that will enable them to improve their quality of life, including their residences. Here are some that can be found in that element.

- Partner with local community development corporations to provide resources and services for job readiness, especially for low-income and unemployed residents.
- Provide skills training for City residents to meet the demand of targeted industries. Encourage partnership with Union County College and its Center for Economic and Workforce Development. The trades (i.e. electricians, plumbers, welders, carpenters) should be promoted as reputable occupations in the City. There should be seamless connections and communications among educational institutions and City employers. Programs such as apprenticeships should be explored to prepare trade workers. Explore partnerships with organizations that support young people going into trades, such as Mike Rowe's mikeroweWORKS foundation.

For more information see:

Land Use Element

- Residential Uses
- New Development
- Recommendations

Utility Services Element

- Smart City Recommendations for Housing

Community Input

Sampling of comments from Community Workshops

- Like Low Density Housing.
- More home ownership / less apartments / more single family dwelling ownership.
- Apartments downtown over-crowded/ Density bringing congestion.
- Need to accommodate seniors, have age-restricted neighborhood – look at W 8th St.
- Need a homeless shelter/ Address homelessness
- Revisit the selection process for affordable housing/ In 4th ward, too much affordable - need more middle income.
- Too much abandoned housing.
- Code enforcement needs to address property conditions/ Demolish abandoned homes.

From the Master Plan Survey

Should the City encourage or discourage the following types of potential residential development?

Single-family: 56% Strongly encourage; 26% Encourage; 14% Neutral/No opinion; 3% Discourage; 1% Strongly discourage.

Duplex: 14% Strongly encourage; 34% Encourage; 30% Neutral/No opinion; 14% Discourage; 7% Strongly discourage.

Townhouses: 25% Strongly encourage; 35% Encourage; 27% Neutral/No opinion;

10% Discourage; 3% Strongly discourage.

Apartments/Condominiums: 21% Strongly encourage; 19% Encourage; 30% Neutral/No opinion; 22% Discourage; 8% Strongly discourage.

Mixed-use (Residential and Commercial combined): 19% Strongly encourage; 37% Encourage; 29% Neutral/No opinion; 13% Discourage; 1% Strongly discourage.

Senior housing (of any style): 47% Strongly encourage; 33% Encourage; 20% Neutral/No opinion.

Affordable housing (of any style): 44% Strongly encourage; 20% Encourage; 21% Neutral/No opinion; 11% Discourage; 4% Strongly discourage.

- Too much housing will turn a quiet and calm community into a busy and crowded community.
- There is a need for new apartment buildings, of high quality with subterranean parking and architectural significance.
- We should prevent gentrification and the displacement of the poor.
- We should establish rent control laws.
- I like the quiet nature of the Netherwood Heights area, and its proximity to the Raritan Valley Train station.

ECONOMIC PLAN ELEMENT

“Artificial symptoms of prosperity or a ‘good image’ do not revitalize a city, but only explicit economic growth processes for which there are no substitutes.”

- Jane Jacobs, *The Economy of Cities*

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How We Get There

Provide a variety of job training programs and educational opportunities for City residents.

- Encourage partnerships with the Board of Education, Union County College and its Center for Economic and Workforce Development.

Expand the City's tax base by attracting new and diverse businesses to the City.

Promote the redevelopment of vacant, abandoned and underutilized properties.

- Continue to advance the redevelopment efforts within the Transit Oriented Development Downtown (TODD) and the Transit Oriented Development Netherwood (TODN) Districts.

Retain and grow industries that are thriving in the City, including medical/healthcare, industrial, and commercial.

Provide career advancement, good living wages, and bridge the gap of economic inequality

Facilitate entrepreneurship in the City by creating facilities for start-up businesses to grow, including maker spaces, co-working spaces, business incubators, and others, to attract and develop opportunities for small scale manufacturing and technology-driven entrepreneurs.

Strategic Vision

The City of Plainfield will work with residents, businesses, neighborhood and social groups, and developers to identify the potential for economic growth and new residential, commercial and quality-of-life development within the City and establish job creation strategies that provide greater career opportunities and an improved standard of living for residents.



Source: www.freepik.com

INTRODUCTION

The City of Plainfield is poised for a rebirth that is inclusive, one that positively affects the lives of all city residents and the businesses now located in the City and attracts businesses still needed and development that is beneficial.

That Plainfield residents care about their city was evident during the community meetings held to gain input from them. At the core of their comments were concerns about lack of jobs and the ability to meet employers' needs; the need for a major grocery store; and the desire for greater public safety.

The lack of job training and diverse job types for residents – especially technology-related – were seen as primary problems. In tandem, there is a substantial need for adequate job training for residents in technology and related fields, where necessary skills are always changing. Residents expressed the need for greater retail and service options. In particular, residents conveyed the necessity for a major, brand name grocery store within the City so that they aren't forced to leave town to fill their shopping baskets. Some residents also stated they felt unsafe at night in their neighborhoods as well as Downtown, a concern that has economic as well as quality-of-life ramifications. If people don't feel secure shopping or going to dinner or other entertainment venues.

This economic plan element outlines existing labor force characteristics and identifies basic industries within the City's local economy. It also assesses the retail service base, through examination of the Central

Business District as well as other commercial areas in the City. State and local resources for economic development facilitation are identified. Recommendations and implementation strategies are provided to assist the City in initiatives to enhance residents' standard of living and expand the City's tax base.

Brief History of Plainfield's Economy

The City of Plainfield was originally where Quakers settled in the 1600s. The "Queen City" gradually developed into a bedroom community for New York City as the Central Railroad of New Jersey grew, beginning in the 1830s. The railroad also provided the City with shipping docks and the ability to ship goods to other cities. This led to the development of industrial factories in the

City, which supplied jobs to its increasing residential population.

Manufacturing has been a significant industry in Plainfield since the early 20th Century. The current Injectron plant was previous occupied by the Mack Truck Company and the Niles-Bement-Pond Company prior to that. Manufacturing continues to be a major industry in the City, in addition to Injectron noted above, Papp Iron Works, New Industrial Foam Corporation, Fayette Trading, Inc., and Montrose Molders are among companies currently operating.

Muhlenberg Hospital, now known as the Muhlenberg Regional Medical Center, was founded in 1877. During the period it operated as a full hospital it was a prominent institution in the central part of the state. Although the hospital facility closed in 2008, the JFK Satellite Emergency Department currently operates on the campus as well as the JFK Muhlenberg Harold B. & Dorothy A. Snyder Schools of Nursing and Medical Imaging. Through adaptive reuse and some new construction, the historic facility is in the midst of being re-purposed into multi-family residential dwellings and a medical arts complex, which would provide an array of medical services.

Commerce had once been an essential part of Plainfield's economy. In the early 20th century its downtown district was considered a significant shopping destination in the region, home to numerous department stores including Sears, Tepper's, Bamberger's, Montgomery Ward, Steinbach, Rosenbaum's and Woolworth's. Many movie theaters provided entertainment downtown,

MUNICIPAL LAND USE LAW

"An economic plan element considering all aspects of economic development and sustained economic vitality, including (a) a comparison of the types of employment expected to be provided by the economic development to be promoted with the characteristics of the labor pool resident in the municipality and nearby areas and (b) an analysis of the stability and diversity of the economic development"

including the Strand, Liberty, Paramount and Oxford theaters.

The construction of new regional shopping malls marked the end of downtown Plainfield's primacy as a shopping destination, with department stores moving to malls as close as Route 22, leaving an abundance of vacancies and disinvestment.

But times have changed again. Plainfield and its downtown district are now experiencing a targeted rebound sparked in part by revitalization. The local economy has begun its transformation, with various redevelopment efforts being pursued citywide. In particular, projects are focused within the Transit Oriented Development Downtown (TODD) and Transit Oriented Development Netherwood (TODN) districts.

Plainfield Moving Forward

As the City progresses, Plainfield's position as a transportation hub makes it a prime location for business to thrive and grow. The City is located in close proximity to Newark Liberty International Airport and also accessible via multiple modes of transportation, including train, bus, personal vehicle, bicycle, walking and ride sharing services such as Uber, Lyft and traditional taxicabs. In addition to major roadways (Route 22, Route 28, etc.), there are two NJ Transit Train stations – the Downtown Plainfield Train Station and the Netherwood Train Station – that are stops along the Raritan Valley Line.

The viability of an inner-City linkage system should also be explored. This system may

involve use of a Jitney service that would traverse the City and link more remote areas to the downtown transportation hubs and cultural/civic locations. In the absence of any inner-city buses, this system would facilitate mobility within the City.

ECONOMIC PROFILE

Labor Force

The City Labor Force is defined as residents of Plainfield who are either employed, actively searching for work and at least 16 years old. The labor force does not take into account children, disabled individuals, retirees or anyone who has stopped searching for work for more than three months. Current statistics regarding Plainfield's workforce are summarized in Table 1.

TABLE 1: ANNUAL AVERAGE LABOR FORCE ESTIMATES - 2017

	Plainfield	Union County	New Jersey
Labor Force Participation	70.10%	68.20%	65.60%
Employed	61.50%	60.80%	61.00%
Unemployed	8.60%	7.40%	4.60%

Source: 2013-2017 American Community Survey, 5-Year Estimates

Labor Force Participation

As depicted in Table 1 Labor Force Statistics, the City's labor force participation rate was 70.1%, according to the 2013-2017 American Community Survey 5-Year Estimates. This

is slightly greater than the labor force participation rate of Union County, which is 68.2%, and New Jersey's rate, which is 65.6%. It is important to differentiate between the labor force participation rate and the employment/unemployment rates. Whereas the participation rate accounts for both employed and those actively looking for employment, the employment/unemployment rate accounts only for those actually employed or unemployed.

Unemployment Rate

The unemployment rate of Plainfield's labor force is 8.6%. Comparatively, this is higher than the unemployment rate of Union County, which is 7.4%, and New Jersey's rate, which is 4.6%.

Covered Employment

Covered employment is defined as work that is covered by unemployment insurance when a worker becomes unemployed. Based on covered employment data for 2018, there were 669 private sector business establishments in Plainfield, which held an average employment of 5,147 workers. Retail Trade sector had the most business establishments with 113 and employed 691 workers. The second highest sector was Other Services, which had 96 business establishments and employed 485 workers. The Health and Social sector followed with 93 business establishments; however, this sector had the highest average annual employment with 1,334. Table 2 depicts the covered employed in Plainfield.

**TABLE 2: ANNUAL PRIVATE/PUBLIC SECTOR COVERED EMPLOYMENT
FOR PLAINFIELD - 2018**

Description	Average Units	Average Annual Employment
Utilities	.	.
Construction	74	207
Manufacturing	22	352
Wholesale Trade	17	141
Retail Trade	113	691
Transportation and Warehousing	23	58
Information	.	.
Finance and Insurance	13	48
Real Estate	22	68
Professional Scientific, and Technical Services	26	104
Management	.	.
Administration and Support, Waste Remediation and Remediation	49	371
Educational Services	10	212
Health Care and Social Assistance	93	1,334
Arts, Entertainment and Recreation	.	.
Accommodation and Food Services	77	614
Other Services	96	485
Unclassified	20	21
Private Sector Totals	669	5,147
Federal Government Totals	3	110
State Government Totals	3	35
Local Government Totals	10	2,096
Local Government Education	6	1,354

Note: Information for some industries were not available.

Source: NJ Department of Labor and Workforce Development, Labor Market Information

The high worker total employed in the Health Care and Social Assistance sector is consistent with the presence of medical facilities in the City, including the JFK Muhlenberg Harold B. & Dorothy A. Snyder Schools of Nursing and Medical Imaging and Sierra Allied Health Academy. As the former Muhlenberg Regional Medical Center transforms in a modern medical arts complex, the Healthcare and Social Assistance sector is expected to continue to strengthen as an employment magnet and spur economic growth in the City.

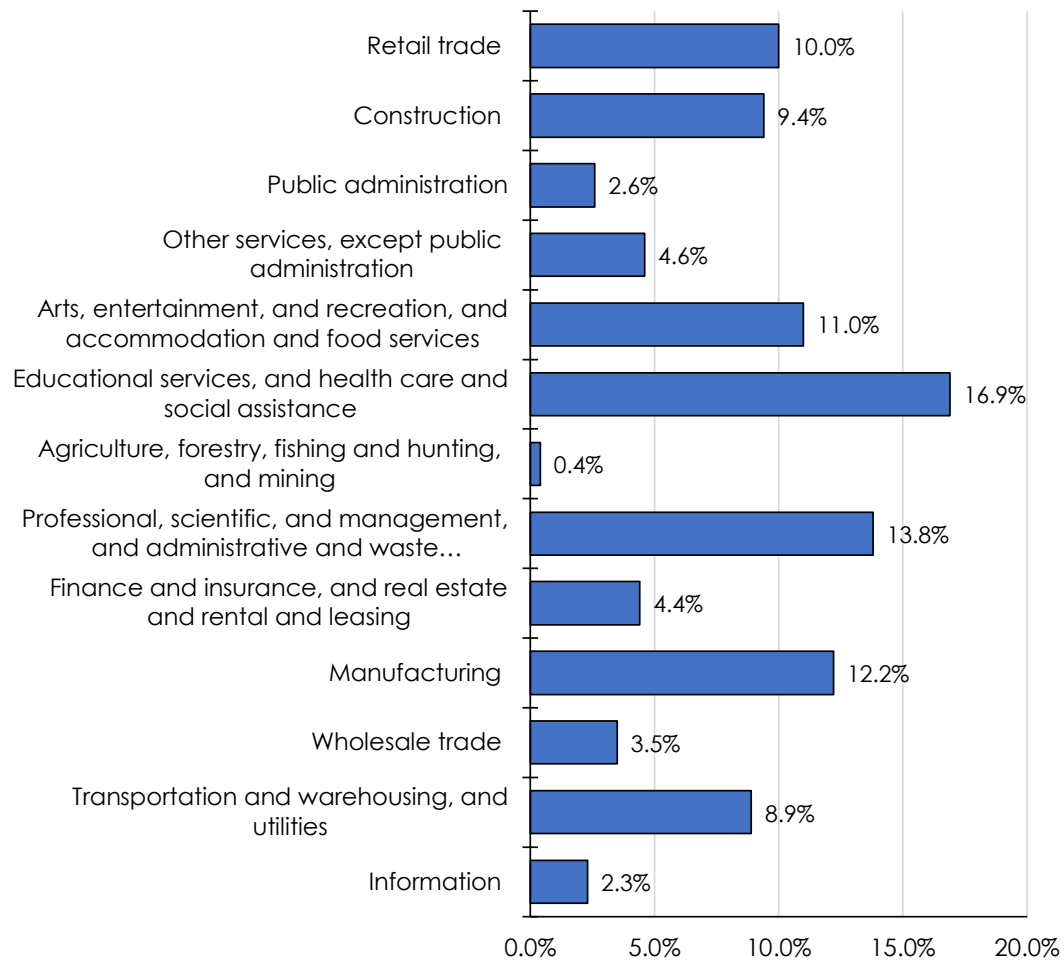
Employment by Industry

Furthering the analysis of Plainfield's workforce, Chart 1 details the number of workers in each specific industry. According to data derived from the U.S. Census Bureau's OnTheMap (2017) interface, the most significant industries in which workers were employed in Plainfield were educational services, 20.7%; health care and social assistance, 18.8%; retail trade, 10.6%; public administration, 8.5%; other services excluding public administration, 7.5%; and accommodation and food services, 7.3%.

Occupation

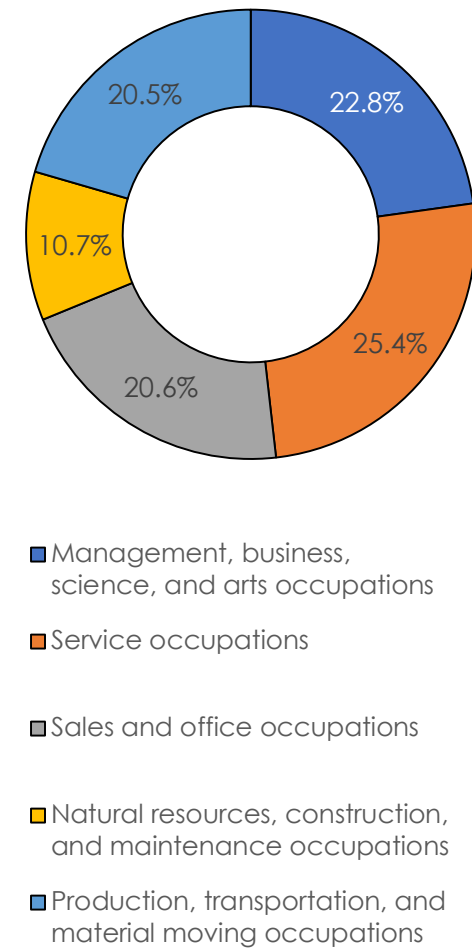
Of the 25,442 residents employed, the occupations in which they are employed was distributed relatively evenly service (25.4%), management, business, science and arts (22.8%), sales and office (20.6%) production, transportation and material moving (20.5%), and natural resources, construction, and maintenance (10.7%). (see Chart 2)

CHART 1: EMPLOYMENT BY INDUSTRY - 2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey, 5-Year Estimates

CHART 2: EMPLOYMENT BY OCCUPATION - 2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey, 5-Year Estimates

Employment by Class of Worker

The majority of workers in Plainfield are private wage and salary workers (87.1%). Approximately 10.4% of workers held jobs in the public sector or government. Small percentage of workers identified as self-employed (2.5%) and unpaid family workers (less than 1%). Chart 3 outlines the Class of Workers in the City.

Employment Inflow and Outflow Analysis

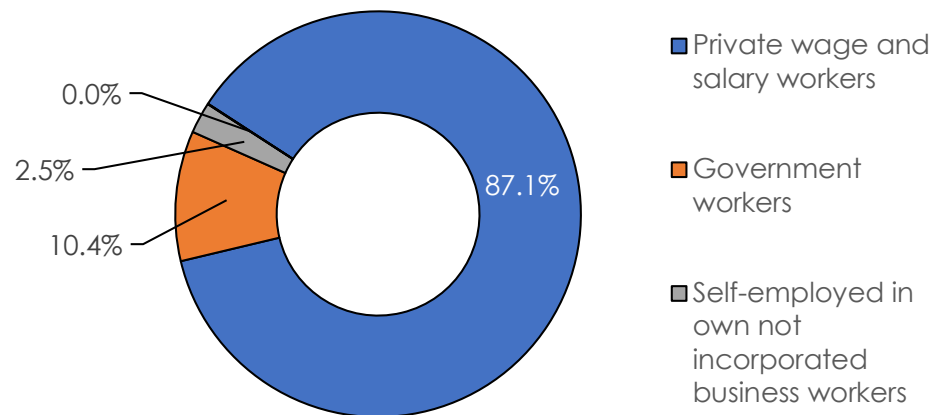
An analysis of 2017 On-the-Map data shows that approximately 92% (18,174) of employed Plainfield residents worked outside the City, while the remaining 8% (1,614) worked within the City. At the same time, there were approximately 5,661 individuals who live outside the City, but work in Plainfield (see Map 1).

Of Plainfield residents who worked outside the City, approximately 9% worked in New York City, 4% worked in South Plainfield, and another 4% worked in Newark. Other areas of employment include Elizabeth, New Brunswick and Franklin Center. Of the City workers who lived outside Plainfield, 4.3% came from North Plainfield, 2.9% from South Plainfield, and 2.0% from Elizabeth.

Educational Attainment

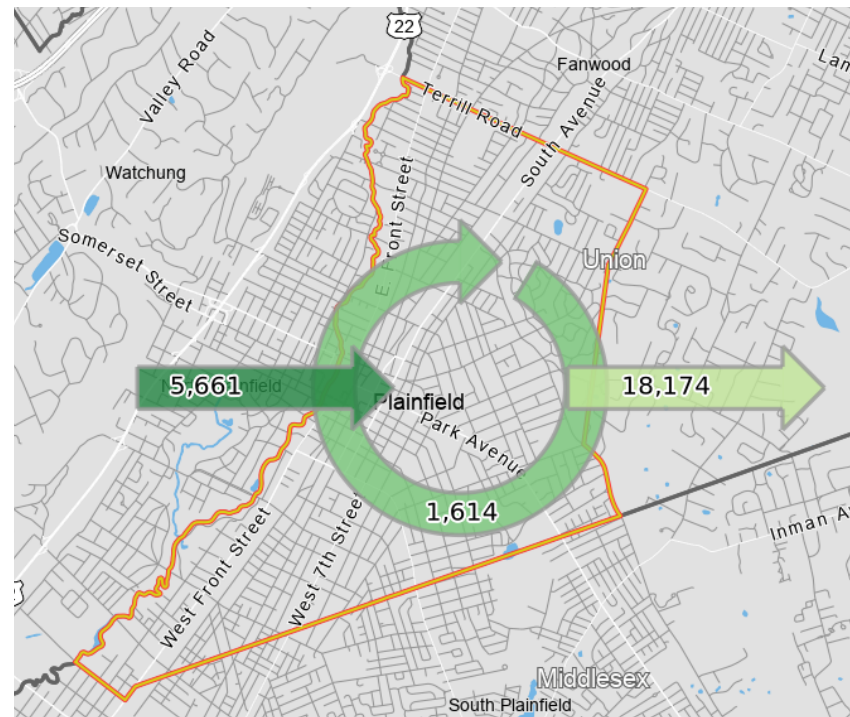
Educational attainment generally has a direct impact on the success in the labor force. According to the 2013-2017 American Fact finder, approximately 72.7 percent of City residents 25 years old or older had

CHART 3: CLASS OF WORKER - 2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey, 5-Year Estimates

MAP 1: INFLOW-OUTFLOW

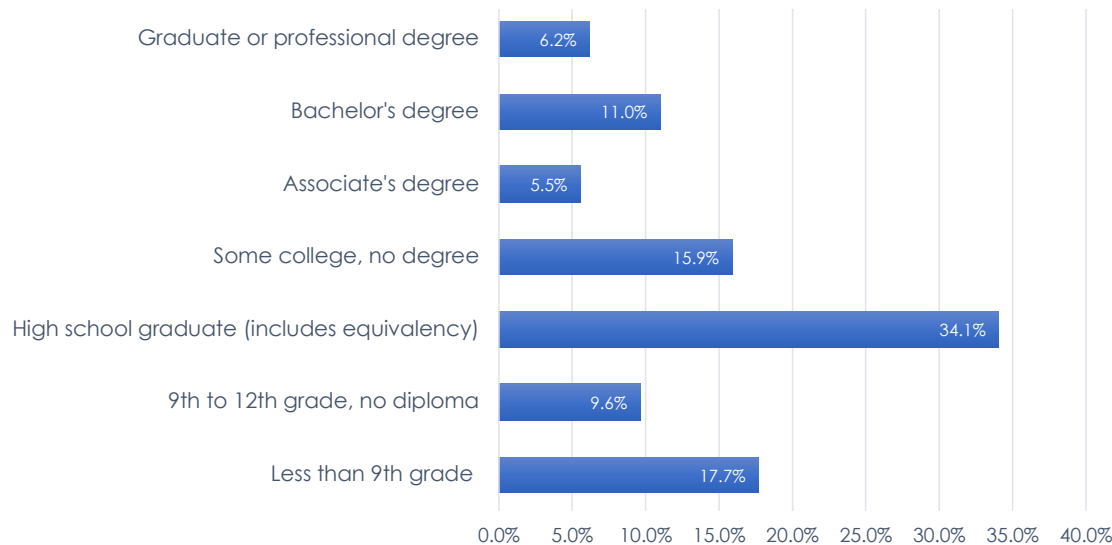


Source: U.S. Census Bureau

at least graduated from high school or achieved an equivalent diploma (GED), which is below the high school achievement of Union County and New Jersey residents (89.5% and 89.2%, respectively).

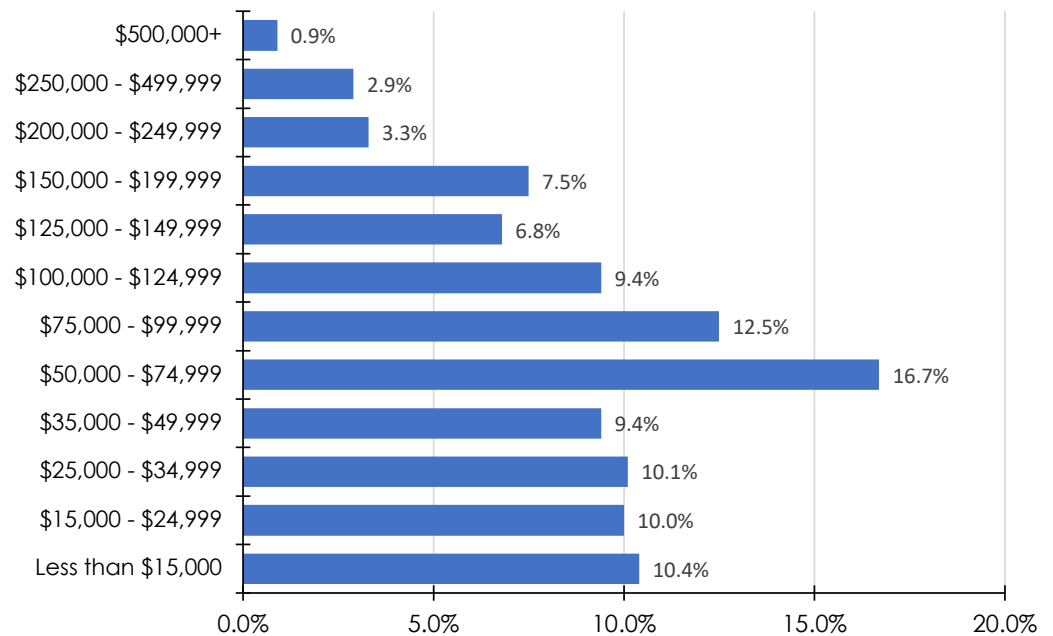
The educational attainment of City residents is displayed in Chart 4 below. An associate's degree was obtained by 5.5% and 11 % of the population has obtained a bachelor's degree. A graduate or professional degree was obtained by 6.2%. Additionally, almost 16% reported having completed some college but did not obtain a degree.

CHART 4: EDUCATIONAL ATTAINMENT - 2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey, 5-Year Estimates

CHART 5: HOUSEHOLD INCOME DISTRIBUTION - 2020



Source: Claritas - Pop-Facts® Premier, U.S. Census Bureau

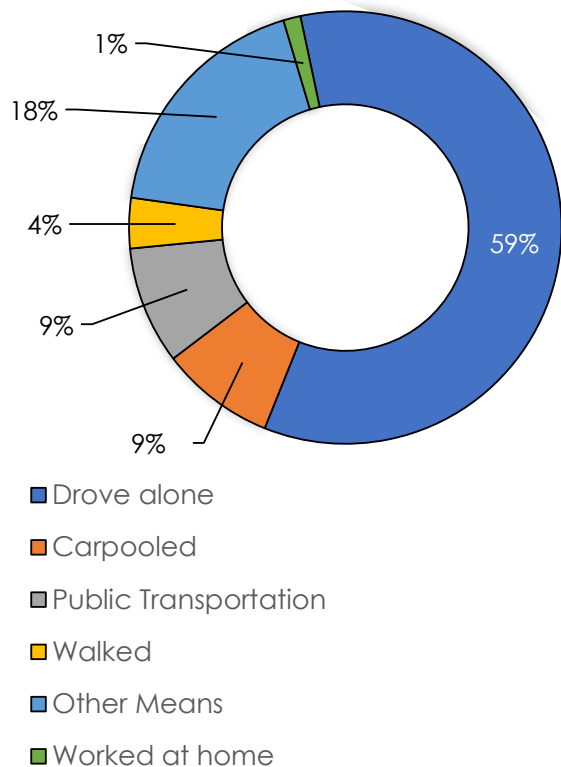
Income

As noted by Pop-Facts Demographics compiled by Environics Analytics, and summarized in Chart 5, the median household income is \$64,613. This is slightly higher than Union County's median household income, which is \$64,245 and also less than New Jersey's median household income, which is \$86,372. Approximately 16.7% of households reported an income between \$50,000 - \$74,000. Almost one third (30.4%) of households earned an income below \$35,000, which suggests that approximately 4,693 households have limited disposable income.

Commute to Work

The median commute time of the employed population of the Plainfield worker was 30.9 minutes. As noted in Chart 6, almost 60% traveled by car alone to work. Another 8.6% also traveled by car while carpooling with others. Approximately 8.8% utilized public transportation to commute to work. Other means of travel reported were close to one fifth (18.2%) of the City's employed population. These 'other means' could include shuttle services, private van, bicycle, scooter, taxi or ride-share services.

CHART 6: COMMUTE TO WORK - 2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey, 5-Year Estimates

MAJOR EMPLOYERS IN THE CITY

Public Sector

The Union County Economic Development Corporation (UCEDC) provides an array of economic development services to businesses throughout Union County. These services consist of financing assistance, government contracting, training and business tools. In addition, UCEDC also lists major public and private employers in the county, contact information and number of employees in its annual reports. The City, the City of Plainfield and the Plainfield Board of Education have been identified as major public sector employers in 2019.

Private Sector

Major private employers within the City were also reported by the UCEDC. The following companies noted as the major private employers in 2019:

- Liberty Cab
- Solaria Health System Cedar Brook
- Woodlands Center
- Eagle Affiliates Inc.
- Detailed Designs

JOB DENSITY

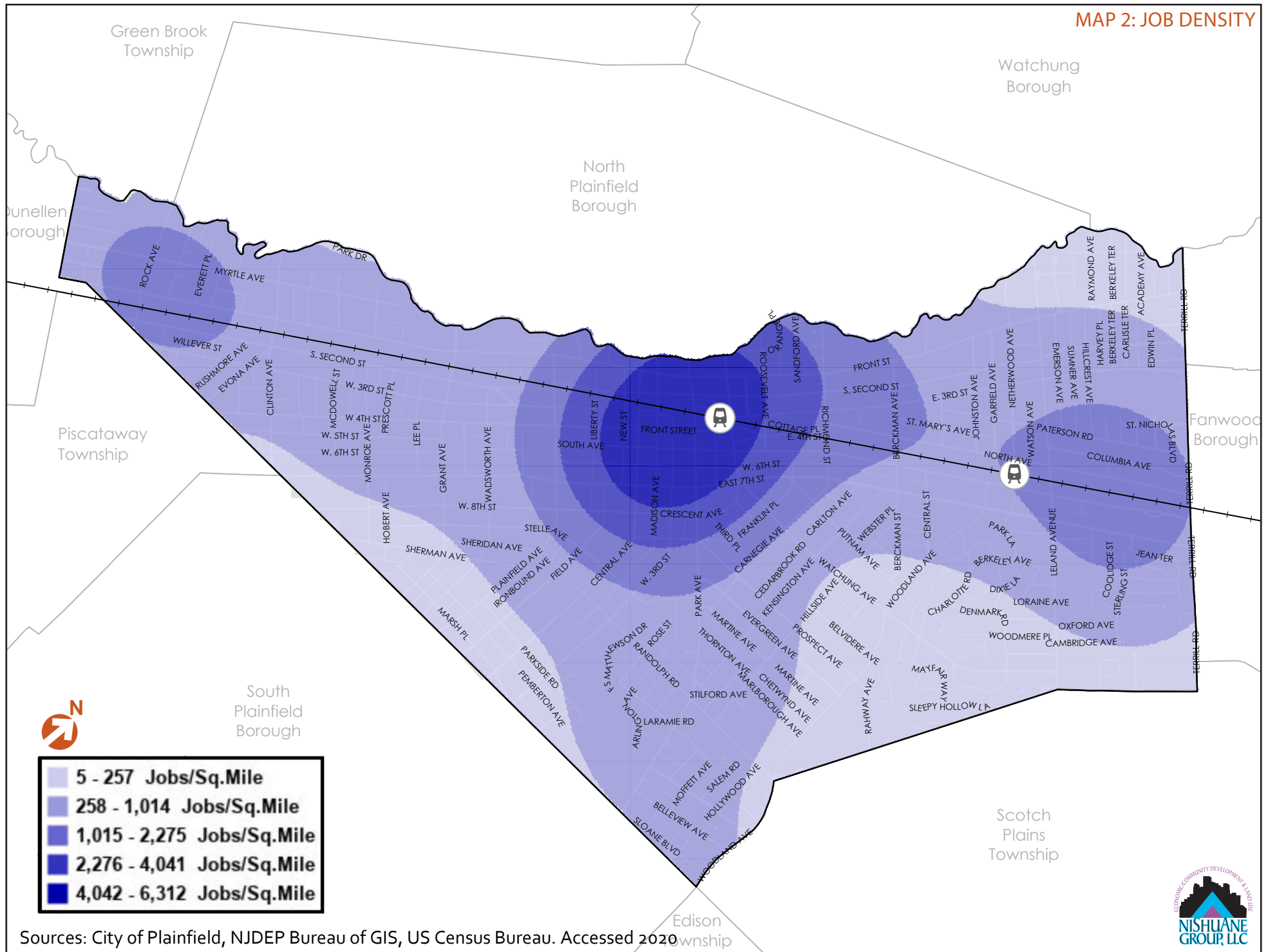
Additional analysis of major employers within Plainfield, Map 2 shows the concentrations of jobs within the City based on data generated by OnTheMap. The most significant cluster of jobs is located within the Central Business District of the City. This cluster is mostly derived from the Downtown-centric jobs related to City government and retail sales and services.

There are also job clusters at the City's northern and eastern ends as well as along the southwestern area of the city. The job cluster located close to the City's border with Fanwood is most likely attributed to the commercial activity along both sides of South Avenue. At the southwestern job cluster, companies include PSE&G, Verizon, Montrose Molders, and New Industrial Foam.



Watchung Avenue

MAP 2: JOB DENSITY



EDUCATION/JOB TRAINING PROGRAMS

Union County College

The Plainfield Campus of Union County College is bordered by East Second Street, Roosevelt Avenue, East Third Street and Church Street. Union County College's Center for Economic and Workforce Development offers various educational and occupational training programs, including ESL, Adult Basic Education and other programs and job placement services. Additionally, this center also provides alternative job training programs, such as welding, supply chain management, medical billing and coding, and pharmacy technician. Partnerships with the City and Union County College should continue to offer education and job training programs for residents.

Other Alternative and Non-Traditional Education Programs

Pillar College

Pillar College is a higher education institution that offers an array of programs at the associate's and bachelor's degree level. The college's instructional site program is located in Downtown Plainfield at 320 Park Avenue.

Nursing Schools and Health Profession Programs

The medical and healthcare field is a significant industry in Plainfield. Union County College offers several programs related to health professions, including Emergency

Medical Technician, Paramedic Program, Physical Therapist Assistant and Licensed Practical Nursing.

In addition to the healthcare programs at Union County College, there are also two other licensed practical nursing school facilities located in the City. JFK Muhlenberg Harold B. & Dorothy A. Snyder Schools of Nursing and Medical Imaging on the former Muhlenberg Hospital campus offers programs in nursing, radiography and diagnostic medical sonography. Sierra Allied Health Academy, Inc., on West 7th Street, is a state-accredited registered nursing program.

The City should continue to develop and expand job training relevant to medicine and healthcare as there is a strong foundation for this sector in Plainfield. Other related education programs could also be offered, including occupational therapy and physical therapy assistants, dental hygienist and massage therapy. Focusing on skills and education related to the healthcare industry will strengthen and broaden job prospects of City residents.

Culinary School

In January 2020, it was announced that a culinary school, to be located at 537 North Avenue, would be opening in the near future through the Art of Hospitality Path to Success foundation. The school will prepare and educate underemployed residents for the opportunity to pursue careers in the food service and beverage industry. Chef David Felton, one of the people involved with the foundation, also plans to open a restaurant to be called DJBK. It will be located in the former Courier-News building at 212 Park Avenue.



Union County College



Pillar College



Courier Building

RETAIL AND SERVICE BASE

Central Business District

Plainfield's Central Business District is the main retail area within the City. Nationally, the retail sector is struggling. Traditional brick-and-mortar stores have been closing in recent years, in particular department, clothing and other stores. Under-performance is generally caused by the shift in consumer preference as many shoppers choose to purchase goods electronically and have them delivered.

Similarly, the restaurant industry is also experiencing issues as consumers are choosing to have food delivered rather than enjoying a 'dining experience' at a restaurant. These challenges and struggles are evident in the City's Central Business District.

Plainfield's Central Business District spans the north side and the south side of the Downtown Train Station. In particular, it contains corridors along East and West Front Street, Watchung Avenue and Park Avenue. North Avenue and South Avenue are also major commercial corridors in the City.

As the City seeks to revitalize and transform, Plainfield should continue to bolster its Downtown and commercial corridors. The following analysis further examines the existing status of retail in the City and looks at opportunities for services and stores that are currently lacking, as demonstrated by the number of residents venturing outside Plainfield for these needs.

Retail Supply and Demand

The economic landscape of the City is largely shaped by the relative demand for various types of goods and services for residents and the supply available through retail outlets within Plainfield. In the process of developing this Master Plan, issues regarding retail were consistently raised among the diverse population groups of the City. Absence of a major, brand name grocery store and lack of retail variety dominated residents' shopping concerns.

To evaluate the missing needs, a "retail gap" or "leakage" analysis has been conducted to assess what goods and services residents are spending their income on within the City and to what extent their demands are being met in Plainfield. In this analysis, expenditures, or demand, are measured against sales, or supply. The outcome is either a surplus, which occurs when expenditures are lower than retail sales, or opportunity gap, which occurs when expenditures are higher than retail sales.

Based on 2018 data generated by EnviroNics Analytics and Claritas – Retail Market Power, \$675.1 million in retail sale expenditures were made by City residents (from retail outlets both within and outside of the City.) The largest category in which these expenditures were made was Motor Vehicle and Parts Dealers, where approximately \$114.5 million was spent, accounting for approximately 17% of the total retail expenditures in the City. Within this category, Automobile Dealers, both new and used vehicles, represented the majority of sales (\$98.7 million).

The next highest categories of retail expenditures were Food and Beverage Stores (\$91.1 million), including grocery and convenience stores; Non-store retailers (\$86.3 million), including electronic shopping and mail-order houses; General Merchandise Stores (\$82.7 million); and Food Services and Drinking Places (\$79.1 million), including restaurants and bars.

It is important to note the category of Non-Store Retailers represents retailers selling items outside the confines of a traditional 'brick-and-mortar' retail facility and includes e-commerce sales made through electronic shopping and mail-order home delivery sales, among other methods. Residents spent \$86.3 million at non-store retailers, of which only \$23.8 million was expended through non-store retailers in Plainfield. Despite the disparity between resident expenditures and local sales (\$62.4 million), there has been significant growth in this retail category, with the rapid growth of e-commerce retailers, such as Amazon and other companies that provide monthly box delivery subscriptions. According to statistics compiled by the U.S. Department of Commerce, non-store retail sales nationally, as a percentage of total retail sales, have more than doubled since 2002. The growth in this retail category is likely to have an impact on Plainfield's local economy as well, as consumers continue to expand their preference of non-store retail, for convenience and apparent savings.

While the expenditures mentioned above represent overall resident demand (\$675.1 million), retail sales that took place within City retail stores, within the same period, represent the supply. There was a total of

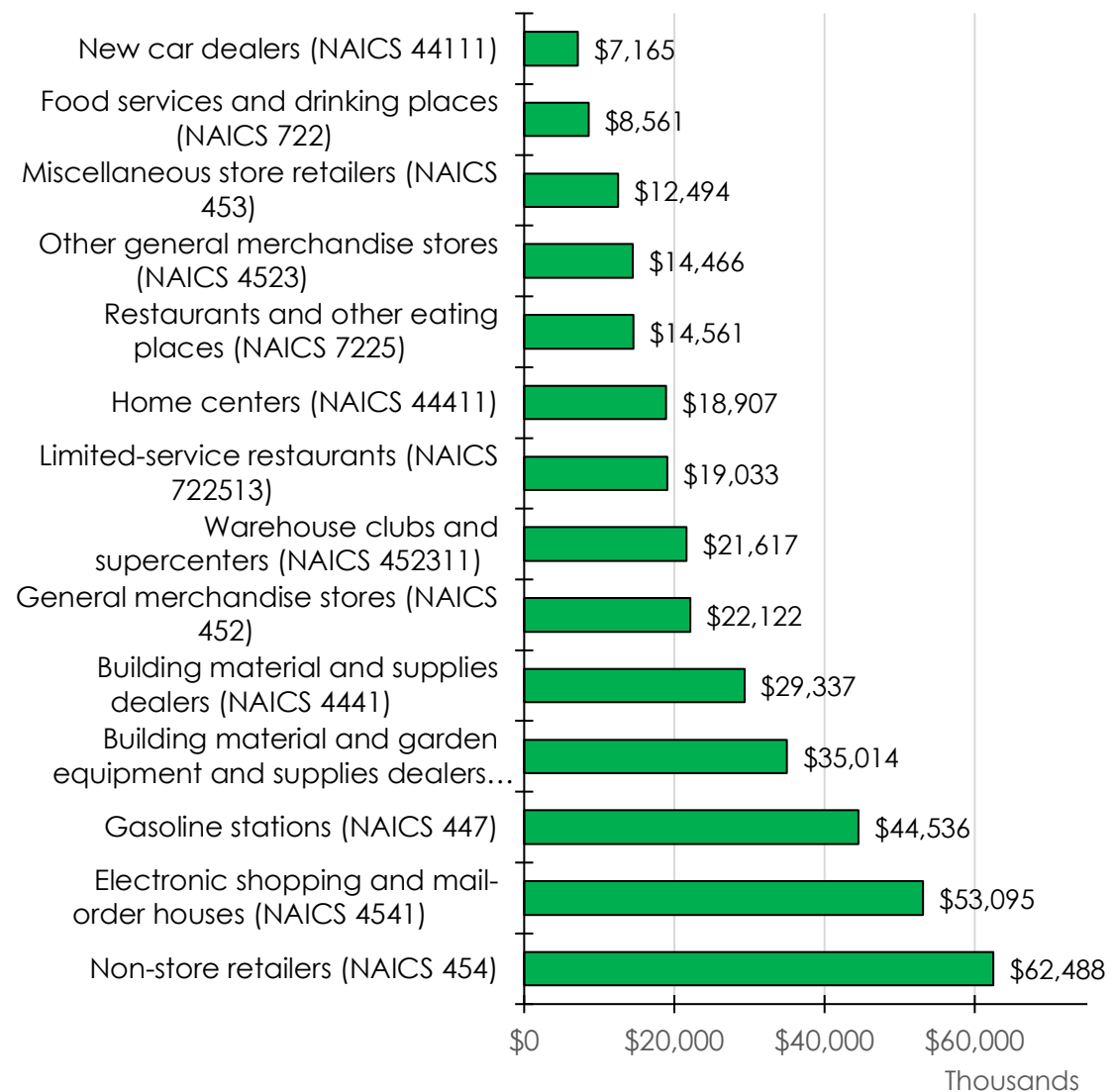
approximately \$566.7 million in sales at retail. This is a disparity of approximately \$108.4 million, or the amount of resident expenditures not being made in the City of Plainfield.

Regarding retail sales that have occurred within the City, the highest category was Motor Vehicle and Parts Dealers (\$142.7 million) and Food and Beverage Stores (\$135.5 million) followed by Food Service and Drinking Places (\$70.5 million); General Merchandise Stores (\$60.6 million); and Clothing and Clothing Accessories Stores (\$50.8 million).

Drilling down, retail “gaps” were determined by calculating categories where resident expenditures were greater than the actual sales in Plainfield. There was approximately \$199.4 million in retail expenditures made by Plainfield residents at retail outlets, across all retail categories, at establishments outside of the City. Although this represents retail demand that is not being fulfilled within Plainfield, it also presents opportunities for economic growth in its retail sector.

Following Non-Store Retailers with a disparity of \$624 as mentioned above (and noted in Chart 7), other “underrepresented” retail categories in Plainfield are Gasoline Stations, with a disparity of \$44.5 million and Building Material and Garden Equipment and Supplies Dealers, with a disparity of \$35 million. Additionally, regarding retail subcategories, Electronic Shopping and Mail-Order Houses had a disparity of \$53.1 million and Limited-service Restaurants had a disparity of \$19 million.

CHART 7: UNDERREPRESENTED RETAIL - 2018
(RETAIL CATEGORIES WITH GREATER RESIDENTIAL EXPENDITURES THAN LOCAL SALES)

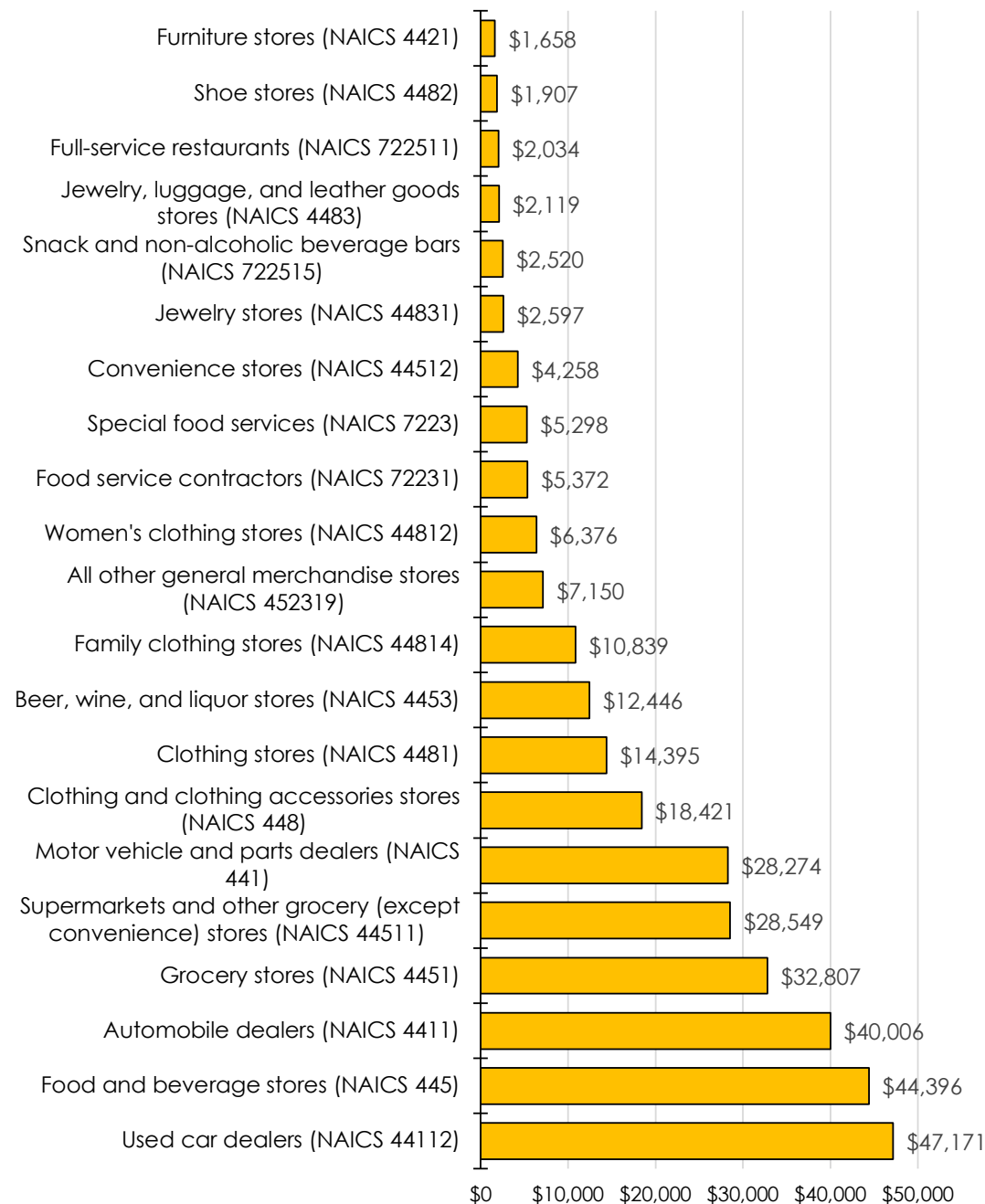


Source: Environics Analytics and Claritas – Retail Market Power

Alternately, as shown in Chart 8, looking at the retail categories where local sales outpaced the local demand, there was approximately \$326.1 in sales at local stores, above and beyond the local demand for the purchased retail goods, by Plainfield residents. The retail category with the highest disparity was Used Car Dealers (\$47.1 million); in comparison, only \$10.4 million was made in expenditures by residents. This retail category was followed by Food and Beverage Stores (\$44.4 million), Automobile Dealers (\$40 million), and Grocery Stores (\$32.8 million). These figures demonstrate where potential business growth could occur as local business may be able to build on economic activity coming into the City.

With local sales outpacing local demand, this indicates that there is a wider regional draw for these retail categories. A further analysis should be undertaken to identify how retail stores in these categories may be leveraged to attract customers to other retail sales and service establishments throughout Plainfield.

CHART 8: OVERREPRESENTED RETAIL - 2018
(RETAIL CATEGORIES WITH GREATER LOCAL SALES THAN RESIDENTIAL EXPENDITURES)



Source: Environics Analytics and Claritas – Retail Market Power

COMMERCIAL CORRIDORS

In addition to the core concentration of businesses within the City's Central Business District, there are multiple commercial corridors throughout Plainfield, serving retail and service needs as well as providing jobs in various neighborhoods.

Front Street

Within the Central Business District, the thoroughfare of both East and West Front Street is a significant commercial corridor with retail branching off along both sides. East Front Street commercial uses run from Park Avenue at its western limit to its intersection with Sandford Avenue at its eastern end. Historic buildings, including the Strand Theater and the old YMCA, are also located along East Front Street. The main commercial corridor of West Front Street extends from Park Avenue at its eastern limit to Liberty Street to the west. East and West Front Street will continue to serve as the City's main artery for retail sales and services.

Park Avenue / Somerset Street

Also known as County Route 531, the Somerset Street and Park Avenue corridor runs through the Central Business District. The Somerset Street portion begins at the City's northerly boundary and extends toward its intersection with Front Street, where the street becomes Park Avenue. Park Avenue continues from this intersection to East 7th Street to the south, where commercial use transitions into residential and institutional uses.

Watchung Avenue

Commercial activity along Watchung Avenue runs from Green Brook at its western end within the City limits to its diverging point with Crescent Avenue. Several municipal uses are also located along this corridor, including the Post Office, Municipal Court, Police Division, City Hall and its Annex. The former YMCA, located along this corridor, is currently vacant and has potential to be a significant anchor in the City while utilizing adaptive reuse rehabilitation.

South Avenue

In the Netherwood neighborhood of the City, South Avenue is a significant corridor that stretches from Berckman Street to the west and Terrill Road to the east and continues as a major commercial area into Fanwood. South Avenue is currently lined on both sides with an array of commercial-use businesses consisting of industrial, automobile-related and retail with large accessory parking lots. Netherwood is experiencing change as the construction of a multi-family residential complex is reaching completion, among other redevelopment projects. As the neighborhood becomes more dense, additional retail sales and services will be needed to accommodate the increased population. It is anticipated that South Avenue will become a commercial corridor with a walkable downtown environment.

North Avenue

Within the City's Central Business District, North Avenue is located between Watchung Avenue to the east and Park Avenue to the

west. The North Avenue Pedestrian Mall, to be positioned along the northern side of the Downtown Train Station, is being planned. It will provide enhanced accessibility and mobility to pedestrians who utilize the Downtown Train Station and also retail shops and services along North Avenue.



North Avenue Downtown

CULTURAL ASSETS

Given its diversity, Plainfield has many cultural attributes that include its historic buildings and districts, arts organizations, public venues, houses of worship and ethnic restaurants, among many others.

Historic Districts

Plainfield has ten historic districts within the City.

- North Avenue Historic District
- Van Wyck Brook Historic District
- Crescent Area Historic District
- Putnam Watchung Historic District
- Hillside Avenue Historic District

- Broadway Historic District
- Netherwood Heights Historic District
- Civic Historic District
- Green Brook Park Historic District
- Cedar Brook Park Historic District

Additionally, Plainfield has multiple historic sites that are both on the national, state, and/or local historic registers. Historic districts can be attractive to visitors. Cultural heritage tourism should be explored as potential revenue generation for the City.

Destination for Arts, Culture, and Entertainment

In efforts to diversify not only the City's economy but also its identity, Plainfield should encourage and support the growth of the arts.

In 2019, the Cleveland Arts and Culture District was included within the TODD South Redevelopment Plan adopted by City Council. In this District, a developer can obtain a development bonus if a certain percentage of the ground floor space is dedicated to an arts-related use. Art galleries, theaters, dance studios, recording or production studios and other arts-related uses would qualify for the bonus. Cleveland Avenue has the potential to serve as the gateway to the arts, as well as the City. Additionally, this designation could make the area attractive to ancillary businesses, such as arts supplies stores, music instrument shops and bookstores.

The Plainfield Performing Arts Center (PPAC), at 724 Park Avenue, recently opened in the City. This venue will provide opportunities for

various performing arts and events for large audiences, such as plays, concerts, film festivals, graduations, galas, guest speakers and other community events. PPAC will fill a substantial void in the City as a community event and performing arts space has been needed for some time. Simultaneously, PPAC will serve as the City's arts and culture anchor. Although it is designated as a 'performing arts center', PPAC will also offer space for artist studios. PPAC is exploring opportunities to attract film production companies to stage films throughout the City. Events and workshops will also be held to promote entrepreneurship of artists, workforce development and engagement of underrepresented populations, such as seniors, special needs children, and the LGBTQ community. PPAC will be a drive of the City's creative workforce and magnet for social justice. The Drake House Museum and Swain Galleries are also other notable cultural places that will continue to attract visitors.

As the arts continue to gain momentum and develop as a major industry, the City should embrace and encourage artists not only to perform and display their work, but to live, stay and shop in Plainfield. With existing arts organizations such as the Plainfield Symphony, duCret School of Art, Plainfield Garden Club and Women's Art Collective, Plainfield can assert itself as a notable destination for arts, culture and entertainment. Working with these organizations, Plainfield can establish partnerships to attract a diverse pool of artists and art enthusiasts.

REDEVELOPMENT IN THE CITY

Since 2009, significant redevelopment has taken place and more is underway.

TODD

Transit Oriented Development Downtown (TODD) regulations were adopted by the City in 2012. Within the TODD, there are seven zones. In 2014, the New Jersey Department of Transportation designated the City as a Transit Village.

TODN

In addition to revitalizing the Downtown Train Station area, the City is also seeking to advance redevelopment within the area near the City's Netherwood Train Station. Transit Oriented Development Netherwood regulations also were adopted by the City in 2012.



The Quinn Residential Development on South Avenue

Muhlenberg Redevelopment

Historically, healthcare has been a major industry in the City. Although the former Muhlenberg Regional Medical Center closed in 2008, the buildings and campus are in the midst of redevelopment. The center is being repositioned and re-purposed into a mixed-use center with a residential component containing 120 dwelling units and a medical arts complex, consisting of a medical and community healthcare facility that will offer primary and specialty care, a women's health center, ambulatory care, sleep center, home health care agency, physical therapy, diagnostic center and pharmacy as well as other health and wellness-related services.



Rendering of Muhlenberg Medical Arts Complex

ECONOMIC DEVELOPMENT PROGRAMS AND INITIATIVES

There are numerous programs and initiatives at the local, state and federal levels that provide assistance to promote, grow and start businesses.

State Resources

New Jersey Economic Development Authority (NJEDA)

NJEDA is an independent state agency that provides financial assistance and resources to small and medium-sized businesses; administers tax incentives to retain, attract and grow businesses; revitalizes communities through redevelopment initiatives; and supports entrepreneurial development by providing access to training and mentoring programs.

With a diverse portfolio of programs and services all designed to assist municipalities in attracting new business and industry, it can provide businesses in need of capital to expand and grow or assist a developer seeking funds for a significant redevelopment project.

NJEDA creates public-private partnerships statewide to bridge financing gaps and to increase access to capital by the State's business community. It supports entrepreneurial development through access to training and mentoring programs. NJEDA also undertakes real estate development programs.

In February 2019, Plainfield was included as one of eight municipalities to become a part of the Small Business Lease Assistance Program. Initially developed as the Business Lease Incentive, this program aims to revitalize commercial corridors through the attraction of small businesses and the incentivization of building improvements on buildings' ground floors. The program reimburses businesses and non-profit organizations 15% of their annual lease payments for two years when they lease market-rate first floor commercial (office, industrial, or retail) spaces for a minimum five-year term.

In March 2019, the City of Plainfield was one of five municipalities to be awarded the Innovation Challenge Grant, which is intended to enhance local innovation ecosystems through collaboration with higher education institutions, among other strategic partners. The grant, valued at \$100,000, will assist the City in conducting a technology-needs assessment of the Plainfield's underutilized and vacant industrial and commercial properties. This will allow the City to evaluate the feasibility of creating a network of commercial, industrial and mixed-use corridors within the City so that it can be a central hub of the State's innovation economy.

With this award, Plainfield can begin to attract technology-based start-ups, beneficial in fostering a collaborative atmosphere that can lead to technology companies incubating, developing and growing in the City.

NJEDA also offers other programs:

Grow NJ Assistance Program

The Grow NJ Assistance Program is designed to assist in job creation and retention that strengthens New Jersey's competitive edge in the global marketplace. The program provides tax credits on a per job, per year basis, to eligible businesses, with bonus credits awarded based on applicable criteria.

Economic Redevelopment and Growth Program (ERG)

The ERG program is grant-based, aimed at providing incentives for developers and businesses to address revenue gaps in redevelopment projects. Projects eligible for ERG funding include:

- Transit projects
- Supermarkets (in areas without adequate access to fresh foods)
- Residential projects that will include an affordable housing component

Small Business Fund

The Small Business Fund provides direct loans to creditworthy small, minority or women-owned businesses that have been in operation for at least one year (at least three years for not-for-profits) and may not have the ability to obtain traditional bank financing.

Small Business Services

In addition to the funding programs offered through NJEDA, the agency also partners with numerous organizations that provide services to businesses and entrepreneurs.

Bond Financing

This program provides access to long-term

financing for eligible manufacturing and 501(c)(3) not-for-profit organizations.

Opportunity Zones

Opportunity Zones enable designated low-income Census Tracts to allow private investors to support investments in distressed communities. In turn, these investors can defer paying federal taxes on certain capital gains. Plainfield has two Opportunity Zones, Census Tracts 393 and 390, as seen on Map 3. Cumulatively, both Opportunity Zones span the Central Business District and areas surrounding both the Downtown and Netherwood Train stations.

UEZ

Urban Enterprise Zone Program (UEZ) assists in fostering local urban economies through revitalization of their central business districts and stimulates their growth by encouraging businesses to invest, grow and create jobs. The UEZ Program offers numerous benefits to businesses, including reduced sales tax, financial assistance and tax credit options. There are five UEZ municipalities in the State: Plainfield, Newark, Trenton, Camden and Bridgeton. The UEZ in Plainfield is outlined on Map 4.

N.J. Small Business Development Center

A secondary location of the Small Business Development Center (SBDC) at Kean University is located in Plainfield. Serving Plainfield's Special Improvement District, the SBDC network provides comprehensive assistance to small and medium businesses to maximize opportunities for growth and

generate economic impact statewide. These opportunities include counseling and training for businesses in formulating strategies for success.

Local Resources

Assistance and resources are also available at the local level to help existing and future businesses succeed in the City. Job searching and career preparation assistance is provided for City residents who are seeking new career opportunities.

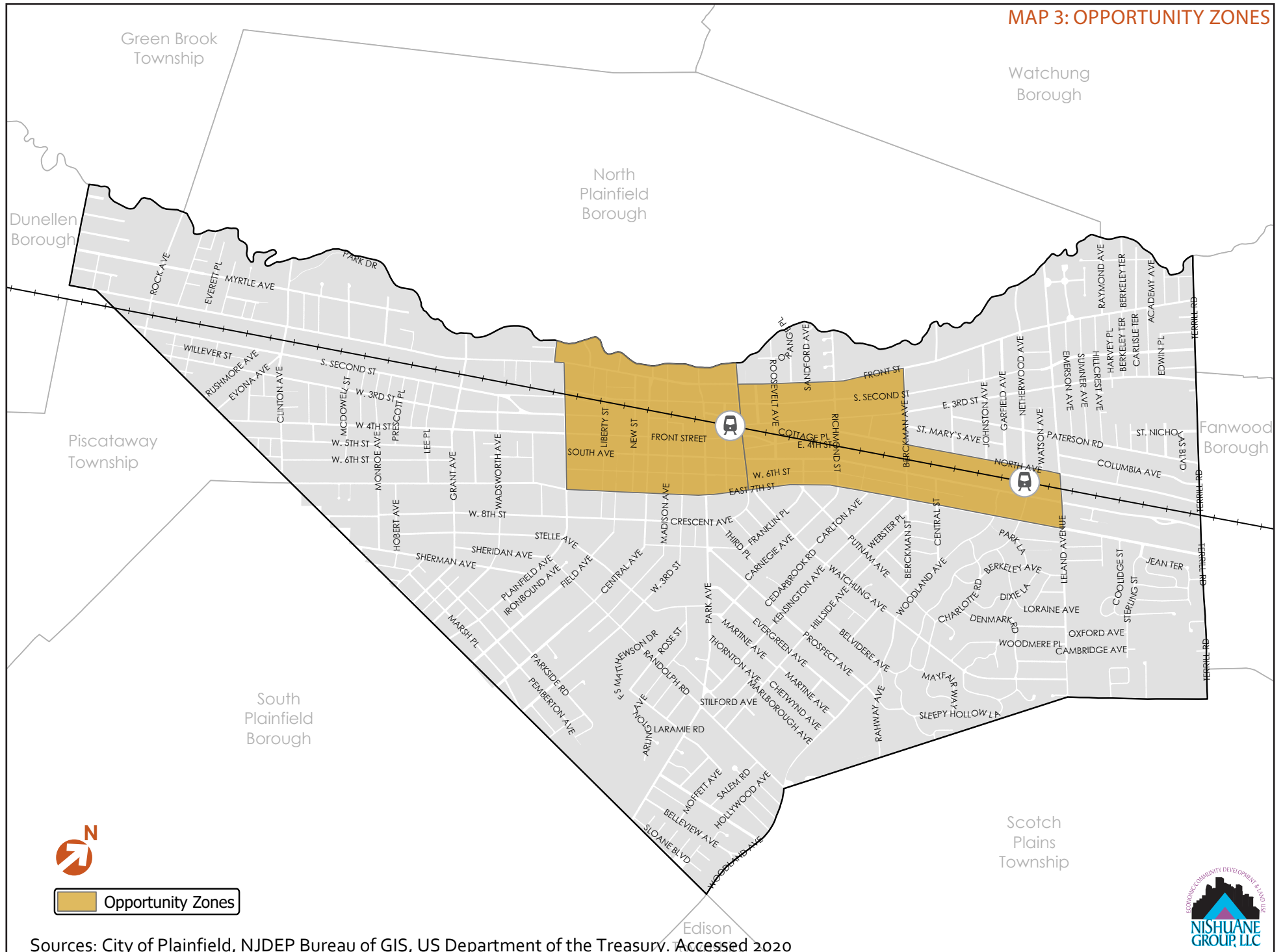
Union County Economic Development Corporation (UCEDC)

Union County Economic Development Corporation is a non-profit community development financial institution and economic development corporation providing financial and technical assistance to existing and new businesses. UCEDC works with under-served people and communities to provide tools, training and resources for local businesses to succeed.

Workforce Investment Board and One-Stop System

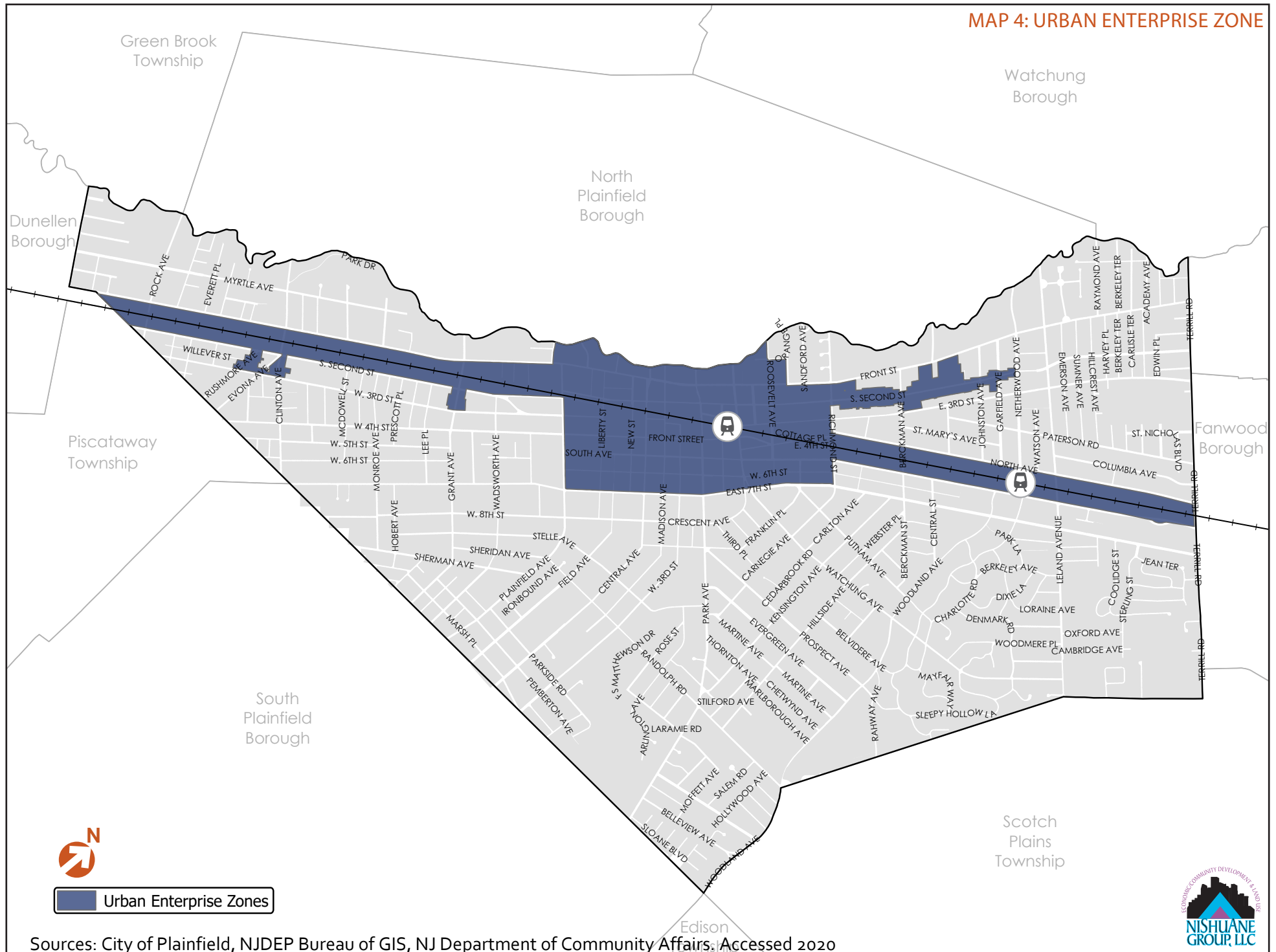
The Plainfield American Job Center is located at 200 West Second Street and provides various social and economic services, including adult services, dislocated workers, welfare training, employer services and youth services. It also provides resources such as public computers, telephones, internet access, fax machine and meeting rooms. Services available for residents include ESL classes, resume writing and assistance with filing unemployment benefits.

MAP 3: OPPORTUNITY ZONES



Sources: City of Plainfield, NJDEP Bureau of GIS, US Department of the Treasury. Accessed 2020

MAP 4: URBAN ENTERPRISE ZONE



RECOMMENDATIONS

The following are recommendations Plainfield should consider in supporting a strong economic future. The City has already begun implementing a number of these recommendations. Others are more long term and include incremental steps to be taken to achieve the overall goal.

- **Job Training:** Provide skills training for City residents to meet the demand of targeted industries. The City has partnered with the Elizabeth Economic Development Center to provide training and apprenticeship in the building trades through the New Jersey Builders Utilization Initiative for Labor Diversity (NJ BUILD). NJ BUILD which provides outreach, apprenticeship training, and post-graduation placement in the construction trades industry for women and minorities. The City should continue to encourage these partnerships, especially with Union County College and its Center for Economic and Workforce Development. The trades (i.e. electricians, plumbers, welders, carpenters) should be promoted as reputable occupations in the City. There should be seamless connections and communications among educational institutions and City employers. Programs such as apprenticeships should be explored to prepare trade workers. Additionally, the City should explore partnerships with organizations that support young people going into trades, such as Mike Rowe's mikeroweWORKS Foundation.

- **Redevelopment:** The City should move forward with appropriate Redevelopment Plans and Projects, especially in TOD areas.
- **Business Development:** Retain, attract, generate job-generating businesses. The City should continue to generate jobs in industries that are vital to the existing economic base. Sectors of focus are medical, healthcare and biotechnology; research and development; industrial and warehousing; and retail sales and services, all of which will also strengthen the City's tax base.
- **Small Business Recovery:** The effects of COVID-19 has had impacts on the City's economy. In efforts to assist the reopening of local small businesses, the City has created a UEZ 2020 COVID-19 Emergency Assistance Fund for. This fund provides rental/lease, administrative and overhead, and wages. The City is referring businesses to financial and technical support resources. The City will continue to provide assistance to local businesses utilizing UEZ funds.
- **Arts:** Build upon the arts community within the City and incentivize the development of galleries, studios, schools, and specific forms of art such as film, performing arts, painting, drawing, printmaking, sculpture, etc.
- **Film Hub:** Within the arts and creative workforce, the City should promote film production companies to film as well as locate in Plainfield. Production companies should also take advantage

of tax incentives such as New Jersey Film and Digital Media Tax Credit Program.

- **Muhlenberg Redevelopment:** Continue with the redevelopment of the former Muhlenberg Regional Medical Center in order to support the City's growth into a major medical hub. The City should consider fostering partnerships with other nearby educational institutions, such as the School of Nursing, School of Public Health and School of Pharmacy at Rutgers University.
- **Urban Enterprise Zone:** Continue to leverage existing businesses and encourage others to locate within the City's Urban Enterprise Zone and take advantage of the tax abatements and benefits. Small businesses should continue to take advantage of the assistance and services offered by the UEZ Program.
- **Opportunity Zones:** Take advantage of the City Opportunity Zone designation, which incentivizes development and investment in areas that have experienced economic distress. There are two Opportunity Zone designations within City limits. The City should consider funding of these zones.
- **Grocery Store:** Provide opportunities for major, brand-name grocery stores to locate in the City. During the community engagement sessions, residents expressed concerns that, brand-name grocery stores are lacking. City residents also noted that they tend to travel outside the City to shop for groceries. The City should encourage potential sites for

new grocery stores so that residents from each ward have equal accessibility.

- **Community Development:** Partner and collaborate with local community development corporations in providing resources and services for job readiness, especially for low-income and unemployed residents.
- **Diversify economic base:** In combination with job training programs, the City can create opportunities for a variety of job types that require various skill sets and experience.
- **Public-Private Partnership:** The City should consider public-private partnerships as a means of coordinating, managing and financing redevelopment projects.
- **Explore an Inner-City linkage system:** The City should explore the viability of a local Jitney service that would traverse the City and link more remote areas to the downtown transportation and cultural and civic locations. In the absence of any inner-city buses, this system would be facilitate mobility within the City. This service could also provide direct transportation to nearby employment centers in New Brunswick.
- **Coding Program:** In collaboration with the Board of Education and the City's Information Technology Division, a coding program or school should be considered for learners of all ages to obtain skills and fluency in multiple programming languages and data analysis as jobs these skilled are

increasingly in high demand.

- **Maker economy and Maker-Space:** Stimulate small-scale manufacturing (makerspaces, microbreweries, etc.) within the City. As former larger-scale industrial uses have declined and vacated the City in recent years, smaller-scale manufacturing and light industrial uses are appropriate replacements. Similar to co-working spaces in office settings, makerspaces can provide space for numerous makers within one facility. This will also foster collaborative partnership among many types of makers. The maker economy should be explored as a job growth sector as the trade specialties develop in the City. Programs offering maker-related skills should be expanded in Plainfield, such as the welding program at the Center for Economic and Workforce Development at Union County College.
- **Light industrial / manufacturing (South Western end of the City):** The City should foster the growth and expansion the industrial and manufacturing industries. There is an existing hub of manufacturing and industrial businesses in Plainfield. Since these industries are significant drivers of the economy, the City should work towards creating more jobs.
- **Co-Working Space:** The City should look into attracting a co-working operator into the City. Currently, there are no co-working facilities in Plainfield. The real estate market for office space has declined due to employees working remotely, abundance of space and

tenant preferences.

- **High technology:** The City should consider implementing 'Smart City' standards. As the City is a recipient of NJEDA's Innovation Challenge Grant, the City should position itself as a technological hub, transforming aging vacant and industrial properties to thriving mixed-use, high-technology centers. As discussed earlier, a technology-needs assessment should be conducted to determine the technical infrastructure needs of the City.
- **Biotechnology:** As Plainfield is seeking to fortify the technology and medical industries, the City should explore opportunities in the biotechnology and life sciences research and development fields. Target companies would include labs and incubator space housing related companies, encouraging collaboration and cross-pollination.
- **Incentivize business incubators in the City:** The City should encourage a business incubator to open in Plainfield. Developing a local entrepreneurship scene will allow for start-ups to locate in the Plainfield. These businesses will continue to grow while establishing roots in the City. Partnering and collaborating with other start-ups will benefit theses in their infancy stage
- **Diversify restaurants:** Although the existing restaurants in the City span across many cultures, Plainfield should work to attract more ethnically diverse restaurants. Destination-type, experiential restaurants will also bring in visitors to the City.

- **Hotel:** There are no hotels presently located within the City. The City should consider attracting a hotel as an economic anchor as it could drive numerous supplemental uses, such as retail, banquet halls, office/co-working space, and recreation opportunities. Additionally, a hotel could be a significant employment generator for City residents.
- **Urban Agriculture:** The City should develop a program of creating accessible community gardens in every ward. In encouraging citizen participation, workshops should be held by the City to educate residents on proper and sustainable gardening techniques as well as opportunities to participate as a vendor in local Farmers' Markets.
- **Flood Resiliency:** Insist on flood-resilient redevelopment projects and assist existing businesses to implement flood-proofing techniques.
- **Seek to grow targeted industries:** The City should explore industry and job growth in sectors such as manufacturing, medical, healthcare, energy, and biotechnology. Additionally, green industries should also be examined as potential industrial hub in the City.
- **Special Improvement District:** Capitalize on the existing capacity of the City's Special Improvement District (SID). The City and Special Improvement District should work together to promote safety

within the Central Business District by providing sufficient lighting, signage, and presence of police officers and security. Shoppers will be more inclined to patronize Downtown if they feel safe and secure. The Plainfield SID should continue to promote the improvement district through special promotions, events and marketing through various outlets, including mailings, emails and social media. Promoting Plainfield as a preferred place to shop will bring awareness of the City and its positioning as a revitalized place to do business. Concurrent with the promotion of the Central Business District of Plainfield, the SID should emphasize the safety of Downtown with facts. Enhancing the streetscape, maintaining sidewalks and providing amenities such as street furniture and recycling receptacles.

- **Entrepreneurship training:** The City should continue to provide resources for residents to start, operate, and promote their own business. The City provides monthly seminars for businesses in creating a business plan, Quickbooks, Maximizing Google Search Engines, Financial Resources for Small Businesses, and other seminars.
- **NAN Plainfield Tech World:** The City should hold more events thorough the NAN Plainfield Tech World, a comprehensive digital literacy and technology training center, to educate residents on basic fundamentals of using technology in daily life. Although the NAN Plainfield Tech World has held events since the late 2010s, the City should consider tapping

into this technical resource for resident training. The success of the previous events, workshops, and programs should be evaluated (i.e.—training participants who have obtained jobs and where they are employed) to determine the events and program content to be offered in the future.



Front Street Storefronts

For more information see:

Community Facilities Plan Element

- Arts and Cultural Assets

Land Use Plan Element

- Redevelopment

Green Building and Environmental Sustainability Plan Element (overall)

Community Input

Sampling of comments from Community Workshops

- Quality stores, brand name supermarket.
- More diversity in restaurants.
- Performing arts center, museums, movies and theaters.
- Tax incentives.
- Safe shopping, parking.
- Makers and artisans.
- Jobs for local people.
- Cafes, bistros.
- High taxes.
- High store rents.
- Not enough job training for young adults.
- No tech incubator.

From the Master Plan Survey

Among participants in the survey, 58% said redevelopment of underutilized parts of the city was very important; 26% said very important.

Survey comments included:

- Supporting existing local businesses is important and provides more jobs to the town so people can support their families.
- For 80 years, cheap and unattractive building and alteration has been permitted.
- Many buildings are not adaptive re-use. Too many tax incentives to developers.
- Supermarkets and true upscale retail is a must. Parking is a huge concern.

When asked how often in a typical month they shopped or used services in Plainfield, participants said:

45%	Rarely (once a month or less)
20%	Daily
16%	2-3 times a week
15%	4-5 times a month
4%	2-3 times a month

Related survey comments on what is needed/not needed and how people shop included:

- Recreational centers for children to replace the YMCA/YWCA that no longer exist in Plainfield.
- No more restaurants, beauty services, bars/lounges or industrial!!!
- Clean, full service grocery store with quality merchandise.
- Need more stores like Target.
- Cultural establishments, restaurants, professional services.
- A hospital and doctor's offices.
- Only go to Post Office, bank

CIRCULATION ELEMENT

"The street is the river of life of the city, the place where we come together,
the pathway to the center."

- *William H. Whyte*

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How We Get There

Enhance Transit Oriented Development (TOD) investments through infrastructure improvements

- Invest in improvements to train station facilities.
- Implement planned initiative to create North Avenue pedestrian mall.
- Develop parking plan around downtown station.

Encourage all modes of mobility

- Adopt a Complete Streets Ordinance.
- Where they can be accommodated, develop new bicycle and pedestrian facilities along City roadways.
- Create biking connections between Plainfield and surrounding municipalities.
- Enhance pedestrian safety through sidewalk improvements and changes to streets and public spaces.

Insist on the equitable investment of public transportation services and facilities in Plainfield

- Improve locations of bus stops to make them more convenient to residents and improve livability.
- Construct bus shelters at heavily used bus stops.
- Integrate micro-mobility services such as bike share programs to complement public transportation services
- Enhance bicycle safety in and around train stations and bus stops.
- Develop bike and shuttle routes from train stations to multifamily developments.
- Encourage new development to promote the use of and provide adequate space for dockless bicycles.

Develop mass transit connections between Plainfield and nearby centers of employment and education

- Partner with transit providers to create transit routes from Plainfield to Rutgers University and other employment facilities in New Brunswick.
- Work with NJ TRANSIT to improve local bus routes to increase reliability and frequency of service.

Strategic Vision

Develop plans and tactics that enable all residents to select transportation modes best suited to their needs, ensuring improved, well maintained options. This means safe streets for walking, driving or biking; public transportation that is enhanced by better facilities and complementary services; and demonstrated equity in how these services are funded.



Source: www.freepik.com

INTRODUCTION

Plainfield is dedicated to providing diverse and effective multi-modal transportation systems that ensure the accessibility and connectivity of community amenities.

Transportation has always played a critical role in the growth and development of the City of Plainfield. Access to jobs, educational opportunities and other amenities through a diverse transportation system that offers residents a wealth of options for getting around is crucial to the quality of life of Plainfield residents and the City's economic well-being. Plainfield is centrally located in the State of New Jersey in the westernmost portion of Union County, approximately thirty-five (35) miles from New York City. The City's historic connection to New York began around the turn of the twentieth century with Plainfield station centrally located in the downtown area. With convenient location to various transportation networks, residents of the City can easily access various employment centers throughout the greater New York metropolitan region. The City's predominant development pattern was established prior to the widespread adoption of the automobile and is evident in its walkable downtown, built around the Plainfield train stations and a traditional grid pattern outside of the immediate downtown area.

The City of Plainfield is well connected to both New York City and various employment centers throughout Union County and New Jersey, by way of major roadways and mass transit networks. Plainfield has two train stations along New Jersey Transit's Raritan

Valley Line, the Plainfield and Netherwood Train Stations. The Raritan Valley Line provides Plainfield residents with direct access to Newark and High Bridge, with connections to Hoboken and New York Penn Station. While there are no major interstates that go through Plainfield, residents are able to access US Route 22, which runs just north of the City and NJ Route 28 that traverses the heart of Plainfield. From these main routes, residents can access Route 78 with Garden State Parkway and Route 287 to Newark or connect to either the Garden State Parkway or I-287. In many ways, Plainfield has benefited from not having major highways going through its boundaries as these types of roadways have historically divided previously thriving urban neighborhoods such as Interstates 78 and 280 traversing the City of Newark and Interstate 280 and the Garden State Parkway bisecting East Orange, among others. Plainfield has

been able to maintain its grid system that is built around access to rail and bus.

Today, Plainfield's walkable downtown and residents' ability to get to New York City in less than an hour has attracted new interest in the City. As a result, the City is bringing in new investment in the form of transit-oriented development, or TOD. Changing demographics and consumer choices are revitalizing neighborhoods that have strong public transit access and "good bones" that make it easy for residents to walk to shops, restaurants and entertainment. TOD is an attractive way to improve a city's well-being as it can add new residents and economic activity without greatly increasing congestion on local roadways as new residents use public transit rather than private automobiles for their daily commute. Additionally, transit-oriented development can improve the use of other multi-modal options like dock-less bikeshare or scooter programs. This is because TOD increases the density of both people and services that are within distances that are attractive to walk and bike.

The City has already enacted policies to take advantage of these changing trends. In 2012, the Plainfield City Council adopted an ordinance to create the Transit Oriented Development Downtown (TODD) around the Downtown Train Station and adopted a similar ordinance to create the Transit Oriented Development Netherwood (TODN) zone around the Netherwood Train Station. The goal of this policy was to revitalize the areas around the Downtown and Netherwood train stations and provide new residential and commercial uses that enhance the economic vitality of the area and improve

MUNICIPAL LAND USE LAW

"A circulation plan element showing the location and types of facilities for all modes of transportation required for the efficient movement of people and goods into, about, and through the municipality, taking into account the functional highway classification system of the Federal Highway Administration and the types, locations, conditions and availability of existing and proposed transportation facilities, including air, water, road and rail"

train ridership. These TOD zones implement TOD best practices, emphasizing the use of multi-modal transportation by requiring parking for bicycles and enhancing sidewalk infrastructure for pedestrian traffic.

Plainfield is also tactically utilizing incentives around its train stations. The City was designated a Transit Village in 2014, an incentive and technical assistance program for municipalities to redevelop the areas around their train stations. Plainfield is seeing the fruits of these policies. Just in the past few years, numerous redevelopment plans have been approved that promote TOD and activity along the commercial corridors next to Plainfield's two train stations. This swell of investment provides the City with ample opportunities for improved circulation around the train stations, but it also brings new challenges that the municipality's leadership will have to address.

As development and economic changes continue to occur in Plainfield, the City requires new strategies to deal with the changing transportation needs to ensure residents have excellent mobility and accessibility opportunities to employment, education and other essential services. A commitment to improving and maintaining the quality of public transportation services and facilities as well as bicycle and pedestrian infrastructure together with a focus on the interconnectivity between land use and circulation represent critical strategies needed to ensure that the revitalization of Plainfield improves the quality of life for its residents.

HOW THE CITY OF PLAINFIELD TRAVELS

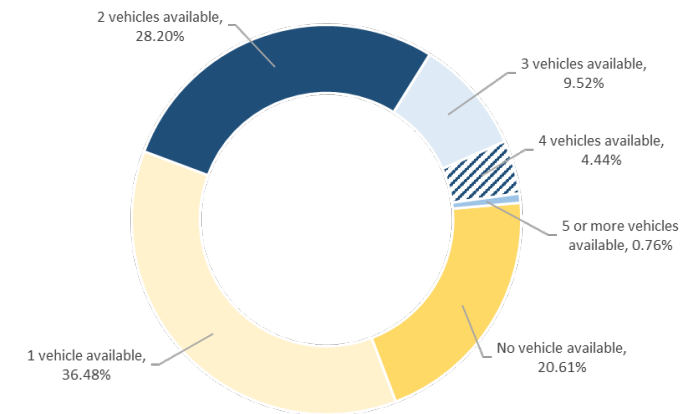
United States Census data provides important insight into the mobility needs of Plainfield's residents. This data may not reflect nuanced condition changes between Census time periods, such as the recent new developments around the City's train stations. This could lead to the under counting of the use of public transportation given that the information for the 2018 American Community Survey is based on the five-year period between 2014 and 2018. This data may also not indicate the usage or reliance on certain modes of transportation outside of commuting to work. The Census also does not reflect changes in mode of transportation. So, while a worker may walk or ride a bicycle to a bus stop or train station to use public transportation, public transportation is the only mode reflected in the person's work trip. However, despite known limitations in the data, Census data does provide a reliable and valuable resource to generally understand how people within the City travel.

Car Ownership

Access to a vehicle is a significantly greater challenge for households in the City of Plainfield compared to Union County and New Jersey. Almost 21% of Plainfield households lack access to a vehicle, which is almost double the percentage of Union County (11.6%) and New Jersey (11.4%). About 36% of Plainfield households have one automobile available, which is roughly the same as the county and state percentages.

Given the significant lack of access to a vehicle for Plainfield households, good and reliable public transportation service as well as pedestrian and bicycle infrastructure plays a critical role in the quality of life and access to opportunities for Plainfield households.

CHART 1: PLAINFIELD VEHICLE OWNERSHIP - 2018



Source: US Census Bureau, American Community Survey, 2018 5-Year Estimates

Mode of Transportation

Even as households in Plainfield have more limited access to an automobile compared to both the County and the state, the predominant mode of transportation for workers (24,692) is the automobile. Just over two-thirds (70.7%) either drive to work alone or carpool with others. While household vehicle ownership is lower than county and state levels, most City residents who work own automobiles. The share of those workers who drove to work alone (62.0%) is roughly

10% lower than the New Jersey percentage (71.4%), and just over 6% lower than the Union County percentage (68.3%).

The second most common mode for commuting was Taxi, motorcycle, or other means (the Census does not define other) at 13.9%. This mode was significantly more common among Plainfield workers compared to Union County's workers (4.9%) and across New Jersey (1.5%). This high percentage of workers using other modes of transportation could help explain why the percentage of Plainfield workers commuting by public transportation (9.0%) is lower than both Union County (12.0%) and New Jersey (11.5%) despite automobile access being much lower in Plainfield. In order to better address Plainfield residents' commuting needs, the City should focus outreach efforts that will help define this vague mode choice category that the Census Bureau uses. Given that it makes up a significant portion of commutes at almost 14%, understanding this commuting pattern can help the City create more equitable and convenient solutions

for these workers. Residents of Plainfield also tend to walk more to work (4.4%) compared to other workers in the County and State. Given, the dense walkable characteristics of the City, this is not surprising. Additionally, Plainfield residents are less likely to work from home (1.6%) compared to the County and State percentages.

Place of Work

Nearly 94% of all workers from Plainfield work within New Jersey, while nearly 56% of those workers leave Union County to get to their place of employment. These percentages indicate Plainfield workers are reliant on good intrastate transportation service and facilities. Still, Plainfield workers do benefit from its train stations with their access into New York City yet only 6% of workers work out of the state. Of the 1,552 people who work outside of New Jersey, 62% take public transportation.

Commute Time

The average travel time to work for Plainfield workers is 30 minutes. This is roughly on par with the average travel times for Union County and New Jersey workers. A little over a majority (53.3%) of commutes by Plainfield workers takes between 15 and 34 minutes, slightly higher than the county and state. Plainfield workers have a lower share of short commutes (less than 15 minutes) at 16.2% compared to that of the county (20.5%) and the state (21.3%). This could be due to the higher number of workers who have to use either taxi, motorcycle or some other form of transportation to get to work.

GRAPHIC 1: PLAINFIELD COMMUTER'S MODE OF CHOICE - 2018



Source: US Census Bureau, American Community Survey, 2018 5-Year Estimates

EXISTING CONDITIONS - PUBLIC TRANSPORTATION

Rail

The City of Plainfield has two active train stations, the Plainfield Train Station is located on North Avenue and Gavett Place, between Watchung and Park Avenues, and the smaller Netherwood station located about a mile northeast of downtown. Rail service in Plainfield is provided by the Raritan Valley Line, which provides service from Raritan to Newark Penn Station where riders can transfer to trains that will take them to New York or Hoboken Terminal. The Raritan Valley Line operates seven days per week and makes stops at the downtown Plainfield and Netherwood train stations. It takes about 40 minutes to arrive at Newark Penn Station from Plainfield station and about 37 minutes from Netherwood. It will take about an extra 25 to 30 minutes to arrive in New York depending on the transfer.

Eastbound service makes 24 stops daily at both the Plainfield and Netherwood stations. Westbound service makes 26 stops daily at both stations.

While much of the City is well serviced by the two train stations, there are parts of the City where it is too far to walk to the station. One particular neighborhood, the West End, which encompasses the area generally north of Seventh Street, south of the train tracks and west of Central Avenue, could greatly benefit from some kind of jitney or shuttle service that would give residents of this neighborhood quick and convenient access to the Downtown Plainfield Train Station. The City should work with NJ Transit to develop

some kind of jitney service to connect the West End and other neighborhoods that are farther away from the train stations to the rail service.

One-Seat Ride

Reliability of service is a key aspect that enables residents to use public transportation to commute to their place of work in a timely manner. One hindrance of this for Raritan Valley Line riders is the lack of one-seat ride, which requires passengers to have to transfer trains at Newark Penn Station if they are to continue on to New York City. This issue is an ongoing one and has been discussed in previous Master Plans. However, new dynamics with NJ Transit have made reliability of service a greater challenge potentially hindering further transit-oriented development in the City of Plainfield.

Since the last Master Plan, NJ TRANSIT had implemented some one-seat off-peak service on the Raritan Valley Line, but it had been suspended for almost one year, until its reintroduction in November 2019. Two key factors led to the initial suspension of the one-seat ride service. The first has been the Federally mandated requirement for Positive Train Control (PTC) on all rail lines in the United States. PTC is an advanced signal and control system that actively monitors train speed and movements to avoid collisions and derailments. As NJ TRANSIT has implemented PTC on its system, it has required the temporary removal of rail equipment from its lines, affecting its ability to provide the same level of service systemwide. The second factor leading to suspension has been the shortage of qualified locomotive

engineers to provide service. This shortage has been a result of the lack of engineers going through the training course, and until recently, residency restrictions on who could be a locomotive engineer. While these issues are being addressed (such as the removal of the residency requirement), there will be a lag in having adequate staffing levels, as call-outs or other factors affecting available labor on any given day has an impact on how NJ TRANSIT can plan for and provide rail service. As of this Reexamination Report, recent data has shown that not only has the issue of delayed or canceled trains become an overall issue for regional mobility on NJ TRANSIT, but the problem is getting worse. The lack of a one-seat ride, insufficient service frequency, and poor reliability have had a detrimental effect on the use of the Plainfield and Netherwood Train Stations by potential riders. In order to reverse the trend of declining ridership and fulfill the City's potential as a transit-oriented community, Plainfield should continue to work with political leaders of other communities along the Raritan Valley line to get NJ Transit to provide one-seat ride to Plainfield commuters.

Plainfield Station

The Plainfield train station is located in downtown Plainfield on North Avenue between Gavett Place and Watchung Avenue. It is owned by New Jersey Transit and saw an average of 727 passengers per weekday in 2018. The station offers two ticketing machines as well as a station house with waiting areas on the street level. Bike facilities are available and there are two news stands outside of the station house. With two high-level side platforms, the station is ADA accessible via the front of the station house. Vehicular access is via three surface parking lots. Lot 1 off Fourth St. & Park Ave. offers daily parking with 53 standard spots and 5 accessible spaces. Managed by Pacific Parking, the lot costs \$4 per day and sees the most traffic out of the lots. Lot 2 on Fourth St is managed by Plainfield Parking Bureau and is available via permit only. It costs a minimum of \$30 per month and has 109 spaces of which two are ADA accessible spaces. Lot 4, also accessed via Fourth St & Park Ave, is owned by the

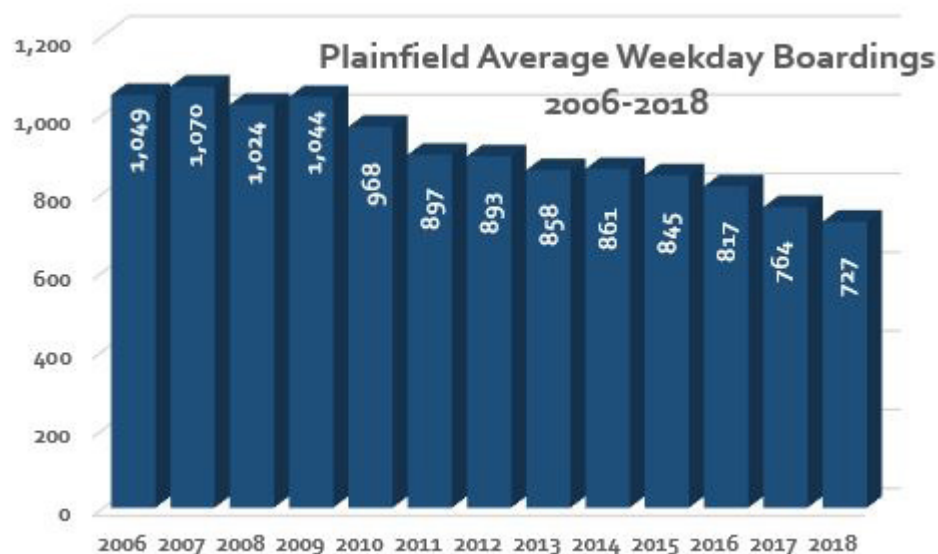
municipality. The lot costs a minimum of \$30 per month by permit only and only has 29 spaces, none of which are designated ADA accessible. During community outreach sessions with residents, safety and lighting at the station was consistently brought up as an issue. Residents would like to see greater lighting and more attractive facilities located at the station.

In March of 2014, the Plainfield station became the 6th designated Transit Village in Union County and the 28th in New Jersey, designated through the Transit Village program administered by NJDOT. A transit village is described as a neighborhood where people can live, shop, work, and play without needing to own or lease a car. The Transit Village program partners the city with several state agencies to help implement mixed-use development and Complete Streets accommodations near transit facilities in an effort to revitalize downtowns and increase ridership. The City of Plainfield has prioritized the development of high density

mixed-use and multifamily development around the downtown station and partnered with the New Jersey Institute of Technology to organize a report based upon transit-oriented development projects. Recent projects planned for downtown Plainfield include the five-story 300 Park Avenue development with 12 units, 347-435 East Third Street with 172 units, TODD West with 400 housing units and 52,00 square feet of retail at Central Avenue, and 829 South Avenue with 70 units and around 4,200 square feet of retail. While ridership has declined since the Transit Village designation in 2014, recent developments such as these will help ensure increased ridership in the future.



Parking Lots near Plainfield Station



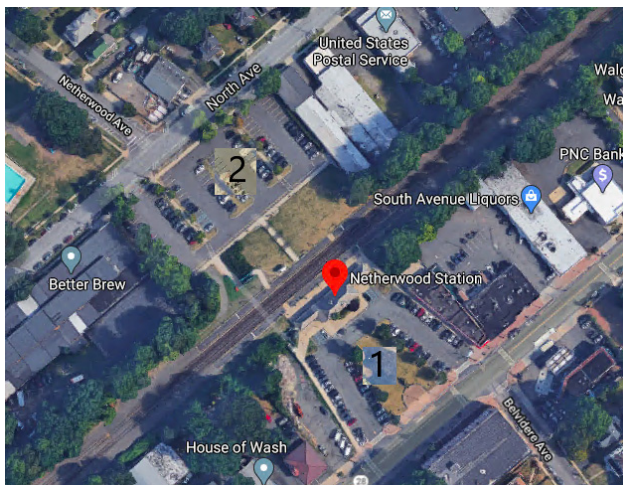
Netherwood Station

The Netherwood station is located along North Avenue at the intersection of Netherwood Avenue and along South Avenue at the intersection of Belvedere Avenue. In 2018, there was an average of 451 passengers per weekday that used the Netherwood station. The station has two ticket vending machines eastbound under the station portico. With electronic announcing boards throughout the station, there are also two side platforms for travel in either direction. Vehicular access can be made via two surface lots that sit on either side of the station house. Lot 1, accessible on South Ave. & Belvedere Ave., is managed by Pacific Parking. Offering daily and permit parking, the lot has 61 standard and four accessible spaces. It costs \$4 per day or \$120 per quarter to use. Lot 2 off North Ave & Netherwood Ave is also managed by Pacific Parking and offers daily or permit parking.

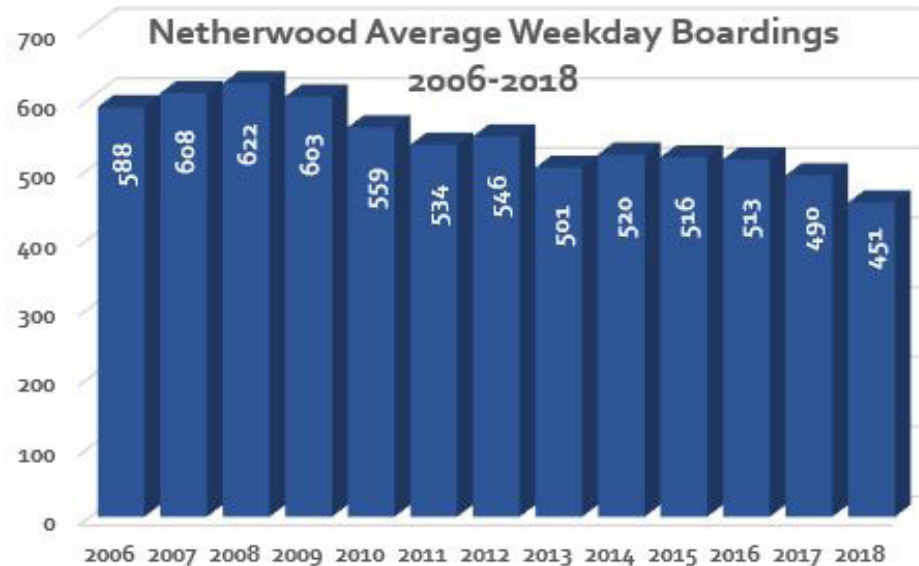
The rates are the same as Lot 1 and it has 100 parking spaces with three being accessible designated.

In 2013, the City Council passed Ordinance MC 2013-01, which rezoned the area around the Netherwood Station as the Transit Oriented Development-Netherwood (TODN) zone. According to the ordinance, "The purpose of the Transit Oriented Development Netherwood Zones (TODN) is to provide the foundation for a complementary mixture of appropriately intensive commercial and high-density residential land uses in close proximity to the Netherwood train station." It is the goal of the rezoning to spur development that will economically revitalize the area while also increasing the use of public transportation and creating more walkable and bikeable environments. As of writing there are several redevelopment plans for mixed-use projects that will include market-rate apartments and first floor retail. On October 3, 2019, QUIN

Sleepy Hollow opened, a 212-unit multifamily residential project located less than half a mile from the station. It is anticipated that the addition of several multifamily residential projects within walking distance of the Netherwood station will help to increase the number of weekday boardings at the station.



Netherwood Station Parking Areas



Bus**NJ TRANSIT**

Plainfield is well serviced by NJ TRANSIT buses. There are seven bus routes that have stops in Plainfield with connections from the two train stations to the bus routes. The Plainfield station houses all the bus connections including routes 59, 65-66, 113, 114, 819, 822 and 986. The Netherwood Station services

routes 113 and 822. The following table details each bus route:

- Route 59 (Plainfield-Newark) – The Route 59 bus runs north-south and takes passengers from Plainfield to Newark. There are six stops in Plainfield off the Route 59 bus including the downtown Plainfield stop at Watchung Avenue and East 4th Street. The route has two northbound stops and four southbound stops. The

total trip duration for this route from Plainfield to Newark takes approximately 84 minutes.

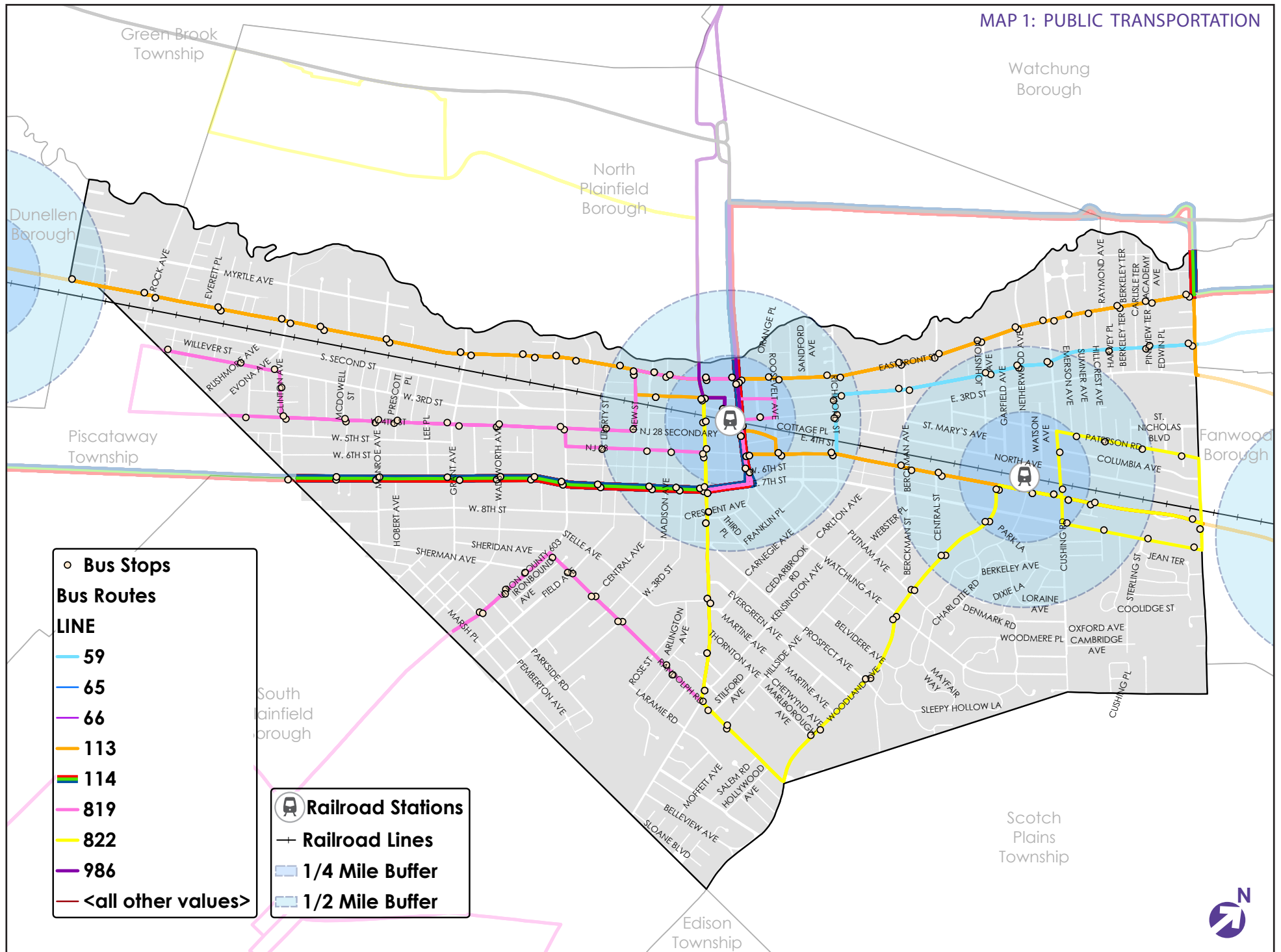
- Route 65-66 (Newark-Mountainside-Somerville) - The Route 65-66 bus goes from Newark Penn Station to Dunellen at Grove St. and Prospect Ave. The route is operational only during weekdays and has 86 stops. The total trip duration for this route is approximately 90 minutes. This is a limited route.

TABLE 1: BUS ROUTES IN PLAINFIELD

Location		Route 59	Route 65-66	Route 113	Route 114	Route 819	Route 822	Route 986
Union	New York			X	X			
	Newark	X	X					
	Elizabeth	X		X				
	Roselle	X						
	Cranford	X		X				
	Garwood	X		X				
	Westfield	X	X	X	X			
	Scotch Plains		X	X	X			
	Plainfield	X	X	X	X	X	X	X
	Hillside	X	X	X				
	Union		X		X			
	Summit							X
Middlesex	Dunellen	X						
	So. Plainfield		X		X	X		
	Piscataway		X	X	X	X		
	Edison					X		
Somerset	Somerville							
	North Plainfield		X		X		X	
	Bridgewater				X			

- Route 113 (Dunellen-New York) - The Route 113 bus goes from Port Authority Bus Terminal in New York to Dunellen at North Ave. and Jackson Ave. The route is operational during weekdays with limited weekend service and has 76 stops. There are 10 outbound stops and seven inbound stops in Plainfield. The total trip duration for this route is approximately 80 to 90 minutes.
- Route 114 (Bridgewater-New York) – The route 114 bus takes riders from the Port Authority Bus Terminal in New York to Bridgewater Commons in Somerset County. The route is operational during weekdays and on weekends. It has 91 stops and the total trip duration for this route is approximately two hours. There are 10 outbound stops and 9 inbounds stops in Plainfield.
- Route 819 (Piscataway-South Plainfield) – The Route 819 bus is a local service route. The first stop of the 819 bus route is 4th St. at Rushmore Ave. in Piscataway and the last stop is Stelton Rd at Hadley Center Dr. in South Plainfield. This bus route is

MAP 1: PUBLIC TRANSPORTATION



operational during weekdays. The route has 51 stops and the total trip duration for this route is approximately 50 minutes. There are four outbound stops and three inbound stops in Plainfield.

- Route 822 (Plainfield-North Plainfield) – The Route 822 bus is a local service route. The first stop of the 822 bus route is Terrill Rd at South Ave in Plainfield and the last stop is North Plainfield Shopping Center (Rt 22). There are three outbound stops and one inbound stop in Plainfield. Bus service is available on weekdays and on Saturdays. The route has 29 stops and the total trip duration for this route is approximately 29 minutes.
- Route 986 (Summit-Plainfield) - The Route 986 bus takes riders from the Plainfield Rail Station to the rail station in Summit. Service is only operational during the weekdays. The route has 28 stops and the total trip duration for this route is approximately 45 minutes.

Union County Paratransit

Union County Paratransit is a curb-to-curb transport service specializing in transportation of senior citizens (age 60 or older), persons with disabilities and/or economically disadvantaged residents of Union County. There is a fare of \$2 per one-way trip.

EZ Ride

EZ Ride is a non-profit Transportation Management Agency that partners with government agencies, private foundations, local non-profits and others throughout northern New Jersey to identify priorities and possible funding sources to implement bike and pedestrian programs. EZ Ride began its partnership with the City of Plainfield and the Plainfield School District in 2015. The organization has been able to create a two-year action plan to reduce the number of pedestrian-involved crashes with special emphasis on school aged children walking and biking to school. As a result of this partnership with EZ Ride, the City of Plainfield has been able to secure over \$300,000 in funding for infrastructure improvements.

Roadways

Jurisdiction

Plainfield's transportation network is made up of a series of roadways that fall under the jurisdiction of multiple government agencies. Not all roadways in Plainfield are managed or maintained by the City. While the City of Plainfield has no roadways under the authority of the Federal government, there are roadways under the authority of the New Jersey Department of Transportation (South Avenue) and Union County (i.e. Park Avenue, Plainfield Avenue). It is important to recognize the distinctions between roadway jurisdictions as Plainfield may have influence on some factors such as land use and zoning patterns despite jurisdiction, while other decisions require cooperation by other governmental agencies in order to improve quality of life factors like safety and mobility. The following are roadways by jurisdiction and their description within the City of Plainfield.

State

NJ Route 28

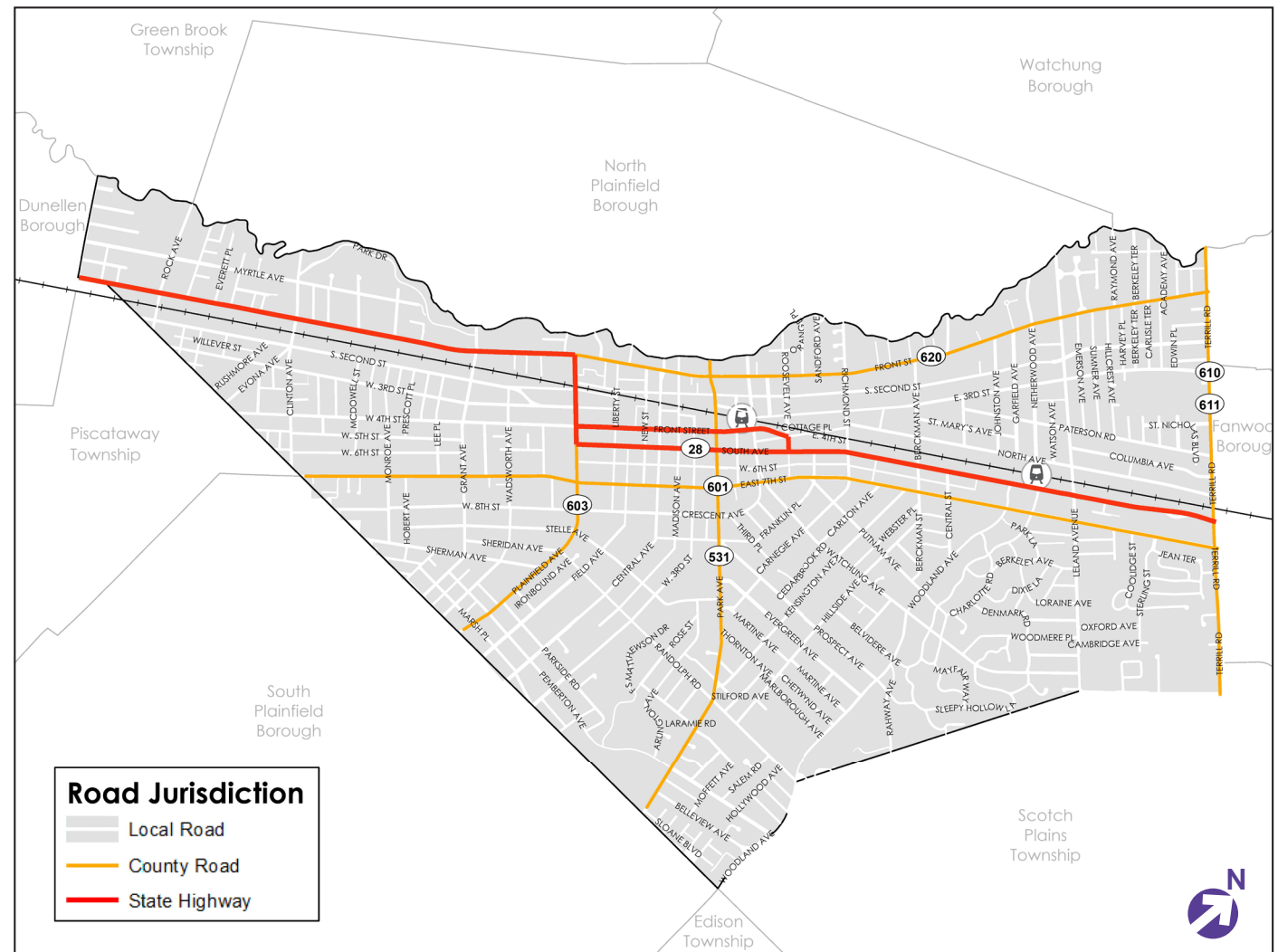
New Jersey Route 28 runs generally east-west from downtown Elizabeth where it intersects with NJ Route 27 to the south and west where it joins with U.S. Route 22 in Somerset County. In much of Union County, NJ Route 28 parallels the Raritan Valley train line. In Plainfield, the Route is a two-lane roadway that starts on South Avenue at the border with Fanwood Borough and continues west, south of the Raritan Valley line. In Downtown Plainfield, NJ Route 28 is a part of 5th Street from Richmond

Street to Plainfield Avenue. The Route is also considered a part of 4th Street from Roosevelt Street to Plainfield Avenue. At Plainfield Avenue, Route 28 becomes a part of Plainfield Avenue until it joins with West Front Street. Land uses along West Front Street are generally residential with some commercial and light industrial, especially near the municipal border with Dunellen and near Plainfield Avenue. There are higher intensity uses including multifamily, mixed use and commercial in downtown Plainfield and from downtown north to the Fanwood border. While Route 28 is a state route, the City is tasked with maintaining the road. Plainfield has tried working to get the State to retake control of the roadway but has not been able to achieve this. It is recommended that the City either renegotiates with the state to take control of maintenance or is able to work with NJDOT to receive funding to make necessary improvements to the roadway that badly need the investment.

County

Plainfield Avenue (County Route 601, NJ-28)

Starting at Wadsworth Avenue at the Plainfield/South Plainfield border, Plainfield Avenue runs primarily east-west. The roadway has two lanes for vehicular traffic and is 40 feet wide from Wadsworth Avenue to Front



Source: US Census Bureau, American Community Survey, 2018 5-Year Estimates

Street. From West Fifth Street to West Front Street to the border with North Plainfield, the roadway is narrower at 34 feet wide. At West Fifth Street the road also joins NJ Route 28. Through its route in Plainfield, the roadway's speed limit is 25mph. In 2017, the average daily number of vehicles that traveled along

Plainfield Avenue was 7,721, which was down from the 2016 average of 8,320 vehicles daily.

7th Street (County Route 601)

East/West 7th Street is a two-lane roadway that starts at the Plainfield/Piscataway

border and runs primarily north-south and ends at Terrill Road at the border between Plainfield and Fanwood Borough. The roadway is 38 feet wide with no shoulder. There are two lanes of vehicular traffic with curbside parking on both sides. The speed limit is 35mph. As of 2017 data, the average daily number of vehicles that traveled along 7th Street was 10,459, which was down from the 2011 average of 11,801.

Terrill Road (County Route 611)

Terrill Road runs east-west along the border between Plainfield and Scotch Plains as well as the border between Plainfield and Fanwood. The road starts at the intersection with Cushing Road and goes to the North Plainfield border. Terrill Road is a high-speed roadway with a 40mph speed limit between Cushing Road and North Avenue. The speed limit is lowered to 35mph between North Avenue and the Watchung border. The roadway is 24 feet wide with a 6-foot shoulder from Cushing Road to Columbia Avenue. From Columbia Avenue to E. 3rd Street, the roadway is 36 feet with an 8-foot shoulder. The roadway width increases to 40 feet between E. 3rd Street and the North Plainfield border. The roadway has two travel lanes between Cushing Road and E. Second Street where there is a left turning lane at the intersection. From the intersection with E. Second Street to North Plainfield, there are 4 lanes of vehicular traffic with two lanes going either way. In 2012, the most recent year for data, the average daily number of vehicles was 15,357.

Front Street (County Route 620)

Front Street runs primarily north-south and starts at Plainfield's border with Dunellen and ends at the Plainfield/Scotch Plains border. From Plainfield Avenue to the Borough of Dunellen, the route is considered part of NJ-28. From Plainfield Avenue to Terrill Road the route is a part of Union County Route 620. The roadway has two lanes for vehicular traffic and ranges from 34 to 40 feet in width with no shoulder. The speed limit is 30mph from Watchung Avenue to Farragut Street and 35mph from Farragut Road to the Scotch Plains border. In 2017, the average daily number of vehicles was 9,342, which was down from the 2016 average of 9,937.

Park Avenue (County Route 531)

Park Avenue runs north-south from the Plainfield/South Plainfield border to Randolph Street. From Randolph Street to the City's border with North Plainfield, the street runs more east-west. Currently, Union County has jurisdiction of the roadway from the South Plainfield border to Ninth Street while the City maintains jurisdiction from Ninth Street to the North Plainfield border. The City should work with Union County to have them take jurisdiction of all of Park Avenue. Park Avenue is 40 feet wide with two vehicular travel lanes with parking permitted on both sides of the street until Front Street. From Front Street to the North Plainfield border the roadway is only 34 feet wide. In 2016, the average number of daily vehicles that traveled along Park Avenue was 10,340, which was up from the 2010 average of 9,469.

Functional Classifications

The Federal Highway Administration (FHWA) defines classes of roadways based on their principal function of providing vehicular mobility (i.e. efficient movements of road travel with minimal connections to surround land and other roads) or accessibility, which provides more connection via direct or secondary access to land uses.

There are three main categories of roadway classifications: arterials, collectors, and local roads. Arterials are further sub-categorized as interstates, other freeway/expressways, principal arterials and minor arterials. Collectors are also sub-categorized as major collectors and minor collectors.

Arterials

Interstates

Interstates are designated by the United States Secretary of Transportation. They are the highest classification of arterials and were designed and constructed with mobility and long-distance travel in mind. These roadways tend to be limited access, divided highways with the intention of high levels of mobility between major and urban areas. There are no interstates in Plainfield.

Freeways/Expressways

Freeways and Expressways serve a purpose similar to that of interstates. These roads are intended to provide high levels of mobility, have limited access via ramp locations and are not intended to directly serve

adjacent land uses. There are no freeways or expressways in Plainfield.

Principal Arterials

Principal Arterials provide a high level of mobility, but unlike interstates and freeways/expressways, these roads provide direct access to surrounding land uses. In Plainfield, West Front Street (County Route 620), Plainfield Avenue (County Route 601, NJ-28), South Avenue, West 4th Street and West 5th Street are classified as Principal Arterials. Land use along these arterials has a consistent intensity and character. Commercial is disbursed evenly throughout. Most sections of these roads serve for great mobility and fall perfectly into the categorization.

Minor Arterials

According to the FHWA, minor arterials provide service for trips of moderate length, and serve lower level geographies than principal arterials. Similar to principal arterials, they are intended to provide higher levels of mobility (though not as high as principal arterials) and offer direct access to local land uses. County roads Front Street (CR 620), 7th Street (CR 601), Plainfield Avenue (CR 601), Terrill Road (CR 611) and Park Avenue (CR 531) are minor arterials, municipally controlled roads include North Avenue, Rock Avenue and Richmond Street, among others.

Collector Streets

Major Collectors

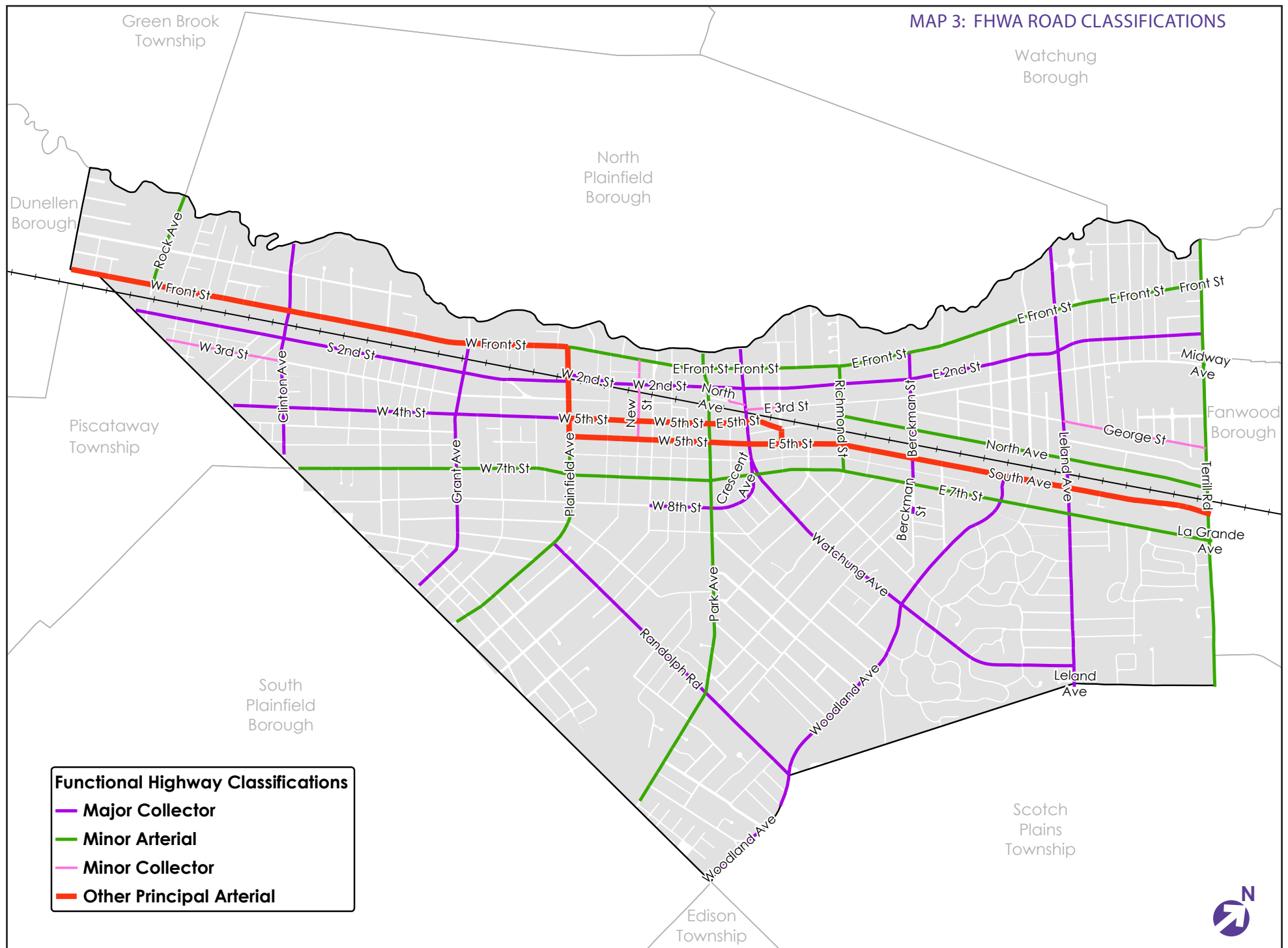
Major Collectors distribute and channel trips between local roads and arterials. They are roads that provide greater accessibility to surrounding land uses than arterials, connecting to higher density residential and commercial/industrial areas, though the FHWA notes that major collectors may “penetrate residential neighborhoods, often for significant distances.” The major collectors in Plainfield include Leland Avenue, Berkman Street, Watching Avenue, Rahway Road, Woodland Avenue, Randolph Road, West 8th Street, Grant Avenue, West 4th Street, Central Avenue, Clinton Avenue and South 2nd Street.

Minor Collectors

Compared to major collectors, minor collectors may have fewer travel lanes than major collectors, lower traffic volumes, and are shorter connections between local roads and arterials. Minor collectors in Plainfield include West 3rd Street, Rahway Road, New Street, Gavett Place, North Avenue, East 3rd Street and George Street.

Local Roads

Local roads generally make up the remainder of the roadway network, and account for the greatest percentage of all roadway mileage. They provide local access to land uses and higher-level road classifications. Most local roads tend to be residential in nature, typically not intended to carry through traffic.



Traffic Count Data

Traffic count data is one of many factors the City should consider when designing a Complete Streets network (see page 110 for discussion on complete streets) that prioritizes the safety of pedestrians and cyclists. It is preferable for the City to either add extra protections and barriers on the most heavily traversed streets or have bike routes that avoid these streets altogether, in order to create a bicycle route that makes cyclists as comfortable as possible to achieve high bicycle usage in the City.

The trends in the volume of traffic occurring on Plainfield's streets does not appear to be uniform across the municipality. Several of the streets including South Second Street and East Front Street have seen relatively stable traffic levels in the past few years, where streets such as East 7th Street and West Front Street have seen a large decline in the number of vehicles traveling along these roadways.

Park Avenue (CR 531) has seen a large increase in traffic volume, with a 2010 average of 9,469 cars daily passing through to 10,340 cars traveling daily along this road in 2016 (+871 vehicles over the 6-year time period, equating to an additional 145 vehicles per year).

The roadway that has the highest average number of daily cars traveling through is Terrill Road with an average of 15,356 cars traveling daily along this road in the most recently recorded year (2012). As a county route that connects to US-22, it is unsurprising that this would be the most heavily traveled route in the City.

Truck routes

In New Jersey, standards and procedures of truck operations are regulated by truck routing rules. These truck routing rules also established the National Network and the New Jersey Access Network. The New Jersey Access Network allows large trucks to travel on State highways and some county roadways. In the City of Plainfield, roadways within the New Jersey Access Network include NJ-28, which runs through downtown Plainfield and Park Avenue (County Route 531). Even if roadways in Plainfield are designated as truck routes, they are not currently as accommodating to truck traffic, particularly at intersections. Tight intersections can make it very difficult for trucks to make turns and could cause safety hazards. One particularly intersection that the City should work with NJDOT to improve is the intersection of Front Street (NJ-28) and Rock Avenue. By allowing for a greater turn radius at this intersection, trucks will be better able to navigate their way through this area to get to their destination.

Industrial zones should be recognized as freight generators since all shipments must be made by truck because there are no freight lines in Plainfield. It should also be recognized that commercial buildings like retail stores, or contractor showrooms also receive freight shipments for the end consumer. The City has two main light industrial zones: one in the southwestern portion of the City that is serviced by NJ-28 and the other is on the northern and southern ends of the Trainside Commercial (TSC) Zone that is around the Netherwood train station. Trucks traveling to this zone need to use North Avenue, which is not designated as a trucking

route. It is also a local roadway so the City may restrict truck access based on weight, which it currently does. In order to provide trucks with convenient access to the City's industrial zones, South Second Street should be designated as a truck route.

Crashes

Vehicular Crashes

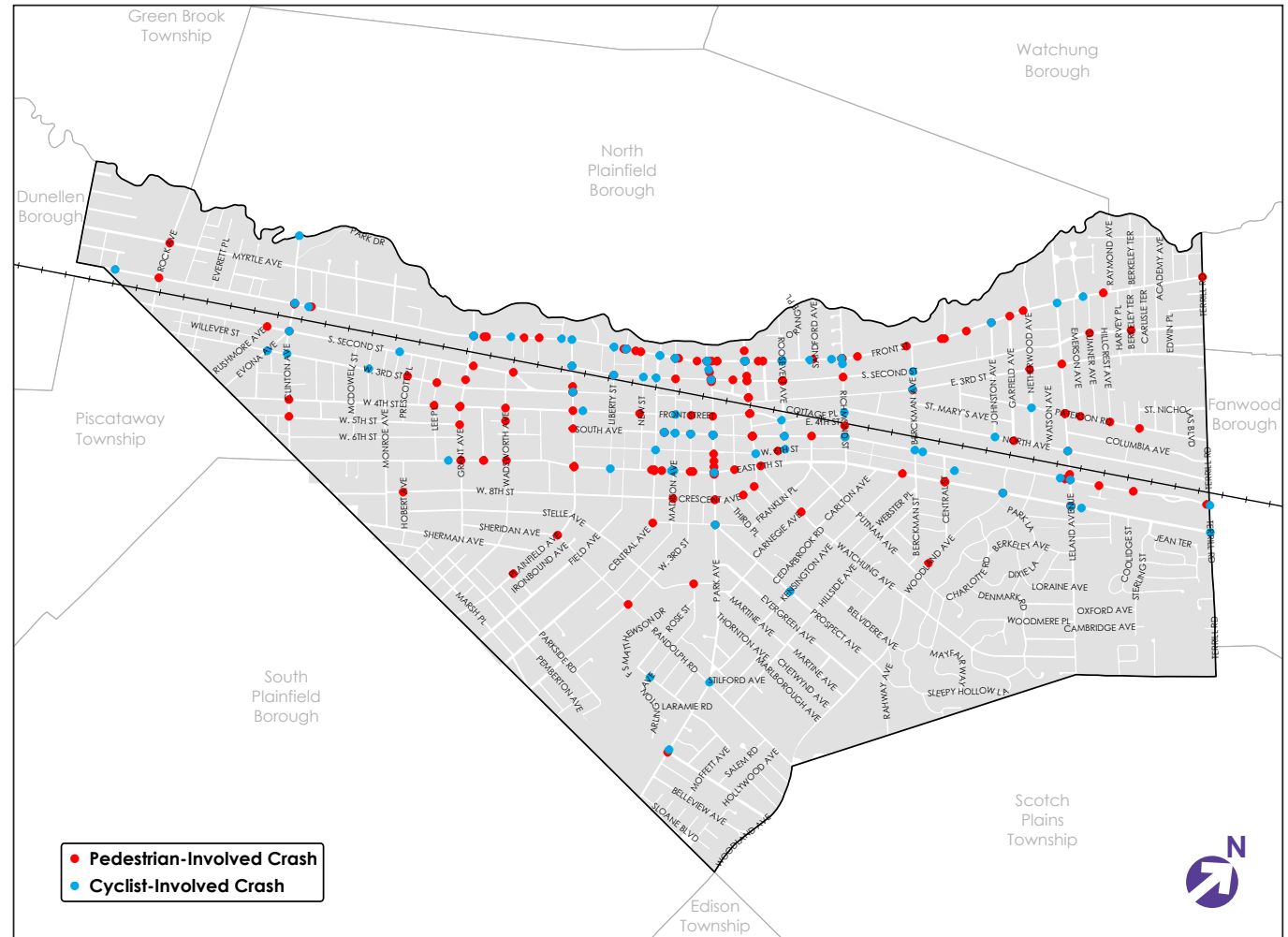
From 2013-2018 there were approximately 5,600 vehicular crashes reported in the City of Plainfield. This equals approximately 2.6 crashes per day. The majority of these crashes occurred on county and state roadways, with a particular hot spot in downtown Plainfield near the train station. This may be due in part to the increased traffic that occurs there and the fact that both Union County Road 620 and Union County Road 531 converge on this area. All county roads in the City of Plainfield, which include County Routes 601, 603, 610, 611, 620 and 531 had relatively high numbers of vehicular crashes. The County is utilizing Federal Highway Administration and North Jersey Transportation Planning Authority (NJTPA) funds to make intersection improvements along CR 620 and CR 601. Many of the local roads, especially on the eastern side of Plainfield near Scotch Plains Township and South Plainfield saw very few or no crashes.

Most of the crashes occurred at or near the intersection of a state or county road. While the highest concentration of crashes occurred along several blocks in downtown Plainfield between County Route 620 (East Front Street) and the Plainfield Train Station, the highest number of crashes outside of the

downtown area was at the intersection of County Route 601 (West 7th Street) and County Route 603 (Grant Avenue).

Another high-crash area is the area to the south and west of Plainfield Station along County Route 531 (Park Avenue), County Route 601 (West 7th Street) and State Route 28 (South Avenue). Because West 7th Street according to the data is a particularly dangerous road, Union County's Division of Engineering is receiving Federal Highway Safety Improvement Program Funds to improve four (4) intersections along the County roadway. These intersections are Leland Avenue, Beckerman Street, Woodland Avenue, and Arlington Avenue at East/West 7th Street. The proposed improvements include constructing new traffic signals, implementing ADA compliant curb ramps and high visibility crosswalks, and including new left turn bays on East 7th Street at Leland Avenue and Woodland Avenue among other improvements. The City of Plainfield should monitor how these intersection improvements affect safety and consider working with Union County to expand safety measures beyond the intersections as East/West 7th Street appears to be a street that could use a road diet as a traffic calming measure. The roadway is two lanes with on-street parking on both sides but is 38 feet wide with a speed limit of 35 mph. Another strategy to consider is the addition of a buffered bike lane that would make drivers proceed through Plainfield with greater caution.

MAP 4: BICYCLE/PEDESTRIAN CRASH SITES



Pedestrian and Bicyclist Crashes

Plainfield's pedestrian and bicycle crash patterns are distributed similarly to the vehicular crash data. There were roughly double the number of pedestrian-involved crashes compared to the number of cyclist-involved crashes between 2013 and 2018. This is likely due to the data that shows Plainfield residents are much more likely to walk to work and commercial services than travel by bike.

A high number of pedestrian- and cyclist-involved crashes are along County Route 620. This is likely because this route leads directly to downtown Plainfield. There are also several large apartment buildings and commercial uses along the roadway. Refer to the Bicycling and Walking section for a discussion of strategies to address crash hot spots to increase safety for bicyclists and pedestrians.

BICYCLING AND WALKING

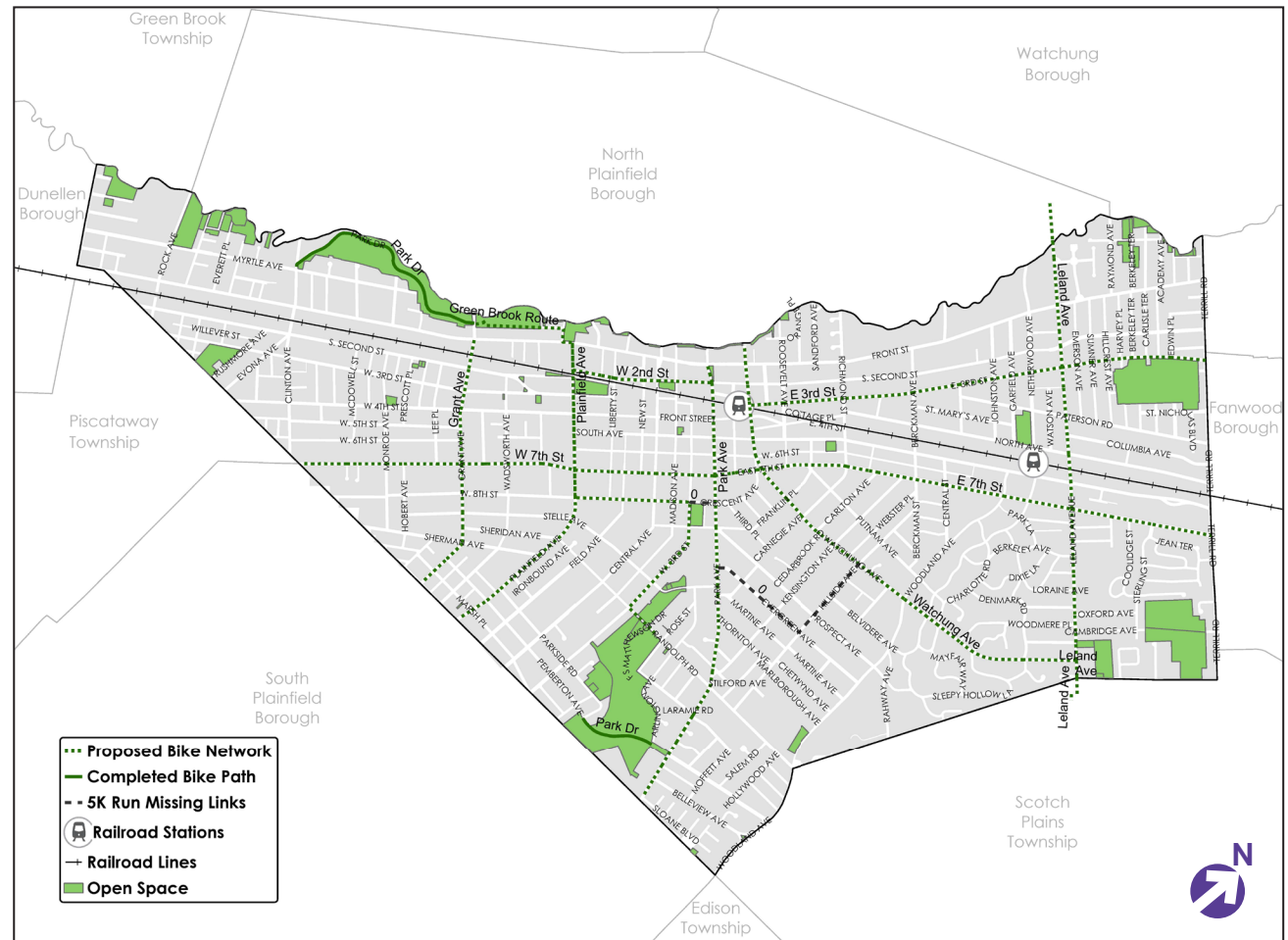
Existing Bicycle Facilities

Comprehensive bicycle infrastructure can expand opportunities for employment and recreation for all residents. Cities across the state and country are exploring partnerships that focus on the access to bicycling on their roadways. On June 1, 2018, Plainfield launched its partnership with the bike share company LimeBike, a dock-less bikeshare program - the first LimeBike program to launch in New Jersey. The company utilizes a dock-free network that uses GPS on each bike and is enabled using the LimeBike smartphone app. The benefits of this public-private partnership with LimeBike program is that the program does not cost the taxpayers, and it gives users the freedom to drop off the bikes wherever their destination is rather than having to find a docking station.

As of this writing, the City's partnership with LimeBike is no longer existing, but the City should seek future partnerships with a private entity to develop a new bike share program. A future bike share program should be subsidized for low-income residents in Plainfield to help expand access to this mode of transportation in the City. Existing bicycle facilities in Plainfield include an off-street bicycle path, the Albert T. McWilliams Memorial Trail, which when completed will go through Green Brook Park. A shared use path is located in Cedar Brook Park. There are currently no on-street bicycle facilities. As a critical component of the City's bicycle facilities, the City should seek grant funding and work with partners at the County and State level to implement these off street trails.

Memorial Trail, which when completed will go through Green Brook Park. A shared use path is located in Cedar Brook Park. There are currently no on-street bicycle facilities. As a critical component of the City's bicycle facilities, the City should seek grant funding and work with partners at the County and State level to implement these off street trails.

MAP 5: POTENTIAL BICYCLE ROUTE



Bicycle Rack

Developing a Bicycle Route System

Plainfield, with significant streetscape improvements, can become highly bikeable community because of its relatively flat terrain, numerous parks, historic sites and grid network of roadways. Given the existing conditions, there is tremendous opportunity to establish a formalized bike route system within the City that connects residential neighborhoods to schools, train stations, parks, the downtown and other employment centers, and potentially a greater regional system of other key destinations. Based on a variety of factors such as roadway width, and public feedback on the desire to do more traffic calming on streets, Map 5 provides a potential bicycle route system to be implemented throughout the City of Plainfield. This proposed bicycle network attempts to provide realistic yet significant routes that will greatly improve access to the City's train stations, schools and commercial

areas while also highlighting many of the City's historic neighborhoods including the Sleepy Hollow neighborhood. Specific styles of treatments that correspond to the map are described in the following sections.

Safety Improvements

Survey results show that the vast majority of residents think the safety of pedestrians and bicyclists are important. To meet this desire of greater safety, there are a wide range of roadway treatments that can make bicycling through Plainfield much more pleasant and enjoyable for residents. The type of treatment needed largely depends on the type of roadway that the City wants to make improvements to and the feasibility of that improvement. Roadway characteristics to consider are the speeds at which vehicles travel, the width of the roadway, and the average volume of traffic among others. On roadways that have higher traffic volume and vehicle speeds, a more aggressive tactic

such as a physical barrier between the bike lane and car lane might be needed while a shared lane marking may be the correct tactic on a less traveled neighborhood street. The City should strive to create a bicycle network that allows bicyclists to maintain an adequate level of comfort on their journey throughout the network. The below graphic from the NJDOT Complete Streets Design Guide shows the different types of bicycle facilities that are appropriate based on the average amount of traffic and vehicle speeds. In addition to safety, the bicycle route needs to be practical and able to get residents to the various commercial corridors and transit stops as well as provide safe loops for journeys that connect to adjacent municipalities.

Shared Lane Markings

Shared lane markings are a low-level treatment of bicycle infrastructure, not providing a dedicated space for bicyclists. Rather, they are intended to provide increased awareness to a driver that a bicyclist may be using a roadway in a shared manner. Similarly, shared lane markings can provide route guidance and wayfinding to bicyclists using this system. Shared lane markings are typically in the form of a "sharrow" (share the ROW), which is marked with a bicycle and two chevrons indicating the direction of travel for the bicyclists. In areas where on-street parking is permitted, sharrows should be placed away from parking areas and outside of the area where car doors may open into the street. These treatments may be appropriate in key areas of the City where on-street parking is important to retain and there is still a desire

TABLE 2: SAFETY IMPROVEMENTS

ADT	85TH PERCENTILE SPEED ¹						
	≤ 20	25	30	35	40	45	≥50
≤ 2,500	ABCDEF	A ² BCDEF	CDEF	CDEF	CDEF	DEF	F
2,500–5,000	BCDEF	BCDEF	CDEF	CDEF	DEF	DEF	F
5,000–10,000	B ³ CDEF	B ³ CDEF	CDEF	DEF	DEF	EF	F
10,000–15,000	DEF	DEF	DEF	DEF	EF	EF	F
≥15,000	DEF	DEF	DEF	EF	EF	F	F

A: Shared Street/Bicycle Boulevard **B:** Shared-lane Markings **C:** Bicycle Lane **D:** Buffered Bicycle Lane
E: Separated Bicycle Lane **F:** Shared-use Path

¹If data not available, use posted speed

²Bicycle boulevards are preferred at speeds ≤25 mph

³Shared-lane markings are not a preferred treatment with truck percentages greater than 10%

Source: NJDOT Complete Streets Design Guide

to acknowledge a bicycle route. One example of this is 3rd Street, which provides a convenient north-south travel route from residential neighborhoods to Downtown Plainfield and is also less traveled compared to nearby 4th Street.



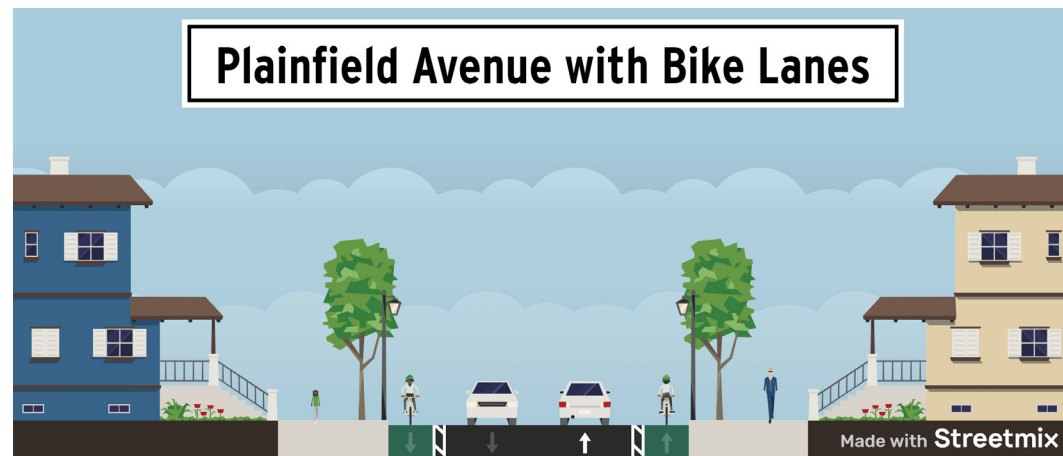
Sharrow

Bicycle Lanes

Unlike shared-lane markings, bicycle lanes provide dedicated space along the roadway exclusively for the use of bicycles. The lines are striped with solid white lines, denoting separation with a vehicle travel lane, and providing a higher perceived level of comfort for bicyclists using the lane, further encouraging its usage. In some cases, they may be painted another color, typically green, to increase their visibility.

When space allows, the NJDOT Complete Streets Design Guide recommends at least a 5-foot width bicycle lane and a buffer between the bicycle lane and the travel lane. Much of Park Avenue (Union County Route 531), except when it crosses through the downtown area is 40 feet in width. Despite being a County Route, the speed limit is 25 mph. The section of Park Avenue that could add a bike lane would be from the South Plainfield border to West 8th Street, which would pass by Plainfield High School and Plainfield Public Library, giving students

a safer route to school than currently exists. Park Avenue would also serve as a critical crosstown route that it is clear residents desire. During fieldwork, there was a notable amount of residents that were riding their bicycles along Park Avenue, but were doing so on the sidewalk as they did not feel comfortable being exposed on the street. Implementing streetscape tactics that make people feel safe riding in the street will help to encourage more users while increasing safety. Creating this scenario would require parking to be prohibited on the street in this



section, but the benefits of added safety for riders would far outweigh the potential negatives of a few parking spots being taken away. This tactic would permit a 5-foot bicycle lane located adjacent to the curb, with a 3-foot striped buffer and 12-foot travel lanes on both sides of the roadway. Where the land uses make it more difficult to take away parking spots, the bicycle lane should switch to being a sharrow.

While it is preferable to have a buffer between the driving lane and the bicycle lane, this may not be possible on streets that could still be a part of the bicycle lane network. According to NJDOT's guidelines, the minimum bicycle lane width is 5 feet adjacent to the curb.

Another potential option for Plainfield to consider is to add bike lanes on Plainfield Avenue (Union County Route 603). This will add another east-west route and could help connect to the rest of the proposed network. Because much of the roadway is only 34 feet wide, it is impossible to create a wide buffer between the bike lane and the driving lane, but because the speed limit is only 25mph on this road, it is less necessary to have a bike lane compared to more frequently traveled roadways. Plainfield could have two options with implementing a bicycle lane on Plainfield Avenue. It could create a bike lane with the minimum width of 5 feet, which would leave two 12-foot driving lanes. An alternative would be to narrow the driving lanes, which would cause drivers to be more cautious and could add the minimum buffer width of 1.5 feet.

Shared-Use Path

Similar to bicycle lanes, shared-use paths provide dedicated space for non-motorized travel modes including bicyclists. Unlike lanes, however, they are located outside of the roadway, and physically separated from all forms of vehicular traffic. One such path that does exist is the trail through Green Brook Park. While this trail helps to attract residents to the park, there is very little connectivity to other existing bicycle infrastructure. The City could look to expand the shared-use path through the portion of the park that is south of West End Avenue. The City may also consider putting in bike lanes along Park Drive as an alternative. Another potential option to expand shared-use paths in Plainfield is through Milton Campbell field, which would connect the shared lane markings on 3rd street to other residential neighborhoods on the opposite side of the park.

Programmatic Solutions

Through Plainfield's partnership with EZ Ride, the City has focused its efforts on implementing Safe Routes to School policies to reduce the number of pedestrian-related crashes. The focus of this campaign has been on the Plainfield School District's elementary and middle school students. Given the high percentage of households that do not have access to a vehicle, there is a significant number of school-aged children who walk and bike to school. The goal is to encourage safe walking and bicycling practices to create a safer environment for both students and drivers. The City should also consider creating events specifically centered

around encouraging residents to bicycle throughout Plainfield. Several municipalities throughout New Jersey have organized such events. The nearby City of New Brunswick organizes Cyclovias, events that close streets to car traffic to allow residents to walk and bike, throughout the year in different neighborhoods in the city. The City of Plainfield and the Plainfield School District's partnership with EZ Ride to develop initiatives to improve pedestrian safety and provide wellness initiatives to Plainfield residents could allow the City to organize similar types of events for Plainfield residents.

Walkability

Given the relative density of services and amenities to the residential areas of the city, Plainfield has an excellent opportunity to enhance the quality of life of residents through improved walkability. Improvements to pedestrian safety are critical to encouraging residents to make shorter trips to commercial areas by walking rather than driving to the destination. This helps to create a sense of vibrancy that will allow businesses to thrive. Based on survey results, residents indicated that much of the troubled intersections are located in the several blocks between Park Avenue to Plainfield Avenue and between W 4th Street and W 7th Street. Much of this is likely because these intersections are located in and around the downtown area. Additional comments from residents indicated that 7th Street, Watchung Avenue, Park Avenue and Woodland Avenue have several intersections that are dangerous. Based on crash data and resident responses, 7th Street appears to be one of the most problematic roadways in the City of Plainfield. The County's proposed

intersection safety improvement projects should help to increase safety at these intersections especially for pedestrians crossing the roadway. Going forward, special priority should continue be taken to this roadway to improve safety for all roadway users with particular focus on pedestrians and bicyclists. Reducing vehicle speeds by way of traffic calming, improved pedestrian crossings, and an attractive streetscape with amenities are key strategies to employ when trying to improve the pedestrian environment in and around Plainfield's downtown and transit-oriented development zones.

Complete Streets

The term "Complete Streets" is used to describe a context-sensitive approach to roadway design that considers the needs of all users, including motorists, bicyclists, pedestrians, transit users and people of limited mobility. The planning and design of a Complete Street also considers the access needs of surrounding land uses. Physical elements of a Complete Street can include:

- Pedestrian infrastructure – sidewalks, crosswalks, ADA ramps, crossing island, curb extensions.
- Bicycle facilities – bike lanes, wide shoulders, neighborhood greenways.
- Public transportation access – bus shelters, dedicated bus lands, bus pullouts.
- Traffic calming – road diets (reduction of travel lanes), street trees, back-in angled parking, center medians.
- Local deliveries – parking regulations, on-street loading zones.

The City of Plainfield has not adopted a Complete Streets Policy Resolution. While the policy itself is not a prerequisite to improving bicycling and walking conditions throughout the City, it is an indication the City is in support of such initiatives, and the existence of a Complete Streets Policy can also improve the ranking of certain NJDOT grant applications.

For a city like Plainfield which has a large percentage of its households without access to a vehicle and is looking to invest in transit-oriented development, it is imperative that the City ensure its roads are safe and accessible for all users, regardless of the type of transportation being used. Given the traditional grid system and the density of uses located near public transportation, the existing roadway network in Plainfield has the necessary infrastructure that could provide for a network of complete streets. Adopting a Complete Streets policy could help Plainfield become an even more vibrant and walkable urban environment. A Complete Streets policy could also help further the popularity of a new bike share program and lower the amount of traffic through the City, a major concern of residents given the new TOD projects being constructed. Additionally, if the City decides to seek certification through Sustainable Jersey, it can gain points for having a Complete Streets policy.

Sidewalk Infrastructure

Plainfield residents heavily rely on good pedestrian infrastructure not just to get to work but also to walk to necessary services and goods. A large majority of Plainfield households also have access to one or no

vehicles, which makes walking a significant non-commuting form of transportation. Since Plainfield is an older city, developed prior to the, sidewalks have not been developed in all parts of the city. While maintenance of sidewalks is the responsibility of the property owner, the City recognizes the importance they play in ensuring a mobile community. During public outreach, many residents commented on the poor condition of sidewalks in certain areas that was forcing pedestrians to walk along the side of the street creating a dangerous situation for pedestrians. The City of Plainfield should consider taking inventory on the conditions of the sidewalks around Plainfield with particular focus along streets that are the most convenient connections between residential neighborhoods and schools, parks, and centers for local services, identifying any "gaps" that may exist. The City should not simply stop at sidewalks but expand focus to pedestrian street crossings. It is critical that sidewalk on/off ramps are ADA compliant to allow for handicapped individuals be able to utilize the sidewalk. Better line marking for crosswalks will also help to notify drivers to stop prior to the crosswalks. To create an environment that is safe for residents to walk to and from important points of interest in Plainfield, the City should consider the critical role that infrastructure such as sidewalks, intersections and lighting play in creating this safe environment. Refer to streetscape guidelines for further discussion on ways to improve pedestrian infrastructure.

As a part New Jersey's Safe Routes to School (SRTS) program, the Alan M. Voorhees Transportation Center developed a School Travel Plan for the Plainfield School District

in 2016. The Plan details the specific issues as well as potential solutions to improve the district's students' ability to safely walk and bike to school from their homes. In 2017, Plainfield received a \$304,000 grant from NJDOT to implement some of the SRTS improvements. As of writing, these improvements have not been made. Plainfield should use the NJDOT grant to make the necessary SRTS improvements to increase the safety of its students.

Streetscape Guidelines

Safety

The City should implement safety enhancements in streetscape design when capital improvements for roadways are needed. When redesigning certain roadways, Plainfield should not only consider vehicular safety, but also prioritize the safety of pedestrians and cyclists. The graphic from the NJDOT Complete Street Design Guide shows how higher vehicle speeds make traveling by bicycle or on foot much more dangerous. Without knowing these exact statistics, pedestrians and

cyclists inherently feel safer when traffic is traveling at lower speeds. One particular way to lower the speeds at which drivers travel is to decrease the roadway width allotted to vehicular travel. In Plainfield, despite many of the roadways only being two lanes, vehicles are granted wide travel lanes, which naturally encourages drivers to travel at higher speeds than they would if the travel lanes were narrower. An example of this on a local roadway is Watchung Avenue. Residents identified this roadway as having several troubled intersections with concerns about drivers speeding. Watchung Avenue has been identified as a roadway that could serve as a part of the City's bicycle network. The City should implement a roadway treatment that both improves bicycle facilities along the roadway and acts as a traffic calming measure. This strategy could be used as a template for future streetscape treatments on local roadways. Given the dense, walkable character of the city's grid system, particular focus should be placed on devising ways to have drivers slow down. To create a downtown environment where pedestrians and cyclists feel safe, the City of Plainfield should design a streetscape that prioritizes safety above all else.



Pedestrian Fatality Rate

Lighting

Streetlights are a critical streetscape element to provide both an attractive environment to walk through and for pedestrian safety. The New Jersey Complete Streets Design Guide recommends pedestrian scale lighting to be provided near transit stops, commercial shops, intersections and other areas that attract large numbers of pedestrians during nighttime hours. During the Master Plan's community outreach initiative, one of the largest concerns for Plainfield residents was the lack of lighting near the train stations, which made residents feel uncomfortable for their safety. To promote greater usage of the train station and overall pedestrian safety, the City should add pedestrian scale lighting at the stations and nearby areas. Plainfield should also conduct a study to determine where lighting is especially poor in the city to understand areas that should be prioritized for greater investment in proper streetlights.

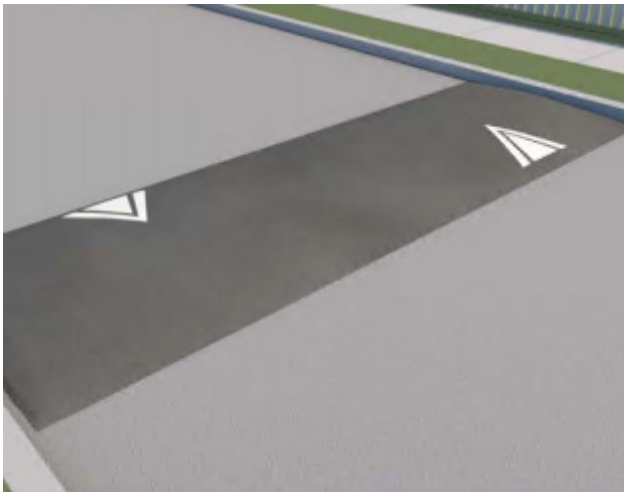
Medians

Medians play a role in both calming vehicular traffic and decreasing the distance that pedestrians have to spend walking through driving lanes. These two aspects help to increase pedestrian safety. NJDOT requires that medians be a minimum of 6 feet wide and 6 feet long. Medians also give the pedestrian respite when crossing between the lanes of vehicular traffic creating an overall improved pedestrian experience. One area where this could be effective is at the convergence of Crescent Avenue and Watchung Avenue. This convergence makes it very dangerous for a pedestrian

walking along East 6th Street. The pedestrian has to be aware of multiple lanes of traffic as they proceed through the crosswalk. A median placed at this crosswalk would help pedestrians feel much safer by limiting the amount of time they would potentially be exposed to vehicular traffic.

Speed Humps

Description automatically generated Speed humps are a streetscape element that forces drivers to slow down to avoid damaging their vehicle. Speed humps, or speed bumps as they are more popularly referred to as, are



Speed Hump

Source: NJDOT Complete Streets Design Guide

typically 3 to 4 inches high and 12 to 14 feet wide. This design forces drivers to slow down to between 15 to 20mph to safely drive over the hump. This could be a good tactic for the City of Plainfield to implement as many residents indicated that many drivers are not adhering to recently implemented four way stop signs.

Crosswalks

Crosswalks are a primary way to improve safety and visibility for pedestrians and bicyclists. There are several potential roadway treatments that the City of Plainfield could implement to improve pedestrian safety.

- High-visibility Crosswalks

Crosswalks are formalized crossings where drivers are required by state law to stop and remain stopped for pedestrians while they are in the crosswalk. Standard crosswalks are typified by two parallel solid white lines crossing the road demarking the crossing area. These provide some level of visibility for where pedestrians are expected to cross. There are, however, higher visibility crosswalk patterns that could be implemented that provide an even greater level of visibility to pedestrians particularly in high crossing areas.

- Curb Extensions

Curb extensions at intersections (or bump-outs) are particularly effective at promoting traffic calming and pedestrian safety. By creating an extension of the

sidewalk, these bump-outs narrow the roadway at intersections, forcing drivers to slow down, and increase visibility for pedestrians. They can combine with green infrastructure treatments such as rain gardens or pedestrian amenities like benches. They also provide good delineation for allowable street parking distances to the intersection. Consideration of the required turning radius of trucks, buses, and emergency vehicles are needed in the planning for curb extensions. While these extensions can be implemented on local roadways, Union County may not permit the implementation of "vertical treatments" on county roadways.

- Street Signs

Rectangular Rapid Flashing beacons (RRFBs) are flashing pedestrian signs that provide a dynamic indicator that a pedestrian is crossing a roadway, and only flash when actuated by the user (as opposed to a static flashing pedestrian crossing sign). The irregular timing of the flashing helps provide greater visibility of crossing pedestrians to drivers and increases compliance with the requirement to stop for crossing pedestrians. Studies have shown that drivers stopping for pedestrians increase by more than four times with an RRFB as opposed to a standard marked crossing. These signals can be implemented at key crossings along the bicycle route, particularly at non-signalized intersections along main roads.

- Hawk Signals

(High-Intensity Activated crossWalk beacon) A HAWK beacon is a traffic control device used to stop road traffic and allow pedestrians to cross safely. It is officially known as a Pedestrian Hybrid Beacon. The purpose of a HAWK beacon is to allow protected pedestrian crossings, stopping road traffic only as needed. This could be an important safety measure to take around Plainfield's train station. The City could first implement Hawk Signals at the intersection of Watchung Avenue and North Avenue as a part of the planned North Avenue pedestrian mall. Given that this area attracts high volumes of both pedestrian and vehicular traffic, it is an critical location to protect the safety of pedestrians coming and going from the train station and planned pedestrian mall.

accommodate existing downtown business activity and future growth.

- Maximizing the utilization of existing parking assets and sharing parking between complementary users to mitigate the amount of parking to be developed.
- Providing increased convenience and a higher level of parking patron comfort with upgraded wayfinding, communication information and parking facility improvements.
- Outlining strategies for smart growth and transit-oriented development parking requirements and opportunities to implement other alternative transportation options to relieve the reliance on automobiles and "right-size" the amount of parking to be developed.

Parking Strategies

To effectively meet the parking challenge for the City of Plainfield and its future development, a "Parking Planning Plan" is included as Appendix A of this Master Plan. The Parking Element recommends strategies to effectively maximize the utilization of its existing parking assets and ensure that the parking requirements and facilities for future development are sized correctly and in accordance with "smart growth" principles. Recommendations have the intent of the following:

- Centralizing parking operations into a single-responsibility center to improve planning operations to better

Detailed parking analyses and Plainfield-specific parking recommendations can be found in Appendix A of this Master Plan.

ISSUES/TRENDS

Walkable Downtowns

National recognition of “downtowns as centers of place” has altered the way people shop and civically engage. Changes in consumer preferences are showing that people are looking for amenity-rich, walkable neighborhoods in or close to downtowns. One critical component of activating a downtown and creating that center of place is the walkability of the downtown. Residents of and visitors to the downtown need to feel safe walking around and be kept interested in the unique features and shops that a downtown might offer. Cities across the country are realizing these trends and making the necessary infrastructure investments to make their downtowns more walkable and attractive to potential future residents and visitors.

Plainfield has an opportunity to enhance the pedestrian infrastructure of the downtown area near the train station and the recent mixed-use developments. One such idea under consideration by the City is to close Gavett Place and North Avenue between Park and Watchung Avenues to automobiles to create a pedestrian-only thoroughfare. These types of pedestrian-only thoroughfares near downtown locations have had major success at becoming public spaces that help local businesses thrive and creating a gathering space for community events. Characteristics of these pedestrian malls often include attractive features such as moveable tables and chairs, additional lighting, bicycle racks, unique street painting and programming. Jersey City's pedestrian

plaza along Newark Avenue and Somerville's Division Street are popular examples of how these municipalities were able to make thriving public spaces where local businesses can succeed and new visitors can breathe life into an area. With enough foot traffic, local retail is able to survive in the age of e-commerce and big box retailers as businesses offer unique experiences that patrons may not get otherwise.

Autonomous Vehicles

Autonomous vehicles are among the top technology “disruptors” as there are multiple ways in which they may be implemented, and their overall effect on travel, car ownership, and other aspects have yet to be determined. Autonomous vehicles are essentially “self-driving cars”, which allows the occupant to take a passive role, while it is the automobile that regulates the speed and navigation and gets occupants to their destination. Autonomous vehicles are being tested today with varying degrees of success, and while implementation has not been as smooth as supporters had hoped, this technology is making continued advances. How these vehicles evolve will be the subject of monitoring. While the initial belief that autonomous vehicles will be similar to owning a personal vehicle (driven from origin to destination then sit parked until the next trip), there is also a belief that autonomous vehicles could travel from destination to destination without actually needing an occupant at all. Both beliefs will influence actual demand for parking spaces, congestion on roadways, and even the need to own an automobile at all versus “subscribing” to a transportation service.

Transportation Demand Management (TDM) Strategies

TDM policies work to incorporate many forms of micro-transit like ride-hailing services such as Lyft or Uber, bike shares such as Plainfield's LimeBike program, or bus/jitney systems like Boxcar and EZ Ride/Meadowlark. Also known as demand responsive transit, micro-transit are transportation systems that match the demand for a trip with the ability to supply a trip. They are typically provided for by private transit operators and can supplement or fill in gaps in coverage, service capabilities, and convenience within the public transportation system. Micro-transit can be further expanded to fill “last mile” gaps of the public transit system, as local jitney services or shuttles from new developments to reduce parking demand around the Downtown and further encourage transit usage. While these ride hailing services can greatly expand mobility options for residents and reduce the amount of parking needed, there are regulation challenges especially at the point of pick-up/drop-off that municipalities need to address to prevent greater congestion. Much of this can be solved with greater regulations on curb space. Strategies to address this issue are in the “Parking Enforcement and Curb Management” section of the Parking Plan. With regards to the “last mile” issue, Plainfield should review what other municipalities in New Jersey have done to address this and expand mobility access. The following are just three examples.

Case Study: Glen Ridge, NJ

Since 2002, the Borough of Glen Ridge in partnership with NJ TRANSIT has operated a commuter jitney program, which provides residents of the community with a shuttle to/from the Glen Ridge train station to their neighborhood. Residents can sign up for monthly and annual passes. The jitney program has been widely popular among residents and has prevented increased congestion on the Borough's main streets near the train station due to the decreased need for residents to be picked up and dropped off by other family members.

Case Study: Jersey City, NJ

In 2020, the City of Jersey City entered into a partnership with the ride-sharing company VIA to provide the city's residents with an on-demand transit system. Residents pay a flat rate of \$2 to ride using the VIA mobile app to select a pick-up and drop-off location for their ride, and the routes work like bus routes to pick people up going to similar locations along the "route." The aim of the partnership is to provide residents without access to a car and who are in "transit deserts" (generally locations in the city that are poorly serviced by transit), the ability to get to their destinations in a quick and convenient manner.

Case Study : Summit, NJ

In 2016, the City of Summit entered into a ridesharing partnership with Uber to develop a program where residents with pre-paid commuter parking permits were eligible for free rides from their home to the train station

during the weekend. Since then, the City has switched to Lyft and expanded the program to include residents on the commuter parking waitlist, charging a \$2 per ride fee to the station. The program has reduced overall demand and all-day utilization of existing parking around the station and alleviated the need for additional parking capacity in the downtown.

Smart City Technology

3D Crosswalks

3D crosswalks are painted with 3D paint, so that the usual crosswalk lines look like 3D objects to drivers. From a distance, the road appears to have oblong white boxes placed on it. The 3D crosswalk's purpose is to create an optical illusion that grabs the driver's attention and, as a result, he or she will navigate the intersection carefully. 3D crosswalks first gained popularity in India and Europe and have started to be implemented near school zones in the United States. Cities



3D Crosswalk

Source: THE CANADIAN PRESS/Ryan Remiorz

hope that this simple innovation will help to increase pedestrian safety by slowing car traffic down near intersections, but more time is needed to better understand the effectiveness of these designs.

CIRCULATION FUNDING PROGRAMS

While roadway and other transportation related funding projects are typically funded through a municipality's capital budget, there are also grant or technical assistance programs available to aid in the planning and development of circulation improvements.

Federal Resources

CDBG for streets and sidewalks

The Community Development Block Grant (CDBG) program is a federal program by the U.S. Department of Housing and Urban Development (HUD). The program provides states and local governments with grants to devise innovative and constructive approaches that improve the physical, economic and social conditions within communities. The CDBG program works to ensure decent affordable housing, to provide services to the most vulnerable in our communities, and to create jobs through the expansion and retention of businesses.

Transportation Alternative Programs (TAP)

The TAP grant is funded through the Federal Highway Administration's Federal Aid Program and administered by the New Jersey State Department of Transportation (NJDOT). The grant provides federal funds for community-based "non-traditional" projects related to surface transportation. Grants have been used to complete

streetscape improvements, bicycle facilities, complete streets projects, among other kinds of projects.

Solicitations for applications open in May and applications are due in August. The grant is only available in even numbered years (i.e. 2020, 2022, 2024).

State Resources

NJDOT Local Aid

The Municipal Aid program is a competitive program intended to provide municipalities with transportation-based grants to supplement their transportation programs. The Municipal Aid Program is administered consistent with a distribution system contained within the Transportation Trust Fund legislation that allocates funds by a county-based formula that considers population and municipal roadway miles. Applications receive points based on various criteria including existing conditions, Average Daily Traffic (ADT), safety improvements and access to services to the public. Most recently, the City received Local Aid monies for roadway improvements for Prospect Avenue.

NJDOT Transportation Alternative Programs

The Transportation Alternative Programs (TAP) grant is funded through the Federal Highway Administration's (FHWA) Federal Aid Program and administered by the New Jersey Department of Transportation (NJDOT). The grant provides federal funds for community-based "non-traditional" projects

related to surface transportation. Grants have been used to complete streetscape improvements, bicycle facilities, complete streets projects, and other related initiatives. Solicitations for applications open in May and applications are due in August. The grant is only available in even numbered years (i.e. 2020, 2022, 2024).

NJDOT Safe Routes to School

The Safe Routes to School (SRTS) program is funded by the FHWA's Federal Aid Program and is administered through the New Jersey State Department of Transportation (NJDOT) in partnership with the North Jersey Transportation Planning Authority (NJTPA). County and municipal governments and schools are eligible to apply to the program. The types of projects funded include infrastructure projects for the planning, design and construction or installation of sidewalks, signals, traffic-calming and bicycle facilities as well as non-infrastructure projects such as public awareness campaigns, walk and bike to school events and training, traffic education and enforcement and student lessons on bicycle and pedestrian safety, health, and the environment. In 2016, the Safe Routes to School program supported the development and creation of the Plainfield School District's Travel Plan that created by Rutgers University.

NJDOT Safe Streets to Transit

NJDOT's Safe Streets to Transit (SSTT) grant program provides funds to counties and municipalities to improve the overall safety and accessibility for mass transit riders

walking to transit facilities, encourage mass transit users to walk to transit stations and facilitate the implementation of projects and activities that will improve safety in the vicinity of transit facilities (approximately one-half mile for pedestrian improvements). SSTT encourages the integration of walking in the public transportation system and enhances the ability of communities to invest in projects that can improve the safety and practicality of walking for everyday travel.

NJDOT Bikeways

NJDOT's Bikeway Grant Program provides funds to counties and municipalities to promote bicycling as an alternate mode of transportation in New Jersey. The main goal of the bikeways program is to provide funding for projects that create physically separated bicycle facilities. Funding can also be used for the construction of any new bicycle facility. In 2020, three municipalities were recipients of bikeways grants for a total of \$1 million.

NJDOT Transit Village Grants

NJDOT's Transit Village grant program provides grants for non-traditional transportation-related projects to New Jersey municipalities designated as Transit Villages. The types of projects eligible for funding under this program include the construction of bicycle/pedestrian paths and lanes, bike route signs, bicycle parking and storage, wayfinding signage, improvements to transit stations, rehabilitation of historic train stations, information kiosks with transit info, construction of a modern roundabout, traffic flow improvement/signal synchronization,

and traffic calming measures. The City of Plainfield was the recipient of a Transit Village Grant of \$150,000 for improvements to the Plainfield Train Station.

NJDOT Bicycle and Pedestrian Technical Assistance

NJDOT offers free planning assistance through consultant on-call services to municipalities looking to improve bicycling and walking in their community, including a planning project related to Complete Streets. The program does not require a municipal match for the assistance, but the community is expected to be involved through a steering committee and has to indicate its commitment to implement the recommendations of the plan results.

Local Safety Program

The Local Safety Program is administered by the North Jersey Transportation Planning Authority (NJTPA) that provides funding for the construction of cost-effective, high-impact safety improvements on county and local roadways to increase safety for drivers, bicyclists and pedestrians. The Local Safety Program is intended to focus on known high crash areas. Projects supported by this program include new and upgraded traffic signals, road diets, modern roundabouts, pedestrian safety including countdown signal heads, high visibility crosswalks, curb extensions, new and upgraded signs and pavements markings, bike lanes and other improvements.

Only the 13 member counties and the cities of Newark and Jersey City can apply on

an annual basis. Eligible projects must be located on high crash network screening lists or propose systemic safety improvements. Counties are limited to two applications per cycle and must meet several programmatic requirements. Union County received a \$2,918,700 grant through the NJTPA's FY 2017-2018 Local Safety Program (LSP). The grant includes funding for design, construction and construction inspection services. The project will improve safety and overall operations at four intersections on 7th Street -- at Leland Avenue, Woodland Avenue, Berckman Street and Arlington Avenue -- and at the intersection of East Front Street and Leland Avenue.

Planning for Emerging Centers

Planning for Emerging Centers is a program administered by NJTPA that provides technical assistance in support of efforts by municipalities to create more sustainable, transit-supportive and walkable communities using strategic planning approaches at the local level. The NJTPA provides consultant and staff support to municipalities to conduct various planning studies that support the goals of the Regional Transportation Plan (RTP). The program is free to municipalities selected for the assistance, but support by staff is expected.

Complete Streets Technical Assistance

This technical assistance program provides free planning through a combined relationship of Sustainable Jersey, Rutgers University and the NJTPA. The planning program supports municipal efforts to implement complete streets in their community. Selected

municipalities will receive free technical assistance to accomplish a specific task related to a Complete Streets initiative.

Street Smart Campaign

StreetSmart is a public education, awareness and behavioral change campaign that uses high visibility enforcement, education and grassroots public awareness to address pedestrian safety issues. The free education campaign is funded and managed by the North Jersey Transportation Planning Authority (NJTPA). Capacity for the Street Smart Campaign is limited so the application process can be competitive.

Together North Jersey Technical Assistance Program

The Together North Jersey Technical Assistance Program is a comprehensive plan for sustainable development. The Plan contains recommendations and strategies for improving individual areas, while also emphasizing the “big picture,” articulating a holistic approach to planning for our region’s future. Together North Jersey (TNJ) brings together a coalition of nearly 100 diverse partners -- counties, municipalities, educational institutions, nonprofits, businesses and other groups -- to develop the first thorough plan for sustainable development for the 13 northern New Jersey counties.



RECOMMENDATIONS

General/Roadways

- Ensure roadways are safe and accessible for all users regardless of the type of transportation being used.
- Ameliorate traffic congestion
- Pass a Complete Streets Policy Resolution.
- Continue to pursue NJDOT Local Aid money for local road projects.
- Implement safety enhancements in streetscape design when capital improvements for roadways are needed.
- Provide or replace road signage for residential neighborhoods.
- Provide wayfinding signage throughout the City, especially in the downtown and commercial districts.
- Work with NJDOT and Union County to implement traffic calming measures at NJ Route 28 and Union County Route 601 (7th Street).
- Develop a road dieting strategy for Union County Route 601 (7th Street) that improves safety beyond the planned intersection improvements.
- Install speed reducing measures along neighborhood roadways that are commonly used as pass through streets.
- Install traffic calming measures on Watchung Avenue to discourage speeding and increase pedestrian safety
- Designate South Second Street as a truck route to provide greater access to Industrial Zones
- Amend LUO to require industrial development and redevelopment to allow sufficient space for the retention of existing and provision of new on-site rail sidings
- Designate arteries that are used for importing and exporting freight
- Work with Union County to take over responsibility for maintenance of Park Avenue from Ninth Street to North Plainfield to Union County border.
- Create and designate emergency response routes
- Upgrade traffic lights with timers that adjust to traffic levels using Intelligent Transportation Systems (ITS) downtown
- Install traffic signals where none exist on East Seventh Street, Franklin Place and Putnam Avenue; and Randolph Road and Plainfield Avenue
- Improve the intersection of Rock Avenue and Front Street to better accommodate truck turns
- Maintain and annually update an ongoing plan for capital improvements to the circulation system
- Identify areas where traffic lights or signs should be installed and where additional traffic control devices are needed
- Continue to work with PSE&G to convert street lights to LED to reduce power usage and city costs
- Complete Phase II of the downtown streetscape program that involves enhancing the area along Watchung Avenue, repairing sidewalks between East Second Street and Fifth Street, and enhancing Park Avenue and West Front Street
- Implement the recommendations resulting from the Parking Plan attached as Appendix A.

Public Transportation

- Partner with transit providers to create transit route from Plainfield to Rutgers University and other employment facilities in New Brunswick.
- Improve lighting and handicap accessibility at Plainfield and Netherwood train stations.
- Promote One-Ride service on the Raritan Valley Line to create direct train service from Plainfield to Penn Station New York.
- Explore partnerships to solve “last mile” issue to/from train stations. (Uber/Lyft/ trolley)
- Create a transportation HUB in the West End.

- Explore jitney service to connect West End and other neighborhoods to the Downtown Plainfield station and other areas of City and to employment centers in neighboring communities.
- Promote multi-modal connections to Newark Airport, the Amtrak Northeast Corridor, the City of Elizabeth, and to regional employment and educational centers
- Develop parking plan around downtown train station to create strategies that promote alternative means of transportation to and from the station.
- Conduct outreach efforts targeted at workers who commute by “taxicab or other means” to better understand commuting patterns of Plainfield residents
- Identify opportunities for creative placemaking where art and cultural amenities may be integrated into transit stations.
- Enhance and construct bus shelters at bus stop locations to provide adequate shelter and location identification to the residents.
- Work with NJ TRANSIT to improve location of bus stops to make them more convenient for residents.
- Explore ways to improve convenience and frequency of local bus routes to include educational and employment centers in and around New Brunswick.

Bike/Ped

- Where they can be accommodated, develop new bicycle and pedestrian facilities along City roadways.
- Partner with Union County and NJDOT to develop new bicycle and pedestrian facilities along County and State roadways.
- Utilize NJDOT's Bicycle Facility Table to guide the type of bicycle facility that should be constructed throughout Plainfield's bicycle network.
- Implement planned initiative to create North Avenue pedestrian mall.
- Seek opportunities to create a new bike share program with subsidies for low-income residents
- Work with Union County to have certain paths and/or sides of paths in Green Brook and Cedar Brook parks designated for bicycle use
- Work with EZ Ride to implement strategies to improve Safe Routes to School and other pedestrian/bicyclist safety at identified dangerous intersections in Plainfield.
- Produce a map of recommended school routes and identify safety improvements that should be given priority for implementation
- Create biking connections between Plainfield and surrounding municipalities.

- Add high visibility crosswalks and RRFBs at major pedestrian crossing locations, especially in downtown area and near train stations.
- Utilize NJDOT grant to make Safe Routes to School improvements
- Install Hawk signals at Watchung/North Avenue intersection as a part of North Avenue pedestrian mall initiative
- Install barrier free sidewalk improvements in conformance with ADA requirements to ensure accessible routes for the disabled
- Undertake a street lighting study to identify areas in the City where additional lighting is needed or needs maintenance.
- Install pedestrian scale lighting near transit stops, commercial districts and other areas identified in the lighting study as areas in need of additional lighting
- Require private development to implement the City's Streetscape requirements.
- Enhance bicycle safety and bicycle facilities in and around train stations and bus stops.
- Seek annual grant funding to implement the Green Brook Multi-Use Trail
- Ensure that there is adequate amount and distribution of bicycle racks throughout Plainfield
- Encourage new development to promote the use of and provide adequate space for dockless bicycles.

- Conduct a sidewalk inventory. The inventory should identify neighborhoods lacking sidewalks, sidewalks in disrepair or sidewalks inaccessible due to vegetation. Capital improvements should be prioritized by demand (proximity to pedestrian generators), existing conditions (sidewalk not present or in poor condition) and functional classification.
- Explore the potential of a sidewalk improvement fund. The fund could be supported through new development applications as a way to make repairs or address gaps in existing sidewalk infrastructure in off-site locations.
- Inventory locations where sidewalk ramps are not provided, street signs are missing, traffic control signs are faded, and crosswalk striping has deteriorate, and install such improvements as required. Implement a regular program to monitor and rectify problems relating to such conditions.

For more information see:

Utility Services Element

- Recommendations for Plainfield to become a Smart City - Mobility

Land Use Element

- Zoning

Green Building and Environmental Sustainability Element

- GHG emissions reduction

Community Input

Sampling of comments from Community Workshops

- Front yard parking takes away from neighborhood.
- Expand bike lanes, capitalize on bike paths to Scotch Plains.
- High pedestrian traffic at Belvidere Ave., E. 7th Street.
- Hillside & Highland, enforcement needed.
- Prospect & Watchung – “drag strip.”

From the Master Plan Survey

The top challenge related to new construction was traffic, at 67%.

In a list of issues and trends affecting the City, these were deemed very important: 56%, reliability of public transportation, 54%, bicycle and pedestrian safety, and traffic, 48%.

When asked how they travel around the city, residents said:

77% Travel alone.
 8% Someone else drives.
 6% Use public transportation.
 3% Human services transportation.
 6% Other ways.

Several comments related to circulation:

- Park & Second.
- Madison/W. Front Street.
- Unsafe on Watchung Avenue from City Hall all the way to Rt. 22.

- Speeding is a citywide issue.
- On Randolph Road, difficult to see traffic heading north on Woodland Road.

COMMUNITY FACILITIES ELEMENT

“The greatness of a community is most accurately measured by the
compassionate actions of its members.”

- Coretta Scott King

Contents

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- A Survey of Plainfield's Existing Community Facilities 124
- Proposed Community Facilities Improvements, Growth Plans and Needs Assessment 134
- Issues and Opportunities 138
- Recommendations 138

How We Get There

Evaluate the Situation

- Assess the current levels of service and usage.

Identify Target Actions

- Accommodate the under served and underrepresented population of the City.
- Develop additional public health and wellness programs for children and seniors.
- Promote healthy practices in striving to be a sustainable community.

Enhance and Improve Existing Assets

- Advocate the arts and cultural wealth of Plainfield
- Invest in modern accessible civic spaces throughout the City

Strategic Vision

To ensure that Plainfield residents of all ages have access to an array of community facilities and services that meet and exceed their needs, improving health and quality of life for individuals and the city overall.



INTRODUCTION

Community facilities are a measure a city's heart and health. They affect the well-being and safety of all residents and can also enrich the city by attracting more business and investment.

This Community Facilities Plan Element identifies the existing conditions of such facilities. It also provides recommendations regarding upgrades, expansions and improvements of these facilities. In determining these assessments, data has been obtained pertaining to current usage and the projection of future demand based on population growth as well as physical and socioeconomic changes within the City. This element will also discuss changes the City has experienced since the 2009 Master Plan and what has already been addressed to accommodate them.

Traditional community facilities are discussed, including relevant civic services such as public safety, education and institutions. New and emerging community facilities are also examined, such as the Plainfield Performing Arts Center and the medical arts complex at the former Muhlenberg Regional Medical Center campus.

In addition to outlining the current status of the City's range of community facilities, this element also forecasts the anticipated needs and improvements necessary for each type of community facility. Recommendations have been designed to achieve the overall goal of addressing the needs of all residents and bridging any gap due to inequity or under service. In

determining these recommendations, input from Community Meetings and surveys were taken into account to incorporate and unify all the voices of Plainfield.

Throughout the City, participants in the community meetings shared similar concerns. They wanted more public spaces, refreshed buildings, communication about redevelopment, expanded activities for seniors, a shelter for the homeless, more public bathrooms, increased programs for young people and more formal gateways to the City along with overall beautification efforts.

Innovative recommendations are also proposed that integrate with other Plan Elements. As discussed in the Economic Plan Element, arts, culture and entertainment are envisioned as new and thriving industries that also offer job opportunities. The Green Building and Sustainability Element highlights agendas that focus on public health and sustainable community initiatives.

MUNICIPAL LAND USE LAW

"A community facilities plan element showing the existing and proposed location and type of educational or cultural facilities, historic sites, libraries, hospitals, firehouses, police stations and other related facilities, including their relation to the surrounding areas"

A SURVEY OF PLAINFIELD'S EXISTING COMMUNITY FACILITIES

Municipal Facilities and Services

Municipal Building Complex

There are two buildings within the City Municipal Complex. Plainfield City Hall is located at 515 Watchung Avenue and is listed on both the state and national Register of Historic Places. Numerous municipal agency offices operate within City Hall, including Office of the Mayor, Audit and Control, City Clerk, Purchasing, Tax Collector, Tax Assessor, Corporate Council, Economic Development, Planning, Engineering, Director of Public Works, Community Development, Building, Inspections and Personnel.

Plainfield's City Hall Annex is located at 510 Watchung Avenue and is also listed on the state and national Register of Historic Places. City agency offices housed in the City Hall Annex are the City Administrator, Director of City Finance, Recreation, Women Infants and Children (WIC), Vital Statistics and Plainfield Action Services (PAS).



Plainfield City Hall

Municipal Court Building

The Plainfield Municipal Court Building, 325 Watchung Avenue, shares occupancy with the Plainfield Police Division, with an entrance at 200 East Fourth Street. Within the Municipal Court, where is office space, one court room with two file storage closets, one judge's chamber for three judges and one small holding cell. There is also one violations window, and restrooms for staff and the public. The court room is also used by City Council to hold their meetings. Staff parking is located adjacent to the Court Building at its rear.

The Municipal Court is regulated by the New Jersey Supreme Court and must follow the state's Record Retention Schedule, which requires it to retain criminal case records for a period of six years and DWI case records for 15 years after the cases are adjudicated. Existing conditions impose space constraints and make it difficult for the court to comply with these requirements.



Plainfield Municipal Court

Health and Social Services

The Health and Social Services Office of Plainfield, the City's public health office, is housed within City Hall at 515 Watchung Avenue. Its three component divisions are Health, Community Development and Social Services. Programs provided include Communicable Disease, Public Health Nursing, Environmental Health, Childhood Lead Exposure Prevention (CLEP), Rabies Control and Health Education/Health Promotion.



Plainfield Department of Public Works

Department of Public Works

The Department of Public Works office is housed in City Hall and is responsible for street and parks maintenance; snow removal; refuse removal; maintenance of municipal owned-vehicles; shade tree equipment; and maintenance of City-owned occupied and vacant lots. The Department also provides oversight for several divisions, including Inspections, Recreation, Planning, Building and Engineering.

Plainfield's Public Works facility, also known as the City Yard, is located at 745 South Avenue. The municipal garage is located here as is city equipment for Sanitation Bureau street sweeping, Parks and Recreation and street and lot maintenance and repair. There are also accessory gas pumps and oil recovery tanks at the City Yard.



Plainfield Municipal Utilities Authority (PMUA)

Plainfield Municipal Utilities Authority (PMUA)

PMUA is responsible for assessing and maintaining the sanitary sewer system within the City. Its headquarters is located at 127 Roosevelt Avenue and includes a public meeting room, offices, customer services, public information and community relations and operations.

Additional PMUA facilities are located at Cottage Place and Richmond Street, housing sanitary sewer field administrative and operational offices, training facilities and field equipment storage.

PMUA also leases office space on the second floor of a building located at Second

Street and Park Avenue for a range of administrative purposes, including human resources, purchasing and contracts services, facilities and grounds maintenance, risk management and insurance, inspections and enforcement and the Office of the Ombudsman.

Plainfield Environmental Resource Center (PERC)

PERC is located at 95 Rock Avenue and serves as the City's transfer station where waste (solid, recyclables, electronic, bulky and vegetative) is disposed of properly. PERC is City-owned and operated by PMUA.



Plainfield Environmental Resource Center

Animal Control

Within the City's Health Division, the Animal Control Officer handles stray animals, both domesticated and wild. The Officer receives emergency calls from residents and the Police Division, and stray animals are taken to a private facility in East Brunswick.

Parking Bureau

The City has 13 municipal parking lots scattered throughout the City. Several of these municipal lots are located within the Central Business District. The Parking Bureau, located in a 2,100-square foot structure at 127 West Fourth Street, maintains and oversees the lots. The municipal parking inventory consists of 244 metered, 765 permitted and 15 handicapped spaces. The Parking Plan Element will provide more detailed analysis of parking supply and demand in Plainfield and the future parking needs of the City's residents, commuters, workers, shoppers and visitors.

Public Safety

The Plainfield Department of Public Affairs and Safety consists of the Police and Fire Divisions, and the Office of Emergency Management.

Police Division

The Plainfield Police Division, located at 200 East Fourth Street, has a staff of ___ personnel. It is organized among five bureaus including:

- Administrative
- Criminal Investigation
- Support
- Patrol
- Professional Standards

Additionally, there is a Joint Divisions Quality Life of Task Force. Established in 2018, the Task Force supplements daily investigations of City Inspectors and examines issues beyond typical property maintenance violations, such as illegally subdivided and occupied residences, illegal dumping, and other nuisance-related concerns.



Plainfield Police Headquarters

Fire Division

The Plainfield Fire Division headquarters, located 315 Central Avenue, operates within the City's Department of Public Affairs and Safety. There are two other fire stations: Fire Station #3 is located at 1147 West Third Street, Fire Station #4 is located at 1015 South Avenue.



Plainfield Fire Headquarters

Educational Facilities

Public School District

The Plainfield Public School District is one of the state's 31 Abbott Districts, which are now known as School Development Authority (SDA) Districts. The Plainfield Board of Education office is housed at 1200 Myrtle Avenue. There are eight neighborhood elementary schools, one K-8 Center, two middle schools, and two high schools in the School District. Plainfield Public Schools has over 1,200 certified teachers and professional staff members.

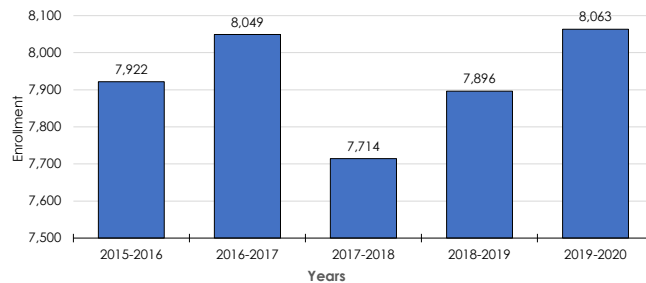
During the 2019-2020 school year, total student enrollment was approximately 8,063 students, with 4,021 in elementary schools (including pre-kindergarten), 1,871 in the middle schools, and 1,991 in the high schools. The ethnicity breakdown of the student enrollment consists of 75 % Hispanic, 23% African American, and 1% White. Asian, Native Hawaiian, American Indian and students of two or more races make up the remaining 1%. Details regarding each school are depicted in Table 1 including the current student enrollment as of the 2019-2020 school year.

Enrollment Trends

The Plainfield Public School student enrollment fluctuated between 2015-2016 to 2019-2020 school years, which is displayed on Chart 1. Enrollment dropped the greatest in 2017-2018 by 335 students from 2016-2017. Enrollment is currently the highest in 2019-2020 at 8,063 students, after a decline during the 2017-2018 school year. Enrollment increased by

182 students during 2018-2019 and increased again in 2019-2020 by 167 students. These fluctuation is due to several variables: school choice (as there are five Charter Schools in Plainfield), increase of families purchasing homes, immigrant families moving to the City, and students returning to the School District from the Charter Schools.

CHART 1: SCHOOL ENROLLMENT



Private Schools / Charter Schools

There are also numerous charter and private schools within the City, including:

- College Achieve Central Charter School
- Cresthaven Academy Charter School (Emerson Elementary School)
- Queen City Academy Charter School
- Barack Obama Green Charter High School (Former Boys and Girls Club) - 238 students
- Union County TEAMS Charter School (Shiloh)

TABLE 1: PLAINFIELD PUBLIC SCHOOL DISTRICT

Schools	Grade Levels	Address	Total Students Enrolled
Dewitt D. Barlow Elementary School	Kindergarten - Grade 5	2 Farragut Road	370
Cedarbrook K-8 Center	Kindergarten - Grade 8	1049 Central Avenue	690+
Clinton Elementary School	Kindergarten - Grade 5	1302 West 4th Street	391
Emerson Elementary School	Kindergarten - Grade 5	305 Emerson Avenue	500
Jefferson Elementary School	Kindergarten - Grade 5	1750 West Front Street	450
Frederic W. Cook Elementary School	Kindergarten - Grade 5	739 Leland Avenue	
Evergreen Elementary School	Kindergarten - Grade 5	2280 Evergreen Avenue	660
Stillman Elementary School	Kindergarten - Grade 5	201 West 4th Street	360
Washington Community School	Kindergarten - Grade 5	427 Darrow Avenue	600
Hubbard Middle School	Grades 6 - 8	661 West 8th Street	700
Maxson Middle School	Grades 6 - 8	920 East 7th Street	
Plainfield Academy for the Arts and Advanced Studies (PAAAS)	Grades 7 - 12	1700 West Front Street	
Plainfield High School	Grades 9 - 12	950 Park Avenue	1,500

Source: Student Enrollment Data according to each school's website.

Other Educational Facilities

In addition to the educational facilities operated by the Plainfield Public School District or as private/charter schools, there are other institutions in the City providing academic instruction.

Post-Secondary Institutions

Union County College

Within the Union County College (UCC) system, there is a satellite campus in Plainfield located at 232 East Second Street, occupying most of a city block between East Second Street to the north, East Third Street to the south, Church Street to the west and Roosevelt Avenue to the east. The campus consists of three buildings and two parking lots.

The Logos Building is a three-story building containing approximately 28,000 square feet. Within this building there are classrooms, lecture hall, computer and science laboratories, a “One-Stop concept” student center, student lounge and faculty offices. Additionally, within the Logos Building, there is a state-of-the-art laboratory for American Sign Language (ASL) and Deaf Studies.

In the Annex Building, 11,724 square feet of space is dedicated to the Library and Academic Learning Center, study room, conference room, faculty and staff offices, cafeteria, dining room and bookstore.

The Health Sciences Building opened in 2015 as an academic center for health-

science programs, including practical nursing, emergency medical technology and paramedic sciences. Health science programs are a significant focus of the Plainfield Campus.

Pillar College

An instructional site of Pillar College, a higher education institution that offers programs at the associates and bachelors degree levels, is located in Downtown Plainfield at 320 Park Avenue. Pillar also offers programs in English as a Second Language (ESL), Life Enhancing Accelerated Degree (LEAD) and others that cater to a diverse student population.

Nursing Schools

There are also two licensed practical nursing school facilities located in the City. The JFK Muhlenberg Harold B. & Dorothy A. Snyder Schools of Nursing and Medical Imaging is located on the former Muhlenberg Regional Medical Center Campus. In conjunction with the Union College Cooperative Nursing Program, the school offers programs in nursing, radiography and diagnostic medical sonography. The school has 26 dorm rooms, of which six are designated for single parents with a child or children.

The second nursing school facility is the Sierra Allied Health Academy, Inc., a state-accredited registered nursing program located on West 7th Street.



Plainfield High School



JFK Muhlenberg Harold B. & Dorothy A. Snyder Schools of Nursing



Hubbard Middle School

Library

Plainfield Public Library

The Plainfield Public Library was founded in 1869 and is located at 800 Park Avenue. The library building was constructed in 1968 and contains approximately 45,000 square feet of floor space on two floors, housing approximately 310,000 volumes. Staff consists of 15 full- and part-time employees. The library's vision is to provide equal access to education programming and resources for lifelong learning in the community.

The library provides numerous amenities and services including:

- Eight meeting rooms
- Two computer labs (20 computers in Adult Room and 10 computers in Children's room)
- Other children's programs
- Adult literacy program
- Bookmobile Special historic collections
- Educational workshops and art exhibits



Plainfield Public Library

Post Offices

There are four United State Post Office branches within the City of Plainfield:

- Plainfield Post Office (Main Office Headquarters) is located at 201 Watchung Avenue.
- Muhlenberg Post Office is located at 1080 Arlington Avenue.
- Station A Plainfield Post Office is located at 14 Clinton Avenue and serves as a finance station.
- Netherwood Post Office is located at 1120 North Avenue.

Both Muhlenberg and Netherwood are satellite post offices. All of the post offices serve residents and those who work in Plainfield, offering standard postal transactions. Operated by the Federal Government, numerous residents are employed with at the Plainfield Post Office.



Plainfield Post Office

Houses of Worship

Within the City, there are approximately 39 houses of worship. A list of them is provided in Appendix B of this Plan.

Hospitals

The former Muhlenberg Regional Medical Center was the sole hospital located within the City until it closed in 2008. The Hackensack Meridian/JFK Satellite Emergency Department and DaVita Dialysis Center both operate within a portion of the former hospital facility. Also located on the former hospital's campus is the JFK Muhlenberg Harold B. & Dorothy A. Snyder Schools of Nursing and Medical Imaging.

In 2014, a study explored repurposing opportunities of the hospital facilities and its campus. A Redevelopment Plan for the Muhlenberg Hospital was adopted by City Council in 2017. A portion of the former hospital is currently being converted into a 120-unit apartment building. Also within the former Muhlenberg Hospital will be a 186,000-square foot medical arts complex/community healthcare facility containing medical services including primary and specialty care, women's health center, diagnostic laboratory, ambulatory surgical center, pharmacy, sleep center, diabetes counseling, behavioral health, home healthcare agency, physical therapy and others.

Neighborhood Health Services Corporation

Also known as the Plainfield Health Center, the Neighborhood Health Services Corporation is a non-profit community health center which receives federal funding as it is a Federally Qualified Health Center from the Bureau of Primary Health of the United States Department of Health and Human Services. Located at 1700-58 Myrtle Avenue, health services are available for patients of all ages with an array of examinations and treatments provided.

Senior Citizen Facilities

Senior Housing

There are several options for senior residents in Plainfield.

- Covenant Place, formerly known as Covenant Manor, is located at 623 East Front Street. It has 57 affordable housing units and is operated by United Methodist Communities.
- United Plainfield Housing Corporation operates two multifamily housing developments in the City. The Whitney Young Jr. Apartments are located at Central Avenue and West 4th Street and contain 55 units in seven buildings. The Frank W. Allen Village is located at Clinton and Myrtle avenues and contains 52 units in eight buildings.
- Richmond Towers is managed by the Housing Authority of Plainfield and

is located at 510 East Front Street. It contains 225 units, 135 efficiency and 90 one-bedroom spaces. Richmond Towers offer congregate housing (each resident has a private bedroom or living quarters but shares with other residents a common dining room, recreational room, or other facilities) with housekeeping, personal assistance and an evening daily hot meal. Other services include a social worker on staff, transportation to medical appointments and laundry facilities. Activities and events are held by staff and a horticulture program has been established.

- Buena Vista Estates, a senior housing residence, is located 40 Roosevelt Avenue and contains 80 units.

Plainfield Senior Center

The Plainfield Senior Citizens Service Center is located at 400 East Front Street. It is a multipurpose facility that provides seniors with enriching activities and services that include recreational, educational, social, and cultural programming as well as medical, transportation and nutritional services.

The Senior Center features a conference room and classrooms for art, computers and exercise. A billiards room is also provided. A Veterans Center is housed within the same building.

Assisted Living, Rehabilitation, Nursing Home and Adult Day Care Day

Within the City, there are three privately owned short-term, acute care rehabilitation centers. Operated by Genesis, The Woodlands is located at 1400 Woodland Avenue and has 120 beds. JFK Hartwyck at Cedar Brook is located at 1340 Park Avenue, close to the JFK Emergency Satellite Department, and has 106 beds. AristaCare at Norwood Terrace is located at 40 Norwood Avenue and has 120 beds.

As residents continue to age in place within Plainfield, facilities dedicated to the healthcare of seniors will be in demand. Simultaneously, as Plainfield continues to evolve as a medical and healthcare hub for education and employment, job opportunities will grow along with the need to fill jobs at centers for seniors.



Plainfield Senior Center

Emergency Food Providers

The Plainfield Coalition of Emergency Food Providers is a system of organizations that provide food to residents in need when the City faces a crisis or emergency situation. These groups are:

Soup Kitchen/Prepared Foods

- The Salvation Army
- Grace's Kitchen
- The Lord's Kitchen
- Muslim Community Soup Kitchen
- Mt. Olive Baptist Church

Food Pantries

- The Salvation Army
- The Lord's Kitchen
- New Covenant Church
- Plainfield Action Services (Star Fish)
- Church of the Living God

Meals on Wheels

- Meals on Wheels provides home-delivered meals to Union County residents who are 60 and older, live alone and are unable to shop or prepare a meal themselves.

Further details regarding these service providers' location and contact information are provided in Appendix B of this Plan.

Institutional Uses

Institutional use means use of land for a public purpose, such as hospitals, schools, libraries, auditoriums, and office complexes. Institutional uses in Plainfield include childcare centers, community residences group homes, community-based organizations, community development corporations, houses of worship, youth centers and behavioral and mental health counselors. These facilities and social services agencies are detailed in the Appendix of the Master Plan.

Group Homes

Group homes are identified as any single-family dwelling that is utilized in the placement of children as defined by the state's Department of Children and Families and in rules and regulations adopted by the department. No group home shall house more than 12 children (40:55D-66b). Group homes are permitted in all residential districts. The City is not aware of how many group homes exist.

Community Residences

Community residences consist of various types of congregate housing arrangements for specific populations, such as the developmentally disabled, terminally ill (hospice), persons with head injuries, adult day care homes for elderly individuals and physically disabled adults. Shelters for victims of domestic violence and halfway houses are also considered community residences. Community residences are permitted in all residential districts of the City and the requirements are the same as for single-

family dwelling units located within these district (40:55D-66.1).

Although the City does not know how many community residences exist within City limits, some examples include Keystone Community Living and the Dudley House Veterans Transitional Housing Program. Operated through the City's YMCA, the Dudley House provides housing and support for 18 male veterans. It also provides social services including employment training, case management and behavioral and mental health services.

Childcare Centers

Childcare Centers are required to obtain a license issued by the state's Department of Human Services. These are permitted in all non-residential districts (40:55D-66.6). Within Plainfield, there are approximately 16 licensed childcare facilities and are listed in Appendices of the Master Plan. Childcare centers are approved by the City's Board of Education

Family Day Care Homes

Family Day Care Homes are located within a day care provider's private residence, which must be registered as a family day care home according to the Family Day Care Provider Registration Act. Family Day Care Homes are permitted in all residential districts (40:55D-66.5).

Community Centers

There are several neighborhood-based community centers. The Neighborhood

House has provided early childhood education year-round since 1937. The South Second Street Youth Center closed in 2018 and then opened a new facility at the corner of South Second Street and Plainfield Avenue. The Hannah Atkins Community and Teen Center is located within Hannah Atkins Park and hosts several recreation amenities, including a community pool and tennis courts. The Plainfield Senior Center and Veterans Center also serve specific populations of the City.



Second Street Youth Center

Arts and Cultural Assets

Plainfield is blossoming as a hub of arts and culture. Programming that embraces the City's cultural diversity is being developed by the Plainfield Cultural and Heritage Commission. The City should continue to support this cultural diversity through the promotion of programming that encourages individual artists and cultural groups to create and display work within the City. The Commission also sponsors art and cultural events to engage, educate and spread diversity awareness.

Drake House

The Drake House Museum, located at 602 West Front Street, hosts events, exhibits and programs and publications conducted by the Historical Society of Plainfield. The museum, also known as the Nathaniel Drake House, built in 1746, is on the National Register of Historic Places.

duCret School of the Arts

The duCret School of the Arts, oldest arts school in the state, is an independent institution at 1030 Central Avenue. DuCret offers an eclectic selection of workshops and classes, including drawing, stained glass, painting, computer skills, jewelry design and yoga sessions. The French School of Music also operates within duCret.

Plainfield Symphony

The Plainfield Symphony is the oldest community symphony orchestra in the state and is the third oldest continuously operating

community symphony in the country. The Symphony performs at the Crescent Avenue Presbyterian Church with regularly scheduled events and performances.

Swain Galleries

Swain Galleries is an art gallery at 703 Watchung Avenue, in the Crescent Historic District. It is the City's oldest retail establishment and the state's oldest privately-owned art establishment. Swain Galleries hosts art exhibits and provides various related services including artwork framing, appraising, gilding, restoring and art installation consulting.

Plainfield Performing Arts Center

The Plainfield Performing Arts Center (PPAC), at 724 Park Avenue within the First Unitarian Society of Plainfield Church, was organized in late 2019. Formerly known as the Plainfield Cultural Arts Center, the PPAC serves a vital need as a space for the performing arts, events and other community gatherings.



Plainfield Performing Arts Center

Historic Districts

There are ten Historic Districts within the City. These districts are a resource that can serve as a focal point of cultural tourism and as a prominent means of retaining and reinforcing the City's historic character and identity.

PROPOSED COMMUNITY FACILITIES IMPROVEMENTS, GROWTH PLANS AND NEEDS ASSESSMENT

As the City looks 10 years ahead, it is likely that management of growth and understanding and acting on the needs of residents and businesses will be primary concerns. Here are summary descriptions of the City's Community Facilities' strengths and limitations and strategies outlining how necessary changes can occur.

Municipal Facilities and Services

Municipal Courts

The Municipal Court has been experiencing numerous issues that need to be resolved for the facility to operate properly as Plainfield progresses towards its future. Lack of necessary storage and space is the primary concern of the Court. Records need to be safe and secure. A former holding cell is used for storage. Space is needed for both the Public Defender and Prosecutor. The Prosecutor's office is within the Court Room and needs to be located in a separate room.

Privacy is also a major concern of the Court. During court sessions, mediation takes place in the hallway, which is also where individuals line up waiting for their cases to

be heard. Public and private staff restrooms are located adjacent to one another and are also outdated. Security is another issue. Parking is a major issue that the Court faces, as it is limited. Parking for the staff, judges, and public is not sufficient, especially when court is being held. Handicapped parking is limited and not accessible.

Other improvements requested of the Municipal Court include internal enhancements. The Court would like to create three violation windows, which will allow for translators to service the public. The Court is looking to either extend the rear wall or construct a new wall which will be sound-proofed and contribute to eliminating noise.

In order to adequately serve the City, options are being explored for the Court to operate optimally in the future. These options include:

- Expanding the existing facility
- Construct a new facility to house the Municipal Court and Police Division. A potential site of this facility would be across 4th Street, which is currently a parking lot.

Public Safety

As new mixed-use and residential developments arise in the City in the coming years, the population is expected to increase as well. In considering this rise in population, the City should consider expanding Public Safety facilities to maintain adequate service. With all public safety stations located south of the railroad tracks, potential locations for satellite facilities on the northern side of the railroad tracks should be explored and evaluated for access and minimal response time.

TABLE 2: CAPITAL IMPROVEMENT PROJECTS – PLAINFIELD SCHOOL DISTRICT

Schools	Proposed Improvement
Dewitt D. Barlow Elementary School	New addition construction; Room reconfiguration/reassignment; Parking lot improvement; New playground equipment; Systems improvements
BOAACD and District Offices (former Jefferson School site)	Systems improvements
Jefferson Elementary School	Systems improvements
Cedarbrook K-8 Center	New construction/building addition
Clinton Elementary School	Athletic field/playground improvements; Parking lot improvements
Evergreen Elementary School	Demolition; New building construction
Hub Stine Field	Athletic field improvements (systems)
Hubbard Middle School	Room reconfiguration/reassignment; Systems improvements
Lincoln Adult School	Demolition
Maxson Middle School	Play area improvements; Room reconfiguration/reassignment; Systems improvements; Parking lot removal?
Plainfield High School	New building construction (9th Grade Academy); Demolition (1914 HS building); Partial demolition and new addition construction (1969 HS building); Room reconfiguration/reassignment (1969 HS building); Systems improvements (1969 HS building)
Stillman Elementary School	New addition construction; Room reconfiguration/reassignment; Systems improvements
Washington Elementary School	Room reconfiguration/reassignment; Systems improvements
Woodland Elementary School	New building construction

Source: 2015 Plainfield Public School District Long Range Facilities Plan – 2017 Amendment, Action Summary Report

Educational Facilities

Plainfield Public School District Long Range Facilities Plan (LRFP)

As outlined in the School District's LRFP Action Summary Report, numerous improvements are planned as indicated in Table 2.

As noted by the School District, the following capital projects have been completed within the last 10 years:

- Cafeteria and auditorium were constructed at the Barrow School, which enlarged the school building
- The Maxon Middle School Cafeteria was renovated
- All windows were replaced in the Plainfield High School North Building
- Roof replacements were installed at the Evergreen Elementary, Maxson Middle School and Plainfield High School
- Science Labs were constructed at Plainfield High School.
- The School District acquired a building at 1800 Front Street as a technology center to support students
- 504 Madison Ave was renovated after fire damage
- The Plainfield High School swimming pool was renovated

Also, the School District is currently working with the New Jersey School Development Authority on the development of the new East-End Elementary School. This new 120,000-square foot elementary school is anticipated to open in the year 2022.

Union County College

According to the 2019 – 2023 Long Range Facilities Plan of UCC, there were two projects in the pipeline for the Plainfield Campus. Both of which have been completed as of January 20, 2020. The first project completed was the second phase of the Health Sciences Building which will include renovating the building interior to accommodate the college's new Allied Health programs.

The second proposed project completed was a parking facility. It is anticipated that vacant land located adjacent to the Health Sciences Building will be utilized to accommodate 105 additional parking spaces for students, faculty and staff. The project involved the installation of an underground stormwater detention facility, lighting and security. With this area will serving as a gateway to the Plainfield Campus, enhanced landscaping and streetscape features, designed in collaboration with the City, were also implemented.

Although not specific to the Plainfield Campus, another future project of the UCC system to be located in the City is the construction of a central records warehouse storage facility.

Pillar College

The Plainfield Instructional Site is expected to continue to grow in the coming years, with an anticipated student enrollment of 250 students by the year 2025. At the time this Master Plan was prepared, Pillar College is seeking to move into a permanent location

in Plainfield from its current site at 320 Park Avenue.

Plainfield Public Library

Representatives from the Plainfield Public Library have indicated several anticipated items to bolster growth and modernization and implement user preferences.

- Renovate and upgrade the existing main entrance to the Library.
- Add ADA access ramps at Park Avenue and College Place.
- Build an additional third story onto the existing facility as well as a parking deck.
- Reduce open space and the fountain area to create more work areas and computer space.
- Create a collaborative work area; current workspaces are designed for individual use.
- Designate a space for teens (middle and high school-age students) to encourage their use of the library.
- Open a second branch of the library in the West End of the City.
- Start a "Friends of the Library" organization.
- Promote digital literacy.
- Promote the use of the meeting space, the only free meeting space in the City.

The Library has begun the process of creating a Strategic Plan, which will detail proposed enhancements to be put in place in the coming years.

Plainfield Post Office

There are no recommendations for the post office system in Plainfield as the post offices are federal facilities.

PPAC

PPAC was recently launched late in 2019. PPAC will continue to bolster its programming as it continues to get its feet off the ground. PPAC will be home to visual art exhibits, theater art performances, musical acts, public art, applied art and other types of art.

It will serve not only as a performing arts center; PPAC will be the epicenter of social justice in the City. Programming opportunities will also consist of creative entrepreneurs, resident arts program, workforce development for underrepresented populations, such as seniors, special needs individuals and members of the LGBTQ community.

The operators of PPAC aim to establish the City as a film production designation. This would also allow film production companies to take advantage of the New Jersey Film and Digital Media Tax Credit Program. Film festivals are ideal events to be held at PPAC. The Queen City Film Festival has been held at First Unitarian Society Church since 2018.

Culinary arts; food lab. PPAC aims to take advantage of the existing commercial kitchen located in the former Unitarian Church. Programs involving culinary arts and chef instructors can allow for small-scale food production. A food laboratory is also a potential program under consideration.

In partnership with the City's Division of Parks and Recreation, PPAC will offer educational programs for the youth. These youth programs will provide an arts education and broaden cultural understanding and cross-cultural participation.

Overall, PPAC will be an asset to the community as it will fulfill a myriad of needs. It will be a vital multi-purpose space that the City sorely needs. To this end, PPAC will be a magnet for the arts, culture, and gatherings in general in the City.

Institutional Uses: Hackensack Meridian/JFK Muhlenberg Campus

The JFK/Hackensack Meridian facilities are expected to remain. At the time this Plan Element was written, no significant growth or expansion of existing or new facilities were indicated.

Healthy Communities

Health and wellness are critical characteristics of a sustainable and robust community. As Plainfield continues to move forward, the City's Health and Social Services Department anticipates public health initiatives that are necessary for the growing population.

- Establish a mobile health center where screenings can be conducted and education workshops can be held in all neighborhoods.
- Hire a public health educator who will assist with health training for the public

as well as City employees.

- Mandate a health component for redevelopment projects, whether it be a fitness center or gym, walking trails, play areas or community gardens.
- Install outdoor exercise equipment in city parks.
- Emphasize the importance of sanitation and cleanliness in preventing disease outbreak.

It is especially important that public health outreach focuses on building awareness and educating residents on best practices in the mitigation and prevention of bacteria, viruses, diseases and other contagious illnesses. The City should mandate all divisions to regularly sanitize frequently used facilities and record each time a cleaning is completed.

Access to healthy, quality food options is also a critical need. During the community meetings in preparation of this Master Plan, numerous residents expressed the needed for a local grocery store as many currently travel outside Plainfield to shop for food. Positioning a grocery store in a centralized location would give residents the opportunity to shop in their hometown for a range of healthy food options.

Fitness and exercise should continually be promoted to combat child and adult obesity. Various outlets, such as team sports for youth and adults, senior walks, park hikes, group bicycle rides, dancing classes and others should be offered by the City's Health and Recreation divisions.

Senior Facilities

The senior population of Plainfield is expected to continue its growth in the coming years. In 2015, the daily enrollment of typical day program was 130 residents; now, that figure has reached 150 residents per day. The main goal of the Senior Center is to tap into the 2,700+ members. With senior-aged residents being a vulnerable population, the Senior Center focuses on avoiding social isolation. As the senior population rises, the Senior Center is planning to accommodate this growth. As many residents continue to work even as they reach their senior years, the Senior Center is expecting more residents to become involved with its evening program. The evening program consists of event such as recreation, exercises, parties, fashion shows and other events. The Senior Center is working to continually bolster its day and evening programs to accommodate a spectrum of seniors in the community.

Senior facilities, such as continuing care retirement communities, assisted living and independent living, should be considered, attracted and pursued in the City. Bringing in such facilities into the City will encourage residents to age in Plainfield while obtaining the assistance they may need or the amenities they desire in their elder years.

ISSUES AND OPPORTUNITIES

The City continues to face numerous issues relevant to community facilities and amenities.

- **Impact of Anticipated Redevelopment Projects.** With numerous redevelopment projects in the pipeline, the City should understand the cumulative impacts they will have on community facilities and public services through a thorough evaluation of the capacity to support such projects. Expansion of public safety efforts should match projected residential population growth in the upcoming years.
- **Vacant and Abandoned Properties.** There are currently just under 250 vacant and abandoned properties within the City. The abundance of properties that are not actively being used or maintained poses public health concerns.
- **Homelessness.** Homelessness continues to pose a difficult problem for the City. Individuals who are homeless tend to congregate at the Downtown Train Station as well as other areas of the City that have heavy pedestrian traffic. Although there are numerous agencies and community organizations working to prevent homelessness, there is currently no homeless shelter in the City.

RECOMMENDATIONS

As Plainfield moves forward on significant changes, including redevelopment, improved services and building awareness for the City as an arts and cultural destination, it will need a toolkit of recommendations and action steps that will help it achieve its important goals.

General

- Establish a new Community Center
 1. Establish an adult education program offering an array of education opportunities for residents. Courses might include technology basics; GED; home improvement and mastering the ownership process; language and literacy; cooking; exercise; photography; and trades (i.e., welding, plumbing, carpentry, electricity).
 2. New Recreation Center: The City's YMCA facilities, located at 232 East Front Street and 518 Watchung Avenue, are both closed. Thus, Plainfield is in need of a new YMCA or general recreation facility to serve all residents. Locations for a new facility should be explored. The selected location should be equally accessible to all residents. The new YMCA or recreation center should also offer a wealth of programming and serve as a multipurpose event space. This recreation facility could be consolidated with the recommendation for a new community center and its intended programming.

Public Health/Community Wellness Initiative:

- The City should continually engage with residents to promote healthy lifestyles. Events, such as healthy cooking classes, exercise classes, meditation and general wellness workshops should be held at City venues, such as PPAC.
- The Health Division should establish a mental health hotline that is accessible 24 hours a day, 7 days a week.
- Establish a year-round Farmers' Market: farmers' markets provide residents access to locally grown fresh fruits, vegetables and other area-sourced food suppliers. Plainfield participates in the WIC and Senior Farmers' Market Nutrition Program, which allows eligible women with young children and seniors to purchase food from farmers' markets in Union County using vouchers. Overall, establishing such a market in the City will provide access to healthy food to residents. Potential sites are North Avenue between Park Avenue and Watchung (or a portion of this area); City-owned parking lot #14 or lot behind Scott Drugs. The farmers' market could also continue operating at its seasonal location at the intersection of West 6th Street and Watchung Avenue.
- Target and Encourage Urban Agriculture: The City should develop a program of creating accessible community gardens in every ward. In encouraging citizen participation, workshops should be held by the City to educate residents on proper and sustainable gardening techniques.

Seniors

- Plainfield should conduct an Aging-Friendly Community Assessment in preparing the City in becoming an aging-in-place city.
- Additionally, the City should partner with the Senior Center and other organizations dedicated to working with seniors to provide events for the elderly and adequate transportation services so that such events would be accessible to all seniors throughout the City.
- Accommodate aging population: Provide adequate community amenities to encourage residents to age-in-place.

Public Safety

- Potential Satellite Police and Fire Stations: Due to the current and expected growth in Plainfield's residential population, the Police and Fire Divisions should evaluate their essential services and determine how they should be expanded. Based on the proposed development pattern and necessary service area indicated by both the Fire Division and Police Division, a new satellite public safety station (police, fire or both) should be located on the north side of the railroad tracks.
- Enhance Public Safety: Emphasize public safety by continuing to develop partnerships with the community and educate residents on safety issues. Provide updated engagement communication (message board, social media) for increasing community

participation in programs and events.

- Conduct a feasibility study of a new Public Safety Complex: This feasibility study will assess the needs of the Fire Division, Police Division and Municipal Court in determining siting and operations of a new Public Safety Complex.

Educational Facilities

- Board of Education: Encourage seamless and consistent communication between the School District's Board of Education and the City's Planning Division and Planning Board.
 1. Establish a joint committee of the Planning Board and Board of Education members. The objective would be to determine how the School District would be impacted from the proposed development and mitigation measures so that these impacts could be managed. The committee should collectively evaluate the Capital Improvements to the School District facilities.
 2. Conduct Impact Analyses: Simultaneously, the Planning Division should continually advise the Board of Education on new redevelopment projects underway and their impacts to the School District system (i.e., projected additional school-aged children anticipated in the new redevelopment projects; capacity; budgeting, etc.)
 3. Safe Routes to School: The City should

work toward implementing a Safe Routes to School Policy, for students of public and non-public schools alike.

Arts and Cultural Facilities/Assets

- Plainfield Performing Arts Center (PPAC): Promote events and usage of the newly created PPAC. In optimizing the programs to be offered at PPAC, the City should assist in implementing the goals, objective, strategies and actions of the Cultural Arts Plan once the it is finalized.
- Arts Advocacy: Provide opportunities to expand the programming and events of artists and art enthusiasts in Plainfield. Establishing a coalition of local arts will contribute to the growth of artist community in Plainfield.
- Creative Placemaking: Creative Placemaking refers to the collaboration of various forms of arts and cultural amenities in using spaces and venues. Here are examples of such joint efforts possible in Plainfield.
 1. Continue to facilitate the engagement and growth of the artist community. Promoting Plainfield as an arts destination will contribute to the development of a critical mass of arts-related activities.
 2. Advance proposed enhancements and upgrades to the Plainfield Public Library. Explore various ways to facilitate engagement among all ages of library patrons. The library should utilize Library Park as a venue for outdoor programming and events to facilitate resident

engagement, including used book sales, community dances and holiday bazaars.

3. In collaboration with Plainfield's Special Improvement District, art-related events should be promoted and planned within the Central Business District (i.e.—art walk, film festival, arts and crafts fair, First Friday, etc.)

For more information see:

Housing Element

Economic Development Plan Element

- Arts and Cultural Assets

Land Use Plan Element

- Redevelopment

Community Input

Sampling of comments from Community Workshops

(See Appendix A for all results.)

- Uniform signage throughout the city.
- Public safety, especially around the schools.
- Fix the streetlights! Always out/ not often repaired.
- Improve school systems./
- Expand the library and parking/add café.
- Need community center for all ages.
- With Plainfield Y gone, need a place for kids after the after-school program ends.
- Job training programs especially for young adults.
- Need more public trash cans/more public trash cans.
- Clean up Front St. Corridor.
- Senior population – access to housing, community centers.

From the Master Plan Survey

(See Appendix X for all results.)

Are there intersections or other locations where you feel unsafe, either as a driver, pedestrian, or bicyclist?

- Park & Seventh
- On Randolph Road, difficult to see traffic heading north on Woodland Road
- Front Street and Park Ave. between Front and 8th.

- The stretch from Leland to the light on Woodland Ave. has been like a racing strip.
- Speeding is a citywide issue/Especially on side streets.
- Cars are always speeding down George St. and there is nothing to slow them down.
- More/better bike lanes.
- Downtown and the train stations feel very unsafe at night.
- Crosswalk maintenance everywhere is poor.
- Drivers ignore the crosswalk law, so pedestrians often need to sprint to avoid getting hit.
- Speeding on city streets needs to be discouraged using speed bumps or other traffic calming schemes.

Are there any City services or facilities that are not available now you would like to see offered?

- Code enforcement, litter removal and street cleaning, street paving/ More street and park cleaning / Code enforcement/ improve code enforcement - compel or aid homeowners who neglect private property/code enforcement
- More community activities/ Community center with a fitness center and indoor/outdoor pool/ Facilities for the kids/Indoor sports facility for all ages.
- More help for people in the street.

RECREATION AND OPEN SPACE PLAN ELEMENT

"The measure of any great civilization is its cities and a measure of a city's greatness is to be found in the quality of its public spaces, its parks and squares."

- John Ruskin

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How We Get There

Keep the City Open

- Preserve and acquire open space in order to enhance the quality of life.
- Create open space conservation awareness programs for residents.
- Evaluate the current utilization of existing public open space.

Maximize Existing Assets

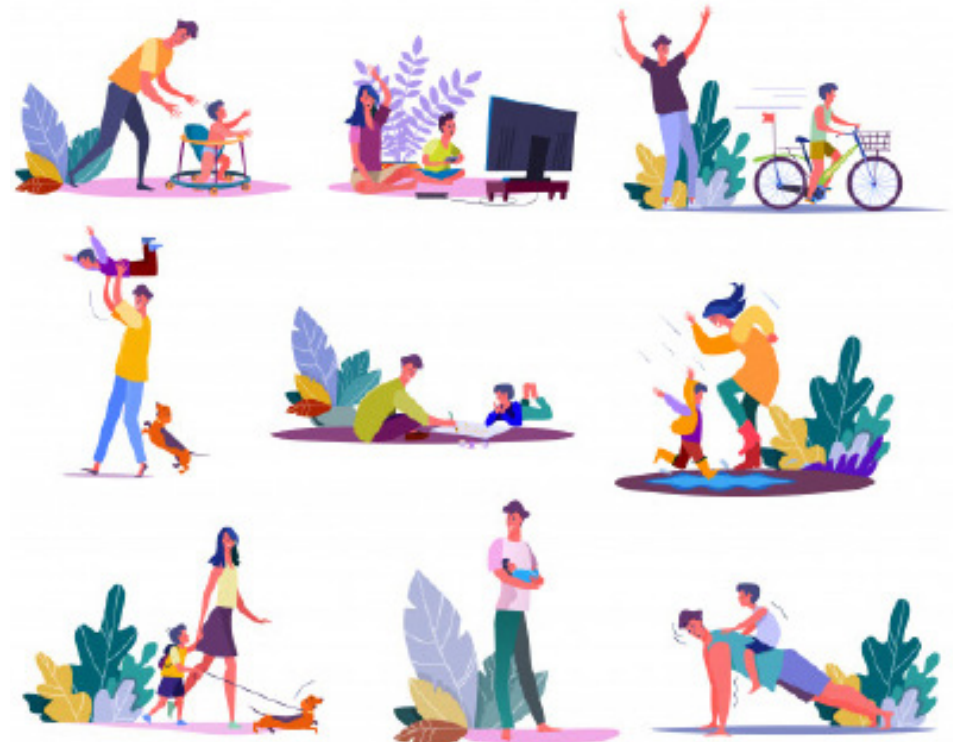
- Upgrade park and open space facilities.
- Maintain parks and open spaces in a state of cleanliness and good repair through the efforts of the Recreation Division and Public Works Department.

Survey

- Examine the evolving needs of residents of all ages to identify changes needed to existing recreational facilities and programs.
- Seek to provide open space in residential, commercial, institutional, civic and mixed use areas, with input from these constituencies.

Strategic Vision

That the City of Plainfield work closely with residents, city departments and developers to ensure that open spaces including parks and recreation areas are attractive, meet the needs of all ages and become integral to the social and cultural life of the city, enhancing overall quality of life in a densely developed and populated community.



INTRODUCTION

Plainfield's parks and open spaces act as the city's open windows, its communal living rooms; they encourage residents of all ages to enjoy fresh air, natural beauty and being with others, whether playing basketball, swimming, walking or having a picnic.

The Recreation and Open Space Plan Element of the 2020 Master Plan lays out the City's existing resources and vision for next 10 years. The Recreation and Open Space Inventory (ROSI) includes information on existing parks and recreation spaces in the City and is at the heart of the element.

Open space areas, parks and recreation facilities are an important component in maintaining and improving the quality of life for city residents. In a densely developed and populated community like Plainfield, providing recreational facilities and amenities is not always easy, even if the benefits are fully understood. There's limited availability of land that can be used for open space and it's expensive. And there's also the need for on-going maintenance of existing and future facilities.

The city government is also not the sole owner and manager of open space in Plainfield. Along with the City of Plainfield, Union County, the Plainfield Board of Education (BOE) and the City Recreation Division have responsibility for maintaining public spaces and providing recreational activities. Public health, safety and welfare should be paramount no matter which agency is in charge. This can be improved through better coordination in the matters

of land use and recreation, ensuring the necessary balance between the built and the open space environment, within an urbanized community like Plainfield.

Residents attending community meetings held in each district shared their concerns about parks and other recreation areas within the city. Some voiced the belief that Cedar Brook Park received more county investment than Green Brook Park. Some felt playground equipment was old, and that some playgrounds appeared forgotten. Several felt that the deer population was getting out of hand. Others wanted more benches and trash cans in public spaces. Some residents expressed the desire for more recreation programs for children and teens and for those over 55. It was clear that residents understood the value of well-kept outdoor space and in the end, wanted to see what already existed in the city to be maintained and improved upon.

MUNICIPAL LAND USE LAW

"A recreation and open space plan element showing a comprehensive system of areas and public sites for recreation"

ACHIEVING OPTIMAL OPEN SPACE

It is important to survey all available and potential open space so that there is an understanding of options, including what can be achieved through negotiation, collaboration and knowledge of how open spaces are now used and how that use could be expanded or improved.

This section documents the open space, parks and recreational facilities in the City. There are also open spaces that are not City-owned, so are not documented here. Although these are private open spaces, they nonetheless contribute in making the City of Plainfield sustainable.

Recreation and Open Space Inventory (ROSI)

The Recreation and Open Space Inventory (ROSI) is a list of set-aside lands under the State's Green Acres program (filed with New Jersey Department of Environmental Protection). Lands that are on this register cannot be disposed, developed or converted to anything other than recreation and conservation purposes. If for any reason the city determines that ROSI land is required to be utilized for a "public good," the municipality must petition the State of New Jersey to remove such land from ROSI designation. The following tables provide the list of lands held for recreation and conservation purposes.

TABLE 1: RECREATION AND OPEN SPACE INVENTORY (ROSI)

Map Key	Municipal Location per Tax Records	Name of Park / Facility	Block No.	Lot No.	Total Lot Acres
1	801 Sleepy Hollow Lane	Neighborhood Park/Open Space	7	13	0.14
2	1130-68 Woodland Avenue	Hub Stein Athletic Field Expansion	12	22	2.36
3	63-73 Woodland Avenue	Woodland Avenue Plaza	20	1	0.1
4	1459-63 Vivian Street	Sloane Blvd. Playground	21	3.01	0.253
5	508-52 West Third Street	Hannah Atkins Playground	107	19.01	4.103
6	647-653 West Third Street	James Sherman Park	109	16.01	0.393
7	226-30 Mulhenberg Place	Neighborhood Park/Open Space	110	6	0.163
8	671-75 South Second Street	Neighborhood Park/Open Space	111	1	0.134
9	600-38 South Second Street	South Second Street Tot Lot	112	1	0.993
10	701 West Third Street	Spooner/West Third St. Playground	114	15	0.078
11	209-15 Prescott Place/ 929-35 South Second Street	South Second Street Tot Lot	119	1&2	0.156 x2= 0.313
12	966-80 West Fourth Street	Mathewson Playground	123	20	0.889
13	222-24 Rushmore Avenue	Neighborhood Park/Open Space	139	8	0.05
14	1401-1503 West Third Street	Rushmore Avenue Playground	144	7.01	6.51
15	1833-45 Second Street	Second Street Park	207	48	0.615
16	1804-46 Second Street/ R96-102 Jefferson Avenue	Second Street Park	207	49.01	6.164
17	93-129 Brokaw Boulevard	Green Brook	208	1.01	1.04
18	1634-64 Myrtle Avenue	Rock Avenue Baseball Complex	208	12	8.31
19	77-97 Everett Place	Green Brook	213	1	1.84
20	94-100 Brokaw Boulevard/ 1601-21 Florence Street	Green Brook	213	28	0.533
21	101-37 Louise Street	Green Brook	214	1	1.932
23	R1406 Myrtle Avenue	Green Brook	215	4	0.893
24	70-72 DeKalb Avenue/ R73 DeKalb Avenue/ 80-94 Everett Place/ 96 Everett Place	Green Brook	215	16.01	6.434
25	33-37 Geraud Avenue	Green Brook	230	1.01	0.387
26	638 Brookside Place/	Green Brook	230	11.01	0.148
27	564-608 West Front Street	Green Brook/Drake House	234	15	3.12
28	29 Washington Avenue	Green Brook	240	1	0.061
29	R500-506 West Front Street	Green Brook	240	7	0.016
30	40 Sycamore Avenue	Green Brook	240	18	0.442
31	21 Grove Street	Green Brook	241	1.01	0.112



Hanna Atkins Playground



James Sherman Park



South Second Street - Neighborhood Park

Map Key	Municipal Location per Tax Records	Name of Park / Facility	Block No.	Lot No.	Total Lot Acres
32	301-23 West Second Street	Madison Avenue Playground	244	1	0.931
33	R-202-214 West Front Street	Green Brook Pedestrian Pathway	249	1	0.018
33	R18-24 Madison Avenue	Green Brook Pedestrian Pathway	249	9	1.253
34	R116-114 West Front Street	Green Brook Pedestrian Pathway	250	7.06	1.03
35	101-05 Park Avenue	Downtown Bank Plaza Open Space	316	1	0.46
36	R127-95 East Front Street	Green Brook Pedestrian Pathway	317	19	2.19
37	R201-33 East Front Street	Green Brook Pedestrian Pathway	318	14	2.7
38	70 Roosevelt Avenue	Green Brook	319	26.01	0.345
39	300-54 Netherwood Avenue	Seidler Field	403	1	4.838
40	1322-50 & 1360-64 East Third Street	Milton Campbell Field	421	1	34
41	79 Academy Avenue/ 80-88 Andover Avenue/	Green Brook	435	1.01	2.147
42	69-99 Berkeley Terrace	Green Brook	435	15	1.517
43	37-67 Berkeley Terrace 1308-14 Milton Avenue	Berkeley Terrace	436	1.01	1.626
44	30-62 Berkeley Terrace	Berkeley Terrace	437	26	1.192
45	61-65 Birch Avenue	Green Brook	439	1	0.355
46	66-76 Academy Avenue	Green Brook	439	30	0.263
47	1425-63 Sumner Avenue	Green Brook	440	12.02	0.826
48	615 Huntington Avenue	Open Space/Sewer Easement	517	4	0.103
49	419-31 East Sixth Street	Bryant Playground	609	6	0.909
50	415-27 Madison Avenue	Maple Crest Playground	703	2	0.381
51	113-31 West Eighth Street	Library Park	718	1	2.537
52	168-74 Stelle Avenue	Cedar Brook Park	721	2	0.229
53	1081 Rose Street	Union County Cedar Brook Park Expansion	722	13	0.007
54	105-07 Randolph Road	Arlington Heights Redevelopment Plan	726	2	0.166
55	149-165 Randolph Road	Cedar Brook Park	732	2	1.59
56	1327-1453 Cambridge Avenue	Cushing Road Retention Basin	921	13	16.18
57	1391-1445 Cambridge Avenue	Cushing Road Retention Basin	922	10	15.16

Source: City of Plainfield, ROSI 2017

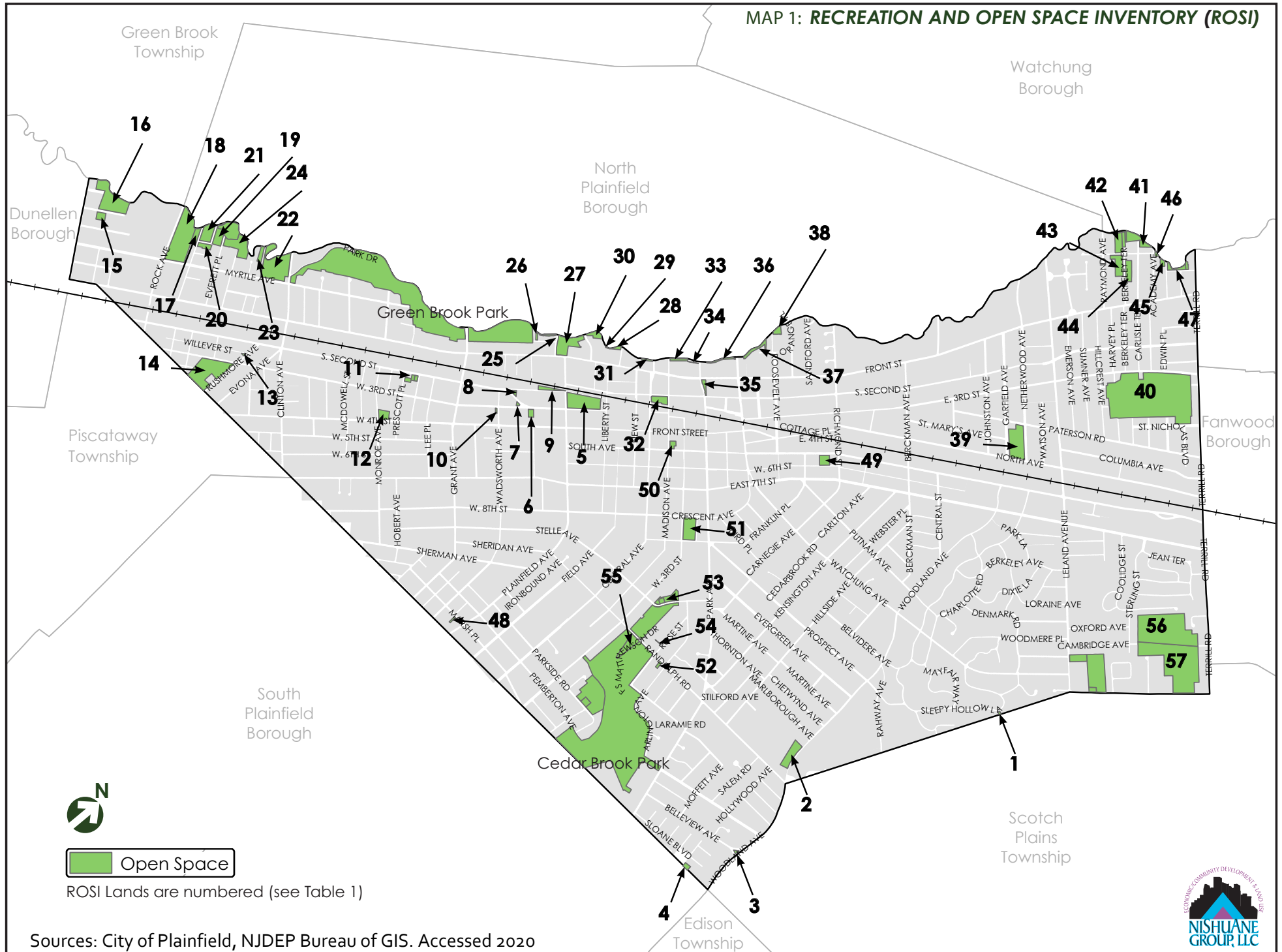


Cedar Brook Park



Green Brook Park

MAP 1: RECREATION AND OPEN SPACE INVENTORY (ROSI)



Recreation and Open Spaces as per Census Tracts in the City of Plainfield

Based on the data in Table 2, the city does not have adequate open space in census tracts 389, 390, 392, 393, 395 and 396. Census tract 397 meets the standard only if Cedar Brook Park (a county park) is included in the acreage total. Census tracts 388, 391 and 394 have adequate open space.



Green Brook Park

MAP 2: RECREATION AND OPEN SPACES AS PER CENSUS TRACTS (ROSI)

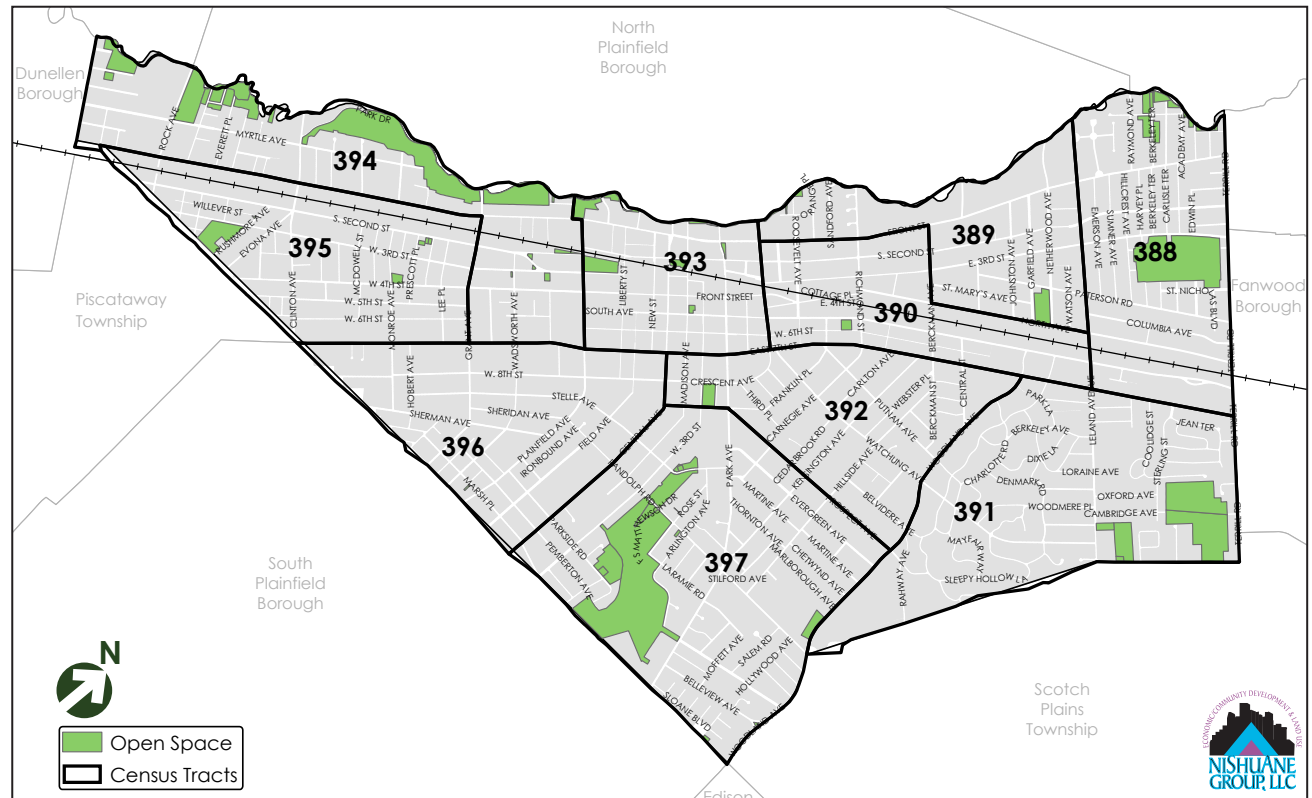


TABLE 2: RECREATION AND OPEN SPACES AS PER CENSUS TRACTS (ROSI)

Census Tract	2020 Population Estimate	ROSI Land	Acreage Standard	Status	Notes
388	4748	41.56	29.36 - 46.98	Adequate	
389	5487	5.84	32.60 - 52.61	Very Low	
390	4231	0.909	22.78 - 36.64	Very Low	
391	3416	29.87	21.26 - 34.02	Adequate	
392	5245	2.54	31.89 - 51.03	Very Low	
393	6466	10.21	36.35 - 58.17	Low	
394	5479	80.04	30.36 - 48.57	Ample	Green Brook Park
395	6924	7.91	34.06 - 54.50	Low	
396	4299	0.103	26.13 - 41.82	Very Low	
397	5382	97.13	33.94 - 54.31	Ample	Cedar Brook Park

Source: City of Plainfield, ROSI 2017



Shakespeare Garden, Cedar Brook Park

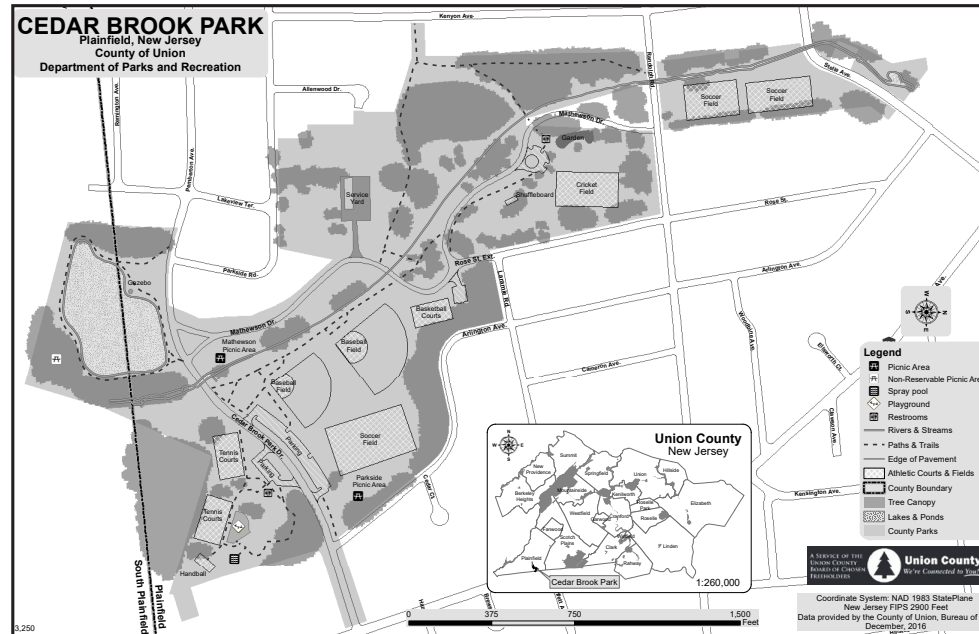
County Parks

Union County owned/operated parks and facilities include Cedar Brook Park, Green Brook Park and open space along Cushing Road (formerly Peterson Farm, the last working farm in Union County). Both the parks are listed as 'Designated Historic Landscape' on the state and national registers for historic places. Union County purchased six acres of land along Cushing Road in 2004 through the Union County Open Space Program.

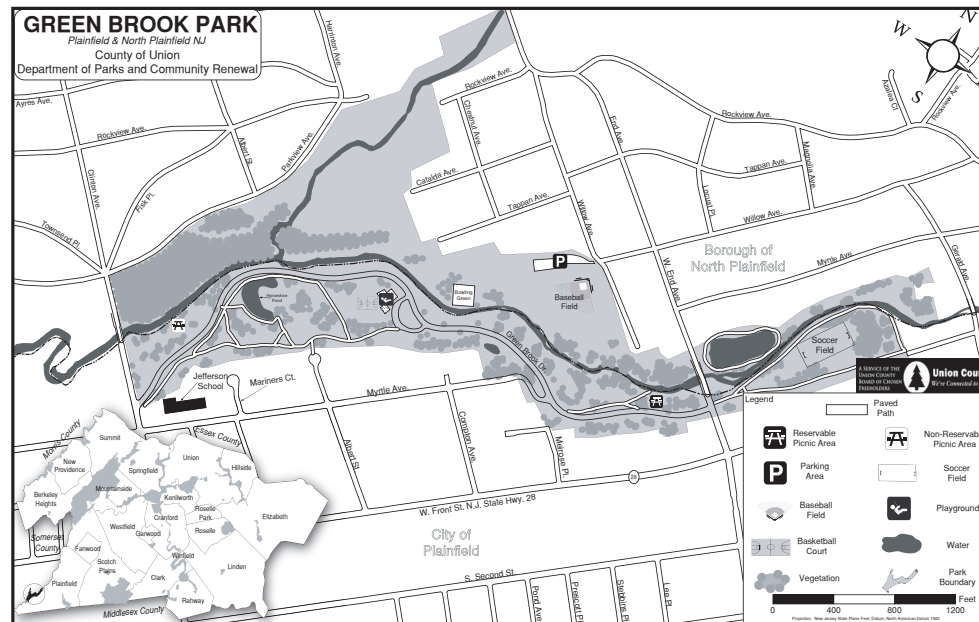
Cedar Brook Park spans the City of Plainfield and South Plainfield and is located along Park Drive in Plainfield. It was designed by the Olmsted Brothers and built from 1924 to 1930. Facilities in the park include baseball, basketball, cricket, fishing, fitness trail, handball, picnic area (reservable), playground, restrooms, soccer, softball, spray pool and tennis courts.

Cedar Brook Park also includes the Shakespeare Garden and hosts annual events such as *Music in the Park* (sponsored by Union County) and Plainfield's annual 4th of July Fireworks display.

Green Brook Park, located at northern part of the City was started in 1933 during the Great Depression and built through the auspices of several New Deal agencies. It extends through the City of Plainfield and North Plainfield. Facilities available include baseball, basketball, fishing, picnic area (non-reservable), playground and soccer.



Cedar Brook Park



Green Brook Park

Source: Union County, Department of Parks and Recreation

City Parks and Playgrounds

- Bryant Playground, Located at 419 - 31 E. 6th Street - Two basketball courts, swing set, playground equipment, open space, benches, bathrooms and water fountain.
- Hannah Atkins Playground, Located at 508 - 52 W. 3rd Street - Two swimming pools, two basketball courts, tennis courts, picnic area, swing set, playground equipment, open space, community room, utility room, benches, gazebo, water fountain and restroom.
- Mathewson Playground, Located at 966 - 80 W. 4th Street - Basketball court, baseball field, picnic area, swing set, playground equipment, open space, benches, utility box (high volume electrical outlet), water fountain and restroom.
- James Sherman Park, Located at 200 W. 3rd Street - Benches, open space and play equipment.
- Joe Black Jr. Baseball Field, Located at 1634 - 64 Myrtle Avenue - Two baseball fields, playground equipment, bathrooms, concession stand, water fountain, and bleachers.
- Madison Avenue Playground, Located at 301 - 23 W. 2nd Street - Basketball court, picnic area, swing set, playground equipment, playground equipment, utility box (high volume electrical outlet), pavilion, parking lot, benches, skate park, bathrooms and water fountain.
- Maple Crest Basketball Courts, Located at 300 W. 5th St. & Madison Avenue - Basketball courts, playground equipment and water fountain.
- Milton Campbell Field, Located at 1322 — 50 E. 3rd Street 1360— 64 E. 3rd Street - Softball field, baseball field, soccer field, basketball court, tennis courts, picnic area, swing set, playground equipment, open space, utility room, parking lot, two bleachers, benches, water fountain, restroom, and ADA accessible playground.
- Rushmore Playground, Located at 1401 — 1503 W. 3rd Street - Two swimming pools, soccer field, two basketball courts, picnic area, swing set, playground equipment, open space, utility room, parking lot, three bleachers, gazebo, concession stand, water fountain and restroom.
- Seidler Field, Located at 300— 54 Netherwood Avenue - The facilities include two swimming pools, two basketball courts, picnic area, swing set, playground equipment, open space, artificial turf field, seven bleachers, benches, pavilion, utility box (high volume electrical outlet), announcer's booth, concession stand, water fountain and restroom.



Milton Campbell Field



Madison Avenue Playground

Board of Education

School facilities and buildings often have adjacent properties that have recreational facilities. Designation of the lot containing the recreational facilities as open space would not limit the BOE (Board of Education) in its ability for future expansion of a school. These spaces are Hub Stein Field, Hubbard School Field and Netherwood Tennis Club.

Privately Owned Land along Green Brook Park (potential open spaces)

There are non-City owned lands within and adjacent to City-owned parks such as Milton Campbell Field, Seidler Field and Rushmore Avenue Park that minimize full use of City-owned parks. The City should look into collaborating with the land owners to maximize the use and access to the parks.

Green Brook Multi-Use Trail (Albert McWilliams Memorial Trail)

The first part of the Green brook Multi-Use Trail was completed in May 2019. The 7.2-mile-long trail for walking and biking spans Plainfield and North Plainfield, connecting the greater regional greenway and park system. The trail extends through Union County Green Brook Park and provides infrastructure for walking and biking to encourage use of alternate modes of transport.

Cushing Road Detention Basin

The Cushing Road Detention Basin is located in the southeastern section of the city and is bounded by Terrill Road to the east and Cushing Road to the south. It stretches across three municipalities – Plainfield, Scotch Plains and Fanwood. The basin is located at the headwaters of Robinson's Branch of the Rahway River. The 29.73-acre basin site supports a diverse population of wetland and upland flora and fauna.

RELATIONSHIP OF OPEN SPACE WITH LAND USE AND ZONING

Lands, except those under ROSI, are zoned for physical development as the current Zoning Ordinance is not yet updated. The Zoning Ordinance update that complies with this 2020 Master Plan should include standards and provisions to maintain and enhance open spaces and parks that are not under ROSI.



Green Brook Multi-Use Trail

RECOMMENDATIONS

Add to ROSI

- Place existing city-owned vacant land that is suitable for open space on the ROSI, concentrating on lands adjacent to Green Brook, in designated flood areas, that are needed for extending the Green Brook Trail, and near existing recreational lands and undeveloped open space.
- Discuss the potential of other public and private owners of placing vacant open space on the Recreation and Open Space Inventory (ROSI) as well as open space easements wherever applicable.

Encourage City Initiatives

- Collaborate with divisions of Parks and Recreation, Public Works, stakeholders and residents to create a program to maintain and keep the existing parks clean.
- Consider working with residents to create Friends organizations for the two parks that would be dedicated to looking after the parks, with seasonal clean-ups, fundraisers, etc.
- Work with the Board of Education and Recreation Department to use available space creatively to expand recreational facilities throughout the City.

Improve, Enhance Existing Parks

- Conduct a “Parks Master Plan” to get a comprehensive assessment of the condition of the City’s parks and recreational facilities, and plan for their update, maintenance and expansion where needed/appropriate.
- Upgrade and expand parks and open spaces through available capital programs and state grants.
- Include more walking and biking trails like Green Brook Multi-Use Trail, safer for all age groups and accessible from all parts of the City.
- Consider expanding Green Brook Multi-Use Trail.
- Develop and improve the lands that are under ROSI, but are still vacant or underutilized.

Meet Resident Needs

- Include recreational activities that provide places to exercise. For example, open gym, running tracks etc.
 - Create community gardens, dog parks, etc. to increase social interaction as well as to take a step further towards sustainability.
1. Hold workshops on planting/gardening, provided by Union County/Rutgers extension service.

Use Redevelopment, Zoning to Expand Open Space

- Create a new “Open Space Zone” category that will apply only to publicly owned lands, with the exception of the property surrounded by Cedar Brook Park, which is owned by the Middlesex Water Company as a groundwater recharge area. ROSI lands that serve as municipal parks will need to be looked at on a site by site basis for designation under this zone category.
 - Include small open spaces in neighborhoods through Redevelopment Plans and Zoning Ordinance.
1. Seek redevelopment fund and other appropriate funds to maintain and expand open spaces and recreational activities in the City.

IMPLEMENTATION

The City of Plainfield should continue to identify and apply for various municipal, state and federal funding options in order to preserve and expand recreational and open space in the City. The City should also consider other preservation tools such as tax foreclosures, easement rights, land donation, zoning and vacant land acquisition. The City should plan for short term and long-term action plans to implement the recommendations in this element.

Proposed Recreation and Open Space Improvements can be placed into short and long-term projects:

Short term

- Amend the Zoning Ordinance to add standards for maintaining and enhancing existing open spaces.
- Begin work on the proposed North Avenue Plaza project, including street improvements and a pedestrian mall, by closing off Gavett Place and possibly a part of North Avenue to vehicular traffic to create a public space.
- Direct the recreation division to begin collecting data relating to age groups of residents who utilize the parks on a regular basis. These records can be vital when parkland is purchased, and infrastructure improved in order to provide services and facilities that are consistent with residents' demands and overall city demographics.

Long term

- Add to ROSI land to meet minimum recreational and open space land requirements per census tract set forth in the National Recreation Standards (NRS) and the New Jersey Recreation and Park Association (NJRPA).
- Create 5-year Parks Improvement Capital Plan which include an assessment of City-owned parks.
- Acquire vacant and underutilized lands to develop for recreation and open space purposes.
- Expand Green Brook Multi-Use Trail which will require 10-year construction schedule.

For more information see:

Conservation Element

- Wetlands
- Trees and woodlands
- Floodplains

Land Use Element

- Proposed Zoning

Community Facilities Element

- Board of Education

Community Input

Sampling of comments from Community Workshops

(See Appendix A for all results.)

- Park maintenance, re-plant trees.
- Maintain and evaluate street trees.
- Need a dog park.
- Need community gardens.
- Need park security.
- Food truck park or other public space on Park Ave. across from hospital.
- I go to other communities to walk in safe parks.
- Need walking paths - need one on Woodland Avenue near Muhlenberg Hospital
- Need more community events at Green Brook Park.
- Bike shortcut to get on towpath in Bound Brook.
- Old, outdated playground equipment. Need work-out stations.
- Matthewson Park – no benches, 1 trash can, outdated falling apart sign, no lights.
- Cedar Brook and Green Brook need to be maintained equally.

From the Master Plan Survey

(See Appendix A for all results.)

Among participants in the survey on how often they go to a Plainfield park, respondents said:

- | | |
|-----|--------------------------------|
| 65% | Rarely (once a month or less). |
| 11% | 2-3 times a week. |

- | | |
|-----|------------------------|
| 11% | 2-3 times a month. |
| 8% | Daily or almost daily. |
| 4% | 4-5 times a week. |

When asked which parks were used, the top four were:

- | | |
|-----|------------------------|
| 70% | Cedar Brook Park. |
| 30% | Green Brook Park. |
| 24% | Milton Campbell Field. |
| 14% | Library Park. |

When asked if they rarely visited a park, why that was, 44% said the parks were not in good condition or feel unsafe and 27% said the parks did not have the facilities they want.

Comments about how and why participants use the parks (or don't) include:

- I don't feel safe.
- Would like to see fitness stations in Cedar Brook Park.
- Walk my dog.
- I take my grandchildren and we typically use the playground/swings, picnic and relax.
- Concerts or family functions.
- Green brook Park needs to be cleaned up.
- To view nature, trees, birds, light, plants, flowing water.

CONSERVATION PLAN ELEMENT

“Conservation is the application of common sense to the common problems
for the common good”
- Gifford Pinchot

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How We Get There

Preserve Natural Resources

- Create an inventory of natural resources in the City to keep track of resources and conserve them.
- Create a plan to preserve environmentally sensitive areas (those areas where the natural environment can easily be harmed).
- Maintain quality of water resources and make sure they are adequate to supply the entire city.
- Preserve and maintain environmentally critical sites, such as Cushing Road Detention Basin and other wetlands.
- Preserve and enhance existing open space, woodland and natural vegetation.

Encourage environmentally sustainable initiatives

- Promote sustainable developments and redevelopments to reduce effects on the environment.
- Create and/or preserve greenway corridors along streams and water bodies in the City.
- Restore ecology by preserving and improving existing flora, fauna and endangered species.

Curb climate change effects and incorporate resiliency

- Make organized efforts to reduce energy use, Green House Gas (GHG) emissions and increase energy efficiency in mobility, sustainable buildings and public spaces.
- Include resiliency plan for existing and future development especially for the floodplain areas.

Strategic Vision

Armed with the necessary information to protect the City of Plainfield's natural resources and environments, city government, residents and businesses can work together to develop and implement plans to preserve the good that exists today and to bring about change that will reduce the city's Greenhouse Gas emissions. In this way Plainfield can curb the consequences of climate change as well as reduce other harmful effects to the natural environment.



Source: www.freepik.com

INTRODUCTION

This is the City of Plainfield's first conservation plan; however, it incorporates conservation concepts from other elements of previous master plans. The 2009 master plan indicated the need for the protection of environmental resources by recommending the establishment of an Environmental Commission and suggesting new ordinances for tree preservation and protection of environmentally sensitive areas. This plan also provides the underlying basis for the development of related city ordinances advocating protection and preservation of the city's natural resources and open spaces.

Although the idea of conservation was not addressed directly in community and public information workshops held throughout the city in late 2019, participants' comments regarding open space, sustainability and recycling clearly reflect Plainfield residents' concerns about protecting their environment through conservation.



Green Brook

NATURAL RESOURCES IN THE CITY

Geology, Soils and Topography

Plainfield is located in the Piedmont Plateau geologic region between the Highland region to the northwest and Coastal Plains region to the southeast. The city is relatively flat with topography generally ranging from 60 to 140 feet above sea level and peaks around 200 feet at the Scotch Plains border. Consistent with a relatively flat topography, the city falls within a level slope category of less than 2 percent. Typically, only slopes in excess of 16% pose a constraint to development.

Soils in the city have largely been distributed through years of development. The various base soils types indicated in soil surveys

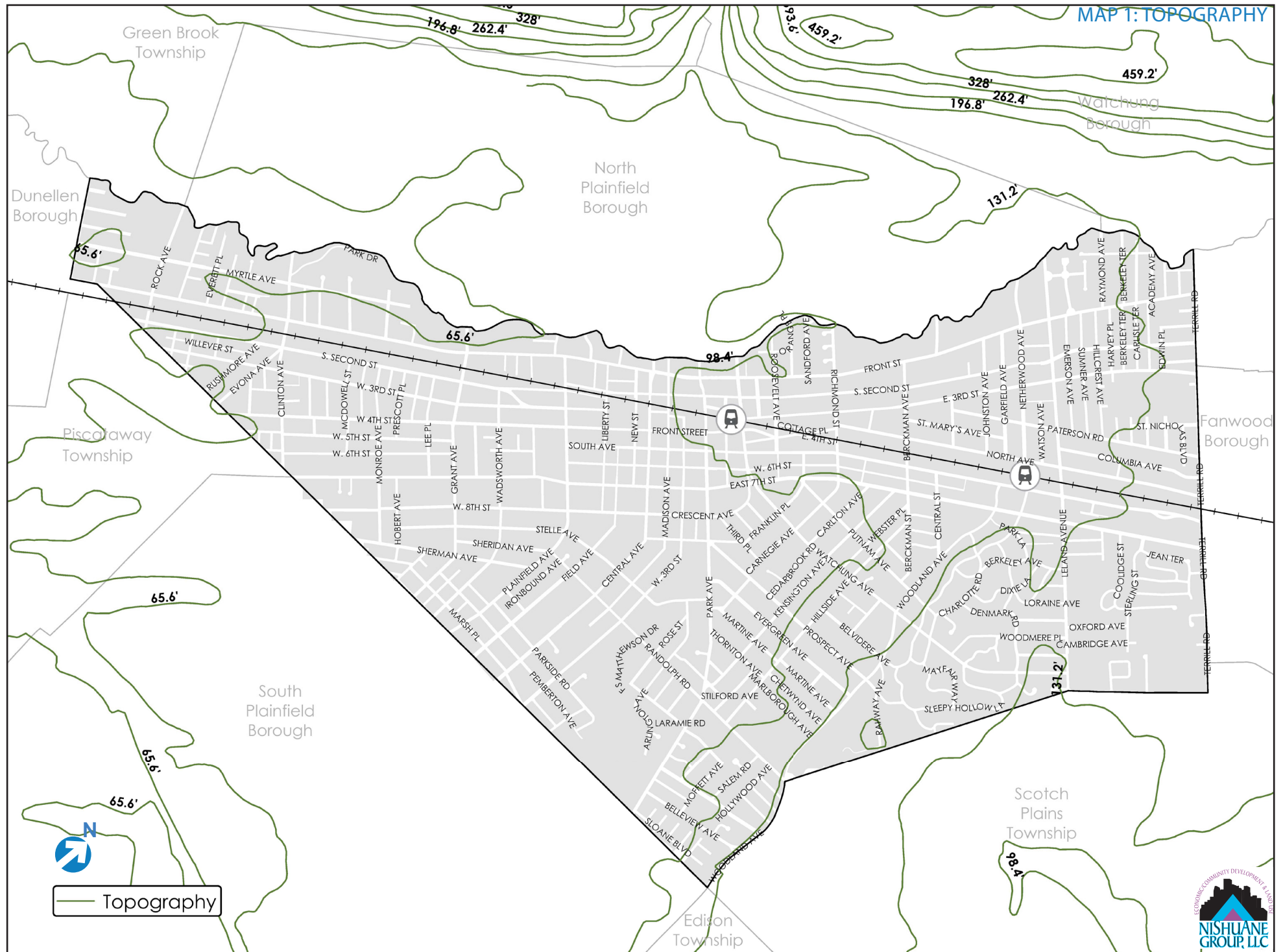
do not pose a constraint to development as conducted in accordance with flood regulations. City of Plainfield has different soil conditions as according to the New Jersey Department of Environmental Protection report (2009) prepared in comparison with the U.S. Geological Survey. Most of Plainfield's land has Lower Stream-Terrace Deposits (fine to medium sand, silt, pebbly sand, silty clay, minor coarse sand; reddish brown, grey in color), followed by Alluvium soil (sand, silt, clay, pebble gravel; dark brown, brown, reddish brown, yellowish-brown, grey, black in color), and some parts have Rahway Till (silty sand to clayey sandy silt; reddish-brown, yellowish-brown in color), Till of the Terminal Moraine, Till Colluvium, and Eolian Deposits (very fine to fine sand, silty fine sand, very fine sandy silt; reddish-brown, yellowish-brown, very pale brown.)

The city has regulations for soil conservation in the Land Use Ordinance, but only for lots 5,000 Square feet or more. The combination of acceptable soils and flat topography make Plainfield an ideal location for development.

The City has also enacted ordinances to regulate development on steep slopes, sustainable building and green infrastructure and for the protection of trees.

MUNICIPAL LAND USE LAW

"A conservation plan element providing for the preservation, conservation, and utilization of natural resources, including, to the extent appropriate, energy, open space, water supply, forests, soil, marshes, wetlands, harbors, rivers and other waters, fisheries, endangered or threatened species wildlife and other resources, and which systemically analyzes the impact of each other component and element of the master plan on the present and future preservation, conservation and utilization of those resources."



Brownfield/Contaminated Sites

Based on the United States Environmental Protection Agency, a brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

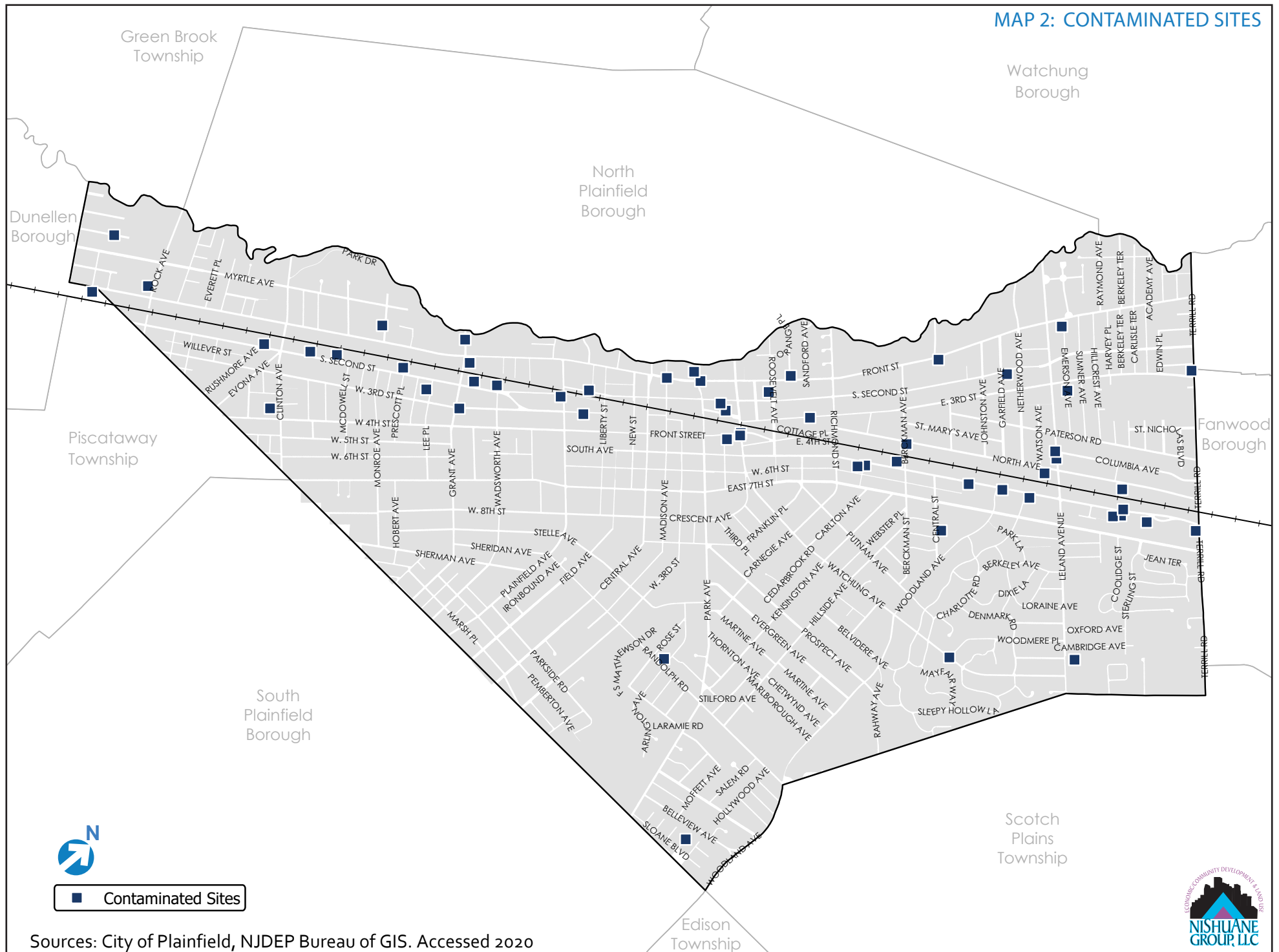
Plainfield has a number of brownfield sites, most of which are located in close proximity to the train tracks. These are for the most part, former industrial sites, which have been contaminated from years of industrial use. Map 2 shows the locations of brownfield sites and Table 1 provides their addresses and status. The City should consider remediating and developing these sites to fulfil market demand and create sustainable development, or preserve them in a natural state after clean up, based on the appropriate use. The City could encourage owners to develop their brownfield and contaminated sites or remediate them through the Brownfield Development Area (BDA) initiative, which is managed by the NJDEP (New Jersey Department of Environmental Protection.)

The BDA works with selected communities affected by multiple brownfields properties to design and implement remediation and re-use plans so that work is done in a coordinated manner. The city received \$200,000 in grant funding from the EPA (Environmental Protection Agency) for clean-up of brownfields in 2009.

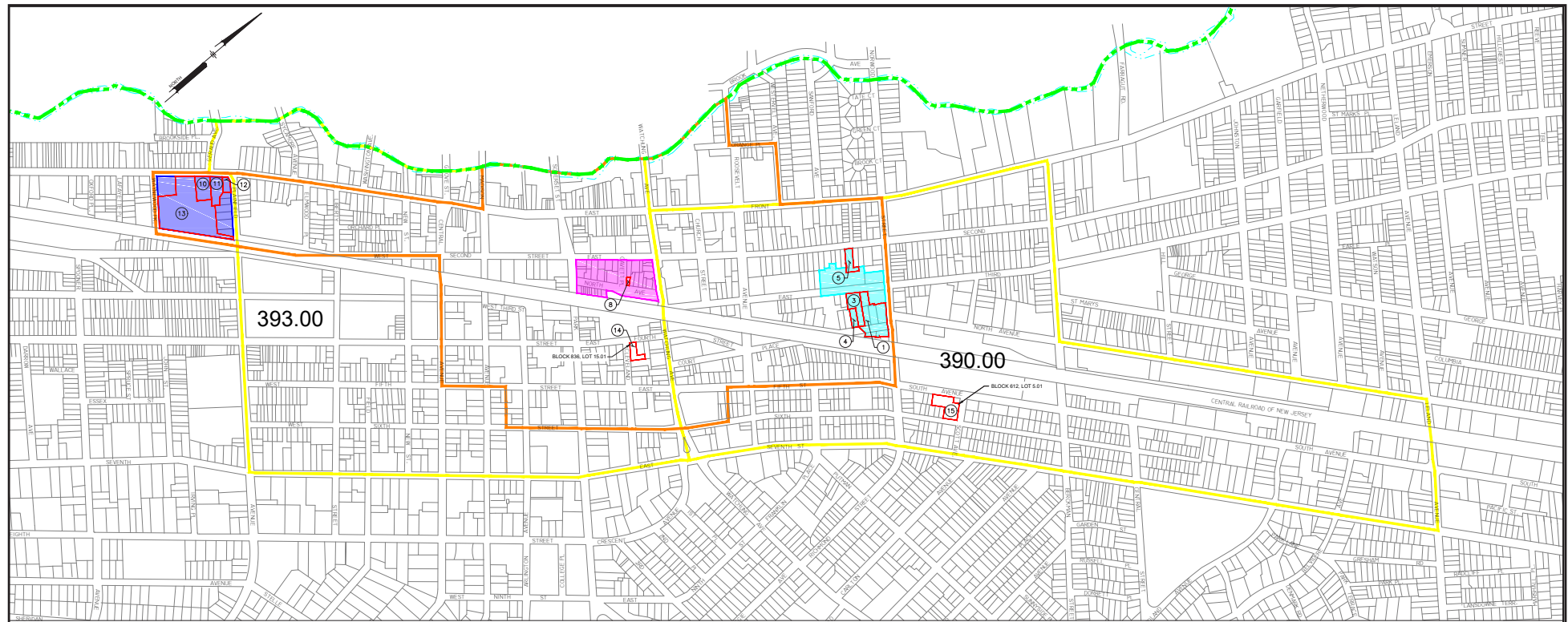
TABLE 1: CONTAMINATED SITES

NAME	ADDRESS	STATUS
NATIONAL STARCH & CHEMICAL CORP	1701 1761 W FRONT ST	Active
WOODLAND ELEMENRAY SCHOOL	730 CENTRAL ST	Active
ELMWOOD GARDENS	532 W 2ND ST	Active
CLINTON SCHOOL	1302 W 4TH ST & CLINTON AVE	Active - RAP
BP SERVICE STATION #20516	504 TERRILL RD	Active
SOUTH SECOND ST PLAINFIELD REALITY PROPERTY	1000 S 2ND ST	Active - RAP
METRO METAL RECYCLING CORP	1300 SOUTH 2ND ST	Active
EMERSON SCHOOL	305 EMERSON AVE	Active - RAP
MOBIL SERVICE 12AFP	1314-26 SOUTH AVE	Active - RAP
DELTA	1100 SOUTH AVE	Active
D&R RADIATORS UNLIMITED	600 SOUTH AVE	Active - RAP
PLAINFIELD SHOPPING CENTER	229 GRANT AVE	Active
ELIZABETHTOWN WC GREEN BROOK PARK WELL	PARK & WEST END AVES	Active
WEST END GARDENS	543 WEST 3RD ST	Active - RAP
PLAINFIELD GAS WORKS FORMER	201-249 E 4TH ST & 317-347 WATCHUNG AVE	Active
912 SOUTH AVENUE	912 SOUTH AVE	Active
HALLER TESTING LABORATORIES	336 LELAND AVE	Active
TERRILL ROAD SHELL	190-98 TERRILL RD	Active - RAP
ROYAL APEX MANUFACTURING CO INC	639 SOUTH AVE	Active - RAP
NETHERWOOD AUTO REPAIR CENTER	1000 SOUTH AVE	Active
ELIZABETHTOWN WC WATCHUNG AVENUE WELL	WATCHUNG AVE	Active
THOMAS D COLAVITO INC	1128 NORTH AVE	Active
INPLANT SYSTEMS CO INC	324 330 LELAND AVE	Active
AMERICAN IMPRESSIONS	400 WATCHUNG AVE	Active - Post Rem
29 99 TENNIS SHOE WAREHOUSE	403 3RD ST E	Active
STEVENS GLOBAL	745 755 WEST FRONT ST	Active
B&T CORNER SERVICE INC	409 CLEVELAND AVE	Active
CENTURY SPORTS	403 BERCKMAN ST	Active - RAP
FIRST UNION NATIONAL BANK	102 E FRONT ST	Active - RAP
GUY DUNN AUTO REPAIR SHOP	1006 EAST 2ND ST	Active
PLAINFIELD MOVING CENTER	241 E 2ND ST	Active
PARK MADISON SITE	WEST FRONT ST & MADISON AVE	Active - RAP
GAVETT PLACE & NORTH AVENUE	165 169 NORTH AVE	Active
738 758 SOUTH 2ND STREET REDEVELOPMENT	738 758 S 2ND ST	Active
200 222 PLAINFIELD AVENUE	200 222 PLAINFIELD AVE	Active - RAP
662 736 SOUTH SECOND ST	662 736 S 2ND ST	Active - RAP
1417 MAPLE AVENUE	1417 MAPLE AVE	Active
136 140 EAST 2ND STREET	136 140 E 2ND ST	Active
PLAINFIELD SENIOR CITIZEN COMPLEX	342 406 E FRONT ST	Active - RAP
208 222 LEE PLACE	208 222 LEE PL	Active
ALJUMA PLAZA	1304 1312 SOUTH AVE	Active
TEPPERS DEPARTMENT STORE	110 140 W FRONT ST	Active
SOUTH AVENUE CAR WASH INC	1327 33 SOUTH AVE	Active
25 27 COMPTON AVENUE	25 27 COMPTON AVE	Active
TAI PLAINFIELD INC FORMER	1700 WEST FRONT ST	Active
750 FRONT STREET	750 FRONT ST	Active
118 EMERSON AVENUE	118 EMERSON AVE	Active
DISCO ALUMINUM	520 532 SOUTH AVE	Active
COLUMBIA TRANSMISSION COMMUNICATION	1202 1212 S 2ND ST	Active - Post Rem
1ST STREET GROUND WATER CONTAMINATION	1ST ST	Active
951 959 LELAND AVENUE	951 959 LELAND AVE	Active
1092 1098 ARLINGTON AVENUE	1092 1098 ARLINGTON AVE	Active
ENDURING FREEDOM PROPERTY	950 S 2ND ST	Active - RAP
57 RESERVOIR AVENUE LLC	1358 62 SOUTH AVE	Active
NEW JERSEY AMERICAN WATER	1292 1330 NORTH AVE	Active

MAP 2: CONTAMINATED SITES



Brownfield Development Area (BDA)



Source: City of Plainfield, Pennoni Associates Inc., 2019

LEGEND

- EAST THIRD STREET AND RICHMOND STREET REDEVELOPMENT AREA
- NORTH AVENUE (HISTORIC DISTRICT) REDEVELOPMENT AREA
- MARINO'S TRACT REDEVELOPMENT AREA
- BROWNFIELD DEVELOPMENT AREA
- DESIGNATED BLOCK/LOT FOR DEVELOPMENT
- PLAINFIELD OPPORTUNITY ZONE BOUNDARY
- # BDA REFERENCE NUMBER
- 390.00 PLAINFIELD OPPORTUNITY ZONE NUMBER

Source: City of Plainfield, Pennoni Associates Inc., 2019

Brownfield Development Area

Ref #	Site	Owner	Block/Lot	Acreage	Comments
East Third Street and Rickmond Street Redevelopment Area					
1	Plainfield Municipal Utilities Authority	PMUA	Block 305, Lots 1 & 2.01; Block 306, Lots 20.01, 24.01, 26, & 27	1.25	PMUA facility with an office complex and equipment yard
3	Treecycle	SRV Plainfield LLC.	Block 306, Lot 19	0.97	Recycling/Mulching operation consisting of an unpaved lot with storage containers and an equipment yard
4	Contour Metal Shaping	SRV Plainfield LLC.	Block 306, Lot 28	0.23	Machine Shop
5	Carls Towing	Carl Charles	Block 307, Lot 20	0.99	Auto Repair and Towing
North Avenue (Historic District) Redevelopment Area					
8	213 to 219 Gavett Place	City of Plainfield	Block 313, Lot 14	0.04	Vacant grass-covered lot
Marino's Tract Redevelopment Area					
10	Whooptyland Used Cars	Giant Realty, LLC.	Block 233, Lot 2	0.63	Used Car Sales Operation
11	KST Auto Sales Corporation	148 West Fordham Reality Corp.	Block 233, Lot 3	0.68	Used Car Sales Operation
12	T/A Valentino Motors	SB 2012, LLC.	Block 233, Lot 4	0.21	Used Car Sales Operation
13	115 to 133 Waynewood Park	Giant Realty, LLC.	Block 233, Lot 12	4.05	Industrial/commercial property containing associated auto repair buildings and operations
14	B & T Corner service (4th & Cleveland)	City of Plainfield	Block 836, Lot 15.01	0.29	Former Retail Petroleum Station
15	Disco Aluminum	City of Plainfield	Block 612, Lot 5.01	0.66	Industrial/Commercial

Source: City of Plainfield, Pennoni Associates Inc., 2019

Trees and Woodlands

Plainfield is designated a Tree City USA by the National Arbor Day Foundation because it fulfills a number of foundation-mandated requirements in its commitment to preserving the City's urban tree canopy. Plainfield's Shade Tree Commission regulates the planting and maintenance of the trees on the streets, public places, parks and parkways in the City. The City has a five-year Community Forestry Management Plan (CFMP) running from 2016-2020, approved by the New Jersey State Forest Service (SFS). The CFMP is a guide to achieving a healthy, safe and sustainable community forest.

The most significant wetlands in Plainfield are located along the Green Brook, and in the Cushing Road Retention Basin, which is the head waters of the Robinson Branch of the Rahway River. There are additional wetlands in the south of Plainfield along Cedar Brook. Wetlands provide the City with ecosystem benefits such as filtering runoff that consists of chemicals, pollutants and sediment, acting as a natural flood control and releasing stored flood waters in droughts. Wetlands provide critical habitats for many species of fish and wildlife, including endangered and threatened species. The wetlands of New Jersey are regulated by the NJDEP.

Floodplains

The Plainfield Flood Insurance Rate Map (FIRM) was published in September 2006 by the National Flood Insurance Program which is part of Federal Emergency Management Agency (FEMA). The floodplain mapping

presented in the FIRM delineates the 100-year floodplains. A 100-year floodplain is land that has 1% annual probability of flooding.

The City has two main water bodies, Green Brook and the Cedar Brook, which traverse their namesake park lands. These two parklands, Green Brook Park and Cedar Brook Park, are prone to flooding and the majority of the city's floodplain areas are located within these areas. Although most of the impacts associated with the floodplain area are isolated to the aforementioned parklands, the floodplain does extend to existing developed residential areas.

Areas in a 100-year floodplain should comply with elevated construction requirements included in the Land Use Ordinance/a respective redevelopment plan and as stated in the NJDEP regulations.

Threatened and Endangered Species

The entirety of Plainfield is located within the Northern Piedmont Plains landscape region according to the most recent (2017) version of the New Jersey Landscape Project prepared by the NJDEP, Division of Fish and Wildlife (DFW), and the Endangered and Nongame Species Program (ENSP) for the purpose of providing peer-reviewed, scientifically sound information that documents threatened and endangered species habitat. According to the 2008 New Jersey Wildlife Action Plan, there is one federally threatened, 14 state endangered, 12 state threatened, 71 special concern and regional priority species, and seven additional harvested species of regional priority located within the Northern Piedmont Plains region.

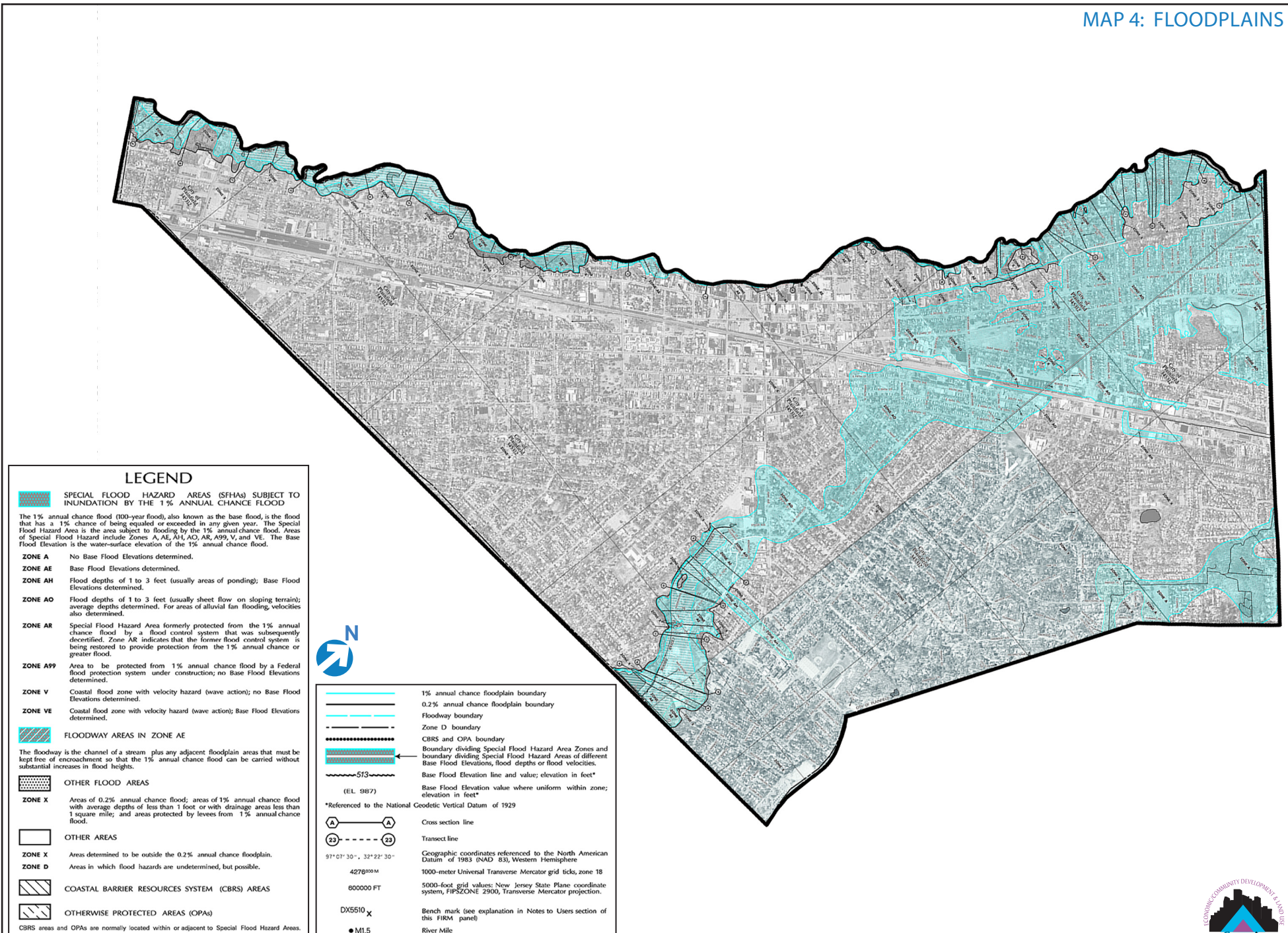


Source: NJDEP - <https://www.njfishandwildlife.com/ensp/landscape/index.htm>

Watchung
Borough



MAP 4: FLOODPLAINS



Source: FEMA Flood Map

RESILIENCY PLAN

The City of Plainfield recognizes that the preservation and maintenance of natural resources is necessary in creating a healthier and sustainable future for the residents of the City. The City also understands that there should be provisions to tackle climate change and resiliency measures that can be implemented to mitigate unavoidable impacts. Resiliency measures to be taken in order to reduce/mitigate climate change and other impacts caused by natural disasters:

- Encourage residents to use water responsibly for activities like agricultural practices and help reduce soil degradation/erosion etc.
- Reduce impervious surfaces by creating grass strips, bioswales along the streets, rain gardens, plantings in surface parking lots, green roofs etc.
- Encourage on-site stormwater management to reduce down-stream in parts.
- Encourage low-impact development, green infrastructure management.
- Reduce Green House Gas emissions. The recommendations for this can be found in the Green Building and Environmental Sustainability element of this Plan.
- Plan for resilient buildings (able to withstand intense disasters, man-made and natural) especially for areas in Plainfield's 100-year flood zone. (see Map 4)

- Continue to balance the need to provide adequate recreation facilities and preserve land.

RECOMMENDATIONS

The city should take the following recommendations into consideration for the conservation of Plainfield's natural assets. The City's Planning Department will be responsible to implement the following recommendations.

- Prepare a Critical Areas Ordinance and design guidelines to protect and preserve environmentally sensitive areas within the authority provided by the Municipal Land Use Law.
- Create a Habitat Conservation policy to protect any vulnerable species and their habitats identified in the Natural Resource Inventory.
- Working with the Shade Tree Commission, the city should continue to preserve existing trees and plant more trees with new developments.
- Take efforts to continue the Tree City designation given by the National Arbor Day Foundation.
- Conduct and maintain an inventory of natural resources, open spaces and brownfield development areas.
- Institute programs and land use regulations to maintain and preserve existing woods, vegetation, streams,

wetlands and other natural resources.

- Continue to maintain an inventory of identified contaminated sites, aggressively pursue Hazardous Discharge Site Remediation Funding (HDSRF) and 'Brownfield Development Area (BDA) status, implement remediation and monitor clean up status with the NJDEP and the U.S. EPA.
- Create city-wide Climate Action Plan that provides policies and measures that the City will enact to reduce greenhouse gas emissions and increase the community's resilience to unavoidable climate change.
- Calculate Plainfield's carbon footprint, or the amount of carbon dioxide and other carbon compounds in the air due to the consumption of fossil fuels. Take efforts to reduce the City's carbon footprint by encouraging sustainable planning and policies, especially in the areas with a higher carbon footprint by encouraging public transportation.
- Create a new "Conservation Zone" category. This zone designation would include ROSI protected lands, such as the Cushing Road and Milt Campbell Field detention basins, as well as the forested lands along the Green Brook in the West End that are either wetlands, forested, contain steep slopes, or are natural areas.

IMPLEMENTATION

The City should create an Environmental Commission that will conduct a Natural Resources Protection Inventory and manage the preservation of resources as well as clean-up of contaminated lands. The Environmental Commission could also spearhead an effort to mitigate climate change impact on the City and to improve the future of Plainfield.

Strategies to implement conservation techniques and initiatives include:

- Promote private land acquisition for development of contaminated sites for development, and public land acquisition of environmentally sensitive sites for protection.
- Encourage Conservation easements. Lands covered by conservation easements for wetlands, wetlands transition buffer, flood plain, flood plain buffer or other significant open space shall remain in their natural, undisturbed state within which no regrading or clearing shall be permitted, except the removal of minor underbrush or dead trees that are hazardous to people or buildings. (Plainfield Land Use Ordinance)
- Include energy and water conservation in the Land Use Ordinance along with soil conservation.
- Modify the City's development regulations to include regulations for resilient buildings, green infrastructure and low-impact development.

- Create standards to maintain and improve stream corridor buffers to preserve flora and fauna, and to create and enhance the recreational activities.
- Amend land coverage standards in the land use ordinance to reduce impervious coverage, especially in the residential areas. Additionally, encourage minimum impervious land coverage in redevelopment areas.
- Amend Zoning Ordinance to add new zones - Open Space Zone, Conservation Zone and Cemetery Zone.



Source: Plainfield Today 2010 - Flood Plain

For more information see:

Land Use Element

- Proposed zoning

Green Building and Environmental Sustainability Element

- GHG emissions reduction
- Water conservation

Recreation and Open Space Element

- Open space conservation and expansion

Utility Services Element

- Stormwater management

Recycling Element

- Recycling Recommendations

Community Input

Sampling of comments from Community Workshops

- Green spaces.
- Address the erosion of brooks – retaining wall must be constructed.
- Turn vacant lots into green spaces.

From the Master Plan Survey

Rank in order to priority the Open Space/ Flood Mitigation strategies that are most important to you:

50% Acquisition of land for open space and conservation of natural habitat/environmental protection.

44% Wetlands/Natural habitat restoration in existing preserved open spaces.

Comments related to Conservation include:

- Habitat restoration...remove invasive plants and plant native plants...massive reduction of mowed lawns...stop destruction of open space by building AstroTurf sport complexes and parking lots.
- There is too much garbage in the Green Brook that flows downstream into Green Brook Park. A concerted effort must be made to educate people about what their littering does to

the environment.

- Coordination with upstream/regional watershed communities.
- Restoration of riparian flora along waterways.
- Green is terrific, just do not raise my taxes to do it.

GREEN BUILDING AND ENVIRONMENTAL SUSTAINABILITY ELEMENT

“Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment.”

- Environmental Protection Agency (EPA)

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How We Get There

Create a more livable city

- Ensure appropriate land uses in appropriate plans
- Establish appropriate population densities and concentrations
- Adopt standards for new development promoting energy efficiency through architectural and site design
- Encourage pedestrian friendly atmosphere and infrastructure
- Prevent and reduce urban sprawl, especially in downtown and Transit Oriented Development areas

Encourage sustainable buildings

- Build sustainability with ample natural air, ventilation and open spaces
- Promote use of renewable energy, including solar and wind energy systems
- Advocate for Green Technology and Green Building standards

Strengthen neighborhoods

- Promote historic districts, parks and open spaces, natural energy resources
- Institute a tree protection ordinance
- Create awareness for the 3Rs – Reduce, Reuse, Recycle (not only for waste management)

Strategic Vision

That the City of Plainfield creates the foundation for a sustainable and healthy future by proposing and implementing sustainability strategies and responsible development guidelines to reduce negative impacts and increase efficiency in a way that enables us to meet the needs of the present population without compromising the ability of future residents to meet their needs.



Source: www.freepik.com

INTRODUCTION

Urban areas are on the front line of the battle for an environment – built and natural – that supports the coexistence of humans and nature now and in the future. Adopting Green Building and Sustainability measures enables urban areas to better manage its destiny in uncertain times. Green building focuses on how buildings are designed, constructed and operated. It is a holistic concept based on the understanding that the built environment can have profound effects, both positive and negative, on the natural environment, as well as the people who inhabit those buildings. Green building creates a positive impact on the climate, protects natural resources and makes significant differences in quality of life.

Residents are already on board. Those attending the four community workshops have clear and consistent thoughts on sustainability. One resident asked how the city determined the sustainability impact of new development. Another sought green energy jobs for residents, to help the community and the environment. Across the four wards, participants believed that solar was the way to go (though at least one wanted to exclude historic buildings) and there was also agreement that more electric vehicle (EV) charging stations were needed. There is an acknowledgment among residents participating in the workshops that sustainability measures must be in place if the City is to thrive.

This is the City of Plainfield's first Green Building and Environmental Sustainability plan element. The 2009 Master Plan was

forward-looking, raising issues regarding the protection of environmental resources and sustainable development and suggesting the establishment of an Environmental Commission. It urged adoption of a new ordinance for tree preservation and protection of environmentally sensitive areas and demonstrated that historic preservation was critical to sustainable development. The 2009 Master Plan gave the city a foundation for developing ordinances that encompassed sustainable land use policies, renewable energy, a focus on energy and environmental design, Complete Streets, reduction of greenhouse gas emissions, improved stormwater management practices and greater awareness among residents on sustainable practices and awareness.

This element builds on that initial work and will guide land-use decisions and provide the basis for ordinances addressing sustainability. It also serves as a first step in introducing sustainability concepts into local planning documents.

MUNICIPAL LAND USE LAW

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

STEPS TO SUSTAINABILITY IN THE CITY OF PLAINFIELD

The world currently faces a number of concerns associated with climate change, environmental sustainability and public health. The challenge for the City is that there are no quick fixes. To residents, these problem areas seemingly take too long to remediate, or seem too esoteric to have a major impact on life in Plainfield.

That is why effective outreach, including educational programs, will be essential for the City of Plainfield to succeed in identifying and implementing the practices that will make the city thrive during such a period of change.

The City of Plainfield has already implemented ordinances and programs that support sustainability, even if goals were not formalized in the previous master plan:

- The City has adopted Transit Oriented Development Netherwood (TODN) and Transit Oriented Development Downtown (TODD) Ordinances which promote mixed use, high density development around the train stations.
- Smart Growth Development Redevelopment Plans
- Plainfield has two train stations and a bus network which help increase the use of public transportation options.
- The City takes efforts in preserving its Historic Districts.
- The City Shade Tree Commission helps protect and establish trees in the City.

Within this Master Plan element, policies and actions related to sustainability and recommended by Sustainable Jersey are outlined in the following areas:

Climate change/Green House Gas (GHG) Emissions

The focus is on energy efficiency (increasing the use of renewable energy alternatives such as solar, wind and geothermal), reducing the use of fossil fuels and miles traveled through coordinated and interconnected transportation system, lowering energy consumption and improving energy conservation. The City would adopt alternative energy ordinances that ensure energy alternatives are compatible with existing community land uses. It should also coordinate reduction efforts with neighboring municipalities and counties.

Renewable Energy

Success in increasing the use of renewable energy shall start with an assessment of existing zoning and other regulations, amending them if necessary to reduce barriers for the development of wind and solar energy systems in appropriate locations. The next step is to adopt solar and wind ordinances that facilitate the permitting of small wind and solar energy installations. The City also has the opportunity to set an example by pursuing renewable energy demonstration projects at public facilities and investigating solar and wind energy systems with the potential to supply electricity to multiple users within the municipality. The City should also explore the feasibility of geothermal and biomass production as a source of renewable energy.

Green Building and Design

The City of Plainfield can encourage Green Building and design in a number of practical ways including adopting a green design/development checklist as part of site plan and subdivision review; providing incentives in land use ordinances for buildings that utilize green design techniques; and encouraging all municipal entities to include green building design techniques in new and upgraded buildings.

Land Use and Mobility

Areas discussed focus on quality of life issues that in many instances strive to lessen dependence on autos, including planning and zoning for development and density near existing infrastructure, especially transit, and away from sensitive environmental areas that should be protected. The City should identify appropriate locations for mixed use centers that encourage people to walk between multiple destinations rather than rely on automobiles. This approach would be supplemented by Complete Streets that ensure that roads are designed for all users, not just automobiles, and connect to local destinations. Another significant segment of land use and mobility would be to locate parks, schools and other recreation and community facilities near residential areas to allow walking and biking to these locations. The City should revise parking standards to allow for more flexible parking provisions, such as shared parking, parking pricing strategies and/or fee-in-lieu of parking. The City should consider providing dedicated and/or preferred parking spaces for carpools, car sharing, and fuel efficient and

low emitting vehicles while also determining a more consistent way of dealing with cars, where they park and when they are used. Finally, in order for any sustainability initiatives to succeed, the City must plan for and preserve open spaces.

Water

The foundation of any actions would be use of a build-out analysis to determine the amount of water needed to serve current and future populations (demand) and the amount of water available in the watershed (supply). Then, watershed-wide techniques should be applied to protect local water supplies beyond municipal boundaries and to plan for water availability and determine where infrastructure currently exists or needs to be implemented, and where it is needed to service all areas of the City with clean water. In addition, the reuse of rainwater through harvesting in buildings, where applicable, should be supported. Alternative systems that utilize natural processes to reduce energy demands in the extraction, processing, treatment, filter, absorb, reuse and discharge of water should be considered, such as constructing wetlands to treat wastewater rather than building an energy-consumptive treatment facility, saving energy and financial resources over the long-term. Increased groundwater recharge should be considered through on-site runoff, such as green roofs, green streets, rain gardens, bioswales (linear channels that concentrate and move stormwater runoff while removing debris and pollution) or naturalized retention basins. Adoption of Integrated Pest Management (IPM) practices on municipal and publicly owned properties

should be instituted. The City should adopt a water conservation ordinance and educate homeowners about reducing water use, including watering lawns at night or early in the morning, using rain barrels to collect water, insulate water pipes, etc.

Food Systems

As a baseline, identify the community's 'food-shed', a delineated area in which food is grown and distributed to consumers via farmers' markets, community-supported agriculture (CSA), and in schools and restaurants. Create policies, ordinances and plans that encourage sustainable food production; improve access to healthy food through zoning, education and incentives for retail operators; ensure that land is available for food production and distribution, open space acquisition, and park maintenance. Finally, work within the community to compile data on health issues, local food availability, costs, etc. in order to make informed decisions and change eating habits.

Waste Reduction

As a first step the City should adopt a municipal waste reduction plan to ensure recycling, including education and training. Building awareness of waste reduction and recycling strategies for residents and businesses along with encouraging composting, especially by homeowners, is an important aspect of the plan. In addition, the City should provide information on agencies/organizations that will accept used items for reuse. On the commercial side, reduction in construction and demolition waste should be encouraged as well as on-site reuse.

RECOMMENDATIONS

The recommendations are divided into four major categories – Land Use, Transportation, Energy and Waste. These four categories include recommendations based on the strategies provided under core topics of this element – Climate Change/ GHG Emissions, Renewable Energy, Green Building and Design, Land Use and Mobility, Water, Food Systems, Waste Management.

Land Use

- Implement and standardize efficient land use practices
 1. Properly mitigate or clean and Redevelop brownfields, grey fields
 2. Promote mixed use development with increased walk-ability, especially near transit hubs
 3. Incorporate new green infrastructure practices and expand best management practices such as rain gardens, bio-swales etc. (refer to NJDEP's new green infrastructure standards for developers)
 4. Demonstrate to property owners the advantages of using green infrastructure
 5. Encourage co-location of new telecommunication facilities to reduce land consumption and share resources, for example, on a roof of multi-storied buildings

6. Create sustainable standards for development in and around flood zone areas

- Establish a Green Building Program for municipal buildings throughout the City
 1. Encourage development of a green building ordinance that follows state and national standards
 2. Educate employees, encourage staff to become LEED accredited
 3. Provide information to the public through websites, community workshops
 4. Create green business recognition program
- Preserve and improve existing open spaces and add new ones
 1. Encourage creation of conservation easements to obtain sensitive lands
 2. Arrange annual community tree plantings, a tree sponsorship program and encourage residents to participate
 3. Create a program that creates community stewards for parks, increasing pride and a sense of ownership

Mobility

- Encourage programs that reduce commuter trips
 1. Create ways to make car-pooling, mass transit easier for municipal employees
 2. Promote use of mass transit and other public transport, including shuttles to and from train stations
 3. Streamline online payments to reduce trips by the public to municipal buildings
- Reduce GHG emissions through land use design and increase municipal fleet efficiency
 1. Periodically analyze existing vehicles, especially older ones, for performance
 2. Encourage alternative fuel vehicles, provide electric charging stations in the public parking lots and municipal properties
 3. Implement anti-idling law of non-emergency municipal vehicles
- Invest in public infrastructure
 1. Improve traffic signal synchronization
 2. Standardize pedestrian infrastructure (sidewalks, crosswalks, bike racks, etc.)
 3. Adopt comprehensive bicycle and pedestrian plan as a part of the

complete street program

4. Promote car sharing programs (e.g. Zipcar) throughout the City

4. Promote low income weatherization program into affordable housing programs
5. Create green electricity from solar, geothermal, wind or hydroelectric sources

1. Fund distribution of compost bins to private residential homes
2. Install compost bins at municipal facilities for employee use
3. Educate residents of the benefits of composting utilizing school system and youth programs

Energy

- Serve as a model of building efficiency by completing a comprehensive municipal energy audit and provide recommendations
 1. Install energy efficient lighting fixtures
 2. Replace incandescent lights with LED or CFL bulbs
 3. Install solar panels and reflective roofing on municipal facilities and public parking lots
- Establish energy saving strategies and arrange seminars on energy saving strategies for the residents and employees in the City
 1. Lights out when not in use
 2. Sensory lighting sensors that turn off computers before closing
- Encourage energy efficiency of public utilities for emergency services, schools, community residents and businesses
 1. Reduce light pollution
 2. Energy efficient traffic and streetlights
 3. Alternative powered mowers over gas consuming machines

Waste (more in the Recycling element)

- Establish internal government paper reduction strategies
 1. Educate employees regarding paper waste caused by printing and faxing
 2. Institute double-side copying for all township documents
 3. Restrict black and white printing on color printers
 4. Process and remit payments of township bills online
- Institute new and improved recycling programs
 1. Enhance the existing residential and commercial recycling program, making the process more accessible to everyone
 2. Create a municipal program for reuse/recycling of construction and demolition materials
 3. Promote litter campaign – citywide as well as for individual neighborhoods
- Increase the use of composting

Other Recommendations

- Encourage the City Administration to establish a local environmental commission with the help of a nonprofit organization like the Association of New Jersey Environmental Commissions (ANJEC)
- Encourage developers to include green building and neighborhood development strategies from LEED checklists in exchange for development incentives.
- Encourage to take the steps towards getting Blue Zone Certification for the City of Plainfield.
- Promote Healthy Living Program
- Plan and include community gardens in the neighborhood parks

IMPLEMENTATION

Strategies to execute the policies recommended in the element start with implementing, with fiscal responsibility, the necessary actions identified in the Green Building and Environmental Sustainability Plan. Identify federal, New Jersey and Union County sources of funding to combine with other forms of revenue to provide a better quality of life for the community in a financially judicious way. Develop a sustainability plan to improve the environmental quality of life for the community and the environment by taking a progressive leadership role to conserve and improve the environment. Utilize construction rating systems that have been established in many individual states and several at the national level. LEED (Leadership in Energy and Environmental Design) is the most widely recognized.

The goal of these rating systems is to establish, in the absence of building code requirements, the innovative and evolutionary design of structures that maximize conservation of natural resources in a energy-efficient construction format. This lowers the carbon footprint and essentially lowers the cost of maintenance and operation over the life of the building.

The City should create sustainability pilot programs especially in redevelopment areas. LEED Neighborhood Development and LEED for New Construction and major renovation checklists (attached here) will provide the measures to address implementation of the green practices and sustainability strategies. These checklists will help the site planning process and

include green practices in the applications. The City can also establish sustainability implementation strategies with the help of Together North Jersey - Comprehensive Plan for Sustainable Development in North Jersey.

CHART 1: USGBC - LEED BUILDING DESIGN CHECKLIST



LEED v4 for BD+C : New Construction and Major Renovation

Project Checklist

Project Name: _____

Date: _____

Yes ? No			
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Integrative Process 1
Location and Transportation Possible Points : 16			
<input type="checkbox"/>	<input type="checkbox"/>	Credit	LEED for Neighborhood Development Location 16
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Sensitive Land Protection 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	High Priority Site 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Surrounding Density and Diverse Uses 5
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Access to Quality Transit 5
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Bicycle Facilities 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Reduced Parking Footprint 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Green Vehicles 1

<input type="checkbox"/>	<input type="checkbox"/>	Sustainable Sites Possible Points : 10	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Construction Activity Pollution Prevention Required
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Site Assessment 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Site Development - Protect or Restore Habitat 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Open Space 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Rainwater Management 3
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Heat Island Reduction 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Light Pollution Reduction 1

<input type="checkbox"/>	<input type="checkbox"/>	Water Efficiency Possible Points : 11	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Outdoor Water Use Reduction Required
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Indoor Water Use Reduction Required
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Building-Level Water Metering Required
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Outdoor Water Use Reduction 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Indoor Water Use Reduction 6
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Cooling Tower Water Use 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Water Metering 1

<input type="checkbox"/>	<input type="checkbox"/>	Energy and Atmosphere Possible Points : 33	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Fundamental Commissioning and Verification Required
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Minimum Energy Performance Required
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Building-Level Energy Metering Required
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Fundamental Refrigerant Management Required
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Enhanced Commissioning 6
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Optimize Energy Performance 18
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Advanced Energy Metering 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Demand Response 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Renewable Energy Production 3
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Enhanced Refrigerant Management 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Green Power and Carbon Offsets 2

<input type="checkbox"/>	<input type="checkbox"/>	Materials and Resources Possible Points : 13	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Storage and Collection of Recyclables Required
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Construction and Demolition Waste Management Planning Required
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Building Life-Cycle Impact Reduction 5
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Building Product Disclosure and Optimization - Material Ingredients 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Construction and Demolition Waste Management 2

<input type="checkbox"/>	<input type="checkbox"/>	Indoor Environmental Quality Possible Points : 16	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Minimum Indoor Air Quality Performance Required
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Prereq	Environmental Tobacco Smoke Control Required
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Enhanced Indoor Air Quality Strategies 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Low-Emitting Materials 3
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Construction Indoor Air Quality Management Plan 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Indoor Air Quality Assessment 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Thermal Comfort 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Interior Lighting 2
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Daylight 3
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Quality Views 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Acoustic Performance 1

<input type="checkbox"/>	<input type="checkbox"/>	Innovation Possible Points : 6	
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Innovation 5
<input type="checkbox"/>	<input type="checkbox"/>	Credit	LEED Accredited Professional 1

<input type="checkbox"/>	<input type="checkbox"/>	Regional Priority Points Possibles : 4	
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Regional Priority: Specific Credit 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Regional Priority: Specific Credit 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Regional Priority: Specific Credit 1
<input type="checkbox"/>	<input type="checkbox"/>	Credit	Regional Priority: Specific Credit 1

<input type="checkbox"/>	<input type="checkbox"/>	Total Possible Points : 110	
--------------------------	--------------------------	------------------------------------	--

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

Source: USGBC

CHART 2: USGBC - LEED NEIGHBORHOOD DESIGN CHECKLIST



LEED v4 for Neighborhood Development Plan Project Checklist

Project Name:

Date:

Yes	?	No				
0	0	0	Smart Location & Linkage	28	0	0
Y			Prereq Smart Location	Required	Y	
Y			Prereq Imperiled Species and Ecological Communities	Required	Y	
Y			Prereq Wetland and Water Body Conservation	Required	Y	
Y			Prereq Agricultural Land Conservation	Required	Y	
Y			Prereq Floodplain Avoidance	Required	Y	
			Credit Preferred Locations	10		
			Credit Brownfield Remediation	2		
			Credit Access to Quality Transit	7		
			Credit Bicycle Facilities	2		
			Credit Housing and Jobs Proximity	3		
			Credit Steep Slope Protection	1		
			Credit Site Design for Habitat or Wetland and Water Body Conservation	1		
			Credit Restoration of Habitat or Wetlands and Water Bodies	1		
			Credit Long-Term Conservation Management of Habitat or Wetlands and Water Bodies	1		
0	0	0	Neighborhood Pattern & Design	41	0	0
Y			Prereq Walkable Streets	Required		
Y			Prereq Compact Development	Required		
Y			Prereq Connected and Open Community	Required		
			Credit Walkable Streets	9		
			Credit Compact Development	6		
			Credit Mixed-Use Neighborhoods	4		
			Credit Housing Types and Affordability	7		
			Credit Reduced Parking Footprint	1		
			Credit Connected and Open Community	2		
			Credit Transit Facilities	1		
			Credit Transportation Demand Management	2		
			Credit Access to Civic & Public Space	1		
			Credit Access to Recreation Facilities	1		
			Credit Visitability and Universal Design	1		
			Credit Community Outreach and Involvement	2		
			Credit Local Food Production	1		
			Credit Tree-Lined and Shaded Streetscapes	2		
			Credit Neighborhood Schools	1		
0	0	0	Green Infrastructure & Buildings	31	0	0
Y			Prereq Certified Green Building	Required	Y	
Y			Prereq Minimum Building Energy Performance	Required	Y	
Y			Prereq Indoor Water Use Reduction	Required	Y	
Y			Prereq Construction Activity Pollution Prevention	Required	Y	
			Credit Certified Green Buildings	5		
			Credit Optimize Building Energy Performance	2		
			Credit Indoor Water Use Reduction	1		
			Credit Outdoor Water Use Reduction	2		
			Credit Building Reuse	1		
			Credit Historic Resource Preservation and Adaptive Reuse	2		
			Credit Minimized Site Disturbance	1		
			Credit Rainwater Management	4		
			Credit Heat Island Reduction	1		
			Credit Solar Orientation	1		
			Credit Renewable Energy Production	3		
			Credit District Heating and Cooling	2		
			Credit Infrastructure Energy Efficiency	1		
			Credit Wastewater Management	2		
			Credit Recycled and Reused Infrastructure	1		
			Credit Solid Waste Management	1		
			Credit Light Pollution Reduction	1		
0	0	0	Innovation & Design Process	6	0	0
			Credit Innovation	5		
			Credit LEED® Accredited Professional	1		
0	0	0	Regional Priority Credits	4	0	0
			Credit Regional Priority Credit: Region Defined	1		
			Credit Regional Priority Credit: Region Defined	1		
			Credit Regional Priority Credit: Region Defined	1		
			Credit Regional Priority Credit: Region Defined	1		
0	0	0	PROJECT TOTALS (Certification estimates)	110	0	0

Certified: 40-49 points, Silver: 50-59 points, Gold: 60-79 points, Platinum: 80+ points

Source: USGBC

For more information see:

Circulation Element

- Walking and Biking
- Transportation sustainability

Recycling Element

- Recommendations

Conservation Element

- Recommendations

Economic Development Element

- Economic Sustainability

Utility Services Element

- Smart city recommendations

Community Input

Sampling of comments from Community Workshops

- More solar houses and buildings (several mentions); LEED-certified buildings.
- More training for green energy jobs.
- City should buy EV, install charging stations.
- More walking/bike trails to encourage clean environment.
- Impact on air quality and traffic resulting from development.
- Strong litter campaign.

From the Master Plan Survey

Of participants in the survey, 61% felt environmental protection/sustainability was very important for Plainfield, 27% said it was important.

More specifically, when asked which sustainable programs and actions participants would favor the City adopting, the top five were:

- 66% Increased tree plantings by Shade Tree Commission.
- 50% Making efficient upgrades to all municipal buildings.
- 48% Providing local incentives for businesses to go green.
- 43% Creating a Sustainable Jersey "Green Team" and achieve certification.
- 43% Requiring new developments to

use green building technology.

Individual Comments Noted on the Survey included:

- Green is good, but you have to educate the public first to the benefits of being kind to the environment.
- Resilient design needs to be understood and implemented
- Resilience needs to become a priority in new developments and in general
- Set up an Environmental Commission to focus on these issues and also use the Tree Commission to educate and encourage private property tree care and planting.

RECYCLING ELEMENT

“If you want grown-ups to recycle, just tell their kids the importance of recycling, and they'll be all over it.”

- *Bill Nye, The Science Guy*

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Strategic Vision

That all residents and businesses in Plainfield understand and actively participate in the city's recycling programs as the city works toward significant improvements in recycling and waste management policies and results.

How We Get There

- *Maintain a positive relationship among the City, PMUA, residents and business*
- *Increase commercial and institutional recycling rates within the city*
- *Continue to educate residents, in both English and Spanish, on the importance of 3-R (reducing, reusing, and recycling) and how to recycle properly*
- *Work with the Police Department, Department of Public Works, Inspections Division and PMUA to address issues of illegal dumping of waste on private and city property; currently the owner of the property is responsible for its removal*



INTRODUCTION

Of all of the elements in the City of Plainfield Master Plan, recycling is the one in which every resident and business can actively participate, making a hands-on, daily contribution to a safer, healthier and more attractive city.

Participants in the community meetings clearly care about recycling, voicing definite concerns as well as ideas related to improving recycling in their neighborhoods. They've kept their eyes on city garbage and recycling bins, which they say are often overflowing. Some noted that recycling bins are half the size of garbage bins and that larger ones are needed. Also suggested was the need for two sizes of recycling cans so that the elderly could have smaller ones since the large bins are difficult for them to roll out. Building awareness for recycling – the who, what, where, when and why of it – is seen as critical to the success of any city recycling program. Another issue raised was the need for improved multi-family and commercial garbage/recycling inspections and better enforcement. But there were kudos for the City of Plainfield's participation in the Recycle Coach app.

New Jersey's Recycling Act requires municipalities to adopt an ordinance based upon their county's recycling plan. It also requires that municipal master plans be revised to incorporate provisions for recycling as part of all new residential, commercial and industrial development. This is the first time the City of Plainfield will include recycling as a separate plan element. Previously, it was incorporated as a



Source: PMUA (Plainfield Municipal Utilities Authority)

MUNICIPAL LAND USE LAW

"A recycling plan element which incorporates the State Recycling Plan goals, including provisions for the collection, disposition and recycling of recyclable materials designated in the municipal recycling ordinance, and for the collection, disposition and recycling of recyclable materials within any development proposal for the construction of 50 or more units of single-family residential housing or 25 or more units of multi-family residential housing and any commercial or industrial development proposal for the utilization of 1,000 square feet or more of land."

part of the Utility Services element in the 2009 Master Plan. This new Recycling element provides information regarding the current state of Plainfield's recycling system and offers policy recommendations designed to increase recycling percentages and reduce the amount of solid waste generated and directed to landfills or incinerators.

The city works in tandem with the Plainfield Municipal Utilities Authority (PMUA) to achieve effective recycling. PMUA provides solid waste and recycling services to all municipal sites including City Hall, fire houses, police and municipal court facilities, city parks and recreation facilities. It also provides, maintains and services all public litter containers. PMUA partners with the city's public works division to accept and dispose of all solid and vegetative waste. The authority also provides on-call site cleanup of private properties when directed by the city, following declarations of violations of municipal codes or in response to health emergencies. The PMUA also works with Union County, periodically offering specialized collection services such as office and personal paper shredding service, household hazardous waste disposal services and electronics waste disposal.

What is Recycling?

Recycling is a three-step process.

- Collecting used materials is the important first step.
- The second step involves using recovered materials as feedstock in the manufacture of new products.
- The final step is purchasing and using the recycling products.

PLAINFIELD RECYCLING PROGRAM

The PMUA (Plainfield Municipal Utilities Authority) handles all city solid waste management including recycling. In New Jersey, every owner or occupant of residential and non-residential property, which includes but is not limited to retail and other commercial locations, as well as government, schools and other institutional locations within the municipality, is required to separate designated recyclable materials from all other solid waste for the purpose of recycling. The designated recyclable materials vary by county, and residents and businesses have different mandated recyclable material lists. In Plainfield, there are 30 categories of recyclables which are handled by PMUA.

PMUA provides the infographic (Chart 2) that shows what is recyclable along with a waste disposal guide for residential waste. There also a calendar on the PMUA website that provides schedule of zone wise recycling and garbage collection.

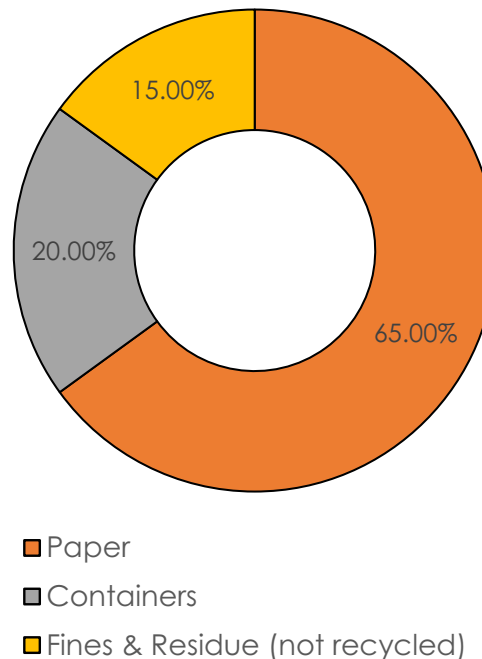
Recycling Process

The PMUA provides a highly varied residential, commercial and institutional on-site collection service that includes: a) curbside (roll-out) or rear yard residential household collection and rear load dumpster container collection services; b) scheduled and unscheduled bulky waste residential collection services; c) 10 to 50 yard roll-off container services; and d) routine collection and disposal of recyclable items such as newspapers, mixed paper, corrugated

cardboard, glass containers, aluminum cans, steel cans, plastic containers, etc. Plainfield provides a recycling and a waste bin for all residents and participates in the Recyclecoach.com which provides information on what is recycled by the city.

Plainfield recycled a total of 163,876 tons of commercial materials and 243 tons of residential materials in 2018. This includes 30 different material categories that are recycled at different locations in the city. Chart 1 and Table 1 below provides how much of each material was recycled in 2018.

CHART 1: MATERIAL CATEGORIES RECYCLED PERCENTAGE- 2018



Source: PMUA - Municipal Tonnage Report 2018

TABLE 1: MATERIAL CATEGORIES RECYCLED TONNAGE - 2018

Total Single Stream Tonnage	Paper	Containers	Fines & Residue (not recycled)
286.12	185.98	57.22	42.918

Source: PMUA - Municipal Tonnage Report 2018

Services provided by PMUA

- Consumer electronic drop-off for Plainfield residential households @ two items per car load for free.
- Styrofoam drop-off for residential customers for free.
- Used motor oil drop-off for residents – 2 quarts per resident.
- The collection and drop-off of metal for residents at the bulk rate.
- Containers to household residents, a 64 gal container for recycling and a 96 gal container for garbage. PMUA also has 35 gal containers for residents requesting a smaller size.

Municipal Recycling Coordinator

The Recycling Act requires that all municipalities designate a recycling coordinator. PMUA's coordinator oversees the entire recycling process and creates a Tonnage Report every year as mandated by state law.

RECOMMENDATIONS

Communication and Education

- Increase awareness for recycling among the residents through continuous education programs, school programs, community outreach and programs for municipal/ private workers in both English and Spanish. Poster contests on recycling could be held in local schools, with winners selected at the elementary, middle and high school level.

- Improve community partnerships to enhance communication among communities about the importance of recycling.
- Coordinate with various departments and PMUA to create a comprehensive guide on recycling and waste management that would be available online and in print versions.
- Coordinate with Union County to promote County-wide Bulk Recycling events.

Changes in Approach to Recycling

- Increase number of recycling containers in high intensity areas such as downtown, business districts, plazas, etc.
- Consider providing a recycling depot where residents and commercial users can bring recyclable materials to one location.
- Include recycling standards for demolition and new construction in the land use ordinance and redevelopment plans.
- Increase commercial and institutional recycling. Ban plastic bags and reduce paper use in commercial and institutional activities. The City could lead the way, posting goals in reduction of paper use and providing yearly results.
- Encourage the use of reusable bags for food and other retail shopping. Design and sell such bags for a minimal price at City Hall or at city events. The tagline on the bag could read "Proud to Shop in Plainfield" or something similar.

CHART 2: ACCEPTABLE AND NOT ACCEPTABLE MATERIALS FOR RECYCLING

ACCEPTABLE	NOT ACCEPTABLE
Materials For Recycling What <u>Can</u> Go Into My Curbside Container?	What <u>CANNOT</u> Go Into My Curbside Container? <small>*These items can be recycled through county recycling programs</small>
 Plastic Bottles & Containers 	 Plastic Bags NO: Please do not bag your recyclables or bags place in bin <small>(visit www.plasticfilmrecycling.org for drop off locations)</small> 
 Mixed Paper YES: Paper, Newspaper, Magazines, Junk Mail, Catalogs & Phone Books 	 Styrofoam* NO: Styrofoam <u>cannot</u> be recycled curbside 
 Cans YES: Aluminum and Steel (tin) Cans & Lids 	 Dishware, Glass & Mirrors NO: These items can be thrown in regular garbage 
 Glass Bottles & Jars YES: All Sizes, Shapes & Colors 	 Dirty Pizza Boxes NO: Leftover food or grease 
 Cardboard YES: corrugated, cereal, clean pizza boxes 	 Shredded Paper* NO: Place shredded paper in regular garbage (or bring paper to be shredded at County event) 
<p style="color: red; text-align: center;">PLEASE DO NOT USE PLASTIC BAGS!</p> 	 Pots, Pans & Small Appliances 
	 Plastic Containers & Plastic Ware 
	 Aluminum Pans & Foil 

Source: PMUA (Plainfield Municipal Utilities Authority)

IMPLEMENTATION

Action Plan:

The City of Plainfield should create and adopt a recycling ordinance as mandated by New Jersey's Recycling Act. The Recycling Ordinance will provide policies and procedures to guide residential and non-residential recycling disposal and management. It can also include fees for collection if any and fines for noncompliance.

Policies and Strategies:

- Develop and enhance formal recycling and solid waste disposal programs
- Green team: Create a group of various stakeholders to organize recycling awareness programs and coordinate meetings with all public facilities leadership
- Promote waste reduction and recycling strategies for homeowners. For example, provide demonstrations on backyard composting, have a program on how to stop junk mail etc., on PCTV, the city's community television station
- Implement target days for electronic waste
- Approach and provide information on agencies that accept items for reuse



Source: PMUA (Plainfield Municipal Utilities Authority)

For more information see:

Green Building and Environmental Sustainability Element

- Waste Management

Utility Services Element

- Waste Management
- Smart city recommendations
- Solid waste management

Community Input

Sampling of comments from Community Workshops

- Get message out to residents about recycling on a regular basis.
- Need repetitive education.
- Plainfield is a designated Material Recovery Facility (MRF), but Plainfield transfers materials because there is no MRF facility in the city. MRF facility would bring in revenue.
- No leaf pile enforcement.
- Need adequate public garbage and recycle bins – often over flowing.
- PMUA now services other towns – Plainfield gets shorted! (use tax lien) – mandated use tax.
- City does not pay for garbage/ recycle; comes out of own pocket – bundle costs with taxes.
- Need 2 sizes for recycle cans for elderly or others with difficulty rolling out large bins.
- Recycle zone schedule and holidays conflict.
- Better multifamily and commercial garbage/recycle inspections.
- Recycling bins are half the size of the garbage bins.
- Need 2 separate bins for cardboard and paper.
- Larger recycling bins
- Possible PMUA refund for residents who don't use both trash pickups provided 2 times a week.

UTILITY SERVICES ELEMENT

"Infrastructure is much more important than architecture"
- Rem Koolhaas

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How We Get There

Ensure the utility infrastructure is sturdy and efficient enough to handle existing, new and increased development

- Plan and implement new utility infrastructure to replace aging and obsolete systems that serve development and redevelopment areas.
- Require, where appropriate, that the cost of the creation, expansion or extension of utilities related to development or redevelopment be borne by the property owner or developer.
- Encourage the City and land use boards to promote the underground placement of all utilities in development and redevelopment areas.

Provide easy access to the range of City utilities for all residents and business owners

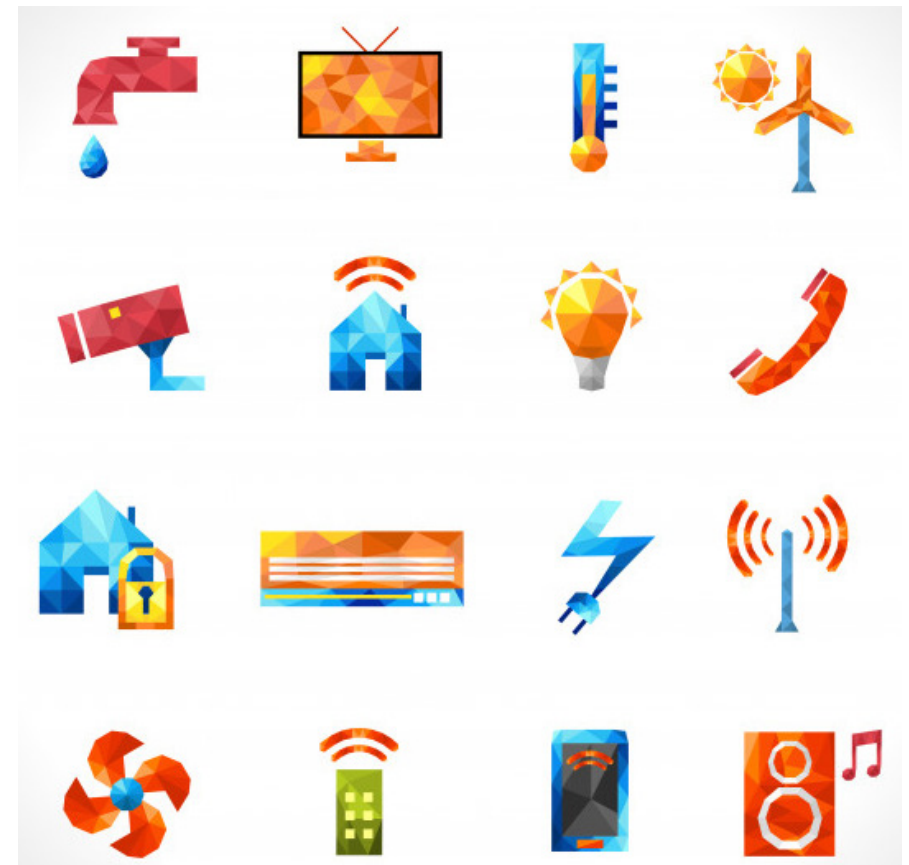
- Make available safe and adequate utility supplies and infrastructure including power, heat and communications utilities, a public (potable) water supply, sanitary sewers, wastewater disposal and treatment and stormwater management.
- Maintain, upgrade, expand and protect the existing utility infrastructure.
- Plan and implement new utility infrastructure to replace aging and obsolete systems, where applicable.

Take efforts to lead Plainfield toward becoming a Smart City

- Coordinate smart design and technology solutions for housing, mobility, sustainability and governance.
- Provide adequate and efficient high technology infrastructure accessibility including fiber-optic data transmission lines, digital switching stations, telecommunication facilities and high-speed Internet access and other technologies as they emerge.
- Work with high-technology providers in planning for the creation and expansion of high technology infrastructure.

Strategic Vision

After a complete analysis of current capabilities, develop a plan to ensure the existence of an adequate utility infrastructure for the present and projected residential population and commercial activity of the city, without adversely affecting the environment or quality of life of the city's residents and general public.



INTRODUCTION

A city's utilities are its lifeblood. Its the pipes, lines, sewers and even less visible communications methods keep a city healthy and humming.

Plainfield has a comprehensive utility infrastructure of public water, sanitary sewer, electric, natural gas, stormwater, communications and solid waste facilities that is able to serve an urban center with significant residential, commercial and industrial developments.

The Utility Service Plan Element looks at what is currently available to support the city and its needed and desired developments and analyzes future needs and improvements, including storm water detention facilities/flooding and emerging utility technologies serving Plainfield.

Today Plainfield's utility infrastructure is able to meet current needs, whether of businesses or residents. However, the infrastructure, built in the late 19th and early 20th centuries, has limitations that constrain the ability to rehabilitate older buildings – a critical element if the city is to capitalize on its architectural strengths and maintain elements of what makes Plainfield so attractive and appealing for living, working and enjoying. Specific challenges include stormwater management issues that lead to flooding in low-lying areas of the city, a storm and sanitary system that can pollute ground water and surfaces and the water distribution network that needs rehabilitation.

In order for the city to shape and manage its

already approved and anticipated growth, it is critical that Plainfield have sewer and water lines to support development and redevelopment. Yet it is also important that this Master Plan serves as the guide for any upgrades and additions to its utilities so that areas deemed environmentally sensitive, planned for open space preservation or holding historic significance are not harmed.

The Utilities Element recognizes that careful planning of wastewater, water supply and stormwater management facilities is crucial if Plainfield is to achieve cost effective development and long-term maintenance of these systems. Such planning is not static but is based on the land development allowed by municipal zoning ordinances and is also affected by societal, economic, environmental and zoning changes.

MUNICIPAL LAND USE LAW

"A utility service plan element analyzing the need for and showing the future general location of water supply and distribution facilities, drainage and flood control facilities, sewerage and waste treatment, solid waste disposal and provision for other related utilities, and including any storm water management plan."

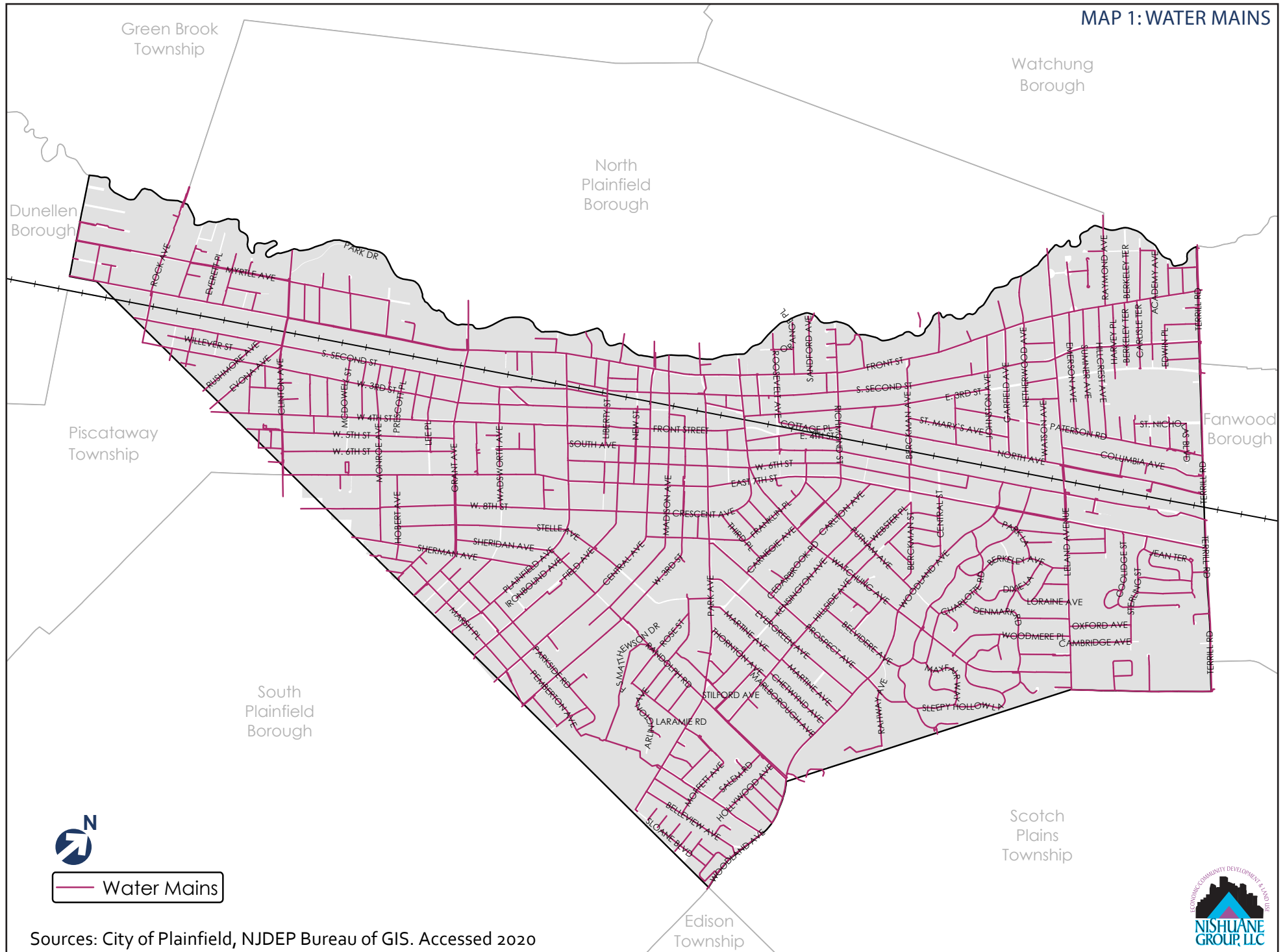
EXISTING UTILITY SERVICES CONDITIONS

Water Supply and Services

New Jersey American Water Company (NJAWC), with headquarters on North Avenue in Plainfield, owns and maintains the potable water distribution system in the city. The average amount of water consumed within the city is approximately _____ gallons per day. NJAWC is currently relining the city's water lines and is working to improve the timing of utility work to lessen inconvenience to residents and businesses. Many of the water mains have been cleaned and cement lined, with most of the hydrants replaced.

NJAWC is committed to providing water that meets or exceeds all federal and state water quality requirements for drinking water. Water company officials indicate that existing supplies are adequate and anticipate no problems with providing additional water to meet future growth in Plainfield. Nonetheless, the water company should continually evaluate its infrastructure to ensure its adequacy to meet current and future needs and provide written assurance to the city.

MAP 1: WATER MAINS



Sewer System

Management, administration, maintenance and operation of the Plainfield sanitary sewer collection system is the responsibility of the PMUA (Plainfield Municipal Utility Authority). The PMUA was created in 1995 to ensure the adequate provision of both sanitary sewer and solid waste services for the city. Plainfield's sanitary sewer system is separate and independent from the city's storm sewer system. The PMUA oversees, operates and maintains over 110 miles of sanitary sewer service lines, ranging in diameter sizes of eight inches through 24 inches, and two active sewage pumping stations. The sanitary sewer system provides for the collection and conveyance of municipal wastewater to regional sewage authorities for further conveyance and proper treatment.

The Plainfield Municipal Utilities Authority (PMUA) is responsible for the sanitary sewer systems (all sanitary sewer mains, trunk lines and related infrastructure, including administering approval of all connections to the system), and has been addressing these issues through a series of on-going improvement projects in its capital program. The PMUA must obtain street opening permits for its work. The authority does not maintain individual customer lateral service lines. Maintenance of lateral service lines connecting the customer to the city's sewer main is the responsibility of the individual property owner. Sanitary sewage generated within the city is conveyed through the city's collection system to the Plainfield Area Regional Sewerage Authority (PARSA) for conveyance to the Middlesex County

Utility Authority (MCUA) for required water treatment and ultimate discharge into state waters. Sanitary sewage is not treated by PMUA-operated facilities and conveyance responsibilities do not extend beyond the city limits.

The pump station at Watchung Avenue which handles sewage from Sleepy Hollow area needs to be upgraded to include new pumps, grinder, emergency generator and advanced computers, as well as upgraded service from PSE&G.

The new PMUA pump station at 95 Rock Avenue, completed in 2010 includes a new wet well with three submersible pumps to handle an average daily flow of 0.288 million gallons a day. In addition to the wet well, a valve chamber and a control/guard building will be constructed. Additional planned improvements to the sanitary sewer infrastructure include plans for the construction of a sewer maintenance jet-vacuum truck dump station for dewatering solid materials removed from the sanitary sewer mains as a result of routine line cleaning maintenance activities. Any extensive future development, especially in the city's redevelopment areas, may require that the local sanitary sewer system capacity be upgraded. The sanitary sewer system will be evaluated as projects become known to the PMUA. It is anticipated that potential developers would need to participate in bearing the cost of needed system infrastructure improvements as outlined in the Authority's Rules and Regulations.

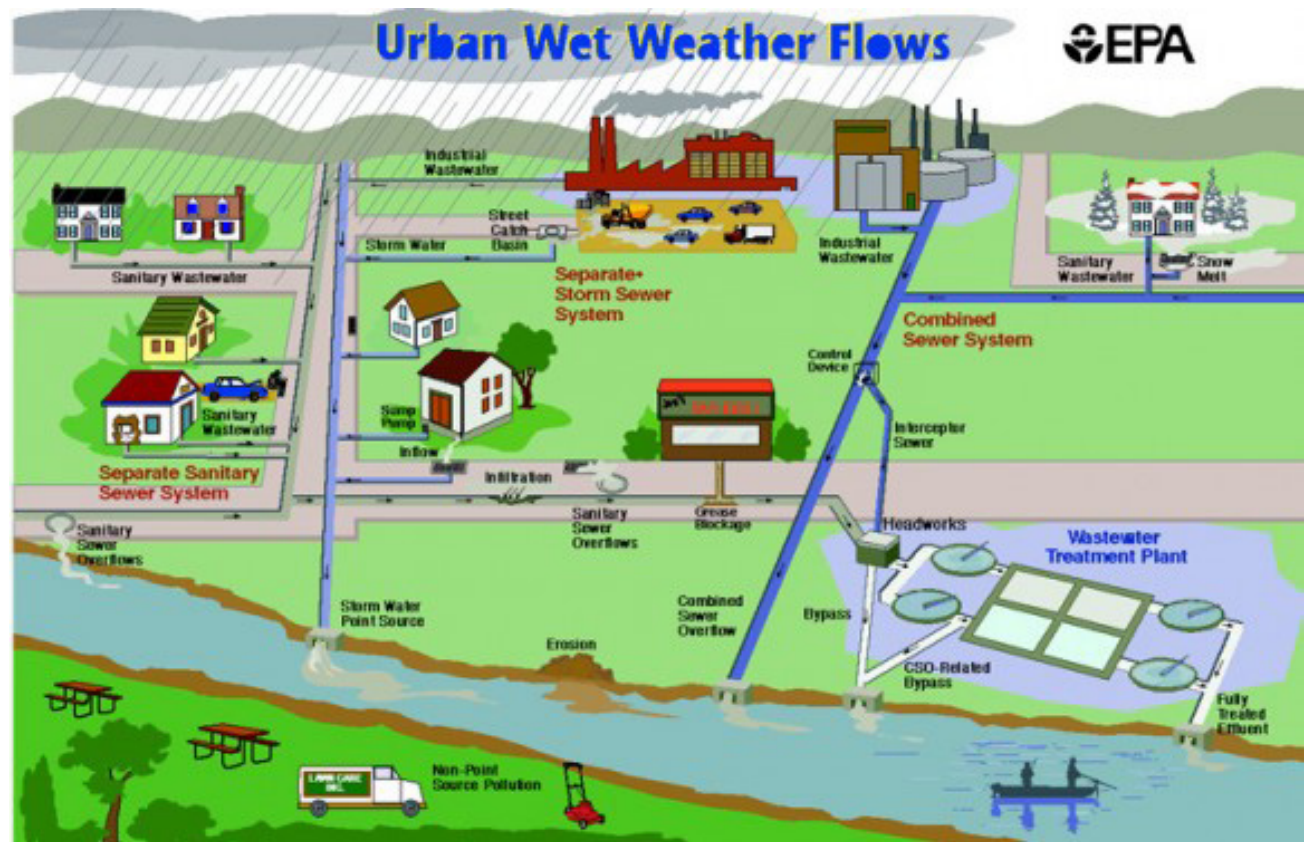
Proposed PMUA actions:

- The PMUA will look into doing more flow capacity studies because of the amount of projected projects throughout the city. The system is 90-100 years old and will likely need some upgrades.
- Conduct a smoke test throughout the city to find any illegal sump pumps that homeowners or businesses have going into the sanitary line which is illegal by the NJDEP rules.
- Look into replacing the sewer department vehicles such as vac-jet trucks and pickup trucks, over the next 10 years.
- Upgrade the flow meter at the Rock Avenue pump station to monitor the flows from computers.
- The sanitary sewer system had 5 major siphons that flow under storm sewers. They are ductile iron pipe that need to be taken apart and cleaned from inside a chamber, and need to be replaced within next 3 to 4 years.
- Replace or upgrade sanitary sewers where needed, as part of the city's roadway reconstruction projects.
- Analyze build-out and sewer flow needs for the city as development/redevelopment projects are identified; ensure sewerage facilities will have capacity to handle projected sewerage flows.

Stormwater Management Rules

On February 2, 2004, the NJDEP established two sets of stormwater rules that establish a comprehensive framework for addressing water quality impacts associated with existing and future stormwater discharges to local waterways. Phase II New Jersey Pollutant Discharge Elimination System Stormwater Regulation Program Rules (NJPDES) (N.J.A.C. 7:14A) are intended to address and reduce pollutants associated with existing stormwater runoff. Stormwater Management Rules (N.J.A.C. 7:8) set forth required components of regional and municipal stormwater management plans and establish the stormwater management design and performance standards for new development. For residential development, the design and performance standards became immediately effective through the Residential Site Improvement Standards (RSIS) N.J.A.C. 5:21-1 ET sec. For non-residential development, each municipal planning board is required to adopt a stormwater management plan consistent with the provisions of N.J.A.C. 7:8-2 and N.J.A.C. 7:8-4. Each municipality is required to adopt a stormwater control ordinance and submit both the plan and the ordinance to the county for review. The city is currently preparing a stormwater management plan.

On March 2, 2020, the NJDEP published new stormwater management rules that will require decentralized, distributed stormwater management practices that enable stormwater to infiltrate and more closely resemble the natural water cycle and use of green infrastructure. This will be



General urban stormwater/sewage system

Source: USEPA

effective beginning in March 2021 and the City will need to update its land use regulations accordingly.



Example of Green Infrastructure

Source: USEPA

Solid Waste Management

In 1988, the New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 et seq.) established a comprehensive system for the management of solid waste in New Jersey. Plainfield is in New Jersey's Union County Solid Waste Operating District and is subject to the NJDEP certified "Union County District Solid Waste Management Plan." The Plan is adopted and amended from time to time by the Union County Board of Chosen Freeholders and is administered by the Union County Utilities Authority (UCUA).

Provision of adequate refuse collection facilities is a requirement of all development applications filed with the Plainfield Planning Board (PB) and Zoning Board of Adjustment (ZBA). The Boards must ensure that each review includes a requirement that the developer/redeveloper provide adequate solid waste and recycling facilities for each project.

The PMUA ensures the adequate provision of solid waste services for Plainfield. As a Municipal Authority, the PMUA is charged with developing, managing, administering, maintaining and operating Plainfield's solid waste management system. The PMUA is responsible for ensuring that Plainfield's solid waste plan and all waste operations are within the bounds of the provisions of the NJDEP and the Union County District Solid Waste Management Plan (UCSWMP). The PMUA manages Plainfield's solid waste infrastructure, including permitting, maintenance and operation of the Rock Avenue Transfer Station facility. Additionally,

the Authority maintains and operates the Plainfield Environmental Resource Center (PERC) / Transfer Station as part of Plainfield's Solid Waste Utility. Neighboring municipalities use this modern convenience center to transfer and dispose of waste as part of PMUA's municipal shared services agreements.

Under updated NJDEP permitting, the facility at Rock Avenue is designated as a Transfer Station/Materials Recovery Facility (TS/MRF). The facility is approved and included in the UCSWMP and is permitted to process waste type 10 municipal waste (household, commercial and institutional), type 13 bulky waste, type 13C construction and demolition waste, type 23 vegetative waste, and type 27 dry industrial waste.

All materials collected, received and processed at the PERC are transferred to properly designated facilities for ultimate disposal. The UCSWMP directs and mandates disposal of all type 10 and type 13 waste materials under waste flow provisions. Recyclable materials are marketed for revenue recovery and vegetative waste materials are transferred for composting by various companies. These materials are not controlled waste under current county solid waste flow mandates. In addition to managing the PERC as a residential and commercial drop-off facility, the PMUA also maintains a solid waste infrastructure that includes a fleet of semi-automatic rear loading garbage packers, trash transport trailers, roll-off trucks and various sized roll off containers, various sized rear load dumpsters for high density and commercial use, and various sized dump trucks, and has invested

over \$1 million in roll out containers for residential solid waste and recycling services. This infrastructure ensures the adequate provision of comprehensive and affordable solid waste services for Plainfield.

The PMUA provides highly varied residential, commercial and institutional onsite collection services that include: a) curbside (roll out) or rear yard residential household collection and rear load dumpster container collection services; b) scheduled and unscheduled bulky waste residential collection services; c) 10 to 50 yard roll off container services; and d) the routine collection and disposal of recyclable items such as newspapers, mixed paper, corrugated cardboard, glass containers, aluminum cans, steel cans, plastic containers, etc. The PMUA provides solid waste and recycling services to all municipal sites including City Hall, fire houses, police and municipal court facilities, city parks and recreation facilities. It also provides, maintains and services all public litter containers. The PMUA accepts and disposes of all solid waste and vegetative waste collected.



Roll-off container

Source: PMUA

Electrical and Communication Utilities

Much of the City's power is supplied from transmission-sourced substations (Fanwood and Green Brook substations), and a sub-transmission-sourced substation at South Second Street. The distribution circuits from these substations are energized at 13.2-kV (13,200 volts). There are two sub-transmission-sourced substations (Plainfield Avenue and Front Street) that supply distribution circuits energized at 4-kV (4,000 volts) that supply older sections of the city, besides the underground network in the downtown area.

There is no one Public Service Electric and Gas (PSE&G) facility that supplies only Plainfield (the Plainfield substation provides service to a significant part of North Plainfield Township). Many PSE&G circuits supply customers in many different municipalities; therefore, Plainfield's exact amount of electric usage cannot be determined. Power company officials have suggested that Plainfield can increase its load demand up to eight mega-watts of power without a major redesign required. Beyond this load it may be necessary to contemplate the construction of additional substation facilities.

Verizon delivers traditional telephone services system and Fiber Optic Service (Fios) throughout Plainfield. Comcast delivers digital cable and high speed internet services throughout the City. Plainfield does not have reverse 911 emergency service capabilities.

The city is committed to the underground

installations of utility lines whenever possible and encourages the underground placement of existing above ground utilities whenever major road reconstruction or development/redevelopment occurs. The city has identified the need for greater emphasis on the screening, location, and size of above ground utility cabinets.

Natural Gas

Natural gas is used in homes and businesses daily for many functions such as cooking, heating, and hot water. The entire city has access to natural gas service, which is provided by PSE&G. This utility is regulated by several government agencies. The city does not have a map of the natural gas system.

Department of Public Works

The Department of Public Works administrative office is housed in City Hall and is responsible for street and parks maintenance; snow removal; refuse removal; maintenance of municipal owned-vehicles; shade tree equipment; and maintenance of City-owned occupied and vacant lots. The Department also provides oversight for several divisions, including Inspections, Recreation, Planning, Building and Engineering.

Plainfield's Public Works Maintenance facility, also known as the City Yard, is located at 745 South Avenue. The municipal garage is located here as is city equipment for Sanitation Bureau street sweeping, Parks and Recreation and street and lot maintenance and repair. There are also accessory gas pumps and oil recovery tanks at the City Yard.

ENVISIONING PLAINFIELD AS A SMART CITY

What is a Smart City?

A Smart City is an urban area employing various types of electronic Internet of Things (IoT) sensors to collect data and then it uses that data and resulting insights to manage assets, resources and services. The connected technology and data then enable the City to improve the efficiency and delivery of city services, enhance quality of life for all and create greater equity and prosperity for residents and businesses. From a planner's perspective, Smart City is not just the technology but is a combination of smart design, technology and policy making/governance.

Plainfield to Become a Smart City

Plainfield has been making strides toward becoming a smart city. It has two prominent TOD (Transit Oriented Development) areas with a developing downtown that includes a variety of housing, businesses and mobility options. The City has also taken care in preserving open spaces and promoting use of solar energy. Plainfield has experience in many of the issues that contribute to a Smart City and has the potential to become one of the first smart cities in New Jersey through actions related to housing, mobility, sustainability and conservation, and infrastructure.

RECOMMENDATIONS

Water Supply and Service

- Preserve and protect the city's public water supply including storage areas, treatment facilities and the distribution system.
- Ensure an adequate supply of potable water.
- Identify water supply demand at build-out and confirm capacity availability.
- Develop a detailed, computer generated map of the city's water supply system.
- Create a fire hydrant locations map that is accessible to the municipal employees and consultants.
- Encourage the replacement of outdated fire hydrants with national standard threads.
- Improve utility and street repair coordination system.

Sanitary Sewer System

- Analyze development and redevelopment area build-out and flow needs; ensure enough capacity exists to handle existing and projected sewage flows.
- Repair and maintain sewer infrastructure.
- Improve utility and street repair coordination system.

- The City should coordinate with PMUA to ensure the timely implementation of proposed utility improvements.
- Develop in cooperation with the PMUA a detailed, computer generated map of the city's sanitary sewer system with updates regarding status of smoke tests, ionized infiltration test, and the development of a grease collection facility.

Stormwater Management

- Reduce flood damage, including damage to life and property; minimize storm water run-off from new development. Minimize pollutants in storm water runoff from new and existing development.
- Identify areas of flooding due to infrastructure delinquencies; follow up with what improvements may be required to abate flood events.
- Determine through study potential abatement options for flooding within the Green Brook/ Cedar Brook floodplains.
- Update the City's Stormwater Ordinance to include new State Stormwater Rules published in March, 2020.
- Amend bulk and land use standards in City's Zoning Ordinance to reduce impervious lot coverage areas.
- Develop a detailed, computer generated map of the city's stormwater infrastructure

Solid Waste Disposal

- Ensure the appropriate storage of residential, commercial and industrial solid waste, recyclables and bulk waste, and ensure their timely collection.
- Encourage increasing the percentage of solid waste that is recycled in Plainfield.
- Conduct programs/workshops for residents to educate them on reduction of solid waste generation and innovative solid waste disposal techniques.

Electric Supply and Communication Utilities (Telephone and Cable TV)

- Preserve and protect the City's electric supply including the distribution system.
- Identify electric supply demand at build-out and confirm capacity availability.
- Encourage the relocation of existing above ground utilities underground whenever road reconstruction occurs.
- Promote the distribution and efficiency of these utilities through environmentally friendly means.
- Add new Wi-Fi locations, especially in downtown areas such as North Avenue pedestrian plaza.
- Review the Land Use regulations regarding communication towers and satellite dishes to ensure updates with emerging technology, proper placement and screening.

Natural Gas

- Determine the adequacy of the inspection of natural gas transmission lines to ensure public safety.
- The city should obtain a map of the natural gas pipeline system in the city.

Other Recommendations

- The city should add an off-tract improvement section to the Land Use Ordinance that would require developers/redevelopers of projects that will impact all utility services discussed in this plan to pay into a redevelopment fund to cover off-tract costs needed for the improvements.
- Ensure utility company and other utility providers obtain city street opening permits for all work and coordination of improvements with city road improvement plans.

RECOMMENDATIONS FOR PLAINFIELD TO BECOME A SMART CITY

Housing:

- Encourage modular housing to provide affordable housing in downtown and other high market rate areas.
- Consider permitting smaller, technologically smart studio units for young professionals. The same space can be used for different functions with automated furniture to create extra storage, hide the bed when not in use, etc.
- Promote live-work concept. Use the same space for work during daytime and living space during nighttime.

Mobility:

- Institute shuttle service (to and from the train stations) to include electric or hybrid shuttle to reduce use of gas/other non-renewable fuel source.
- Increase and create new bike and safe pedestrian infrastructure, especially downtown and encourage people to use bikes and walk.
- Provide electric charging stations as an incentive to encourage more use of electric vehicles.
- Promote Complete Streets and

encourage more use of public transit.

- Encourage employers to support car-pooling and car-sharing by providing incentives such as reserved parking, bonuses for employees.

Sustainability and Energy Conservation:

- Promote the conservation of energy by encouraging Leadership in Energy Efficient Design (LEED) features in new development, municipal and school buildings.
- All new and rehabilitated public buildings are encouraged to be LEED certified.
- Develop zoning strategies that promote reduced single occupancy vehicle trips and advance green building construction and sustainability.
- Encourage use of renewable energy in as many public and private activities as possible.
- Upgrade all streetlights and lights in public spaces to LED or other energy efficient lights.
- Encourage use of kitchen and bathroom fixtures that save water and energy.
- Promote rainwater harvesting for individual homes and apartments with autonomous system.

Infrastructure:

- Partner with communications companies to provide fiber optic service to Plainfield as part of major road improvements, and within development and redevelopment areas.
- Install digital wayfinding and other signs for navigation and to provide information and directions on available access to nearby amenities.
- Create education programs to guide residents and businesses through the transition from existing infrastructure to new technology and update those programs as necessary.
- Microgrids: The City should undertake a survey of current electricity supply and demand and determine whether urban microgrids are possible for certain areas such as Muhlenberg Hospital campus, Union County College campus, redevelopment areas, etc.
- Upgrade infrastructure to ensure maximum use of renewable energy. For example, solar streetlights, etc.
- Introduce autonomous system for activities like garbage collection, public amenities access, etc.
- Introduce block chain technology to create algorithmic systems for day-to-day activities. (A blockchain is a decentralized, distributed, and often public, digital ledger that is used to record transactions across many

computers so that any involved record cannot be altered retroactively, without the alteration of all subsequent blocks.)

- The respective governing agency in coordination with the City should invest in cyber security to prevent technology infringements.

Governance:

- Educate the city's residents and business owners on how connectivity and digitizing will help provide more smart solutions and will eventually be cost effective.
- Work together with local and state government, planners, engineers, architects and technology providers to come up with best possible smart solutions for Plainfield.
- Introduce dynamic zoning and/or algorithmic zoning, especially in Transit Oriented areas, downtown, redevelopment areas. (Dynamic Zoning: An incremental and data-responsive approach to regulating real estate development that facilitates organic urban growth. Algorithmic Zoning: The idea is to first take datasets like mobility times, unit economics, amenities scores, and health outcomes, among many others and feed that into a machine learning model that is trying to maximize local resident happiness. Tokens would then be a currency to provide signals to the market of what things should be added to the community or removed to improve happiness.)

For more information see:

Green Building and Environmental Sustainability Element

- Waste Management

Conservation Element

- Resiliency Plan

Recycling Element

Circulation Element

- Bicycling and Walking
- Issues/Trends

Housing Element

- Recommendations

Community Input

Sampling of comments from Community Workshops

- Billed by water usage – some pay higher rates in the summer because of sprinkler usage, etc. One way to avoid this is to install two different water meters for water usage billing (one for outside water usage and one for inside).
- Plainfield should focus on resiliency, flood zone issues/concerns.
- Cushing Rd. (borders Scotch Plains (no sewers) – street drainage issues/flood concerns.
- Aging infrastructure (water, bridges).
- With all new development, does Plainfield know our infrastructure capacity (i.e. gas, power)? We should!
- Leaf pickup clogging drainage.
- Apartment buildings do not do leaf pick-up ever! (i.e. 2nd street) should have code enforcement go out.
- Leaf piles take up parking spaces and are unsightly.
- Leaves should be bagged.
- Putnam Avenue drainage system is poor.
- A lot of streets do not have curbing.
- Review flood maps – some homeowners paying flood insurance for a property that doesn't flood – need more info/communication from the City about the process.

From the Master Plan Survey

Among participants in the survey, for maintenance of water and sewer infrastructure 82% said it was very important with 15% calling it important.

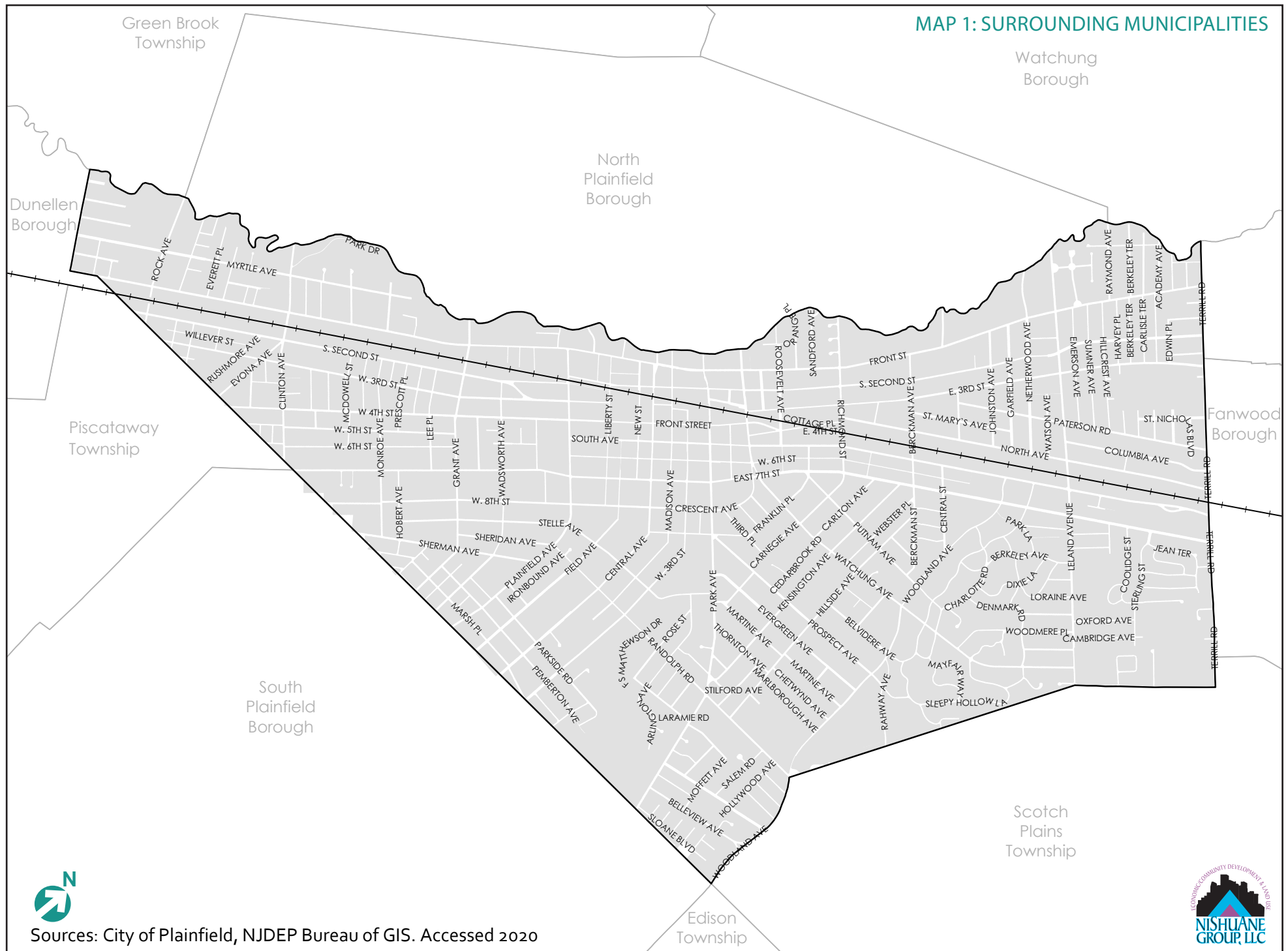
Flooding was also an important issue, with 62% who said flooding in residential neighborhoods was very important, while 27% said it was important. Drilling down, those surveyed gave highest priority to:

58%	Dredging Green Brook/Cedar Brook
56%	Stormwater infrastructure
52%	Elevation of houses
50%	Acquisition of open space for conservation

- There is too much garbage in the Green Brook that flows downstream into Green Brook Park. A concerted effort must be made to educate people about what their littering does to the environment.
- Agree coordination with upstream / regional watershed communities.
- Restoration of riparian flora along waterways.

RELATIONSHIP TO SURROUNDING COMMUNITIES

MAP 1: SURROUNDING MUNICIPALITIES



Sources: City of Plainfield, NJDEP Bureau of GIS. Accessed 2020



CONSISTENCY WITH LAND USE PLANS IN NEIGHBORING MUNICIPALITIES

The City of Plainfield is directly abutted by seven municipalities, including:

- Township of Scotch Plains (Union County)
- Borough of Fanwood (Union County)
- Borough of South Plainfield (Middlesex County)
- Township of Piscataway (Middlesex County)
- Borough of North Plainfield (Somerset County)
- Borough of Watchung (Somerset County)
- Green Brook Township (Somerset County)
- Borough of Dunellen (Middlesex County)

While two of these municipalities are also located in Union County, the remainder are located in Somerset and Middlesex counties.

Scotch Plains Township

Scotch Plains shares a border with the City of Plainfield to the north, separated by Terrill Road and to the southeast below Cushing Road. The Township of Scotch Plains shares a sizable border with the City of Plainfield. Hillside Cemetery is located at the southernmost edge of the township and represents the starting point of the Plainfield borderline. This borderline continues north until Terrill Road, which marks the borderline of the Borough of Fanwood.

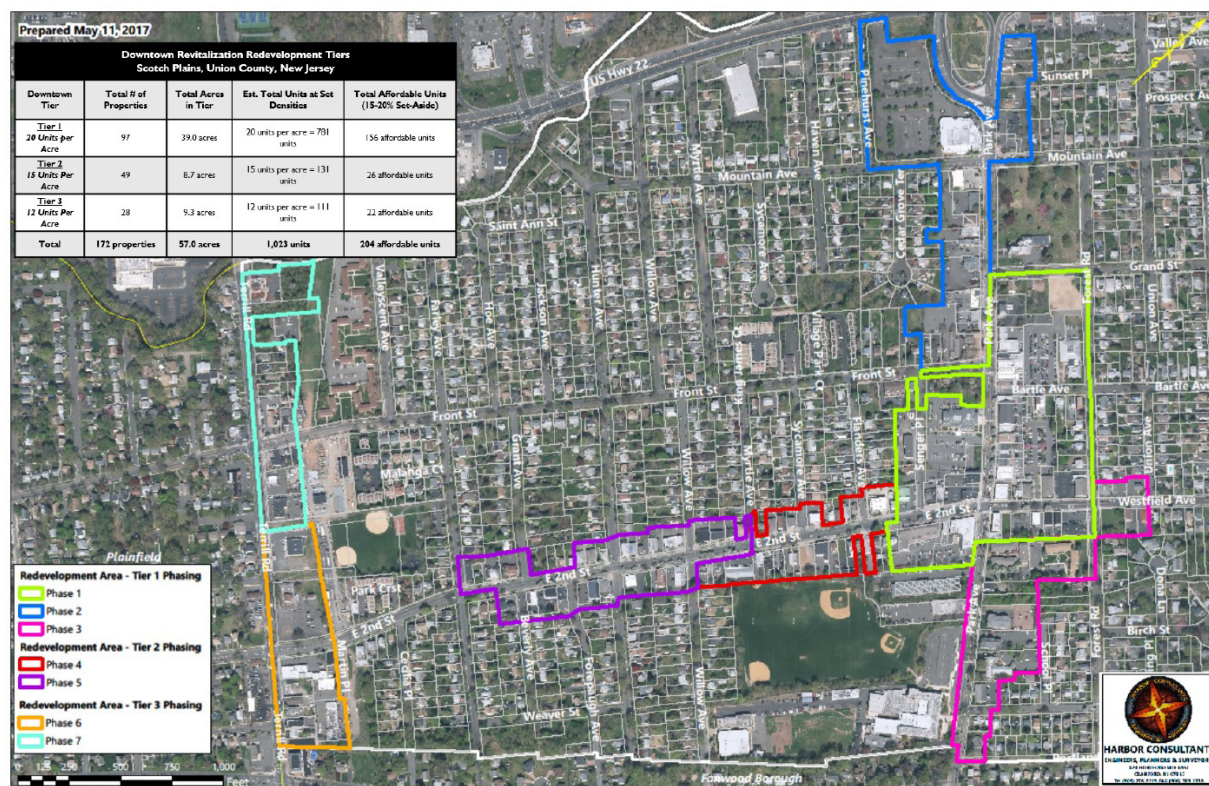
Scotch Plains is currently under an administrative consent directive for affordable housing under the Township's

Fair Share Plan. In compliance with this directive, Scotch Plains plans a multi-phase development, which will include mixed-use development throughout the Township. Among the areas targeted for this development are the parcels fronting Terrill Road, from the Green Brook to the Scotch Plains/Fanwood border. On the opposite side of Terrill Road in Plainfield, this area is zoned as R-3, NC and R-2. This Plan recommended the rezoning of the R-3 zoned lots to NC and the area currently zoned R-2 to be reassessed to determine if the existing lot sizes render them more appropriately zoned R-3. The planned development on the Scotch Plains side of Terrill Road should be taken into account

when considering the recommended zoning changes, as well as addressing joint flooding concerns.

Borough of Fanwood

The Borough of Fanwood is located to the north of Plainfield, separated by Terrill Road. Fanwood has introduced new South Avenue zoning in the area, which extends north and south of the Borough's train station. Additionally, like other communities along the Raritan Valley Line, Fanwood has also changed the zoning around the train station. The goal is to have a continuous pedestrian-friendly corridor on South Avenue, which



Scotch Plains Downtown Redevelopment Tiers and Phases

Source: Borough of Scotch Plains

extends across Terrill Avenue into Plainfield.

The South Avenue Zoning includes a Commercial Center (CC), which is divided into three sections, CC-Western District, CC-Central District and CC-Eastern District. The CC-Western District, which abuts the Plainfield border, serves as the western gateway into the Borough. This District permits commercial uses, including office, restaurant, grocery and personal service establishments, as well as light industrial and small manufacturing enterprises. Among uses that are prohibited within the Fanwood South Avenue Zoning are fast food or drive-in restaurant establishments, drive-through uses, gasoline stations and car washes.

The communities with stops on the Raritan Valley Line have gotten together to coordinate development along South Avenue. The group, which has adopted the working title of "Union County South Avenue Corridor Group," includes Plainfield, Fanwood, Scotch Plains, Westfield, Garwood and Cranford, all towns with stops on the Raritan Valley Line.

The Borough of South Plainfield is located to the south of the City of Plainfield. The predominant land use along the border is residential, specifically R-7.5, R-10, and R-15 zoning. OBC-1 – Local Business Zoning District is located in two areas on the border, though only for a couple of blocks. The City of Plainfield Zone Plan envisions Medium Density Residential, Parks and Medium to High Density Residential development along the mutual boundary with the Borough of South Plainfield. This is compatible with the pattern of existing land uses within the Borough of South Plainfield.

Specifically, the OBC-1 zones in South Plainfield both coincide with similar uses in Plainfield. The OBC-1 zone at the western end of the common border abuts the NC zone at the intersection of West Seventh and Clinton streets and the OBC-1 zone at the eastern end of the boarder runs into Park Avenue in Plainfield. The latter OBC-1 zone contains a strip retail plaza. This is consistent with the development on Park Avenue in Plainfield, with the former Muhlenberg Hospital site and the proposed CVS store on the opposite side.

Additionally, South Plainfield's R-15 zone abuts Cedar Brook Park in Plainfield. As discussed in the Land Use Element, there is an opportunity for both jurisdictions and the Middlesex Water Company, to work together to develop a walkway alongside the waterway that would connect Cedar Brook Park with Spring Lake Park.

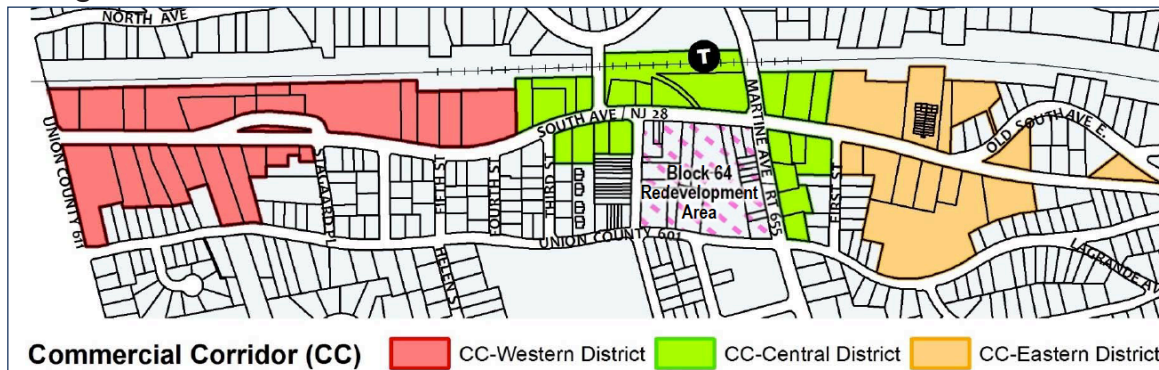
Township of Piscataway

The Township of Piscataway is located to the southwest of Plainfield. The land uses in this area include moderate density residential within the City's R-3 and R-4 zones, as well as light industrial uses in the LI zone. On the Piscataway side, the zoning is primarily Residential R-7.5 with M-1 Industrial on South Second Street and a block on West Sixth and Trinity Place zoned for General Business. The land use pattern on the border of Piscataway and Plainfield is consistent.

The M-1 zone in Piscataway directly abuts the L-1 zone in Plainfield. Piscataway is considering the creation of a redevelopment area here that will remain industrial. This will coincide with the proposed West End Industrial Corridor development being planned for the abutting area in Plainfield. Both the area between West Third and West Fourth streets and the area around the Clinton and Seventh Street NC zone in Plainfield are now being developed.

Piscataway and Plainfield should work together to advance an industrial corridor in both municipalities.

Borough of South Plainfield



Fanwood Borough South Avenue Zoning

Source: Fanwood

Borough of Watchung

The Borough of Watchung abuts Plainfield on its north western border. The two municipalities share Terrill Road to the north. The border between the Borough of Watchung and the City of Plainfield is comprised of commercial and residential uses abutting each other, separated by the Green Brook. The Borough of Watchung is zoned Highway Commercial, while the City of Plainfield is zoned R-2 – Residential. The border is located on the northwestern portion of the City of Plainfield.

A new multiplex theater is located in Watchung on the border with Plainfield and development is currently ongoing on the former Sears site fronting on Terrill Road and U.S. Highway 22. In addition to the main retail establishment being developed here, four “pad” sites are proposed in the parking area. A Chick-fil-A, Miller’s Ale House and an urgent care center are proposed on three of these sites.

Township of Green Brook

The Township of Green Brook abuts Plainfield to the southwest. This area of Plainfield is characterized by medium density residential and professional office uses. This is compatible with the pattern of existing land uses within the Township of Green Brook. The two municipalities share a small border, which is comprised of forested area. The area belonging to the Township of Green Brook is zoned CA – Conservation Area.

The Green Brook also traverses this Township also affording the opportunity to work

together and create a Green Brook Trail section on the Green Brook side of the border. Both Plainfield and Green Brook are members of the Green Brook Flood Control Commission and work together on addressing flooding issues that impact both communities. As with other neighboring communities, the two jurisdictions should work together with other issues of mutual concern.

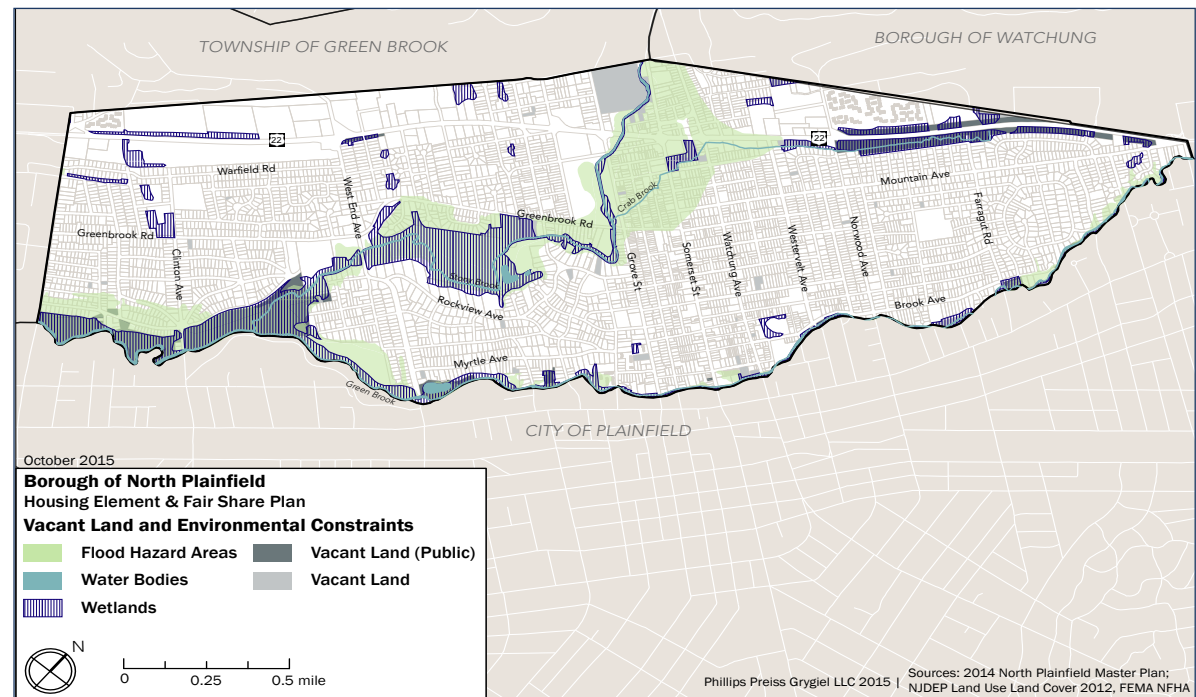
North Plainfield

The Borough of North Plainfield is located to the west of Plainfield. The two municipalities are separated by the Green Brook. The area immediately abutting the Green Brook in the southwestern part of North Plainfield is a dedicated wetlands and flood hazard area, which extends into Green Brook Park

in Plainfield. This flood hazard area extends further to the north west along Stony Brook. North Plainfield is currently contemplating creating an open space zone (similar to what is being recommended for Plainfield) and designating this area as dedicated public land.

The Albert G. McWilliams Trail (Green Brook Trail) traverses from Plainfield into North Plainfield. North Plainfield has expressed an interest in collaborating with Plainfield in furthering the development of this trail, to the benefit of both towns.

The remainder of the common border is characterized by residential uses on both sides.



North Plainfield - Housing and Fair Share Plan
Source: North Plainfield

Borough of Dunellen

The Borough of Dunellen is located on the southwestern-most edge of the City of Plainfield. Jefferson Street divides the two municipalities. The land uses appear to be similar in terms of residential uses on both sides. The zoning adjacent to the rail line for the City of Plainfield is GC – General Commercial, while the Borough of Dunellen is zoned B - Business.

The NJ Transit Raritan Valley Line runs through both towns and like Plainfield. Dunellen has been designated a Transit Village. The Borough is also advancing their downtown mixed-use development similar to Plainfield, with the adoption of a “*Redevelopment Area Phase 1*” study/plan for 19-acres around its train station,

The municipalities share the light industrial zone along West Front Street and the residential areas to the North. Both municipalities should work together to improve their respective Gateways into/out of each municipality. Dunellen will be commencing its Master Plan reexamination in 2021, which will provide an opportunity to ensure that the zoning in this area remains consistent.

Dunelle has also expressed interest in working with Plainfield to extend the Green Brook Trail into Dunellen and working to address the issue of flooding.

SUMMARY OF RECOMMENDATIONS

LAND USE ELEMENT

RECOMMENDATIONS

Recommended Changes to Zoning and Land Use Regulations

- *Study the PO-1 zone along Park Avenue with Muhlenberg Hospital site to determine if it should be changed.*

This zone was originally created to provide for professional medical offices to complement the mixed-use development of the former Muhlenberg Hospital site. However, the area does not seem to be attracting this use. This plan recommends that the zone (PO-1) be reassessed for its viability as a professional office zone.

- *Eliminate the R-5 zone throughout the City.*

There are currently only two areas of the City that are zoned R-5. This plan recommends:

1. The area encompassed by West Front, Oxford and Lafayette streets be reviewed for incorporation into the MU (Mixed Use) zone located to the north and south.
2. The area of East Seventh and East Fifth streets and Putman Avenue should be reviewed for incorporation into the adjacent R-4 zone.

- *Review the zoning for parcels fronting on Terrill Road, between East Front Street and the Watchung municipal boundary for possible change to commercial zone.*

This area is currently zoned R-3. However, the majority of parcels here are non-conforming, containing primarily single-family dwellings. With the high volume of vehicular traffic coming from Route 22, these parcels are not appropriate for the existing residential use. This plan recommends that this area be rezoned to commercial use.

- *The R2 zone along Terrill Road, and Columbia, George streets should be rezoned to an R3 zone.*

This plan calls for a review of lot sizes and determine if R-3 designation is more appropriate.

- *Review West Seventh Street from Irving Place/John Street for possible reclassification.*

This area west to the South Plainfield municipal boundary is in a Low-Moderate Density Residential development pattern and is zoned R-3. This designation permits only single-family dwellings on 12,500 sq. ft. lots, yet the majority of the large structures in this area are not single family, and there are pressures to permit higher densities as the lots are extremely deep. The Zoning Board of Adjustments (ZBA) has granted approvals allowing higher density townhouse /single family development. This plan calls for further study in order to determine if classification permitting a higher density is appropriate.

- *Reviewing area centered on Plainfield Avenue, West Fourth Street, Central Avenue and the NJ Transit tracks.*

The majority of uses in this area are apartment complexes at a much higher density than the pattern or zone calls for. This plan recommends the designation of a higher density land use pattern.

- *Add all redevelopment areas with adopted redevelopment plans to the Zoning Ordinance and Map.*

This Plan calls for the inclusion of Redevelopment Areas with governing plans in the City's Zoning Ordinance and for the updating of the Zoning Map to indicate areas of the City where redevelopment plans have been adopted and where alternate zoning that supersedes the underlying zoning is in place.

- *Update Zoning Map to reflect 197 Scattered Site Redevelopment Plan changes.*

This plan calls for the updating of the Zoning Map to reflect the amendment of the 197 Scattered Site Plan, which is now reduced to 38 sites.

- *Rezone the parcel adjacent to Cedar Brook Park on the South Plainfield border.*

This plan recommends the rezoning of the parcel (Block 731, Lot 15) abutting Cedar Brook Park to the south from the existing R-3 zone to a newly created Open Space Zone (see previous recommendation). This will restrict any development, which could potentially adversely impact Cedar Brook Park.

- *Ensure Cedar Brook Park is shown properly on the zone map.*

There is a section of the park fronting on Parkside Road (Block 733, Lot 22), which should be included in the park area. Both Cedar Brook Park and the adjacent lot are Recreation and Open Space Inventory (ROSI) declared properties on the Union County ROSI (Recreation and Open Space Inventory). This plan recommends that these lots should be shown as open space on the Zoning Map.

- *1229-1253 Cushing Road (The Peterson Farm.)*

This plan recommends that 1229-1253 Cushing Road – the Peterson Farm (Block 922, Lots 55 and 56), which is on the Union County ROSI, should be indicated on the land use map as open space.

- *Add Commercial Recreation Facilities as a permitted use in the CBD zone.*

This plan recommends the addition of "Commercial Recreation Facilities" as a permitted use in the CBD. This and similar uses reflect the ongoing transformation of the CBD and the surrounding Downtown area, where both longtime and new residents will require establishments like this.

- *How should the city address institutional uses (PMUA transfer stations, post offices, etc.)?*

This plan calls for inclusion of "Institutional Uses" as a defined term in the land use ordinance. This will help to eliminate existing confusion about this use.

- *Inclusion of schools as a permitted use in any zone.*

Currently schools are not a permitted use in any zone. This plan recommends that schools be considered a permitted or conditional use in appropriate zones throughout the City. This action should be a part of a wider discussion between the City and the Board of Education as to the most appropriate locations for school facilities throughout Plainfield.

- *Inclusion of funeral homes as a permitted use in additional commercial zone.*

Funeral homes are currently limited to a few commercial zones. This plan recommends that this use be permitted in a greater cross-section of commercial zones.

- *Resolve differences between repair facilities/auto repair/auto body uses and multi-family uses.*

This plan calls for the update of the ordinance to define how these businesses differ. Conduct a study of all auto repair and auto body uses and determine site suitability and conflicts with issuing certificates of occupancy.

- *Establish group home policy.*

Pursuant to the NJ Municipal Land Use Law, (MLUL), group homes are to be a permitted use in all zones. The City currently has 45 group homes operated by both non-profit and for-profit organizations. This plan recommends that a policy be developed to address the conditions under which such facilities should be sited.

- *Establish a policy governing micro-breweries, distillers and brew pubs.*

Determine how they should be treated under the City's land use ordinance.

- *Develop standards for treatment of solar facilities (both on roof tops and as stand-alone facilities.)*

This plan recommends the development of uniform standards to address installations of solar facilities (both rooftop and stand-alone) throughout the City, with specific attention to rooftop panels in the Historic Districts

- *Consider that the following be permitted or conditional uses in appropriate zones throughout the City.*

1. Micro-apartments (should they be considered as a permitted TOD dwelling unit?)
2. Self-storage facilities.
3. Adult Day Care Centers.
4. Hotels and Motels – develop policy to include in TOD area.
5. Social Clubs.
6. Marijuana Dispensary/Sales.
7. Live Animal Sales.
8. Backyard Chicken Husbandry.

- *Create new zone categories*

1. Open Space Zone

This plan recommends the creation of a new “Open Space Zone” category that will apply only to publicly owned lands, with the exception of the property surrounded by Cedar Brook Park, which is owned by the Middlesex Water Company as a groundwater recharge area. ROSI lands that serve as municipal parks will need to be looked at on a site by site basis for designation under this zone category.

2. Conservation Zone

This plan recommends the creation of a new “Conservation Zone” category. This zone designation would include ROSI protected lands, such as the Cushing Road and Milt Campbell Field detention basins, as well as the forested lands along the Green Brook in the West End that are either wetlands, forested, contain steep slopes, or are natural areas.

3. Cemetery Zone

This plan recommends the creation of a new “Cemetery Zone” category which would include existing cemeteries (which are not likely to change). It is not the intent to create or to designate any new cemeteries. In such a district, cemeteries would be a permitted use, which would allow for their improvement or expansion where appropriate and possible.

- *Develop GIS and Mapping Capability*

This Plan recommends that the City investigate the development of its own in-house GIS (Geographic Information System) and mapping capability. This will allow for the efficient and timely creation/modification of the various spatially based maps and similar documents. This capability is particularly crucial for updating the City's parcel map, which is currently not consistent with the City's tax maps.

Other Recommendations

- As development continues place in the Downtown area, this plan recommends that the City work with Union County College to coordinate anticipated expansion plans in this area.
- The Neighborhood Commercial (NC) zone located on East Second Street (between Leland and Johnston avenues) has not seen the level of development anticipated, primarily due to its being located within a flood zone. This plan recommends that the City continue to work with the Green Brook Flood Zone Commission and the appropriate county and state agencies, to ameliorate the flood condition.
- The streetscape guidelines that were previously developed were never formally adopted by the City Council. This plan recommends that the Council adopt these guidelines so that they may be properly applied.
- This plan recommends that a Parks Master Plan be undertaken by the City for an in-depth assessment of the City's open space and recreation facilities and their adequacy in meeting the needs of the City's residents.
- This plan recommends that the City work with South Plainfield to explore the creation of a walkway alongside Cedar Brook. Such a walkway could connect with Spring Lake Park in South Plainfield and ultimately become a part of the East Coast Greenway, which extends from Maine to Florida, connecting 15 States and 450 cities and towns.

- This plan recommends that Cedar Brook and Green Brook parks should be formally designated as Plainfield Historic Landmarks. They are both already designated on the state and national historic registers.
- The Park-Madison Development, which included a parking deck, was completed. However, the parking deck has been underutilized. This plan recommends that the City work with Union County to allow use of the deck to facilitate the TOD development in the area.
- There is a need for some level of public intervention in the West End neighborhood, to help spur private investment. This plan recommends that the City have the West End neighborhood designated as an area in need of redevelopment or rehabilitation, and subsequently create a redevelopment or rehabilitation plan that would encompass the properties in the West End. This would allow for the use of the tax incentives that accompany an “area in need of redevelopment or rehabilitation” designation to incentivize development within the area. This approach would help in addressing the issues related to the deterioration of properties. The creation of sub-district(s) within the redevelopment area would allow for zoning regulations specifically targeted to areas within the neighborhood.
- This plan recommends the City working collaboratively with neighboring municipalities to address common issues and concerns, including the extension of the Green Brook Trail, flooding that extends across municipal boundaries and advocating for a “one seat ride” into Manhattan.

HOUSING ELEMENT

Diversify the City's Housing

- Identify existing areas of the City where changes in zoning is appropriate to allow for alternate housing types and zoning at increased densities. Alternate housing types and zoning may include examples like Cottage Housing Development Zoning¹.
- Facilitate partnerships with the developers of specialty housing, to develop housing units for targeted populations, including senior citizens and adult communities.
- Establish a market rate luxury residential rental market. While there is an existing and strong luxury homeownership market within the City, currently, the Quinn Sleepy Hollow residential development is the only luxury rental development in Plainfield. This segment of the rental market is an important component of City's housing market that will provide opportunities for both new and existing residents, especially older, "baby boomer" residents who are seeking to downsize from their larger homes, yet seek a higher end housing unit with accompanying amenities at a similar level.
- Modify existing zoning where appropriate, to allow for the creation of accessory apartments to house and care for an aging family member.
- Offer options to homeowners who are members of the "baby boomer" age cohort of the population who see that their larger homes become more difficult to maintain. The City should explore the possibility of allowing the subdivision of their larger homes, where appropriate, to create accessory housing units.
- The City should continue to pursue the revitalization, and adaptive reuse, of dilapidated, obsolete, and underutilized commercial and industrial buildings for the production of new housing units where appropriate.
- The City should seek expansion of funding for the Comprehensive Housing Assistance Program (CHAP) to encourage the rehabilitation of substandard structures and prioritize homeownership through its use.

Increase Affordable Home Ownership options

- Before taking properties to auction, allow access to the City's over 200 vacant and abandoned properties by non-profit housing developers to develop for-sale affordable housing units.
- Establish a Redevelopment Fund that will require developers of market-rate units to contribute to the fund that can be used in part for the development of affordable housing units. This may be included as part of a community benefits agreement.

Prepare and Assist Current and Prospective Homeowners

- Create a Housing Resource Center to serve as a "one-stop" for housing resources to help residents address housing and related issues. This Center would connect residents with various local, state and federal resources to assist them with any problems being faced.
- Expand financial literacy programs throughout the City with the aim of preparing individuals to navigate the homebuying process and understanding the steps necessary to maintaining good financial standing.
- Increase existing homebuyer training programs within the City, including the Family Self Sufficiency (FSS) program being operated by the Housing Authority of Plainfield. Create workshops offered at various locations in Plainfield.
- Continue to disseminate information regarding availability of mortgage financing made available through the New Jersey Housing Mortgage Finance Agency (NJHMFA) and any other sources.

- The 2009 Master plan raised an issue that unfortunately is once again timely. The City may wish to explore ways to provide assistance to homeowners facing foreclosure as a result of job loss during the pandemic.

Collaborate to Develop Job/Skill Development Programs

- Partner with local community development corporations to provide resources and services for job readiness, especially for low-income and unemployed residents.
- Provide skills training for City residents to meet the demand of targeted industries. Encourage partnership with Union County College and its Center for Economic and Workforce Development. The trades (i.e. electricians, plumbers, welders, carpenters) should be promoted as reputable occupations in the City. There should be seamless connections and communications among educational institutions and City employers. Programs such as apprenticeships should be explored to prepare trade workers. Explore partnerships with organizations that support young people going into trades, such as Mike Rowe's mikeroweWORKS foundation.

Reinforce Sustainability in All Housing-Related Regulations and Activities

- Ensure there are LEED components to all homeowner education programs.
- Demand and enforce developers and non-profits' use of sustainable design and products.
- Create a competition among those rehabbing, building and rebuilding for best sustainability initiatives.

ECONOMIC PLAN ELEMENT

- **Job Training:** Provide skills training for City residents to meet the demand of targeted industries. The City has partnered with the Elizabeth Economic Development Center to provide training and apprenticeship in the building trades through the New Jersey Builders Utilization Initiative for Labor Diversity (NJ BUILD). NJ BUILD which provides outreach, apprenticeship training, and post-graduation placement in the construction trades industry for women and minorities. The City should continue to encourage these partnerships, especially with Union County College and its Center for Economic and Workforce Development. The trades (i.e. electricians, plumbers, welders, carpenters) should be promoted as reputable occupations in the City. There should be seamless connections and communications among educational institutions and City employers. Programs such as apprenticeships should be explored to prepare trade workers. Additionally, the City should explore partnerships with organizations that support young people going into trades, such as Mike Rowe's mikeroweWORKS Foundation.
- **Redevelopment:** The City should move forward with appropriate Redevelopment Plans and Projects, especially in TOD areas.
- **Business Development:** Retain, attract, generate job-generating businesses. The City should continue to generate jobs in industries that are vital to the existing economic base. Sectors of focus are medical, healthcare and biotechnology; research and development; industrial and warehousing; and retail sales and services, all of which will also strengthen the City's tax base.
- **Small Business Recovery:** The effects of COVID-19 has had impacts on the City's economy. In efforts to assist the reopening of local small businesses, the City has created a UEZ 2020 COVID-19 Emergency Assistance Fund for. This fund provides rental/lease, administrative and overhead, and wages. The City is referring businesses to financial and technical support resources. The City will continue to provide assistance to local businesses utilizing UEZ funds.
- **Arts:** Build upon the arts community within the City and incentivize the development of galleries, studios, schools, and specific forms of art such as film, performing arts, painting, drawing, printmaking, sculpture, etc.
- **Film Hub:** Within the arts and creative workforce, the City should promote film production companies to film as well as locate in Plainfield. Production companies should also take advantage of tax incentives such as New Jersey Film and Digital Media Tax Credit Program.
- **Muhlenberg Redevelopment:** Continue with the redevelopment of the former Muhlenberg Regional Medical Center in order to support the City's growth into a major medical hub. The City should consider fostering partnerships with other nearby educational institutions, such as the School of Nursing, School of Public Health and School of Pharmacy at Rutgers University.
- **Urban Enterprise Zone:** Continue to leverage existing businesses and encourage others to locate within the City's Urban Enterprise Zone and take advantage of the tax abatements and benefits. Small businesses should continue to take advantage of the assistance and services offered by the UEZ Program.
- **Opportunity Zones:** Take advantage of the City Opportunity Zone designation, which incentivizes development and investment in areas that have experienced economic distress. There are two Opportunity Zone designations within City limits. The City should consider funding of these zones.
- **Grocery Store:** Provide opportunities for brand-name grocery stores to locate in the City. During the community engagement sessions, residents expressed concerns that brand-name grocery stores are lacking. City residents also noted that they tend to travel outside the City to shop for groceries. The City should encourage potential sites for new grocery stores so that residents from each ward have equal accessibility.

- Community Development: Partner and collaborate with local community development corporations in providing resources and services for job readiness, especially for low-income and unemployed residents.
- Diversify economic base: In combination with job training programs, the City can create opportunities for a variety of job types that require various skill sets and experience.
- Public-Private Partnership: The City should consider public-private partnerships as a means of coordinating, managing and financing redevelopment projects.
- Coding Program: In collaboration with the Board of Education and the City's Information Technology Division, a coding program or school should be considered for learners of all ages to obtain skills and fluency in multiple programming languages and data analysis as jobs these skilled are increasingly in high demand.
- Maker economy and Maker-Space: Stimulate small-scale manufacturing (makerspaces, microbreweries, etc.) within the City. As former larger-scale industrial uses have declined and vacated the City in recent years, smaller-scale manufacturing and light industrial uses are appropriate replacements. Similar to co-working spaces in office settings, makerspaces can provide space for numerous makers within one facility. This will also foster collaborative partnership among many types of makers. The maker economy should be explored as a job growth sector as the trade specialties develop in the City. Programs offering maker-related skills should be expanded in Plainfield, such as the welding program at the Center for Economic and Workforce Development at Union County College.
- Light industrial / manufacturing (South Western end of the City): The City should foster the growth and expansion the industrial and manufacturing industries. There is an existing hub of manufacturing and industrial businesses in Plainfield. Since these industries are significant drivers of the economy, the City should work towards creating more jobs.
- Co-Working Space: The City should look into attracting a co-working operator into the City. Currently, there are no co-working facilities in Plainfield. The real estate market for office space has declined due to employees working remotely, abundance of space and tenant preferences.
- High technology: The City should consider implementing 'Smart City' standards. As the City is a recipient of NJEDA's Innovation Challenge Grant, the City should position itself as a technological hub, transforming aging vacant and industrial properties to thriving mixed-use, high-technology centers. As discussed earlier, a technology-needs assessment should be conducted to determine the technical infrastructure needs of the City.
- Biotechnology: As Plainfield is seeking to fortify the technology and medical industries, the City should explore opportunities in the biotechnology and life sciences research and development fields. Target companies would include labs and incubator space housing related companies, encouraging collaboration and cross-pollination.
- Incentivize business incubators in the City: The City should encourage a business incubator to open in Plainfield. Developing a local entrepreneurship scene will allow for start-ups to locate in the Plainfield. These businesses will continue to grow while establishing roots in the City. Partnering and collaborating with other start-ups will benefit these in their infancy stage.
- Diversify restaurants: Although the existing restaurants in the City span across many cultures, Plainfield should work to attract more ethnically diverse restaurants. Destination-type, experiential restaurants will also bring in visitors to the City.
- Hotel: There are no hotels presently located within the City. The City should consider attracting a hotel as an economic anchor as it could drive numerous supplemental uses, such as retail, banquet halls, office/co-working space, and recreation opportunities. Additionally, a hotel could be a significant employment generator for City residents.
- Urban Agriculture: The City should develop a program of creating accessible community gardens in every ward. In encouraging citizen participation, workshops should be held by the City to educate residents on proper and sustainable gardening techniques as well as opportunities to participate as a vendor in local Farmers' Markets.

- Flood Resiliency: Insist on flood-resilient redevelopment projects and assist existing businesses to implement flood-proofing techniques.
- Seek to grow targeted industries: The City should explore industry and job growth in sectors such as manufacturing, medical, healthcare, energy, and biotechnology. Additionally, green industries should also be examined as potential industrial hub in the City.
- Special Improvement District: Capitalize on the existing capacity of the City's Special Improvement District (SID). The City and Special Improvement District should work together to promote safety within the Central Business District by providing sufficient lighting, signage, and presence of police officers and security. Shoppers will be more inclined to patronize Downtown if they feel safe and secure. The Plainfield SID should continue to promote the improvement district through special promotions, events and marketing through various outlets, including mailings, emails and social media. Promoting Plainfield as a preferred place to shop will bring awareness of the City and its positioning as a revitalized place to do business. Concurrent with the promotion of the Central Business District of Plainfield, the SID should emphasize the safety of Downtown with facts. Enhancing the streetscape, maintaining sidewalks and providing amenities such as street furniture and recycling receptacles.
- Entrepreneurship training: The City should continue to provide resources for residents to start, operate, and promote their own business. The City provides monthly seminars for businesses in creating a business plan, Quickbooks, Maximizing Google Search Engines, Financial Resources for Small Businesses, and other seminars.
- NAN Plainfield Tech World: The City should hold more events thorough the NAN Plainfield Tech World, a comprehensive digital literacy and technology training center, to educate residents on basic fundamentals of using technology in daily life. Although the NAN Plainfield Tech World has held events since the late 2010s, the City should consider tapping into this technical resource for resident training. The success of the previous events, workshops, and programs should be evaluated (i.e.—training participants who have obtained jobs and where they are employed) to determine the events and program content to be offered in the future.

CIRCULATION ELEMENT

General/Roadways

- Ensure roadways are safe and accessible for all users regardless of the type of transportation being used.
- Ameliorate traffic congestion
- Pass a Complete Streets Policy Resolution.
- Continue to pursue NJDOT Local Aid money for local road projects.
- Implement safety enhancements in streetscape design when capital improvements for roadways are needed.
- Provide or replace road signage for residential neighborhoods.
- Work with NJDOT and Union County to implement traffic calming measures at NJ Route 28 and Union County Route 601 (7th Street).
- Develop a road dieting strategy for Union County Route 601 (7th Street) that improves safety beyond the planned intersection improvements.
- Install speed humps along neighborhood roadways that are commonly used as pass through streets.
- Install traffic calming measures on Watchung Avenue to discourage speeding and increase pedestrian safety
- Designate South Second Street as a truck route to provide greater access to Industrial Zones
- Amend LUO to require industrial development and redevelopment to allow sufficient space for the retention of existing and provision of new on-site rail sidings
- Designate arteries that are used for importing and exporting freight
- Transfer jurisdiction of Park Avenue from Ninth Street to North Plainfield to Union County
- Create and designate emergency response routes
- Upgrade traffic lights with timers that adjust to traffic levels using Intelligent Transportation Systems (ITS) downtown
- Install traffic signals where none exist on East Seventh Street, Franklin Place and Putnam Avenue; and Randolph Road and Plainfield Avenue
- Improve the intersection of Rock Avenue and Front Street to better accommodate truck turns
- Maintain and annually update an ongoing plan for capital improvements to the circulation system
- Identify areas where traffic lights or signs should be installed and where additional traffic control devices are needed
- Continue to work with PSE&G to convert street lights to LED to reduce power usage and city costs
- Complete Phase II of the downtown streetscape program that involves enhancing the area along Watchung Avenue, repairing sidewalks between East Second Street and Fifth Street, and enhancing Park Avenue and West Front Street
- Implement the recommendations resulting from the Parking Plan attached as Appendix A.

Public Transportation

- Partner with transit providers to create transit route from Plainfield to Rutgers University and other employment facilities in New Brunswick.
- Improve lighting and handicap accessibility at Plainfield and Netherwood train stations.

- Promote One-Ride service on the Raritan Valley Line to create direct train service from Plainfield to Penn Station New York.
- Explore partnerships to solve “last mile” issue to/from train stations. (Uber/Lyft/trolley)
- Reopen a former train station on the West End
- Explore jitney service to connect West End and other neighborhoods to the Downtown Plainfield station
- Promote multi-modal connections to Newark Airport, the Amtrak Northeast Corridor, the City of Elizabeth, and to regional employment and educational centers
- Develop parking plan around downtown train station to create strategies that promote alternative means of transportation to and from the station.
- Conduct outreach efforts targeted at workers who commute by “taxicab or other means” to better understand commuting patterns of Plainfield residents
- Identify opportunities for creative placemaking where art and cultural amenities may be integrated into transit stations.
- Enhance and construct bus shelters at bus stop locations to provide adequate shelter and location identification to the residents.
- Work with NJ TRANSIT to improve location of bus stops to make them more convenient for residents.
- Explore ways to improve convenience and frequency of local bus routes to include educational and employment centers in and around New Brunswick.

Bike/Ped

- Where they can be accommodated, develop new bicycle and pedestrian facilities along City roadways.
- Partner with Union County and NJDOT to develop new bicycle and pedestrian facilities along County and State roadways.
- Utilize NJDOT’s Bicycle Facility Table to guide the type of bicycle facility that should be constructed throughout Plainfield’s bicycle network.
- Implement planned initiative to create North Avenue pedestrian mall.
- Seek opportunities to create a new bike share program with subsidies for low-income residents
- Work with Union County to have certain paths and/or sides of paths in Green Brook and Cedar Brook parks designated for bicycle use
- Work with EZ Ride to implement strategies to improve Safe Routes to School and other pedestrian/bicyclist safety at identified dangerous intersections in Plainfield.
- Produce a map of recommended school routes and identify safety improvements that should be given priority for implementation
- Create biking connections between Plainfield and surrounding municipalities.
- Add high visibility crosswalks and RRBs at major pedestrian crossing locations, especially in downtown area and near train stations.
- Utilize NJDOT grant to make Safe Routes to School improvements
- Install Hawk signals at Watchung/North Avenue intersection as a part of North Avenue pedestrian mall initiative
- Install barrier free sidewalk improvements in conformance with ADA requirements to ensure accessible routes for the disabled
- Undertake a street lighting study to identify areas in the City where additional lighting is needed or needs maintenance.
- Install pedestrian scale lighting near transit stops, commercial districts and other areas identified in the lighting study as areas in need of additional lighting

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| • Require private development to implement the City's Streetscape requirements. |
| • Enhance bicycle safety and bicycle facilities in and around train stations and bus stops. |
| • Seek annual grant funding to implement the Green Brook Multi-Use Trail |
| • Ensure that there is adequate amount and distribution of bicycle racks throughout Plainfield |
| • Encourage new development to promote the use of and provide adequate space for dockless bicycles. |
| • Conduct a sidewalk inventory. The inventory should identify neighborhoods lacking sidewalks, sidewalks in disrepair or sidewalks inaccessible due to vegetation. Capital improvements should be prioritized by demand (proximity to pedestrian generators), existing conditions (sidewalk not present or in poor condition) and functional classification. |
| • Explore the potential of a sidewalk improvement fund. The fund could be supported through new development applications as a way to make repairs or address gaps in existing sidewalk infrastructure in off-site locations. |
| • Inventory locations where sidewalk ramps are not provided, street signs are missing, traffic control signs are faded, and crosswalk striping has deteriorate, and install such improvements as required. Implement a regular program to monitor and rectify problems relating to such conditions. |

COMMUNITY FACILITIES ELEMENT

General

- Establish a new Community Center
 1. Establish an adult education program offering an array of education opportunities for residents. Courses might technology basics; GED; home improvement and mastering the ownership process; language and literacy; cooking; exercise; photography; and trades (i.e., welding, plumbing, carpentry, electricity).
 2. New Recreation Center: The City's YMCA facilities, located at 232 East Front Street and 518 Watchung Avenue, are both closed. Thus, Plainfield is in need of a new YMCA or general recreation facility to serve all residents. Locations for a new facility should be explored. The selected location should be equally accessible to all residents. The new YMCA or recreation center should also offer a wealth of programming and serve as a multipurpose event space. This recreation facility could be consolidated with the recommendation for a new community center and its intended programming.

Public Health/Community Wellness Initiative:

- The City should continually engage with residents to promote healthy lifestyles. Events, such as healthy cooking classes, exercise classes, meditation and general wellness workshops should be held at City venues, such as PPAC.
- The Health Division should establish a mental health hotline that is accessible 24 hours a day, 7 days a week.
- Establish a year-round Farmers' Market: farmers' markets provide residents access to locally grown fresh fruits, vegetables and other area-sourced food suppliers. Plainfield participates in the WIC and Senior Farmers' Market Nutrition Program, which allows eligible women with young children and seniors to purchase food from farmers' markets in Union County using vouchers. Overall, establishing such a market in the City will provide access to healthy food to residents. Potential sites are North Avenue between Park Avenue and Watchung (or a portion of this area); City-owned parking lot #14 or lot behind Scott Drugs. The farmers' market could also continue operating at its seasonal location at the intersection of West 6th Street and Watchung Avenue.
- Target and Encourage Urban Agriculture: The City should develop a program of creating accessible community gardens in every ward. In encouraging citizen participation, workshops should be held by the City to educate residents on proper and sustainable gardening techniques.

Seniors

- Plainfield should conduct an Aging-Friendly Community Assessment in preparing the City in becoming an aging-in-place city.
- Additionally, the City should partner with the Senior Center and other organizations dedicated to working with seniors to provide events for the elderly and adequate transportation services so that such events would be accessible to all seniors throughout the City.
- Accommodate aging population: Provide adequate community amenities to encourage residents to age-in-place.

Public Safety

- **Potential Satellite Police and Fire Stations:** Due to the current and expected growth in Plainfield's residential population, the Police and Fire Divisions should evaluate their essential services and determine how they should be expanded. Based on the proposed development pattern and necessary service area indicated by both the Fire Division and Police Division, a new satellite public safety station (police, fire or both) should be located on the north side of the railroad tracks.
- **Enhance Public Safety:** Emphasize public safety by continuing to develop partnerships with the community and educate residents on safety issues. Provide updated engagement communication (message board, social media) for increasing community participation in programs and events.
- **Conduct a feasibility study of a new Public Safety Complex:** This feasibility study will assess the needs of the Fire Division, Police Division and Municipal Court in determining siting and operations of a new Public Safety Complex.

Educational Facilities

- **Board of Education:** Encourage seamless and consistent communication between the School District's Board of Education and the City's Planning Division and Planning Board.
 1. Establish a joint committee of the Planning Board and Board of Education members. The objective would be to determine how the School District would be impacted from the proposed development and mitigation measures so that these impacts could be managed. The committee should collectively evaluate the Capital Improvements to the School District facilities.
 2. Conduct Impact Analyses: Simultaneously, the Planning Division should continually advise the Board of Education on new redevelopment projects underway and their impacts to the School District system (i.e., projected additional school-aged children anticipated in the new redevelopment projects; capacity; budgeting, etc.)
 3. Safe Routes to School: The City should work toward implementing a Safe Routes to School Policy, for students of public and non-public schools alike.

Arts and Cultural Facilities/Assets

- **Plainfield Performing Arts Center (PPAC):** Promote events and usage of the newly created PPAC. In optimizing the programs to be offered at PPAC, the City should assist in implementing the goals, objective, strategies and actions of the Cultural Arts Plan once the it is finalized.
- **Arts Advocacy:** Provide opportunities to expand the programming and events of artists and art enthusiasts in Plainfield. Establishing a coalition of local arts will contribute to the growth of artist community in Plainfield.

- Creative Placemaking: Creative Placemaking refers to the collaboration of various forms of arts and cultural amenities in using spaces and venues. Here are examples of such joint efforts possible in Plainfield.
 1. Explore options to re-use the Strand Theater as a performing arts venue as well as a community education facility.
 2. Continue to facilitate the engagement and growth of the artist community. Promoting Plainfield as an arts destination will contribute to the development of a critical mass of arts-related activities.
 3. Advance proposed enhancements and upgrades to the Plainfield Public Library. Explore various ways to facilitate engagement among all ages of library patrons. The library should utilize Library Park as a venue for outdoor programming and events to facilitate resident engagement, including used book sales, community dances and holiday bazaars.
 4. In collaboration with Plainfield's Special Improvement District, art-related events should be promoted and planned within the Central Business District (i.e.—art walk, film festival, arts and crafts fair, First Friday, etc.)

RECREATION AND OPEN SPACE ELEMENT

Add to ROSI

- Place existing city-owned vacant land that is suitable for open space on the ROSI, concentrating on lands adjacent to Green Brook, in designated flood areas, and near existing recreational lands and undeveloped open space.
- Discuss the potential of other public and private owners of placing vacant open space on the Recreation and Open Space Inventory (ROSI) as well as open space easements wherever applicable.

Encourage City Initiatives

- Collaborate with divisions of Parks and Recreation, Public Works, stakeholders and residents to create a program to maintain and keep the existing parks clean.
 1. Consider working with residents to create Friends organizations for the two parks that would be dedicated to looking after the parks, with seasonal clean-ups, fundraisers, etc.
- Work with the Board of Education and Recreation Department to use available space creatively to expand recreational facilities throughout the City.

Improve, Enhance Existing Parks

- Upgrade and expand parks and open spaces through available capital programs and state grants.
- Include more walking and biking trails like Green Brook Multi-Use Trail, safer for all age groups and accessible from all parts of the City.
- Consider expanding Green Brook Multi-Use Trail.
- Develop and improve the lands that are under ROSI, but are still vacant or underutilized.

Meet Resident Needs

- Include recreational activities that provide places to exercise. For example, open gym, running tracks etc.
- Create community gardens, dog parks, etc. to increase social interaction as well as to take a step further towards sustainability.
 1. Hold workshops on planting/gardening, provided by Union County/Rutgers extension service.

Use Redevelopment, Zoning to Expand Open Space

- Create a new "Open Space Zone" category that will apply only to publicly owned lands, with the exception of the property surrounded by Cedar Brook Park, which is owned by the Middlesex Water Company as a groundwater recharge area. ROSI lands that serve as municipal parks will need to be looked at on a site by site basis for designation under this zone category.
- Include small open spaces in neighborhoods through Redevelopment Plans and Zoning Ordinance.
 1. Seek redevelopment fund and other appropriate funds to maintain and expand open spaces and recreational activities in the City.

Implementation Strategies

- Amend the Zoning Ordinance to add standards for maintaining and enhancing existing open spaces.
- Begin work on the proposed North Avenue Plaza project, including street improvements and a pedestrian mall, by closing off Gavett Place and possibly a part of North Avenue to vehicular traffic to create a public space.
- Direct the recreation division to begin collecting data relating to age groups of residents who utilize the CCTV parks on a regular basis. These records can be vital when parkland is purchased, and infrastructure improved in order to provide services and facilities that are consistent with residents' demands and overall city demographics.
- Add to ROSI land to meet minimum recreational and open space land requirements per census tract set forth in the National Recreation Standards (NRS) and the New Jersey Recreation and Park Association (NJRPA).
- Create 5-year Parks Improvement Capital Plan which include an assessment of City-owned parks.
- Acquire vacant and underutilized lands to develop for recreation and open space purposes.
- Expand Green Brook Multi-Use Trail which will require 10-year construction schedule.

CONSERVATION ELEMENT

City Initiatives

- Prepare a Critical Areas Ordinance and design guidelines to protect and preserve environmentally sensitive areas within the authority provided by the Municipal Land Use Law.
- Create a Habitat Conservation ordinance to protect any vulnerable species and their habitats identified in the Natural Resource Inventory.
- Working with the Shade Tree Commission, the city should continue to preserve existing trees and plant more trees with new developments.
- Take efforts to continue the Tree City designation given by the National Arbor Day Foundation.
- Conduct and maintain an inventory of natural resources, open spaces and brownfield development areas.
- Institute programs and land use regulations to maintain and preserve existing woods, streams, wetlands and other natural resources.
- Continue to maintain an inventory of identified contaminated sites, aggressively pursue Hazardous Discharge Site Remediation Funding (HDSRF) and 'Brownfield Development Area (BDA) status, implement remediation and monitor clean up status with the NJDEP and the U.S. EPA.
- Create city-wide Climate Action Plan that provides policies and measures that the City will enact to reduce greenhouse gas emissions and increase the community's resilience to unavoidable climate change.
- Calculate Plainfield's carbon footprint, or the amount of carbon dioxide and other carbon compounds in the air due to the consumption of fossil fuels. Take efforts to reduce the City's carbon footprint by encouraging sustainable planning and policies, especially in the areas with a higher carbon footprint.
- Create a new "Conservation Zone" category. This zone designation would include ROSI protected lands, such as the Cushing Road and Milt Campbell Field detention basins, as well as the forested lands along the Green Brook in the West End that are either wetlands, forested, contain steep slopes, or are natural areas.

Resiliency Measures

- Encourage residents to use water responsibly for activities like agricultural practices and help reduce soil degradation/erosion etc.
- Reduce impervious surfaces by creating bioswales along the streets, rain gardens, plantings in surface parking lots, green roofs etc.
- Encourage on-site stormwater management to reduce down-stream in parts.
- Encourage low-impact development, green infrastructure management.
- Reduce Green House Gas emissions. The recommendations for this can be found in the Green Building and Environmental Sustainability element of this Plan.
- Plan for resilient buildings (able to withstand intense disasters, manmade and natural) especially for areas in Plainfield's 100-year flood zone. (Map 4)

Implementation Strategies

- | |
|--|
| <ul style="list-style-type: none">• Promote private land acquisition of contaminated sites for development, and public land acquisition of environmentally sensitive sites for protection. |
| <ul style="list-style-type: none">• Encourage Conservation easements. Lands covered by conservation easements for wetlands, wetlands transition buffer, flood plain, flood plain buffer or other significant open space shall remain in their natural, undisturbed state within which no regrading or clearing shall be permitted, except the removal of minor underbrush or dead trees that are hazardous to people or buildings. (Plainfield Land Use Ordinance) |
| <ul style="list-style-type: none">• Include energy and water conservation in the Land Use Ordinance along with soil conservation. |
| <ul style="list-style-type: none">• Modify the City's development regulations to include regulations for resilient buildings, green infrastructure and low-impact development. |
| <ul style="list-style-type: none">• Create standards to maintain and improve stream corridor buffers to preserve flora and fauna, and to create and enhance the recreational activities. |
| <ul style="list-style-type: none">• Amend land coverage standards in the land use ordinance to reduce impervious coverage, especially in the residential areas. Additionally, encourage minimum impervious land coverage in redevelopment areas. |

GREEN BUILDING AND ENVIRONMENTAL SUSTAINABILITY ELEMENT

Land Use

- Implement and standardize efficient land use practices
 1. Redevelop brownfields, grey fields
 2. Promote mixed use development with increased walkability, especially near transit hubs
 3. Incorporate new green infrastructure practices and expand best management practices such as rain gardens, bio-swales etc. (refer to NJDEP's new green infrastructure standards for developers)
 4. Demonstrate to property owners the advantages of using green infrastructure
 5. Encourage co-location of new telecommunication facilities to reduce land consumption and share resources, for example, on a roof of multi-storied buildings
 6. Create sustainable standards for development in and around flood zone areas
- Establish a Green Building Program for municipal buildings throughout the City
 1. Encourage development of a green building ordinance that follows state and national standards
 2. Educate employees, encourage staff to become LEED accredited
 3. Provide information to the public through websites, community workshops
 4. Create green business recognition program
- Preserve and improve existing open spaces and add new ones
 1. Encourage creation of conservation easements to obtain sensitive lands
 2. Arrange annual community tree plantings, a tree sponsorship program and encourage residents to participate
 3. Create a program that creates community stewards for parks, increasing pride and a sense of ownership

Mobility

- Encourage programs that reduce commuter trips
 1. Create ways to make car-pooling, mass transit easier for municipal employees
 2. Promote use of mass transit and other public transport, including shuttles to and from train stations
 3. Streamline online payments to reduce trips by the public to municipal buildings
- Reduce GHG emissions through land use design and increase municipal fleet efficiency
 1. Periodically analyze existing vehicles, especially older ones, for performance
 2. Encourage alternative fuel vehicles, provide electric charging stations in the public parking lots and municipal properties
 3. Implement anti-idling law of non-emergency municipal vehicles

- Invest in public infrastructure
 1. Improve traffic signal synchronization
 2. Standardize pedestrian infrastructure (sidewalks, crosswalks, bike racks, etc.)
 3. Adopt comprehensive bicycle and pedestrian plan as a part of the complete street program
 4. Promote car sharing programs (e.g. Zipcar) throughout the City

Energy

- Serve as a model of building efficiency by completing a comprehensive municipal energy audit and provide recommendations
 1. Install energy efficient lighting fixtures
 2. Replace incandescent lights with LED or CFL bulbs
 3. Install solar panels and reflective roofing on municipal facilities and public parking lots
- Establish energy saving strategies and arrange seminars on energy saving strategies for the residents and employees in the City
 1. Lights out when not in use
 2. Sensory lighting sensors that turn off computers before closing
- Encourage energy efficiency of public utilities for emergency services, schools, community residents and businesses
 1. Reduce light pollution
 2. Energy efficient traffic and streetlights
 3. Alternative powered mowers over gas consuming machines
 4. Promote low income weatherization program into affordable housing programs
 5. Create green electricity from solar, geothermal, wind or hydroelectric sources

Waste (more in the Recycling element)

- Establish internal government paper reduction strategies
 1. Educate employees regarding paper waste caused by printing and faxing
 2. Institute double-side copying for all township documents
 3. Restrict black and white printing on color printers
 4. Process and remit payments of township bills online
- Institute new and improved recycling programs
 1. Enhance the existing residential and commercial recycling program, making the process more accessible to everyone

2. Create a municipal program for reuse/recycling of construction and demolition materials
3. Promote litter campaign – citywide as well as for individual neighborhoods
• Increase the use of composting
1. Fund distribution of compost bins to private residential homes
2. Install compost bins at municipal facilities for employee use
3. Educate residents of the benefits of composting utilizing school system and youth programs
Other Recommendations
• Encourage the City Administration to establish a local environmental commission with the help of a nonprofit organization like the Association of New Jersey Environmental Commissions (ANJEC)
• Encourage developers to include green building and neighborhood development strategies from LEED checklists in exchange for development incentives.
• Encourage to take the steps towards getting Blue Zone Certification for the City of Plainfield.
• Promote Healthy Living Program
• Plan and include community gardens in the neighborhood parks

RECYCLING ELEMENT

Communication and Education

- Increase awareness for recycling among the residents through continuous education programs, school programs, community outreach and programs for municipal/ private workers in both English and Spanish. Poster contests on recycling could be held in local schools, with winners selected at the elementary, middle and high school level.
- Improve community partnerships to enhance communication among communities about the importance of recycling.
- Coordinate with various departments and PMUA to create a comprehensive guide on recycling and waste management that would be available online and in print versions.

Changes in Approach to Recycling

- Increase number of recycling containers in high intensity areas such as downtown, business districts, plazas, etc.
- Consider providing a recycling depot where residents and commercial users can bring recyclable materials to one location.
- Include recycling standards for demolition and new construction in the land use ordinance and redevelopment plans.
- Increase commercial and institutional recycling. Ban plastic bags and reduce paper use in commercial and institutional activities. The City could lead the way, posting goals in reduction of paper use and providing yearly results.
- Encourage the use of reusable bags for food and other retail shopping. Design and sell such bags for a minimal price at City Hall or at city events. The tagline on the bag could read "Proud to Shop in Plainfield" or something similar.

Action Plan: Policies and Strategies

- Develop and enhance formal recycling and solid waste disposal programs
- Green team: Create a group of various stakeholders to organize recycling awareness programs and coordinate meetings with all public facilities leadership
- Promote waste reduction and recycling strategies for homeowners. For example, provide demonstrations on backyard composting, have a program on how to stop junk mail etc., on PCTV, the city's community television station
- Implement target days for electronic waste
- Approach and provide information on agencies that accept items for reuse

UTILITY SERVICES ELEMENT

Water Supply and Service

- Preserve and protect the city's public water supply including storage areas, treatment facilities and the distribution system.
- Ensure an adequate supply of potable water.
- Identify water supply demand at build-out and confirm capacity availability.
- Develop a detailed, computer generated map of the city's water supply system.
- Create fire hydrant locations map that is accessible to the municipal employees and consultants.
- Encourage the replacement of outdated fire hydrants with national standard threads.
- Improve utility and street repair coordination system.

Sanitary Sewer System

- Analyze development and redevelopment area build-out and flow needs; ensure enough capacity exists to handle existing and projected sewage flows.
- Repair and maintain sewer infrastructure.
- Improve utility and street repair coordination system.
- The City should coordinate with PMUA to ensure the timely implementation of proposed utility improvements.
- Develop in cooperation with the PMUA a detailed, computer generated map of the city's sanitary sewer system with updates regarding status of smoke tests, ionized infiltration test, and the development of a grease collection facility.

Stormwater Management

- Reduce flood damage, including damage to life and property; minimize storm water run-off from new development. Minimize pollutants in storm water runoff from new and existing development.
- Identify areas of flooding due to infrastructure delinquencies; follow up with what improvements may be required to abate flood events.
- Determine through study potential abatement options for flooding within the Green Brook/ Cedar Brook floodplains.
- Update the City's Stormwater Ordinance to include new State Stormwater Rules published in March, 2020.
- Amend bulk and land use standards in City's Zoning Ordinance to reduce impervious lot coverage areas.
- Develop a detailed, computer generated map of the city's stormwater infrastructure

Solid Waste Disposal

- Ensure the appropriate storage of residential, commercial and industrial solid waste, recyclables and bulk waste, and ensure their timely collection.
- Encourage increasing the percentage of solid waste that is recycled in Plainfield.
- Conduct programs/workshops for residents to educate them on reduction of solid waste generation and innovative solid waste disposal techniques.

Electric Supply and Communication Utilities (Telephone and Cable TV)

- Preserve and protect the City's electric supply including the distribution system.
- Identify electric supply demand at build-out and confirm capacity availability.
- Encourage the relocation of existing above ground utilities underground whenever road reconstruction occurs.
- Promote the distribution and efficiency of these utilities through environmentally friendly means.
- Add new Wi-Fi locations, especially in downtown areas such as North Avenue pedestrian plaza.
- Review the Land Use regulations regarding communication towers and satellite dishes to ensure updates with emerging technology, proper placement and screening.

Natural Gas

- Determine the adequacy of the inspection of natural gas transmission lines to ensure public safety.
- The city should obtain a map of the natural gas pipeline system in the city.

Other Recommendations

- The city should add an off-tract improvement section to the Land Use Ordinance that would require developers/redevelopers of projects that will impact all utility services discussed in this plan to provide a pro-rata share of reasonable and necessary off-tract costs needed for the improvements.
- Ensure utility company and other utility providers obtain city street opening permits for all work and coordination of improvements with city road improvement plans.

Smart City Recommendations

Housing:

- Encourage modular housing to provide affordable housing in downtown and other high market rate areas.
- Consider permitting smaller, technologically smart studio units for young professionals. The same space can be used for different functions with automated furniture to create extra storage, hide the bed when not in use, etc.
- Promote live-work concept. Use the same space for work during daytime and living space during nighttime.

Mobility:

- Institute shuttle service (to and from the train stations) to include electric or hybrid shuttle to reduce use of gas/other non-renewable fuel source.
- Increase and create new bike and safe pedestrian infrastructure, especially downtown and encourage people to use bikes and walk.
- Provide electric charging stations as an incentive to encourage more use of electric vehicles.
- Promote Complete Streets and encourage more use of public transit.
- Encourage employers to support car-pooling and car-sharing by providing incentives such as reserved parking, bonuses for employees.

Sustainability and Energy Conservation:

- Promote the conservation of energy by encouraging Leadership in Energy Efficient Design (LEED) features in new development, municipal and school buildings.

- All new and rehabilitated public buildings are encouraged to be LEED certified.
- Develop zoning strategies that promote reduced single occupancy vehicle trips and advance green building construction and sustainability.
- Encourage use of renewable energy in as many public and private activities as possible.
- Upgrade all streetlights and lights in public spaces to LED or other energy efficient lights.
- Encourage use of kitchen and bathroom fixtures that save water and energy.
- Promote rainwater harvesting for individual homes and apartments with autonomous system.

Infrastructure:

- Partner with communications companies to provide fiber optic service to Plainfield as part of major road improvements, and within development and redevelopment areas.
- Install digital wayfinding and other signs for navigation and to provide information and directions on available access to nearby amenities.
- Create education programs to guide residents and businesses through the transition from existing infrastructure to new technology and update those programs as necessary.
- Microgrids: The City should undertake a survey of current electricity supply and demand and determine whether installing microgrids would be more efficient option for certain areas such as Muhlenberg Hospital campus, Union County College campus, redevelopment areas etc.
- Upgrade infrastructure to ensure maximum use of renewable energy. For example, solar streetlights, etc.
- Introduce autonomous system for activities like garbage collection, public amenities access, etc.
- Introduce block chain technology to create algorithmic systems for day-to-day activities. (A blockchain is a decentralized, distributed, and often public, digital ledger that is used to record transactions across many computers so that any involved record cannot be altered retroactively, without the alteration of all subsequent blocks.)
- The respective governing agency in coordination with the City should invest in cyber security to prevent technology infringements.

Governance:

- Educate the city administration, residents and business owners on how connectivity and digitizing will help provide more smart solutions and will eventually be cost effective.
- Work together with local and state government, planners, engineers, architects and technology providers to come up with best possible smart solutions for Plainfield.
- Introduce dynamic zoning and/or algorithmic zoning, especially in Transit Oriented areas, downtown, redevelopment areas. (Dynamic Zoning: An incremental and data-responsive approach to regulating real estate development that facilitates organic urban growth. Algorithmic Zoning: The idea is to first take datasets like mobility times, unit economics, amenities scores, and health outcomes, among many others and feed that into a machine learning model that is trying to maximize local resident happiness. Tokens would then be a currency to provide signals to the market of what things should be added to the community or removed to improve happiness.)

APPENDIX A:

PARKING PLAN

City of Plainfield,
New Jersey

Plainfield Master Plan 2020 Parking Plan Circulation Element Appendix A- DRAFT

July 10, 2020

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Introduction

Timothy Haahs and Associates, Inc. (TimHaahs) was retained as a sub consultant to H2M and the Nishuane Group by the City of Plainfield (“Plainfield”) to develop the Parking Plan Element including Parking Strategies and Best Practices for Transit-Oriented Development (TOD) in Plainfield as part of the City’s new 2020 Master Plan.

The TimHaahs’ team has participated in meetings with Plainfield representatives, performed field observations, reviewed related parking information as it pertained to the development of the Parking Plan and the ‘City of Plainfield Master Plan Public Engagement’ Online Survey, and attended stakeholder advisory meetings to obtain information directly from stakeholders regarding parking in the downtown.

TimHaahs’ analyses for Plainfield’s 2020 Master Plan identifies smart growth and TOD parking planning and management strategies and best practices to “right-size” the amount of parking for new development, as well as effectively utilize and manage existing parking assets. We have provided recommendations to improve downtown parking operations and strategies as a component of the 2020 Master Plan with the intent of accomplishing the following:



- Centralizing parking operations into a single-responsibility center to improve planning operations to better accommodate existing downtown business activity and future growth;
- Maximizing the utilization of existing parking assets and sharing parking between complementary users to mitigate the amount of parking to be developed;
- Providing increased convenience and a higher level of parking patron comfort with upgraded wayfinding, communication information and parking facility improvements;
- Outlining strategies for smart growth and transit-oriented development parking requirements and opportunities to implement other alternative transportation options to relieve the reliance on automobiles and “right-size” the amount of parking to be developed.

Parking Comments from Stakeholders Ordered by Significance:

1. Parking facilities need regular maintenance and improvements. Plainfield’s public lots should be well-lit and welcoming to create a sense of safety for parkers. As it stands, women do not feel very safe in the downtown.
2. Disregard for Parking Regulations - People are not following the parking regulations because they believe they can get away with it. People park in the high demand, convenient spots on the storefronts in downtown all day long. During the early evening hours, when patrons are picking up their takeout orders at downtown restaurants, multiple people will improperly park in a single metered space. Further, the daycare and Charter school are located in downtown and during pick up and drop off times, parents use an assigned parking lot because they know that they can get in and out before receiving a ticket.
3. Underutilized Parking Facilities – Some of the parking facilities, including some newer, well-located facilities in the downtown are underutilized.

4. Parking Management – Many stakeholders feel that Plainfield has a parking management problem as opposed to a problem with parking availability.
5. The Parking Bureau is currently operated under the Police Department's Traffic Unit. Further, Plainfield's Parking Bureau is currently understaffed.

Public Engagement Online Survey Parking Comments Summary:

Question 19: Which days/times do you typically park in the Downtown? (27 respondents as of May 26, 2020 at 12:00PM)

- On weekdays, 65% of respondents park in the downtown during mid-day (10AM-2PM); 62% of respondents park during the afternoon (2PM-5PM); 50% of respondents park all day (at least eight hours); 48% of respondents park in the morning (before 10AM); and, 31% of respondents park in the evening (after 5PM).
- On Saturdays, 46% of respondents park in the downtown during the evening (after 5PM); 33% of respondents park all day (at least eight hours); 33% of respondents park in the morning (before 10AM); 23% of respondents park during the afternoon (2PM-5PM); and, 23% of respondents park in the downtown during mid-day (10AM-2PM).
- On Sundays, 23% respondents park in the downtown during the evening (after 5PM); 19% of respondents park in the morning (before 10AM); 17% of respondents park all day (at least eight hours); 15% of respondents park during the afternoon (2PM-5PM); and, 12% of respondents park in the downtown during mid-day (10AM-2PM).

In summary, on weekdays, most community members park in the Downtown during mid-day (10AM-2PM) and on weekends, most community members park in the Downtown during the evening (after 5PM).

Question 20: In your opinion, what is your perception of parking in Plainfield? (61 respondents as of May 26, 2020 at 12:00PM)

- Availability of parking in Downtown: 40% of respondents rated the availability of parking in the Downtown as "poor", while 25% of respondents had "no opinion / were neutral", 20% rated it "fair", 12% rated it "good", and 3% of respondents rated it as "excellent".
- Parking space locations relative to your intended destination: 35% of respondents had "no opinion / were neutral", while 25% of respondents rated it "poor", 20% rated it "fair", 18% rated it "good", and 2% of respondents rated it as "excellent".
- Communication of where parking is located: 32% of respondents rated parking communications as "poor", while 30% of respondents had "no opinion / were neutral", 21% rated it "good", 18% rated it "fair", and 0% of respondents rated it as "excellent".
- Cost of parking: 36% of respondents had "no opinion / were neutral", while 23% of respondents rated it "poor", 21% rated it "good", 13% rated it "fair", and 7% of respondents rated it as "excellent".
- Availability to pay for parking: 43% of respondents had "no opinion / were neutral", while 21% of respondents rated it "good", 20% rated it "fair", 16% rated it "poor", and 0% of respondents rated it as "excellent".
- Security of Lots: 40% of respondents had "no opinion / were neutral", while 25% of respondents rated it "poor", 25% rated it "fair", 7% rated it "good", and 2% of respondents rated it as "excellent".

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- Condition of parking lots / spaces: 38% of respondents had “no opinion / were neutral”, while 30% of respondents rated it “poor”, 23% rated it “fair”, 9% rated it “good”, and 0% of respondents rated it as “excellent”.
- On-street parking in residential neighborhoods: 28% of respondents rated the on-street parking in residential neighborhoods as “poor”, while 28% rated it “good”, 21% of respondents had “no opinion / were neutral”, 21% rated it “fair”, and 3% of respondents rated it as “excellent”.

In summary, parking in Plainfield is more negatively perceived across all categories. That said, the “availability of parking in the downtown” and the “communication of where parking is located” are rated the poorest. **Figures 3 and 4 in Appendix A illustrate the public comments to questions 19 and 20 as of Tuesday, May 26, 2020 at 12:00PM.**

Parking Strategies and Best Practices for Transit-Oriented Development

The implementation of TODs in Plainfield will enhance the City’s vibrancy, offer a sustainable employment center, provide desirable housing options and a pedestrian-oriented environment, and will require the utilization of smart parking planning and development strategies and “best practices” for TOD. It is critical to TOD that proper parking development and management strategies are utilized to maximize the economic viability of these projects and to ensure that parking assets effectively serve residents, businesses and commuters in Plainfield.

Providing adequate and convenient parking presents a significant challenge to the planning, design and financial feasibility of TOD. Due to the permitted density for TOD, the scarcity and high cost of available property, and the application of transit friendly planning and development principles, structured parking is often the necessary and appropriate solution to meet a project’s parking needs. However, the cost of structured parking can significantly strain a project’s economic viability.

Cost effectively addressing parking requirements for TOD projects is critical to the success of a project. Too much parking creates inefficient land use disconnected from transit friendly principles, negatively impacts the environment, and adds a financial burden that threatens project feasibility.

Parking Planning Practices for TOD

To promote and advance TOD projects in Plainfield, it is vital to apply innovative, best practice parking strategies that support both access to mass transit and TOD. Appropriate parking planning and mitigation strategies to assist Plainfield and its future private sector development partners to effectively plan, develop, and manage parking for both TOD projects and commuters include the following:

1. Apply appropriate TOD parking ratios that reflect the presence and reliance of the NJ TRANSIT rail and bus system.
2. Limit the amount of parking built for TOD by applying parking maximums instead of minimums.
3. Construct the right amount of parking to eliminate overbuilds by sharing both commuter and TOD parking to the greatest extent feasible.
4. Create a Payment In Lieu of Parking (PILOP) program ordinance with a dedicated fund for revenues and reinvest these revenues in a parking trust fund dedicated to expanding the public parking or alternative transit opportunities throughout Plainfield.

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5. Unbundle parking fees – promote that developers charge appropriate, market-based parking fees that do not incentivize and subsidize car and parking utilization.
6. Ensure proper parking management, security, and wayfinding to ensure a positive parking experience.
7. Maximize the use of on-street parking to meet TOD project parking requirements.
8. Implement Transportation Demand Strategies, i.e. car sharing and bike sharing services, to reduce the need for car ownership.
9. Plan and design parking with people in mind, to create attractive, welcoming, and secure destinations.
10. Incorporate sustainable parking principles to reduce environmental impacts and long-term operational costs.

“Right-Sizing” Parking

Determining the appropriate amount of parking for downtown activities and new development can be a challenge. If there is too little parking offered, patrons, residents and employers / employees will get frustrated and if there is too much parking, there are unnecessary expenses added to the cost of development.

Parking is Expensive - Parking is costly to construct, both in terms of real estate and capital costs, and if too much parking is required, the economic feasibility of a given project is negatively impacted. A typical surface parking stall costs between \$6,000 and \$10,000 to construct (not including the value of the land), and a structured, above ground parking space in NJ can cost between \$25,000 and \$35,000 per space, depending on a variety of factors.

Parking Takes up Land - Parking requires a significant amount of space, typically between 300-320 square feet per space for an efficient parking facility, and requiring too much parking can negatively impact the ability to achieve the dense, walkable, pedestrian-friendly, downtown environment.

Excess Parking Impacts Housing Affordability and Availability – The cost to purchase land and build parking for a residential project is typically passed along to tenants of the development in the form of increased rent and, in some cases, onerous parking requirements can kill a project altogether, thereby limiting the amount of new housing in the particular municipality.

Parking Has Environmental Impacts – Property dedicated to parking increases the amount of impervious surface associated with a project and contributes to storm water run-off. Free ample parking also encourages more automobile use and dissuades alternative modes of transportation such as, walking, biking, and mass transit. (See the **Conservation and Utility Elements for Plainfield’s goals pertaining to green buildings and sustainability**).



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However, inadequate parking for a project has negative consequences such as forcing project residents to cruise in search of a spot and potentially inundating nearby on-street parking in the adjacent residential areas, which is a current / existing problem in Plainfield.

Apply TOD Parking Ratios to “Right-Size” Parking

Many TOD projects apply parking ratios and standards more typical of areas not served by transit, creating excess parking. To combat unnecessary overbuilds and advocate for proper parking planning, Plainfield must apply appropriate parking ratios recognizing the accessibility of the NJ TRANSIT rail and bus system. **Table 1 illustrates the current required parking ratios in the City of Plainfield.**

Table 1: Plainfield's Required Parking Ratios		
	Land Use	City of Plainfield's Required Parking Ratio
	Residential	See RSIS Standards
	Residential Units in all TODD Zones	1 space / dwelling unit
	Residential Units in all TODN Zones	1 space / dwelling unit
	Medical Office	1 space / 175 SF GFA
	Office	1 space / 400 SF GFA
	Restaurant	1 space / 3 seats
	Retail Sales and Service	1 space / 300 SF GFA

Source: City of Plainfield, 2020

Establishing Appropriate Ratios – Criteria for Reduction

Determining the appropriate amount of parking for a development project requires flexible standards based on the analysis of the characteristics, nuances, and location of the project and the implementation of best practice, parking management strategies that influence parking demand. Each development project is distinctive when it comes to parking planning and there are many factors to consider when determining the right amount of parking including:

- The target market for the development
- Existing vehicle ownership in the given area
- Population characteristics (i.e., total population, total households, household income, etc.)
- Availability of on-street parking
- Availability of other proximate parking resources that could be shared
- Accessibility to mass transit and other alternative modes of transportation
- Mixed-use nature of the development project and surrounding area
- Availability of amenities within walking distance of a project (shopping, dining, etc.)
- Parking pricing (unbundled or bundled with the rent)
- Walkability of the area (walk score)

- Bikeability of the area (bike score)
- Parking and Mobility Management
- Contingency-Based Planning
- Use of a Payment in Lieu of Parking (PILOP) or Shared Parking

Apply Parking Maximums Instead of Minimums

To reduce off-street parking and its impacts, some jurisdictions set the maximum amount of parking given the availability of mass transit, car sharing and other modes of transportation, as opposed to dictating the minimum amount of parking a developer needs to build for a project. Allowing the development of only a certain amount of off-street parking limits the number of spaces, promotes more efficient use of land, encourages the use of alternative modes, and provides for better pedestrian movement.

In Cambridge, Massachusetts (2006), parking maximums are utilized to create adequate parking facilities to meet the “reasonable” needs of all building and land users, without regulations that unnecessarily encourage automobile usage. Most cities link parking maximums with the availability of alternative modes of transportation. Cities such as Portland, Oregon, San Diego, California, Bellevue, Washington, Boston, Massachusetts, Cambridge, Massachusetts, Toronto, Canada and San Francisco, California have established maximum parking requirements for new development as part of “transit first” or auto trip reduction policies and goals. Many cities have established parking maximums based upon parking utilization studies, rather than relying on typical parking ratios based on national standards.

Maximize the Use of On-Street Parking

On-street parking adds vibrancy, convenience, and a buffer to street level activity. It contributes to the overall vitality and viability of a TOD project. On-street parking can also be designed and integrated with a transit station so that it serves as short-term, drop-off parking during the commuter rush period, and is available for downtown merchant parking during off peak hours. On-street parking areas adjacent to a transit plaza, civic, or open space (often a planned component of a TOD) can also be utilized as open space during public events to expand the size of the public venue without permanently dedicating land for this non-revenue producing use.

Many jurisdictions do not count adjacent on-street parking towards meeting parking code requirements for a land use. On-street parking, regulated and enforced to meet retail parking requirements, is critical to providing convenient, high turnover parking. Utilizing on-street parking is tantamount to reducing the amount and cost of structured parking. On-street parking will be used by patrons of multiple retail and commercial establishments in a TOD, so this resource should be counted as meeting a portion of the parking requirement, thereby reducing the amount of parking to be constructed.

Shared Parking

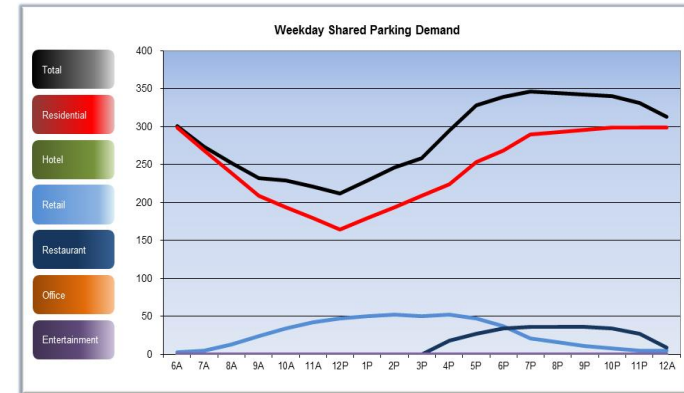
According to the Urban Land Institute (ULI), “Shared Parking is defined as parking spaces that can be used to serve two or more individual land uses without conflict or encroachment”. The mix of land uses, which typical in a downtown or mixed-use TOD project provide meaningful opportunities for shared parking. The utilization of the same parking space by multiple user groups (i.e., parking for commuters during the day, and residents or retail patrons in the evening and weekends) maximizes the use of parking resources, reduces the amount of parking spaces to be built, and if parking fees are charged, financially supports the facilities’ capital and operating expenses.

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Shared parking is an extremely valuable and effective method to reduce the number of parking spaces required, as well as maximize the use of limited land resources. Through the application of shared parking principles for TOD projects, the amount of parking to be built can be reduced, thereby enhancing the project's economic viability and benefits to Plainfield.

Shared parking reduces the land devoted to parking and allows for more developable area, open space, and amenities. Less parking increases the area's sense of place, reduces the cost of developing and maintaining parking, and increases the security and sense of comfort in a parking facility due to increased user activity.

The Urban Land Institute's Parking Generation Manual, 5th Edition details the approach to calculating the shared parking demand for a mixed-use development. In their zoning code, municipalities can also permit developments to form shared parking agreements with adjacent properties that have excess parking or land uses with opposing peak parking periods. Shared parking is an extremely valuable and effective method to reduce the number of spaces required for a mixed-use project, as well as maximize the use of limited land resources.



An Example of a Weekday Shared Parking Demand Curve with a Modal Adjustment. Sourced from Timothy Haahs and Associates, Inc. 2020.

Currently, in Chapter 17 'Land Use' Article IX 'Zone Controls' of Plainfield's zoning code already permits and encourages shared parking agreements in the TODD and TODN Zones. **Shared parking language used in Ordinance § 17:9-42 'Parking, driveways and loading' [Amended 5-11-1999 by Ord. No. 1734] can be referenced in Appendix B.**

Plainfield as a Shared Parking Clearinghouse

It may be a challenge to establish formal agreements between developers or landowners who have excess parking capacity and potential permit parkers to institute shared parking. However, to facilitate agreements between downtown developers / owners and permit parkers, Plainfield could serve as a "clearinghouse" of available parking. In this capacity, the City could obtain parking availability data from private owners as a way to create and maintain a database regarding the availability of parking for lease in all private parking facilities in the Downtown. This information would be available to prospective businesses seeking parking and potential developers wishing to secure parking for new projects. Plainfield could work with parking owners to facilitate standard parking lease terms that would identify the owners of the parking resources and thereby potentially provide a meaningful parking resource for Downtown Plainfield that would otherwise sit empty at certain times of the week. Plainfield has promoted the sharing of parking resources in the past. When the Union County-owned private parking deck on West 2nd Street was built for County, the Plainfield Planning Board had several conditions for its approval. One of the conditions included open dialogue between the City and the County to coordinate sharing the parking deck to maximize its utilization if possible.

Another option is to work with an entity such as BoxCar. BoxCar, an integrated commuting company that



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enters into agreements with local property owners with excess parking and marketing those spaces to commuters or other users and is operating in more than 20 NJ municipalities including Cranford, Jersey City, Matawan, Montclair, Morristown, Newark, Princeton Junction, Red Bank, Summit and Westfield, to name a few. Plainfield could engage with an entity such as BoxCar and discuss the possibility of implementing the service in underutilized municipal parking resources, such as Lot 7, in the Downtown, **(See Plainfield's Off-Street Facilities Location Map on Page 29).**

Payment in Lieu of Parking (PILOP)

The high cost of providing surface or structured parking facilities in urban environments, i.e. land acquisition, soft cost, development fees, and construction hard costs often effect project feasibility and result in developers requesting waivers from municipal parking requirements. A municipality which adopts an ordinance that implements a program for a Payment In Lieu Of Parking (PILOP) offers a developer the option to pay a fee for each waived parking space, in lieu of providing the number of parking spaces required by local land use ordinance. The municipality utilizes the PILOP fee to maintain or construct a public parking facility available to the users or occupants of the development project, as well as the general parking public. For years, municipalities have used PILOP initiatives as a way of allowing new development to proceed without providing all or some of the required parking on the development site. PILOP programs can be a valuable tool for promoting new development, especially with the presence of mass transit where residents and employees of the downtown have the option of an alternative mode of transportation.

The PILOP fee is generally calculated based on the per-space cost of constructing surface or structured parking. Depending on the location and type of parking, this fee can range from as little as \$5,000 to \$10,000 per space in smaller cities with abundant and inexpensive land for surface parking, to over \$25,000 to \$35,000 per space in more dense areas where structured parking is required due to land costs and the desired development density. The benefits of a PILOP program include the reduction of over building parking facilities, encouraging shared parking, saving valuable land for other uses, and creating a fund for future parking development and maintenance or to support parking strategies. PILOP programs exist around the country with different ways to finance the in-lieu costs developers must pay. These typically depend on the fiscal needs, liquidity and desires of each municipality. Some variations on methods to collect payment include:

- Lump sum payment
- Annual installment payment
- Combination of both upfront and installment payments
- Guaranteed monthly permit sales/ payments

Plainfield should create a PILOP ordinance with a dedicated fund for revenues and then reinvest these revenues in a parking trust fund dedicated to expanding the public parking opportunities throughout the Downtown. Funds contributed to a PILOP fund can be used for the following:

- Acquire simple fee or other interest in land, and other real property for parking purposes.
- Construct, maintain, operate, lease, manage, or otherwise provide off-street parking facilities for public use.
- Provide public information to enhance parking utilization including publicity campaigns, signage, and other informational devices.
- Coordinate plans for parking facility improvements and expansion with public transportation plans and operations in the vicinity, particularly joint facilities that might be operated in connection with transit stations and any feeder services.
- Fund parking studies and professional fees for feasibility analysis, design and construction of new facilities.

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The benefits of adopting a PILOP program include:

- Developer flexibility;
- Public parking facilities can be shared by multiple users (private parking facilities are often restricted to users generated by the owner's development project);
- Consolidation of multiple small and single user parking facilities, into a larger strategically located public parking facility;
- Reduction or elimination of parking variances granted by a municipality;
- Creates a level playing field, where all developers contribute to and share public parking; and,
- Provides a funding mechanism for public parking improvements and facilities.

NJ municipalities that presently have PILOP ordinances include Rahway, Metuchen, Asbury Park, Fort Lee, Union Township, Hackensack, and Passaic. The Rahway Division of Parking (RDP) authorized the creation of a PILOP Program in the CBD as part of the City of Rahway's CBD Redevelopment Plan. The PILOP program is administered by the RPD. Rahway PILOP fees are \$10,000 for each public parking space provided off-site by the RDP for a developer to meet development project parking requirements for market rate rental units, \$5,000 per parking space for affordable housing and \$10,000 per parking space for condominium units. **Table 2 outlines the PILOP parking fees in other NJ municipalities. Asbury Park's PILOP Ordinance can be referenced in Appendix C as sample language.**

Table 2: PILOP Parking Fees in Other NJ Municipalities

Municipality	PILOP Fee (Per Space)
Asbury Park	\$15,000
Fort Lee	\$20,000
Hackensack	\$2,500-\$9,000
Metuchen	\$5,000
Passaic	\$2,500-\$9,000
Rahway	\$5,000-\$10,000
Union	\$500

Source: Timothy Haahs & Associates, Inc. 2020

Unbundle Fees

Most zoning laws and development standards require significant parking requirements to accommodate the anticipated needs of the development program. Often the costs associated with parking are included as part of their rent, regardless of actual needs. This practice reduces the affordability of housing and commercial space and often negatively impacts the economic viability of the project by requiring more parking than is needed. This is especially true in developments with proximity to mass transit, where residents may forego owning a car. Accordingly, parking fees in smart growth projects should be unbundled – allowing opportunities for renters who do not utilize parking to pay a lower rate than those who do, thereby disincentivizing the use of parking. It is important to note that with unbundling fees, there is the probability that residents will seek parking

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on adjacent downtown streets to avoid the fee, which could potentially create spillover parking problems for nearby residents. Plainfield is presently dealing with spillover parking problems with some of its older apartment projects, of which landlords have unbundled parking fees and project residents have decided to park in the residential neighborhoods instead of paying the parking fees. Plainfield has addressed this situation pertaining to new development projects with its ordinance §17:9-42.R. 'Parking, Driveways and Loading' which states, "any structure containing two (2) or more residential dwelling units is subject to and conditioned upon an equitable distribution of off-street accessory parking spaces among those occupying the structure". In summary, the ordinance requires property owners to provide parking for every tenant at no additional cost to the tenant as part the rent. This situation can also be addressed with consistent enforcement and a Residential Permit Parking program.



RECOMMENDATIONS: "Right-Sizing" Parking

1. Apply appropriate parking ratios that reflect the presence of mass transit (NJ Transit rail and bus system), the mixed-use, dense nature of downtown development, and the availability of goods, services, and amenities in a walkable environment.
2. Amend the land use ordinance to maximize the use of on-street parking to meet TOD project parking requirements.
3. Use shared parking as an effective strategy to help reduce parking requirements for future development in the downtown and centralize that facility to serve multiple projects.
4. Engage downtown business owners to enter shared parking agreements to utilize municipal parking resources during evenings and weekends to accommodate downtown patrons and employees.
5. Consider adopting a PILOP program ordinance with a dedicated fund for revenues. Reinvest these revenues in a parking trust fund dedicated to expanding the public parking opportunities throughout the Downtown.

Parking Management and Smart Growth Parking Strategies

A comprehensive parking strategy for a municipality includes assessing parking needs, setting common goals and including solutions that address both supply and demand objectives. A well-managed and operated municipal parking system promotes the free flow of traffic and pedestrian safety, enhances residential quality of life, provides convenient parking to support local businesses and generates adequate revenue to cover operating costs, facility improvements, Transportation Demand Management (TDM) initiatives, and future parking and economic development. Given the finite parking resources in Plainfield - it is critical to effectively manage and maximize the utilization of existing parking assets to enhance the overall downtown public parking system. This includes opportunities to improve operations and efficiency, increase convenience of parking for patrons, coordinate both on-street and off-street parking pricing, encourage the delivery of parking information and wayfinding, and improve the user comfort of downtown parking resources.

The future of parking has never been a hotter topic than it is today. With the rising popular demand for Transportation Network Companies (TNCs) or ride hailing services (i.e. - Uber/Lyft), and the potential development of autonomous vehicles, the discussion about how much parking is needed in a downtown to meet the future development needs is front and center. In addition, many communities like Plainfield are presented with multiple alternatives to Single-Occupancy Vehicles (SOVs), such as mass transit, bike sharing, electric scooters, car sharing, etc. and it may be likely Plainfield's younger population has less affinity towards car ownership. While supporting and promoting alternatives to SOVs and ultimately

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reducing the need for parking is an undoubtable smart public policy for Plainfield, providing adequate and convenient parking is critical to support its growth and economic vitality.

A primary strategy, focus, and benefit of smart growth and TOD is planning for and creating places and lifestyles that are much less dependent on SOVs. While an overriding goal of smart growth and TOD is creating vibrant places that are less reliant on the automobile, the reality is that the automobile must be accommodated – just in a better planned, intelligent, and efficient manner. Outlined herein are various strategies to maximize the utilization of existing parking assets and coordinate the delivery of parking services and smart growth parking planning strategies to support Plainfield's economic development.

Parking Administration and Management

Virtually all municipalities recognize the importance of providing adequate parking for residents, visitors, shoppers and people employed within their communities. However, not every municipality realizes the importance of integrating all aspects of providing public parking within the framework of a “parking system”. Plainfield should take steps towards developing a centralized parking operation in which all the assets are controlled and managed by one entity be it a Parking Department, Parking Utility, or Parking Authority. **Currently in Plainfield, key elements of the parking system are somewhat *decentralized*:**

1. Various parking functions are performed by the Parking Bureau under the Traffic Unit of the Plainfield Police Department.
2. The Traffic and Parking Committee (although presently inactive), falls under the jurisdiction of the City's Division of Engineering as per City Ordinance §3:24-1.¹
3. Revenues are not sub divided from the Police Department instead all parking revenues generated go into a general City fund and all enforcement revenues generated go through the City court.

When parking functions are not consolidated under a single-responsibility center with a focus on parking management and planning, no single department or manager has the full authority to plan, supervise, and operate municipal parking services. Due to this lack of centralization, there is less proactive planning, performance analysis, and control of the entire parking system and operations. The efficient and effective way to provide parking services to municipal residents and the public at large is via a unified parking system. In this context the term “parking system” means the delivery of municipal parking services to the public by a single government entity charged with the responsibility of planning, managing, maintaining, and operating all individual aspects or functions of public on-street and off-street parking services. Treating parking as a single-responsibility center in Plainfield may mean taking it out of the jurisdiction of the Police Department where it is understandably not the Police Department's main priority. The intent would be that parking management be its own entity or department, as opposed to it being a Bureau operated under the Police Department's Traffic Unit. The goals of a unified parking system are to centralize parking administration and management including:

- Communication of the mission, goals and objectives of the parking system.
- Parking planning for existing needs and new development.
- Establishment of a single point of responsibility.
- Regular assessment of parking demand and utilization strategies.

¹ <https://ecode360.com/34586576>

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- Creation and monitoring of guidelines and policies / ordinances.
- The provision of consistent parking enforcement.
- Proper maintenance of parking facilities, signage and equipment.
- Commitment to customer service and staff training.

An effective parking management system includes:

- Mission Statement;
- Organizational Chart;
- Job Descriptions;
- Standard Operating Procedures (SOPs);
- Tracking revenues / expenses; and,
- Tracking key performance indicators.

There are three (3) types of government entities that manage and operate parking systems within the state of New Jersey: Parking Authorities, Parking Utilities and Parking Department / Bureaus. Each of these entities has their own set of strengths and weaknesses.

Parking Authority

In 1948, the Legislature of the State of New Jersey adopted N.J.S.A. 40:11A et. seq. commonly known as the “Parking Authority Law”, which authorized municipal governments to create an independent parking authority. A parking authority has the same geographic boundaries as the City which created it, but is “a public body corporate and politic and a political subdivision of the State (of New Jersey)”. A NJ parking authority has five (5) commissioners who are appointed by the governing body of the municipality (City council or City commissioners) for staggered five (5) year terms, or seven (7) commissioners with two (2) mayoral appointments and five (5) governing body appointments. A parking authority may employ an executive director, attorney, parking consultant, engineer, accountant, auditor, financial advisor and any other professionals and staff necessary to manage and deliver parking services to the City’s residents and the general public.

NJ parking authorities have significant statutory authority. N.J.S.A. 40:11A-6 grants parking authorities the powers necessary to carry out and effectuate essential government purposes. Furthermore, parking authorities may: exercise eminent domain (condemnation powers) if given to it by the City council, buy, sell and / or lease property as a lessee or lessor; construct mixed-use development projects and parking facilities; borrow money; issue bonds; mortgage or otherwise encumber its assets; enter into contracts; and retain earnings. Because parking authorities fund their operations from revenue derived from parking user fees rather than through real estate taxation, and board members traditionally are appointed from the business community, parking authorities tend to be operated like a business. Parking authorities are often conscious of the fact that annual expenses should not exceed parking revenue. Surplus annual revenue is retained to pay for new parking equipment, operational software, parking facility maintenance and replacement repairs and to purchase real estate or build new parking facilities. Parking authorities traditionally have generated revenue surpluses at year end or have accumulated financial reserves through retained earnings that, local municipal governments may prefer be utilized for taxpayer relief and be transferred to the municipality’s general fund.

A parking authority can also develop “projects” that include parking facilities, retail, office, commercial and residential components. Projects by the authorities are exempt from municipal land use and zoning (same as Board of Education and County projects) which allows greater flexibility in

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land use options for the authority and for potential Public-Private Partnership (P3) projects. However, pursuant to NJ Municipal Land Use Law 'Title 40 – Municipalities and Counties, Chapter 55D – Planning, Zoning, Etc., 40:55D-30 – Adoption of Capital Improvement Program'² and '40:55D-31 Review By Planning Board'³, projects by the authorities would still be subject to capital project reviews by the Planning Board in conjunction with Plainfield's adopted Master Plan. An authority also has the ability to purchase, lease and sell real estate not subject to State of NJ municipal building and grounds regulations which allows the authority to choose development partners and leverage to create development opportunities. The authority allows for P3 opportunities with the ability to select development partners through an RFP/RFQ process, which is the same process that can be used for 'Areas in Need of Redevelopment'.

The State of New Jersey has approximately thirty (30) parking authorities including Elizabeth, Metuchen, Morristown, Trenton, West Windsor, Dunellen, Newark, South Orange, East Orange, and New Brunswick.

Parking Utility

A municipality, as an alternative to a parking authority, may operate a parking utility. A parking utility, properly organized, has a number of the strengths of a parking authority: an executive officer; operating budget and debt service separate from the municipality; ability to generate annual surplus revenue and retain earnings; and the utility's function is strictly limited to providing public parking.

Considerations associated with a parking utility are: limited independence; chief executive usually reports through the city administrator or CFO, or the city administrator also functions as the CEO of the Utility; the local governing body retains jurisdiction over rates, fees, capital projects, operating budget, personnel; and parking revenues in excess of annual operating expenses generally are turned over to the municipalities general fund. The establishment and adjustments to parking fees and rates must be approved by resolution or ordinance of the municipal governing body. A concern with the parking utility is that excess parking revenues generated by the parking utility are often not reinvested by the municipality back into the parking system. Consequently, some parking utilities may not have the resources to improve the parking system. In addition, utility employees are municipal employees and may be subject to civil service restrictions and municipal collective bargaining agreements. A parking utility does not have the power of condemnation and eminent domain, which must be exercised by the governing body of the municipality. A parking utility does not have the statutory authority to pursue mixed-use development projects. The municipal redevelopment agency would have to be utilized for the development of a parking mixed use project. Both a positive and negative related to a parking utility is that the municipal governing body maintains control of the parking entity thereby placing parking planning and decision-making within the municipal approval and political process. In some municipal environments, parking management and planning can become a political issue rather than a planning issue, which may affect a parking utility's ability to proactively pursue public parking improvements.

There are multiple parking utilities within the state of New Jersey including Hoboken, Bayonne, Hackensack, East Brunswick, Old Bridge, Perth Amboy, Summit, Ridgewood and Princeton.

Parking Department / Bureau

Parking departments are the least independent government entity for managing and operating municipal parking resources. A parking department can stand alone and be on par with other municipal departments; DPW, Clerk's Office, Tax Collector, etc. Alternatively, it can be a subsidiary of a large department such as Police, DPW, Administration or Finance.

² 40:55D-30. Adoption of Capital Improvement Program, (<https://law.justia.com/codes/new-jersey/2009/title-40/40-55d/40-55d-30/>).

³ 40:55D-31. Review by Planning Board, (<https://law.justia.com/codes/new-jersey/2009/title-40/40-55d/40-55d-31/>).

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The advantage of a parking department / bureau is the direct control over operations exercised by the Mayor as the chief executive of the municipality. All parking fees and revenues, absent a bond agreement to the contrary, are deposited into the City's general fund and are available for any and all municipal expenses. The disadvantage of a parking department / bureau is that the parking entity competes with other municipal departments for budget approval and operating funds. The parking department may not retain annual excess parking revenue in a capital account. Any indebtedness incurred by the municipality to fund parking improvement is counted towards the city's debt Cap ceiling. The establishment and adjustments to parking fees and rates must be approved by resolution or ordinance of the municipal governing body.

There are some well managed municipal parking departments within the state of New Jersey, including Red Bank, Cranford and Westfield. In summary, regardless of the choice of parking management entity, Plainfield should continue to centralize parking operations under a single-responsibility center with the support of the mayor, city council, senior administration, and the downtown business community. Included in the centralization of parking operations would be the identification of all City personnel and outside contractors involved in providing municipal parking services and the evaluation of the costs and benefits of centralizing personnel and services under the supervision of one department, a "single-responsibility center".

Reinstate / Reactivate Plainfield's Traffic and Parking Committee

In addition to implementing parking as a single responsibility, we recommend reinstating / reactivating the **Plainfield Traffic and Parking Committee**. With the reinstating of the committee, it would meet on a regular basis to review, discuss, and identify parking issues or concerns with the intent of directly addressing problems and making recommendations and improvements related to both on and off-street parking and formulating policy related to overall transportation and parking programs. As per City Ordinance §3:24-1, this committee would include seven members, one of whom needs to be a councilman. The ordinance should be amended to include representatives from Plainfield's Parking Bureau, downtown residents, business owners, Economic Development, Urban Enterprise Zone (UEZ) and Business Improvement District (BID) representatives, Chamber of Commerce members, and landlords, etc.



The Traffic and Parking Committee is an excellent forum for coordinating the necessary interaction and communication between Plainfield's municipal leadership, the downtown and local stakeholders, residents, and parking management personnel. The Traffic and Parking Committee would provide the City of Plainfield with a forum and communication link to identify parking issues and field complaints, thereby potentially reducing the amount of City Council meeting time dedicated to parking problems.

RECOMMENDATIONS: Parking Administration and Management

The City of Plainfield's Parking Bureau operated under the Police Department's Traffic Unit currently oversees the public parking in the downtown. We would recommend the following for Plainfield's parking and administration management:

1. Consolidate the parking system into a centralized, single-responsibility center, specifically for parking administration and management of Plainfield's public parking resources reporting directly to the City's Business Administrator.
2. Reinstate / Reactivate the Plainfield Traffic and Parking Committee to field and address comments, concerns, and challenges associated with the public parking in Plainfield.
3. Amend City Ordinance §3:24-1 to expand the Traffic and Parking Committee's member representation.

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Parking Permit Management

Commuter Parking Permits

Commuter parking is a current challenge in Plainfield, even with the availability of resident and non-resident parking permits. Presently, a resident permit is \$30.00 per month and a non-resident permit is \$35.00 per month. Daily permits are also available for any lot and cost \$2.00/day. One of the concerns heard throughout stakeholder advisory meetings was regarding commuters occupying on-street parking surrounding the Netherwood Train Station. In an attempt to avoid the daily parking fee, and due to a lack of enforcement, non-resident commuters are able to find free parking on the surrounding residential streets, limiting the available parking during the day for residents.



Commuter Parking Permit Rates

Like any commodity, parking should be priced based on the level of demand, to help cover the costs of providing parking services and to generate revenue to support downtown parking improvements, alternative modes of transportation, and other municipal enhancements deemed appropriate. That said, the parking rates must be reasonably priced to meet the parking demand. TimHaahs researched comparable transit municipalities with similar downtown commuter train station parking permits to compare to Plainfield's parking permit rates. **For reference, a table displaying comparable transit municipalities' downtown commuter parking permit rates is located in Appendix D of this report.**

Permit pricing for transit municipalities ranges from the low end of \$460 per year to the high end of \$2,100 per year. Out of the seven (7) municipalities surveyed, including 26 transit lots and one (1) parking deck, the average permit price for residents is approximately \$1,200 per year. Plainfield currently charges its residents \$360 per year for a permit and its non-residents \$420 per year for a permit. At the Netherwood Station, permits are \$120 per quarter or \$480 per year.

Employee Parking Permits

Another parking challenge is associated with employee parking permits. With more convenient on-street parking spaces, employees opt to occupy these valuable spaces as the alternative to parking in the designated lots. City officials and residents alike have cited concerns over the employees locking up the valuable on-street spaces and feeding the meters throughout the day. It has been noted that time limit parking is not consistently enforced. The business parking permit is priced at \$25.00 per month.

Residential Parking Permit (RPP) Programs

The City does have a Residential Parking Permit (RPP) Program in two (2) areas: Netherwood and the Muhlenberg Hospital Area. Residential Parking Permit Programs are often used as a parking management tool to better regulate on-street parking in neighborhoods and communities that are adjacent to high parking generators, such as the Plainfield Train Station and the Netherwood Train Station. Neighborhoods and communities that are located in proximity to these parking generators are likely susceptible to spillover parking effects with demand from nonresidents, as demonstrated in the area surrounding Garfield Avenue and the Netherwood Train Station. Typically, the parking spillover occurs prominent during weekday hours while people are at work. RPP Programs prohibit overflow parking by non-residents, helping to ensure that convenient on-street parking spaces are not monopolized by surrounding commercial or industrial



Plainfield's RPP Signage on Watson Avenue.

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activities, but rather are available to local residents. Plainfield should consider expanding the RPP program in areas adjacent to the Plainfield Train Stations that are impacted by on-street commuter parking.

Virtual Permitting System

Virtual permitting system technologies help communities to efficiently administer parking permits and are a valuable component of License Plate Recognition (LPR) enforcement. Virtual permitting uses a set of computer-based tools and services that help automate and streamline the parking permit process. A virtual system utilizes software to track permits and enforcement. Most virtual permitting software can be integrated into the larger, municipal-wide electronic management systems, creating a more seamless process for the administration and the enforcement of commuter, employee and residential permits. This software stores permit information in a database that can then be used and updated by multiple municipal parking department personnel. Parkers can apply for virtual parking permits online. Approvals can also take place online in a matter of minutes, as the application's information can be instantly verified and approved using the software's database. Parking Enforcement Officers (PEOs) use LPR technology to enforce the virtual permits at a faster rate because all permits are license plate based. Virtual permit systems range in costs from \$35,000 to \$50,000 annually.



RECOMMENDATIONS: Parking Permit Management

The City of Plainfield presently faces parking challenges related to the parking permit management within Plainfield. TimHaahs would recommend that Plainfield consider the following modifications to its permit parking:

1. Consider increasing the price of both commuter parking permits and daily parking permits in the lots. The additional revenue can be used to fund parking, micro transit, parking demand initiatives and other downtown improvements.
2. Consider expanding the Residential Permit Parking Program in areas adjacent to the Plainfield Train Stations that are impacted by on-street commuter parking to dissuade long-term parking on the residential streets.
3. Meet with digital parking permit system providers and solicit a firm budget estimate to implement a digital permitting system technology based on City enforcement requirements and compare the capital and recurring costs of the system versus the existing manpower, administrative, and permit costs associated with the current permit issuance system.

Parking Enforcement and Curb Management

In today's downtown, the curb is valuable real estate! Be it the increasing popularity of drop-off and pick-up zones for Transportation Network Companies (TNCs) or ride-hailing services taking place at the curb (i.e. Uber / Lyft), the increasing need for loading zone space for package deliveries in our growing e-commerce world, on-street parking spaces to support downtown retail / residential services, pedestrians and street vendors, or a bike lane for alternative modes of transportation (i.e. bikeshare and e-scooters), everyone wants access to the curb! Brian Barth's article published in the American Planning Association's June 2019 magazine, Curb Control, indicated the following:

- In San Francisco, TNCs account for approximately one in five vehicles on the road and two-thirds of all traffic violations.
- Today, there is one internet-based delivery on a given day per 25 Americans and this number is expected to double within a five-year span.

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These factors are challenging the traditional ways we manage curb space, making it more important than ever to determine how we plan and effectively enforce on-street parking. Given the high value of curb space, it is important for public authorities to provide fair and consistent enforcement of parking regulations to support the free flow of traffic, vehicular and pedestrian safety, and parking turnover to support local residents, retailers and merchants. Inconsistent enforcement of regulations is detrimental to the parking program as it catches people unaware and provides the impression that parking enforcement is unpredictable, arbitrary and capricious.

The current Parking Bureau operates under Plainfield Police Department's Traffic Unit. The division consists of three (3) full-time Parking Enforcement Officers (PEOs) and one clerical employee. PEOs are scheduled Monday through Friday from 8AM – 4:30PM. During their shift, PEOs cover Plainfield's three enforcement routes on a daily basis. The South Side and the North Side routes are enforced by foot. The driving route enforces the municipal lots as well as certain blocks on Myrtle Ave, North Ave, Watson Ave, Netherwood Ave, and Garfield Ave. Parking enforcement hours are set from 8AM to 6PM Monday through Saturday, except for Thursdays when enforcement hours are extended from 8AM to 9PM. However, due to a lack of staffing, parking is not enforced beyond 4:30PM on weeknights or throughout the day on Saturdays. The Bureau is looking to hire two (2) part-time PEOs to enforce during the evenings and on Saturdays. PEOs are responsible for parking enforcement and meter revenue collections. The Parking Bureau is also considering the implementation of a city-wide street sweeping schedule, which will likely require more frequent and consistent enforcement as well. In 2019, Plainfield PEOs issued approximately 7,493 tickets. During the first three months of the year, PEOs averaged approximately 294 tickets per month or 14 tickets per day with only two PEOs. However, after hiring a third PEO in March, the issuance of parking summonses increased approximately 40%, averaging 734 tickets per month or 33 tickets per day during the last nine months.

Parking noncompliance can be directly related to two (2) major factors: A belief that parking spaces are not enforced and the lottery factor, "I'll take my chances on getting a ticket". It is important that the general public understands that PEO enforcement activity is vigilant and consistent. PEOs should have 1-hour enforcement routes in the CBD area and other areas of transient paid parking environments, such as the municipal lots. Residential zones can usually be enforced every two to four hours, unless they are adjacent to commercial areas. In NJ, PEOs should be performing on average consistent enforcement at the following standards:

- One (1) summons per 8 to 12 minutes or 5 to 8 summons per hour
- 40 to 60 summons per day

These capture rates are directly related to the amount of parking regulated territory that a PEO can effectively cover in a 1-hour period. Enforcement zone circuits that are less than one (1) hour can cause the public and merchants to claim that the municipal government is lurking and looking for violations as a revenue source as opposed to a means of parking regulation or fee compliance. With increased growth in the number of visitors, patrons and businesses, curb management and parking availability will be a growing concern. It is important to ensure that there is a regular level of enforcement to promote adherence to the variety of parking regulations and time limits throughout Plainfield. This is especially important in the downtown where competition for the curb via TNCs (Uber / Lyft) and package deliveries are increasing.



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On-street parking is often the most convenient parking in a downtown and the appropriate turnover of these spaces is critical to providing access to Plainfield's downtown businesses. In Plainfield, on-street parking is used by patrons of multiple retail and commercial establishments. The on-street parking downtown and off-street metered parking is limited to 2-hour parking 8AM and 6PM, Monday through Saturday, except for Thursdays when it is extended from 8AM to 9PM. However, we believe that due to the lack of enforcement, these spaces are regularly utilized by retail business owners and employees, thereby reducing the availability of the most convenient spaces intended for retail/restaurant patrons. **The low turnover and high occupancy of these convenient spaces often presents the perception that there is a lack of convenient parking in downtown.**

To increase on-street parking availability, consistent and later enforcement of the convenient on-street meters Monday through Saturday should be considered to promote additional turnover by dissuading downtown residents and employees from monopolizing the spaces in the late afternoon / early evening, thereby making more parking available for dining and retail patrons. An extended enforcement period will also help aid in greater curb management for delivery trucks in the downtown.

Event Parking Management Plan / Process

Effective management of special event parking is increasingly important to municipalities and City Centers seeking to foster economic development, generate activity for local businesses, and enhance the vibrancy of the community. Special events, such as Plainfield's annual Historic Queen City 5K Walk / Run for Life and the Queen City Film Festival, often serve as an introduction of the City to new future customers and residents, therefore, the parking experience must be positive to ensure that they come back. As a result, providing adequate parking and transportation services for attendees is an important component of municipal parking management to ensure that there is an adequate and convenient supply of parking to meet the demand generated by special events. The effective management of event parking also improves the overall image of parking in Plainfield and encourages patrons and visitors to return for future events, dining, and entertainment. Accordingly, it is important that Plainfield continues to coordinate the provision of parking resources for major downtown events. Components of a special events parking management plan and associated policies include:



- Define special events as all events in the downtown that would necessitate a significant change in the normal parking and traffic patterns and regulations;
- Require all sponsors of special events to proactively request parking and transportation arrangements;
- Establish the Parking Department, as the department responsible for special events parking;
- Identify parking facilities for special events and overflow areas for regular permit holders; and,
- Develop a special events parking plan outlining the necessary facilities, manpower, supervision, signage, traffic control, and standard operating procedures for the collection of event parking fees.

License Plate Recognition (LPR) Equipment

As Plainfield enhances its parking enforcement program, the City should evaluate the benefits and return on investment of License Plate Recognition (LPR) enforcement and a virtual parking permit system. LPR technology systems use specialized cameras to capture and record license plates in conjunction with analytics that automate license plate reading, identification, and enforcement.

LPR is effective in monitoring and enforcing time limit, permit, and fee parking, which would help free prime downtown parking spaces often occupied by local employees. The LPR enforcement technology uses digital cameras and lasers to perform vehicle recognition (size, shape and color) and combined with accurate GPS, automatically detects and notifies the PEO of unmoved vehicles or vehicles that are parked on-street or in a lot without a valid permit or in a space beyond the permitted time. If Plainfield upgrades its pay stations in its public lots to include “pay-by-plate” capability instead of pay-by-space capability, LPR can also be used to enforce the public lots with pay stations. Parking enforcement productivity increases significantly with LPR enforcement systems, allowing enforcement regardless of weather conditions and expediting the enforcement of time limitations. LPR also yields increased parking compliance, which results in more paid fines, increased revenues, and improved customer parking availability. This efficiency provides the PEO more time to perform other enforcement or downtown ambassador activities. Some additional advantages of LPR systems are:

- Capable of tracking vehicles with outstanding tickets, fines, warrants.
- Allows enforcement officers to monitor time limits and prohibits moving into an adjacent space.
- Allows a small enforcement staff to cover a larger area.
- Simplify enforcement in commuter, permit, or “pay by plate” lots with license plate registration.

In addition, enforcement of permit parking is labor intensive with challenges during inclement weather. With permit parking, there are often issues with lost or fraudulent permits, and the permit system has recurring costs related to the purchase and issuance of new permits. With LPR and a virtual parking permit system, the permit parker would simply register their license plate and enforcement staff would use LPR cameras attached to their enforcement vehicle to read license plates and compare them to the permit database.



The costs of LPR have dropped to a reasonable rate recently and given the manual nature of Plainfield’s existing enforcement, an LPR system can be a cost-effective way to undertake enforcement. For a system equipped with one LPR vehicle, the permit management software, warranties and other necessary equipment, systems are approximately \$30,000 per LPR vehicle and maintenance costs are approximately \$5,000 per year.

Loading Zone Enforcement / Permit Program

As the downtown continues to develop with new businesses and residences and demand for on-street parking increases, the enforcement of loading zones will grow more challenging, causing conflicts with local merchants due to the fact that the loading zones are often occupied by the private vehicles of business owners loading and unloading for their retail operations. Typically, the use of loading zones is restricted to commercial vehicles with the corresponding commercial license plates during normal business hours. This enforcement challenge is prevalent in downtown areas with numerous small businesses where the merchants use their private vehicles for deliveries and loading of merchandise.

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To address this issue and reduce the conflict and abuse of loading zones by local business owners, employees and patrons alike, the City implement a **Loading Zone Permit Program** to better control and regulate loading zones in the downtown. The Loading Zone Permit Program would offer business owners to obtain a permit from the City that would allow their private vehicle to occupy a loading zone for deliveries and loading for a limited amount of time, say 15 minutes. Commercial vehicles would not need to obtain a Loading Zone Permit to use the loading zones. The Loading Zone Permit could be purchased or renewed semiannually or annually and should the City go to an LPR system, the permits can be registered and enforced by the LPR system. The Loading Zone Permit Program could also be coordinated with the City's Land Use Ordinance §17:9-43 'Parking, Driveways and Loading' and §17:11-13 'Loading Areas' to permit a 'block/shared' type of loading zones on a block-by-block basis. If this were implemented, the need for individual commercial users to have their own separate loading area would not be necessary.

Some recommended regulations of the Loading Zone Permit Program include the following:

- The acquisition of a Loading Zone Permit is contingent on the applicant satisfying any outstanding City parking tickets against a license plate registered in his/her name.
- Commercial vehicles may utilize the loading zone for up to 30 minutes.
- Loading zone permit holders (private vehicles) utilizing a loading zone permit are limited up to 15 minutes.
- During such utilization, a vehicle shall, at all times, display a loading / unloading or pick up / delivery place card or permit, as required by the City, on the dashboard or driver's sun visor (facing outward).
- The vehicle shall, at all times, have its hazards flashing.
- In addition to other penalties provided by law, any vehicle illegally parked in a loading zone for more than one hour may be towed at the expense of the owner.

In addition to other penalties provided by law, the permit of any permit holder receiving three or more tickets for violating the permitted use of the permit within one calendar year is subject to revocation of the permit by the City. Based on TimHaahs' on-site observations, we noted only one (1) loading zone throughout the downtown.

Periodic Parking Demand / Occupancy Assessments

As the Downtown land use changes and the downtown population and business activity changes, actual parking utilization should be regularly assessed. These assessments will help determine existing utilization, future parking demands and assess the adequacy of the future parking supply. Plainfield should undertake periodic parking assessments, either on an annual or bi-annual basis, to determine the actual utilization of existing public on- and off-street parking assets. This will provide accurate data related to parking demand and availability that can inform future decisions and strategies related to parking management pricing and the potential need for additional parking resources.



Loading Zone Signage Examples

RECOMMENDATIONS: Parking Enforcement and Curb Management

To improve the consistency and effectiveness of parking enforcement, the City should consider the following recommendations:

1. Produce and track summary enforcement reports related to ticket issuance by type, zone, and PEO. This information will identify appropriate benchmarks for PEO's and help determine if enforcement is consistent. The PEO supervisor should review the enforcement reports to ensure compliance with parking enforcement expectations on a daily basis. Specifically, the supervisor should review the enforcement data to identify any time "gaps" throughout the day which indicates the amount of time elapsed between parking citations. If the time elapsed between citations issued is beyond 20 to 30 minutes, the PEO should be asked to provide an explanation for the gap.
2. Ensure that PEO staffing hours and zones are consistent to ensure regular enforcement of all areas, thereby reducing complaints that enforcement is arbitrary, irregular and capricious. In general, PEO patrol routes should be established so that the routes are fully covered within one hour in the downtown district. In peripheral areas of the downtown, patrol routes can be established to cover these areas every two hours.
3. Consistently enforce the time limits on downtown streets to promote turnover of conveniently located parking for retail / commercial patrons. Courtesy warnings can be issued as a preliminary step to violators prior to increased enforcement to educate the parkers as to the need for consistent enforcement of time limit parking and inform parkers of alternate, longer duration parking options.
4. The existing enforcement hours are 8AM to 6PM, Monday to Saturday, except for on Thursdays when enforcement hours are extended to 9PM. The City should extend enforcement hours in the downtown **from 8AM to 9PM on Thursday & Friday evenings (the hours are presently set to 9pm on Thursdays, but not enforced.)**. The extension of enforcement into the evening will help ensure that the most convenient parking is available to customers of the downtown versus the residents and employees.
5. Provide PEO's with parking industry specific customer service and conflict resolution training to provide them with the necessary tools to better perform their responsibilities. The training topics include the role of the parking enforcement officer, and how this role interacts with the overall parking initiative and / or program; identifying parking demand and utilization by area / zones; citation productivity; and strategies to reduce complaints. Parking situations often lead to contentious interactions between staff and the general public. That said, the parking staff that interacts with the public will benefit from specialized customer service and conflict resolution training to effectively perform their jobs. Parking specific training is available through the International Parking and Mobility Institute (IPMI) (<https://www.parking-mobility.org/>), the local New Jersey Parking Institute (NJPI) (www.njparkinginst.com), and the New York State Parking and Transportation Association (NYSPTA) (<https://www.nysparkingandtransportation.com/>).
6. Establish a formal event parking management plan and associated policies to ensure adequate parking and transportation services to meet the parking demand generated by special events.
7. Meet with LPR providers and solicit a firm budget estimate to implement an LPR system technology based on City enforcement requirements and compare the capital and recurring costs of the system versus the existing manpower, administrative, and permit costs associated with the current enforcement system.
8. Create a Loading Zone Permit Program to better control and regulate loading zones in the downtown and allow loading zones to be passenger drop-off areas for TNC's (Uber / Lyft) after hours.
9. To fully understand actual parking utilization, perform periodic parking assessments in and around the downtown on a bi-annual basis to maximize existing parking assets, to the greatest extent possible, and plan for future parking needs.

Appropriate Parking Fees

Critical to municipal parking planning and management is the proper regulation and pricing of on-street and off-street parking. Public parking is a valuable municipal asset that must be effectively managed and priced, particularly within Downtown Business Districts, to help ensure that the most convenient parking is available to support local retailers, restaurants and businesses. On-street parking provides quick and convenient access to businesses located on busy streets and is often preferred by users or patrons in comparison to off-street parking lots or garages. Accordingly, a goal of the on-street parking is to promote high turnover of the parking spaces due to its greater convenience and the ability to provide multiple uses of the same space. To accomplish increased turnover, a basic parking management premise prescribes that on-street parking should be priced at a higher rate per hour than off-street parking facilities in order to dissuade longer term parkers from monopolizing the on-street spaces. As such, charging appropriate rates for the on-street spots is an important strategy to promote turnover and push long-term parkers to off-street facilities. Most U.S. cities and towns undervalue the price of on-street parking spaces and keep it cheaper than off-street parking spaces, believing that the lower cost of on-street parking is beneficial to local merchants and businesses. Unfortunately, the low cost of on-street parking has multiple negative effects including:



- It encourages long-term parkers to monopolize the most convenient on-street spaces and often times, it is the employees and business owners that are parking in the most convenient spaces right in front of businesses. This situation prohibits customers and patrons from accessing these convenient spaces.
- It creates a high level of occupancy of these spaces, often requiring patrons to cruise the area in search of parking contributing to traffic congestion.
- This high level of occupancy also contributes to illegal parking in loading zones, bus stops, and other prohibited areas which forces trucks and busses to double park, thereby further increasing traffic congestion.

Underpriced and overcrowded on-street parking creates problems except for those lucky drivers who manage to find a space, while most other drivers cruise to find an open space wasting both time and fuel, further congesting traffic, and polluting the air. There is always a concern that implementing a higher fee for on-street parking will dissuade customers to shop and/or dine in the downtown. This is a legitimate concern, but the benefits of fee parking, both in terms of better regulating the public parking supply and generating income to support future parking facilities and downtown improvements, is an effective strategy to improve access to Plainfield's downtown businesses and support continued development. In general, businesses and their customers are more likely to support parking management strategies if they can see a direct impact and experience for themselves the benefits of improved access and mobility brought about by progressive parking management strategies.

The City of Plainfield's on-street and public off-street parking fees are presently set to \$0.25/30 minutes or \$0.50/hour. This parking rate is low in comparison to on-street parking rates in comparable transit municipalities and should be raised to \$1.00/hour in areas of high demand like the downtown. **For reference, a parking fee schedule for comparable transit municipalities' on-street parking rates is provided in Appendix E of this report.**

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Progressive Pricing

An additional parking system management option related to on-street parking fee adjustments is “Progressive Pricing” of parking rates. Progressive pricing promotes proper utilization and turnover of convenient on-street parking spaces by providing a reasonable fee for shorter duration desired parking sessions, but then discourages long-term stays by progressively increasing the parking fee associated with each additional hour spent in the parking space. Progressive pricing typically starts by charging a lower appropriate fee for the first or second hour and increasing the fee substantially in subsequent hours to dissuade longer term parking.

Flexible or relaxed time limits can be implemented in zones or districts with progressive pricing. By charging a higher hourly meter rate for each additional hour, short-term parking is encouraged and turnover increases, while providing time flexibility and convenience to users. However, a higher parking rate is charged for additional time, dissuading long-term parkers. Progressive pricing could be implemented at the most convenient, high demand on-street parking spaces, such as Park Avenue, to incentivize people to park in the underutilized off-street lots. **Table 3 contains a proposed progressive pricing rate schedule.**

Table 3: Potential Progressive Parking Rates

Hour	Rate (Per Hour)
1st and 2nd Hour	\$1.00
3rd Hour	\$1.75
4th Hour	\$2.25
5th Hour	\$2.75
6th Hour	\$3.25
7th Hour	\$3.75
8th Hour	\$4.25

Source: Timothy Haahs & Associates, Inc. 2020

Parking Payment Equipment and Technology

The equipment utilized to collect on- and off-street parking fees is critical to the successful implementation of a modern Parking System Upgrade. User acceptance, customer convenience, reliability of equipment or technology, and revenue control are key elements of a system upgrade. Today's parking payment technologies include virtual & proximity payment, pay-by-cell systems, coin, debit card, and credit card. Equipment includes single/dual space meters, multi-space meters, and central pay-stations. Today, parking payment technologies can improve the parking experience and are quick, reliable and convenient.

With the exception of the 20 new spaces on the 200 block of East 4th Street which utilize three (3) multi-space pay stations, the City's existing on-street meters do not have the capability to accept credit cards. The Parking Bureau has been in contact with vendors and received quotes for both smart meters and multi-space pay station



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technology. TimHaahs recommends that Plainfield continues to upgrade its equipment and payment technology for its on-street parking system to include smart meters and pay-by-cell technology within the next two years (by 2022). **For reference, a budget pertaining to the capital costs, annual recurring expenses and warranty expenses of the parking payment equipment and technology has been included in Appendix F of this report.**

Debit/Credit Card-Enabled Meters and Multi-Space Meters

The City of Plainfield has standard single/dual space MacKay Guardian electronic parking meter technology for the majority of its on-street spaces. The meters are only coin operated. Standard electronic coin meters must be programmed individually to change parking rates and time limits. Further, standard electronic meters do not accept debit cards or credit cards, which is a major drawback since most parkers do not carry enough coins to feed the parking meters. Standard electronic meters are also extremely difficult and time consuming to audit.

Debit/credit card-enabled meters allow users to choose from multiple payment options including debit/credit cards, coins and 'smart' cards. Debit/credit card-enabled parking meters are compatible with pay-by-cell parking systems. With an integrated cell and debit/credit card meter system, initial parking payments can be made at the meter and parking time can be refilled via cell phone. Debit/credit card-enabled parking meters cost approximately \$650 per single-head meter and \$800 per double-head meter. Transaction fees associated with debit/credit card payments made by parkers typically cost the municipality \$0.20 to \$0.35 per transaction. Communications and software maintenance costs are approximately \$7 per meter per month for single-head meters and \$13 per meter per month for double-head meters. Meter mechanism maintenance contracts are optional and typically cost \$30-\$50 per meter per year.

Enhanced parking meters, such as multi-space pay stations and single-space debit/credit card-enabled meters are usually not deployed unless parking fees are at least \$1.00 per hour or they are regulating long-term daily parking with a rate of \$3.00 or more to absorb the cost of purchasing and operating the technology.

Multi-space meter pay stations are well received by the public and can provide the convenience of multiple payment options including coin, bills, and debit/credit cards. They can also be programmed to offer various parking rates and time limits, according to time of day. They are very cost-effective when regulating multiple (30-50) off-street parking spaces in a lot or are in a facility that has a single pedestrian point of entry and exit. When installed for on-street parking, the pay stations are typically used to regulate up to 8-10 spaces on the same side of the street. The City currently uses pay-stations for the 20 new parking spaces on the 200 block of East 4th Street and in the public lots.

The cost of multi-space meters is approximately \$7,000-\$10,000 to purchase with solar panels and dollar bill acceptors. Pay stations are typically developed with the ability to accept debit/credit card and coin payments, eliminating the need for electric services. In addition to the purchase and installation costs for multi-space pay stations, they also require monthly communications and software maintenance contracts which cost approximately \$40 per month, hardware maintenance costs of \$50 per month, receipt paper costs of \$35 per roll, one roll can



Dual-Space On-Street Parking Meter at 4th Street in Plainfield



Multi-Space Pay Station at Lot 6 in Plainfield

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handle approximately 1,500 transactions, and debit/credit card costs of approximately \$0.20-\$0.35 per transaction. Multi-space pay stations have the added benefit of reducing street clutter vs. single-space meters.

Pay-by-Cell

Pay-by-Cell systems are implemented in a growing number of towns and cities throughout the U.S. These systems allow patrons to pay for their parking through various cell phone-based commands (call, text, scanning a QR code, etc.). Using their smart phones, patrons can also purchase or extend their time at a meter or facility from a remote location. Text or email notifications are sent to patrons when their parking time is about to expire. These systems can operate in conjunction with the City's existing parking meters and multi-space pay machines.

With the Pay-by-Cell systems, the services allow users to download a mobile app onto their phones to upload their credit card information, indicate the particular zone in which they wish to park, enter their vehicle's license plate number, and pay for parking for the desired duration. The convenience of paying for parking by smart phone and the ability to remotely activate and reactivate the parking session is a significant benefit to downtown users, including retail or restaurant patrons, commuters and employees. Cell phone payment systems eliminate trips to the meter or pay station to increase parking times. Merchants can establish accounts to either pay or discount customer parking via cell phone, should they desire to do so. Pay-by-Cell systems can also be a financially appealing option, as they require minimal investment on the City's part. Typically, the City incurs little cost to implement a Pay-by-Cell system because the service provider sets up the operating program, installs the signage, markets the service, and negotiates an appropriate service fee with the City to be added to individual parking transactions (usually \$0.25 - \$0.35 per transaction), which is typically paid by the user. Because pay-by-cell systems are dependent on a debit/credit card payment, there are transaction fees associated with this service that are either borne by the City or transferred to the user.



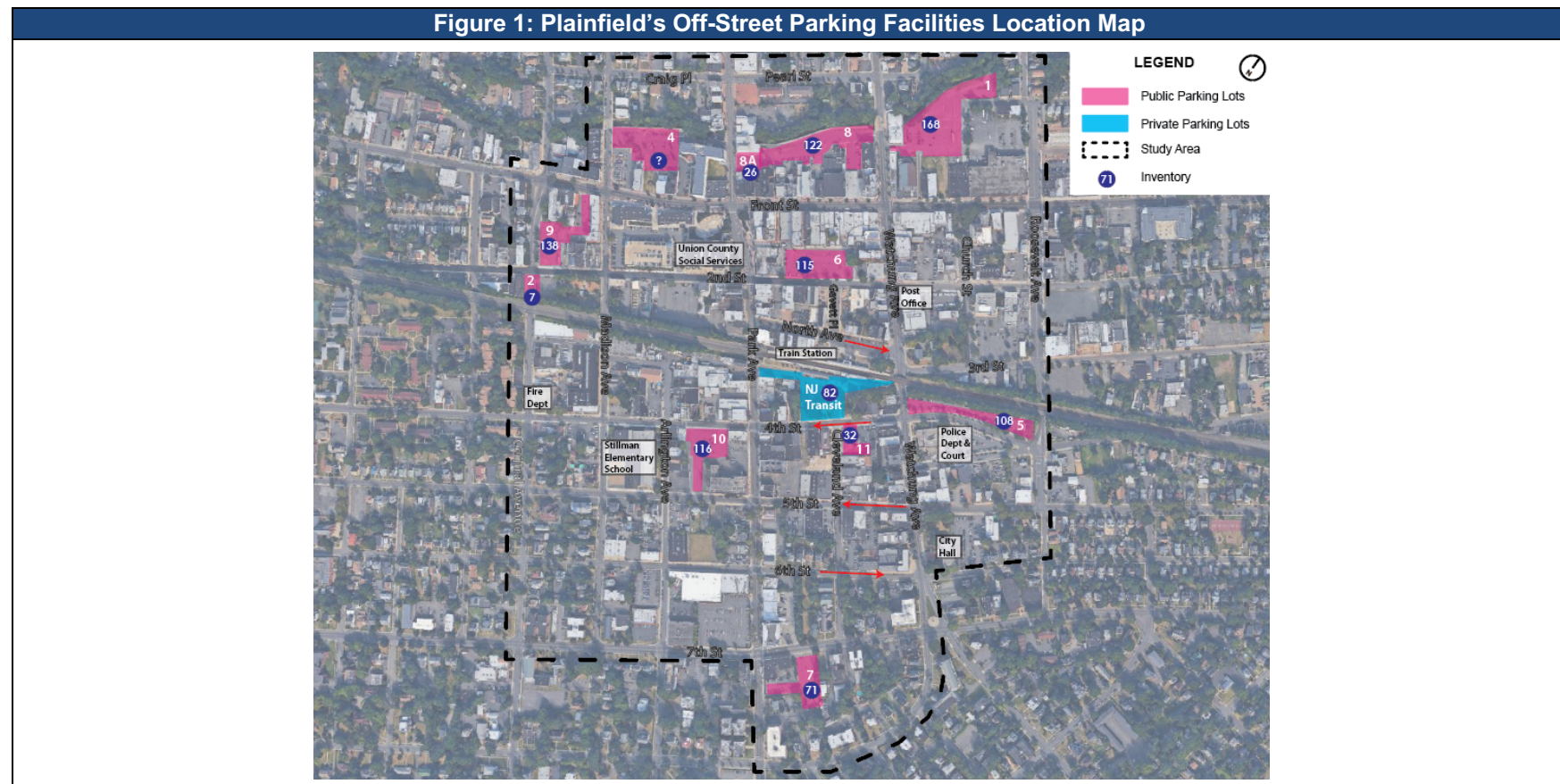
The City should implement a pay-by-cell payment method for both on-street and off-street parking on a larger scale along with the anticipated City-wide meter upgrade. If a pay-by-cell system is introduced, the City could consider providing first-time app users with a discount through the application of a promotion code in order to incentivize parkers and increase the system's adoption rate. This program would only likely be instituted if the City purchased a digital / virtual permit program that would streamline the permitting process.

RECOMMENDATIONS: Appropriate Parking Fees

1. Increase parking rates for the most convenient, high-demand on-street spaces to incentivize people to park in the public off-street lots. According to TimHaahs' field observations and data collection, the following streets have higher parking occupancies: Front Street, North Avenue, 4th Street, Park Avenue, Gavett Place, Cleveland Avenue, and Watchung Avenue.
2. Consider implementing a progressive pricing parking rate schedule on high-demand streets to promote turnover of the parking spaces and discourage commuters and employees from taking prime parking during the day.
3. Consider implementing flexible or relaxed time limits in zones or districts with progressive pricing.
4. Upgrade the existing on-street meters from standard electronic meters to smart meters or pay stations, similar to the three (3) multi-space pay stations on the 200 block of East 4th Street, to allow for debit/credit card payments.
5. Procure a Pay-by-Cell provider to offer a mobile payment service for all on-street and off-street parking resources.

Off-Street Parking Facility Management

A significant component of the downtown parking inventory in the City of Plainfield is located in off-street lots. The City owns approximately **209** off-street public metered parking spaces, **682** permitted parking spaces, and **12** handicapped parking spaces in 11 lots in the downtown area⁴. Additionally, there are **82** parking spaces in the NJ TRANSIT Lot. Parking is available in the City-owned surface parking lots for permit parking and daily parking. Parking time limits for daily parking in the public parking lots are limited to 2-hours. Outlined below are recommendations related to the off-street parking facilities based on our observations and our meeting with City officials. **Figure 1 illustrates a location map of the City-owned off-street parking facilities and the NJ TRANSIT Parking Lot.**



Source: Plainfield Parking Bureau 'Parking Report' 2019 and Timothy Haahs and Associates, Inc. 2020.

⁴ Inventory count pulled from the City of Plainfield's '(City-Owned) – Public (City-Owned) Parking Lots' Map dated June 26, 2019.

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Please note: The City of Plainfield is in the process of preparing a Scattered City-Owned Parking Lot Redevelopment Plan. The plan ensures that there is no loss of parking spaces as a result of development projects by requiring the developer to provide replacement parking through the Redevelopment Plan for the number of parking spaces lost to development.

Parking Facility Maintenance

When coming to Plainfield to work, shop, dine or visit, the downtown's off-street parking facilities will often be the first and last impression that they will have of the downtown. Accordingly, it is critical that the parking facilities be attractive, well-maintained, and secure to provide a high level of user comfort and acceptance, as well as present a positive impression of the downtown. It is also important to maintain these facilities to prevent personal injuries, reduce the City's associated liability, and to ensure that the parking assets are maintained to maximize their useful life. In general, most of the off-street parking facilities are in need of some level of maintenance and / or repair. During our time in the field, we observed and noted opportunities to enhance the appearance and user comfort of the parking facilities. Based on the existing conditions including multiple asphalt repairs, some of the lots, such as Lots 9 and 10, need to be repaved, and parking space lines need to be restriped. Other existing conditions include potholes and overflowing trash.

To ensure that the downtown parking lots continue to be inviting to patrons visiting the downtown, the following actions are recommended:

- Clean litter and inspect lighting in the lots on a daily basis.
- During litter cleaning, inspect all lots for potholes, graffiti, lighting levels, signage, overgrown landscaping, etc.
- Establish an annual repaving and re-stripping program for surface parking lots.
- Determine how much revenue can be devoted annually to improvements.
- Create a six (6) year capital budget to address repairs and improvement.

Lighting and Safety

Based on our evening site visit and observations, it was noted that the paths of travel between various locations and the public parking lots were dimly-lit and somewhat uncomfortable. It was confirmed during a stakeholder meeting that residents and visitors do not feel safe utilizing the public parking facilities. While lighting does exist, it is neither bright nor uniform and there are numerous dark areas. The two primary issues of lighting are intensity, or foot candles, and uniformity. The level-of service (LOS) approach is a useful concept for selection of lighting levels. We recommend an upgrade of the lighting levels. The lighting should be regularly checked to ensure that it is operational and provides adequate lighting levels so that parkers have a high sense of comfort when parking in the evenings.

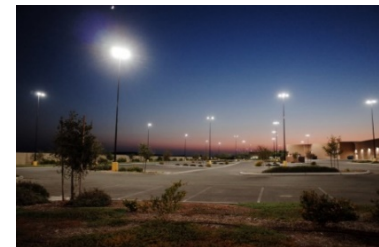
The City's Engineering Department should survey the lighting levels in the study area and develop a plan to establish a minimum LOS B and a targeted LOS A for the parking lots in the downtown and along the paths of



Lot 9



Lot 10



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travel from the public parking lots to downtown destinations. The City should also convert existing lighting with LED replacement lighting, which have a higher efficiency and offer a better Color Rendering Index rating, providing a truer white light while using a fraction of the energy.

RECOMMENDATIONS: Off-Street Parking Facility Management

To ensure that the downtown parking facilities continue to be inviting to patrons visiting the downtown, the following actions are recommended:

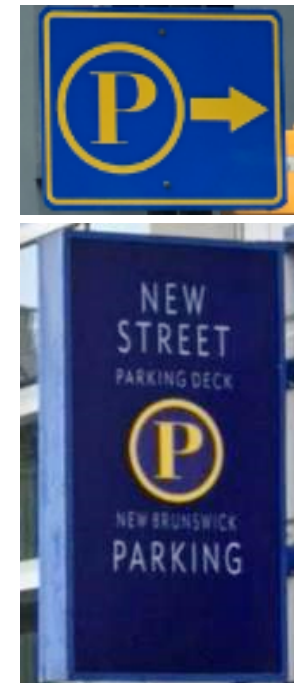
1. Clean all lots on a daily basis.
2. Inspect all lots on a weekly basis.
3. List repairs and have the municipal engineer prepare an estimated budget for each improvement and establish an order of magnitude and priority for each repair.
4. Establish an annual repaving and re-striping program for surface parking lots and determine how much revenue can be devoted annually to improvements and create a six (6) year capital budget.
5. Survey the lighting levels in the study area and establish a minimum LOS B and a targeted LOS A for the parking lots and public paths connecting the lots to downtown destinations to increase the level of safety and user comfort.
6. Convert existing lighting in the lots and on public paths to LED replacement lighting.

Parking Wayfinding and Signage

Proper parking wayfinding and signage can greatly improve access to and the awareness of parking resources. Wayfinding is a comprehensive signage system in a standardized format that clearly communicates the location of parking to easily assist visitors searching for downtown parking facilities. Additionally, a wayfinding system will help reduce vehicle traffic and extraneous vehicular circulation. All visitor/customer spaces should be easily identifiable to a first-time visitor, without creating confusion about who may or may not park in a given space. An ineffective parking and wayfinding signage system may contribute to a perception that there is lack of convenient public parking when in fact there are multiple lots conveniently located to serve downtown businesses. To be effective, signage and wayfinding must be clear, concise and simple, and consist of the following:

- **Trailblazer signs** located on streets leading to the downtowns, these signs show where parking can be found.
- **Site signs** located at the parking lots, these signs describe the type of parking available (permit, daily, etc.).
- **Parking rate signs** located in proximity to the parking space, these signs provide hourly, daily, and monthly rates.

An important aspect of signage is the use of graphic design. Effective signage programs combine aesthetics with information. Choice of color, typeface, character size, weight and spacing, and the use of uppercase and lowercase text all influence readability. A well designed and implemented wayfinding and signage system will not only make finding and using the City's parking more convenient, but it can also help enhance the image of the downtowns and create a "branding" opportunity for the City and its parking system. Some best practices for the design and placement of signage are as follows:



New Brunswick Parking
Signage "Brand"

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- All signage should have a general organizing principle that is consistently evident in the system.
- Directional signage for both pedestrians and vehicles must be continuous (i.e. repeated at each point of choice) until the destination is reached.
- Signs should be placed in consistent and therefore, predictable locations.

The City's public parking lots include a mix of directional, informational, and regulatory signage designed with various fonts, colors, formats, and type size. Some of the signage could use some revamping or repair. We noted that some of the signage is smaller in size than the other signage, making it difficult for parkers to read as they drive by. Although the public lot identification signage inside the City-owned parking lots indicates the parking lot's name / number, user group type, and time limitation, providing necessary information for first-time downtown visitors who are not familiar with the parking characteristics, the intended user groups for the lots are not clearly communicated to drivers passing by on the street. This lack of signage outside the lots and at the lot entrances makes it difficult for first-time visitors to locate these public parking lots and identify if they are allowed to park in the facility prior to entering it. In summary, we recommend upgrading the City's wayfinding and public parking signage system to be consistent, and aesthetically enhanced to better represent the City.



Miami Parking Authority
Public Parking Lot Signage



Parking Signage On-Street and in City-Owned Public Parking Lots and Downtown Wayfinding Signage

Real-Time Parking Occupancy Signage

Digital Signage Systems are increasingly used to provide real-time space availability to parking patrons. With these systems, parking occupancy is monitored in real-time and displayed on digital signage mounted at the entrance of the parking facility/lot. These signs alert parkers to the space availability in the lot prior to entering. The information can also be displayed on the City's website, allowing patrons to check real-time availability from their smart phone before their arrival to downtown. These systems enhance the customer experience, as well as improve the wayfinding in and around the larger parking lots such as Lots 1, 6, and 8, resulting in less vehicles circulating in search of an open space, thereby reducing visitor frustration and vehicle emissions. That said, digital signage systems are expensive, therefore it would not make sense to install this signage in smaller lots with less than 50 spaces.

In 2017, the City of Newark, Delaware implemented digital signage similar to this in their lots through a PILOT Program as a way to make parking more convenient. The City also displays this parking information through an interactive parking map on their website⁵. The City should consider installing a digital signage system in Lot 8, and then as demand increases in the other lots, i.e. Lots 1 and 6, the City should then consider installing additional digital signage systems in those lots as well.



Parking Connectivity and Pedestrian Place-Making

Plainfield should continue to enhance access from the public parking lots and pedestrian pathways to downtown destinations, as the City did with the mural painted in the alleyway connecting Lot 6 to Front Street. Some of the public lots are located behind the retail and restaurant destinations in the downtown and are easily accessible by vehicle or foot but may appear unsafe due to dim lighting and a lack of place-making. We specifically noted the vacant greenspace in between Lot 4 and East Front Street.

Creatively enhancing these lots and linkages can be as simple as adding a vibrant, attractive mural for a comfortable connection or colorful LED lights to transform an unremarkable or seemingly unsafe parking lot / linkage, creating a greater sense of connectivity and safety for pedestrians and contributing to Plainfield's sense of place. Enhancing the blank walls in many of the public lots and linkages in Plainfield where possible will enhance the connectivity between the parking lots.



Vacant Greenspace Connecting Lot 4 to East Front Street in Plainfield

Below is an example of mural art in the City of Plainfield in Union County painted in an alleyway connecting Front Street in the downtown to the City-owned parking Lot 6. The goal of the mural is to provide a piece of public art that is of interest to residents and visitors to downtown Plainfield.

⁵ <https://cityofnewarkde.maps.arcgis.com/apps/webappviewer/index.html?id=2db339cc672a49cf84dfe0d57503f255>

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City of Plainfield's Front Street Alleyway Connecting to Public Parking Lot 6

Below are other examples of creative place-making initiatives to connect alleyways to public parking lots.



Creative Place-Making Initiatives Linking Alleyways to Public Parking Lots

RECOMMENDATIONS: Parking Wayfinding and Signage

1. Update signage and wayfinding systems to convey a distinct Plainfield aesthetic and “brand”. All public parking should be easily identifiable to first-time visitors without creating any confusion about who may or may not park in a given location.
2. Consider installing a digital occupancy signage system in Lot 8, and then as demand increases in the other lots, i.e. Lots 1 and 6, the City should consider installing additional digital signage systems in those lots as well.
3. Continue to designate certain alleyways and vacant spaces as linkages from parking to the downtown, installing vibrant and prominent signage, lighting, murals, and other creative place-making strategies to create a sense of vibrancy and safety.

Parking Program Communications and Information

A common problem experienced by municipal parking systems is that there is little effort expended to communicate and promote the mission, assets and functions of the parking system. In an effort to support the ongoing redevelopment, the City should undertake a comprehensive communication program to inform its residents, downtown merchants, employees, shoppers, commuters, and the general public about City parking and how the parking system operates. The program should address the need for consistent enforcement and the value of limited parking assets, including the value of on-street, time-limited parking to promote turnover for downtown businesses, the plans for upgraded facilities and technology, and other operational information. **The objective in promoting a parking system is to transform what can often be perceived as a negative image into a positive one.** Currently there is limited communication materials dedicated to the City's Parking Program. However, Plainfield does send out an email blast newsletter twice a week to sum up a lot of the City's initiatives. The City should add parking related information into the newsletter as a source of parking communications.

Plainfield's parking website offers limited information. As such, the City should consider adding information pertaining to on-street parking rates and time limitations, frequently asked questions (FAQ's) related to parking (see **Appendix G**), the reasons and rational for parking enforcement and time limits, as well as links to off-street parking and permit information. The City can look to the parking website for Norwalk, CT (www.norwalkpark.org), as their website mentions an app specifically pertaining to parking problems, concerns, and comments, and to the Parking Authority's website for Hartford, CT (hartfordparking.com/), as their website contains real-time traffic information and live traffic conditions for parkers. In addition, utilizing social media outlets such as Facebook and Twitter are also a cost-free strategy to connect with the public and convey information and updates related to Passaic's parking. The Miami Parking Authority uses a multitude of social media outlets to communicate to the parking public regarding events and promotions, and to relay timely information regarding the parking program or situations that may impact local neighborhoods.

The City should also produce a bi-lingual parking brochure and e-brochure that provides valuable parking information, such as parking locations, number of parking spaces, parking rates, and time limitations, etc. for residents, downtown customers, commuters and visitors. The brochure should include an FAQ section with instructions, definitions of parking policies, paying and contesting parking tickets, etc. The City can also coordinate with the Downtown Business District to create promotional initiatives to market downtown retail and restaurant establishments and communicate the location of available parking for customers. Lastly, the City should also update its current webpage for the parking authority to include a dedicated page for parking comprised of the latest parking news, plans, policy or ordinance changes, and improvements with how they will affect the community. See the following municipalities' parking websites:

- Montclair Parking Utility's website (www.montclairnjusa.org/government/departments/parking_utility)
- Bloomfield Parking Utility's website (bloomfieldparking.org/)
- New Brunswick Parking Authority's website (www.njnbpa.org)

Figure 2 illustrates examples of parking program communications materials including a parking brochure from the New Brunswick Parking Authority and a screenshot of the Montclair Parking Utility's website.

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Figure 2: Examples of Parking Program Communications and Information

The New Brunswick Parking Authority's "Reasons Why" Parking Brochure

NEW BRUNSWICK
NBPA
Parking Authority

Think before you park.
Get to know the rules and obey them.
Your safety and the growth and prosperity of our community depend on it.

For more information:
www.nbpapark.org
Phone: 732-545-3118
E-mail: info@nbpapark.org

New Brunswick Parking Authority
106 Somerset Street - 6th floor
New Brunswick, NJ 08901

Office Hours:
Monday - Friday
8 a.m. - 5 p.m.

NEW BRUNSWICK
NBPA
Parking Authority

We are here to enforce parking regulations.
Our goal is NOT to pay on the public and take your hard-earned money. Parking regulations are put into effect to:

- Support public safety
- Promote the free flow of traffic
- Help stimulate economic development
- Maintain a good quality of life for our residents

Think before you park.
Parking in our city is a serious matter. If you disobey a parking regulation, a summons will be issued.

The New Brunswick Parking Authority is committed to keeping our streets as safe as possible for the people who live, work and visit our lovely community.

Know the rules. Common parking regulations—and the thinking behind them—are listed on the following pages. Learn them so that you can avoid costly fines and show your support for the continued success of our city.

We have rules for a reason.
Residential Permit Parking
What is it?
Residential permit parking is designated on a city-wide, first-come basis.

The Reason Why
On-street parking spaces in residential areas are limited. Over the years, many homes have been transformed from single-family to multi-family, causing a dramatic increase in the number of occupants and vehicles. Unfortunately, the number of on-street parking spaces cannot be increased. Thus, a permit system was put in place to improve the availability of parking spaces for residents who obtain parking permits.

Alternate Side Parking
What is it?
From right-of-way, certain street sweeping areas throughout the city. Signs are posted on each street side. When alternate side parking is required, it is to clear the street of debris.

The Reason Why
In order to do this job properly, street sweepers and crews to be clear of vehicles. This service is paid for by the taxpayer, and requires the use of the city's resources. By having one vehicle on the street when the alternate side parking is required, the city can clear the street of debris.

Parking Exceeding Time Limit
What is it?
Time-limited parking spaces are installed in areas where a high volume of parking spaces is needed, such as near retail shops and restaurants throughout the city.

The Reason Why
Customers are not to park near their destination, whether they are shopping at a local store, dining at one of New Brunswick's many restaurants or visiting an office. These rules are in place to ensure that the streets are clear for the public and to provide a service. If vehicles were to park all day at these spaces, they would prevent potential customers from accessing parking close to the business or office where they need to visit. The business owner is kept as well as the customers who decide to visit the establishment because parking becomes too difficult.

Meter Funding
What is it?
Meters are located in areas where high turnover of parking is needed. The length of time allowed at metered spaces ranges from 15 minutes to 12 hours.

The Reason Why
Meter funding allows parking spaces to be used by customers who are shopping, dining and conducting business in New Brunswick.

Double Parking
What is it?
Double parking is when someone parks a vehicle in the road alongside another vehicle that is parked in a legal space. Double parking is against the law.

The Reason Why
When you double park, you interfere with the free flow of traffic. Double parking is one of the leading causes of traffic congestion. It also is a major safety issue. Many of our streets are not wide enough to accommodate double-parked vehicles and emergency vehicles moving through our streets. No one can predict when an emergency will occur. It is critical that we keep our streets clear so that emergency vehicles can reach their destination quickly and safely.

The following rules also are in effect:

- No Parking within 10 Feet of a Stop Sign
- No Parking within 10 Feet of a Fire Hydrant
- No Parking within 25 Feet of a Curb

These regulations are listed in the New Jersey Drivers Manual. These laws are in effect to protect pedestrians and ensure accessibility by the fire department to fire hydrants.

Think before you park.
Get to know the rules and obey them.
Your safety and the growth and prosperity of our community depend on it.

The Montclair Parking Utility's Website for Parking Communications

Montclair HOW DO I? GOVERNMENT RESIDENTS VISITORS BUSINESSES ONLINE SERVICES f t TRANSLATE Q

Home / Government / Departments / Parking Utility

DEPARTMENTS

- Parking Utility
- Parking Updates
- Interactive Parking Map
- Parking Permits
- Commuter Parking
- Visitor Parking
- Parking for Disabled
- Parking Regulations
- Parking Fines & Tickets
- Online Parking Services
- Snow Parking
- Parking and Traffic Issues

Parking Utility

Township of Montclair Municipal Building
205 Claremont Avenue
First Floor
Montclair, NJ 07042

FOR ALL PARKING QUESTIONS: please contact the Parking Utility at
MPU@montclairnjusa.org

Emanuel Germano
Superintendent of Parking
973-509-4997
esermano@montclairnjusa.org

Rita Catalano
Parking Enforcement Supervisor
973-744-6087

Main Number: 973-509-4997

Hours: Monday - Friday, 8:30 a.m. - 4:30 p.m.

The Crescent Deck at Montclair Center and Bay Street Deck
Operated by **Impark (Imperial Parking Corporation)**

Crescent Deck Number: 973-744-6010

The Montclair Parking Utility is responsible for the oversight of parking operations for all meters and municipal lots in the township.

Parking Utility
205 Claremont Avenue
Montclair, NJ 07042
Phone: 973.509.4997
Questions?
MPU@montclairnjusa.org

Source: New Brunswick Parking Authority, 2019, and Montclair Parking Utility, NJ, 2020.

RECOMMENDATIONS: Parking Program Communications and Information

1. Add information to the City's website and the City's newsletter blast pertaining to on-street parking rates and time limitations, frequently asked questions (FAQ's) related to parking, the reasons and rational for parking enforcement and time limits, as well as links to off-street parking information to the City's parking program communications. Provide more parking-related information to educate the public and business owners regarding parking in the downtown.
2. Produce a bi-lingual parking brochure and e-brochure that provides valuable parking information, such as parking locations, number of parking spaces, parking rates, and time limitations, etc. to residents, downtown customers, commuters and visitors.
3. Consider the use of social media outlets such as Facebook and Twitter as a cost-free strategy to connect with the public and convey any parking events or changes related to the City's parking.

Transportation Demand Management (TDM) Strategies

TDM policies directly impact the demand for parking resources. Appropriately priced, well-managed municipal parking can work in tandem with TDM strategies as a helpful tool to reduce parking demand, especially in areas with mass transit. TDM services reduce parking needs and raise awareness of alternative mobility. Making transportation options such as bike-sharing readily available is an important component of managing parking demand especially for "first/last mile" needs. The "first/last mile" refers to the problem in which not everyone lives or works within an easy walking distance of a transit or bus stop, thereby discouraging commuters from using mass transit at all.

Car Share Programs

Car sharing programs allow commuters, residents and employees in transit-served areas (who may not want or need to own a vehicle or a second vehicle) to access one when needed. Integrating car sharing into downtowns or new development projects is an effective strategy to reduce parking requirements and provide residents, commuters, and employees with a vehicle. Car sharing is highly effective in reducing the need of car ownership, especially when combined with accessibility to mass transit.

Several cities in the United States have implemented on-street car-sharing programs on a municipal-wide basis. Hoboken, New Jersey and Hertz Global Holdings became the first corporate-municipal partnership when their car-sharing program debuted in summer of 2010⁶. The program 'Corner Cars' is a pool of vehicles made available to residents who sign up that are shared so that they're used as often as possible. This means that instead of owning a car, residents share a pool of cars with other residents. The program has enjoyed widespread success, providing residents with the ability to rent from a fleet of vehicles on an hourly basis and park them in specially designated spaces throughout Hoboken. Residents who sign up for the service reserve cars online or by phone by the hour, and then walk to the car's parking space on-street. Participants have a membership card that they wave over the windshield and the doors unlock with the keys already inside the vehicle. Participants return the car to the same location when their reservation is over, and they are billed automatically. Fees for the Corner Cars range depending on the amount one uses the car share but are generally \$8-10 per hour plus application fees.



⁶ <https://www.hobokennj.gov/resources/corner-cars>

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Bike Share

Bike-share programs have become popular in walkable communities as an alternative to driving. Companies provide public bicycles for people to use on an “as-needed” basis without the costs, maintenance, storage and responsibilities that come with owning a bike, creating a market for people who would not otherwise ride a bicycle. These programs rely on a system of self-service bike stations or dockless bikes that allow users access through a mobile app to rent a bike by the use of a membership or a credit card. The user is then able to ride the bike to their destination and park the bike in a convenient location, offering an affordable and environmentally sustainable reason to switch from driving to biking within a downtown district. Many companies offer a dockless bike-share program, cutting out the need for a bike rack altogether and allowing users freedom and flexibility in picking up bikes wherever they are available and then leaving them at the user’s end destination. For these dockless programs, users simply unlock the bicycle with their smart phone through the app, pay for the ride, then park and lock the bike from their phone once more when finished.



Studies also show that more people riding bikes in urban areas leads to improved bicycling and walking infrastructure. Benefits to bike-sharing programs include flexibility, reduction of vehicle emissions polluting the environment, health benefits, reductions in fuel consumption and traffic congestion, and financial savings for individuals.

Electric Scooters

Similar to bike-share programs, many mobility companies are beginning to introduce electric scooters (e-scooters) available for rental as the “best form of motorized transportation”. Comparable to the bike-share, the user simply downloads an app in order to scan a scooter’s barcode to rent their ride, and similar to a dock less bike share, the user can just leave the scooter on the pavement at their destination for another person to rent. However, implementation of these scooters has had negative reactions, with concerns regarding safety and conflicting with pedestrians on the sidewalks.

On May 20, 2019, Hoboken launched a six-month PILOT program for a scooter share program once Governor Murphy signed the new law, S-731, authorizing low-speed (no greater than 20 miles per hour) e-scooters and e-bikes in NJ. The law regulates these alternative modes similarly to that of the standard bicycle. Hoboken had 300 electric scooters available for rental to both residents and visitors; in the first week alone the program saw over 21,500 rides, a global high for LimeBike. However, along with the high ridership came increased reports of traffic violations resulting in the creation of a regulatory ordinance to include a fee schedule of up to \$500 and/or loss of riding privileges for repeat offenders. Riders and renters are supposed to be licensed drivers for safety reasons and riders are meant to ride them on the streets or in bicycle lanes, while wearing a helmet. It is important to keep in mind that e-scooters are controversial right now due to safety issues and a lack of regulations. Therefore, it is important to adopt best practices if e-scooters were to be implemented in Plainfield. The City did have a LimeBike program, which included an e-scooter program. However, the e-scooter program was never accepted. **For reference, two sample ordinances for e-scooters are provided in Appendix H of this report.**



City-Wide Jitney / Shuttle Programs

As Plainfield's downtown consists of two (2) train stations, Plainfield and Netherwood, a community-wide shuttle bus service could be an effective option to provide residents with access to the train stations and downtown. Plainfield is comparable to South Orange, NJ due to having multiple train stations. The Township of South Orange, NJ implemented a Jitney Service back in July 2002 with one route and two busses as a way to provide easy and accessible transportation to and from the Train Station. Being a designated "Transit Village", the Township was eligible for transportation grants, of which they received a "Community Shuttle Grant" from New Jersey Transit to provide funding for two busses. Today, the service has expanded to four routes and seven buses.

The Jitney service continues to operate through co-funding by the Village and the Parking Authority. The fee to residents for a 12-month Jitney pass is \$300 and for non-residents that live on the South Orange borders it is \$450. Riders may also pay per ride on the bus, priced at \$2.00 cash each way.



Municipal Ride Hailing Programs

Transportation Network Companies (TNCs) or ride-hailing services, such as Uber or Lyft, are companies that match passengers with drivers via websites and mobile apps. TNCs are examples of shared mobility. Ride-hailing services are now a significant alternative to owning or driving a car and have reduced certain parking needs.

The City of Summit located in Union County, NJ currently has a program with the ridesharing provider, Lyft. This program provides those Summit residents who already have parking permits for the train station with subsidized rides to the Summit Train Station. Drop offs at the train station run from Mondays to Fridays starting at 5AM and ending at 11PM. As of November 2018, the program expanded from 250 to 300 participants. Residents pay \$2.00 per ride and Summit subsidizes the remaining balance. This program has been successful in helping to alleviate parking congestion in municipal parking lots and garages near the train station. The cost to the City is approximately \$200k/year. Plainfield could follow the City of Summit's model and look to implement a similar program to help alleviate parking congestion near the train stations.



Parking and Mobility Management for Major Employers and Residents

Mobility Management, or TMD, refers to strategies and programs that give priority to public transit, ride-sharing and non-motorized modes of transportation. Companies are able to use these programs to promote sustainable mobility systems (i.e. carpooling options or discounts for mass transit use) for their staff as a way of reducing the number of vehicles on the road and parking demand. The purpose of the management programs is to encourage employees to make greater use of green transport modes to promote sustainability.

Strategies can include improving transportation diversity, providing incentives for users to change the frequency, mode, destination, route or timing of their travel, and reducing the need for physical travel through mobility substitutes or more efficient land use. Parking and Mobility Management

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is becoming a more common solution to a variety of transport problems because of the low costs and the multitude of benefits that come with it. Plainfield can work with major employers in the City to encourage the implementation of these programs as a smart growth strategy for current and future development.

Princeton University offers a range of benefits to their faculty and staff that chose alternative modes of transportation to commute to work each day, these incentives are part of the Revise Your Ride Program. The program is an important element of Princeton University's strategic priorities as a way to reduce Single Occupancy Vehicles (SOV's) on campus. The program offers enhanced incentives to participate in one of five TDM programs with cash incentives for doing so: bike/walk, carpool, vanpool, rail reimbursement, and free NJ TRANSIT bus pass. In addition to these programs, the following benefits are also included: Enterprise CarShare options, a guaranteed free ride home, and single commuter parking passes for an average of three days per month in specified lots.

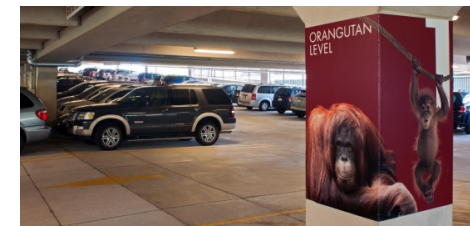
RECOMMENDATIONS: Transportation Demand Management (TDM) Strategies

1. Explore car share, bike share and e-scooter options for alternative modes of transportation to help reduce the overall parking demand in the downtown.
2. Explore the option of implementing a city-wide shuttle / jitney program or a municipal ride hailing program, whether it be a "guaranteed ride home" program or Uber / Lyft subsidies, for Plainfield residents and employees who opt to not drive to the train station.
3. Consider incentivizing parking and mobility management for major employers through the implementation of alternative transportation programs.

TOD Parking Structure Design

Should Plainfield's continued Downtown and TOD development necessitate a new parking structure, the integration, design and user convenience of structured parking requires the application of sound planning principles and attention to detail. These parking facilities will serve several user groups, and provide a meaningful impression to those throughout the community including restaurant patrons, residents, visitors and commuters. As such, certain components of the structures should be planned and designed as "places," not as warehouses for cars. To the extent possible, retail and mixed-use development should be integrated at the ground level of the garage to enliven the streetscape and maintain the connectivity between the land uses adjacent to the garage.

Pedestrian and vehicular access and exits and sections of the façade may be adorned with architectural elements that contribute to the aesthetic character of the community. Stair and elevator towers serve as desirable architectural features, and should be designed using glass with maximum visual access and exposure to vibrant streets to enhance user comfort and security. Lighting levels may be increased beyond typical levels, and components of the structure should be painted or stained to promote brightness. Passive security measures include long, clear sight lines; bright lighting; and the elimination of dark areas. These measures should be incorporated to provide patrons with a high level of user comfort. The interior elevator and stair vestibules can be aesthetically enhanced to reflect the quality and design of the TOD project. Paint, graphics, lighting, wall and floor treatments should be utilized to project the design sense of the entire community.



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TOD parking planners should use the associated pedestrian activity to create “people places”. Given the amount of pedestrians who come and go from a parking structure, the access and egress areas should be designed as public spaces with adjacent retail and quality hardscape, water, and landscaping elements. This activity, coupled with passive security design features such as glass backed elevators and stair towers, clear lines of sight and open design features, enhance security and user comfort. Lastly, it is important to recognize that the design of the structure will represent the community, the station area and the architectural character of the surrounding neighborhood for decades to come. Thus, appropriate investment and attention should be incorporated into the façade and public areas of the parking facility.

Any new public parking facility will act as the gateway to the community, and will often be the first and last impression that a person has of their experience in Plainfield. It is important to design the facility as a place that is more than just somewhere to park. Mixed-use integration should be considered to the greatest extent possible, and may include restaurants, retail or even residential development. The facility should be planned and designed as a people generator in a location that sees a lot of foot traffic. It should include attractive walkways that connect people to the downtown with high-quality graphics, signage, and information to create a user-friendly environment. Security and technology options need to be considered and designed with user convenience in mind, in addition to architectural elements such as stair and elevator towers. Even seemingly small details like lighting levels and paint color need to be considered in detail, as this facility is a representation of the quality of the community as a whole.

Parking planning and design considerations to be evaluated when planning for structured parking include:

1. The structure's proximity and integration with proposed development sites;
2. The structure's proximity to the train stations and downtown businesses;
3. The ability of the facility to accommodate various parking demands, thereby improving its financial viability;
4. The efficiency and number of spaces yielded given the constraints of the various sites;
5. The vehicular and pedestrian circulation and walkability within, to and from the facility;
6. To the greatest extent possible, opportunities to incorporate retail and commercial elements into the facility to create street level vibrancy and complement the downtown;
7. Design parking with residents and patrons in mind, to create an attractive, welcoming, safe and user-friendly facility;
8. Incorporate sustainable parking design principles to reduce environmental impacts and long-term operational costs;
9. Provide bicycle storage and lockup locations in new projects to further incentivize residents to give up their car and parking; and
10. Ensure proper parking management to maintain and maximize the use of parking assets.



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Apply Sustainable Parking Strategies

Parking facilities serving TOD and transit projects should set the standard for sustainable design practices. Sustainable parking design features include renewable on-site energy, energy efficient lighting, storm water capture and reuse for wash downs, maintenance, and landscaping irrigation, and bicycle storage facilities, to name a few. Solar arrays can provide the predominant amount of electricity for lighting and other electrical equipment. Preferred parking and charging facilities for alternative fuel vehicles and preferred parking for fuel efficient vehicles can be established. Lastly, incentives for carpoolers such as preferred parking spaces or discounted fees can effectively reduce the number of parking spaces required at a commuter parking facility.

RECOMMENDATIONS: TOD Parking Structure Design

1. Develop a centralized parking facility to support multiple projects / share parking.
2. Incorporate best practice planning and design considerations for new structured parking.
3. Incorporate sustainable parking strategies to new parking structure design.

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Master Plan Parking Recommendations Summary

# Parking Recommendations Summary	
“Right-Sizing” Parking	
1	Apply appropriate parking ratios that reflect the presence of mass transit (NJ Transit rail and bus system), the mixed-use, dense nature of downtown development, and the availability of goods, services, and amenities in a walkable environment.
2	Amend the land use ordinance to maximize the use of on-street parking to meet TOD project parking requirements.
3	Use shared parking as an effective strategy to help reduce parking requirements for future development in the downtown and centralize that facility to serve multiple projects.
4	Engage downtown business owners to enter shared parking agreements to utilize municipal parking resources during evenings and weekends to accommodate downtown patrons and employees.
5	Consider adopting a PILOT program ordinance with a dedicated fund for revenues. Reinvest these revenues in a parking trust fund dedicated to expanding the public parking opportunities throughout the Downtown.
Parking Administration & Management	
1	Consolidate the parking system into a centralized, single-responsibility center, specifically for parking administration and management of Plainfield’s public parking resources reporting directly to the City’s Business Administrator.
2	Reinstate / Reactivate the Plainfield Traffic and Parking Committee to field and address comments, concerns, and challenges associated with the public parking in Plainfield.
3	Amend City Ordinance §3:24-1 to expand the Traffic and Parking Committee’s member representation.
Parking Permit Management	
1	Increase the price of commuter and daily parking permits and dedicate additional revenue to parking demand strategies.
2	Consider expanding the Residential Permit Parking Program in areas adjacent to the Plainfield Train Stations that are impacted by on-street commuter parking to dissuade long-term parking on the residential streets.
3	Meet with digital parking permit system providers and solicit a firm budget estimate to implement a digital permitting system technology based on City enforcement requirements and compare the capital and recurring costs of the system versus the existing manpower, administrative, and permit costs associated with the current permit issuance system.
Parking Enforcement and Curb Management	
1	Produce & track summary enforcement reports related to ticket issuance by type, zone, and PEO.
2	Ensure that PEO staffing hours & zones are consistent to ensure regular enforcement of all areas.

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3	Consistently enforce the time limits on downtown streets to promote turnover of conveniently located parking for retail / commercial patrons.
4	Consider extending downtown enforcement hours from 8AM to 9PM Thursdays and Fridays to dissuade employee parking.
5	Provide PEO's with parking industry specific customer service and conflict resolution training to provide them with the necessary tools to better perform their responsibilities.
6	Establish an event parking management plan and associated policies to ensure adequate parking and transportation services to meet the parking demand generated by special events.
7	Meet with LPR system providers and solicit a firm budget estimate to implement an LPR system technology based on City enforcement requirements and compare the capital and recurring costs of the system versus the existing manpower, administrative, and permit costs associated with the current enforcement system.
8	Create a Loading Zone Permit Program to better control and regulate loading zones in the downtown and allow loading zones to be passenger drop-off areas for TNC's (Uber / Lyft) after hours.
9	Perform periodic parking assessments in and around the downtown on an annual or bi-annual basis to understand actual parking utilization, maximize existing parking assets, and plan for future parking needs.
Appropriate Parking Fees	
1	Increase parking rates for the most convenient, high-demand on-street spaces to incentivize people to park in the public off-street lots.
2	Consider implementing a progressive pricing parking rates schedule in high demand areas of the downtown.
3	Consider implementing flexible or relaxed time limits in zones or districts with progressive pricing.
4	Upgrade the existing on-street meters from standard electronic meters to smart meters or pay stations to allow for debit/credit card payments.
5	Procure a Pay-by-Cell provider to offer a mobile payment service for all on-street and off-street parking resources.
Off-Street Parking Facility Management	
1	Clean all lots on a daily basis.
2	Inspect all lots on a weekly basis.
3	List repairs and have the municipal engineer prepare an estimated budget for each improvement and establish an order of magnitude and priority for each repair.
4	Establish an annual repaving and re-striping program for surface parking lots and determine how much revenue can be devoted annually to improvements and create a six (6) year capital budget.
5	Survey the lighting levels in the study area and establish a minimum LOS B and a targeted LOS A for the parking lots and public paths connecting the lots to downtown destinations to increase the level of safety and user comfort.
6	Convert existing lighting in the lots and on public paths to LED replacement lighting.

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Parking Wayfinding and Signage	
1	Update signage and wayfinding systems to convey a distinct Plainfield aesthetic and “brand”.
2	Consider installing a digital occupancy signage system in Lot 8 to convey parking occupancy levels and improve user convenience. Then, as demand increases in the other lots, i.e. Lots 1 and 6, the City should consider installing additional digital signage systems in those lots as well.
3	Continue to designate certain alleyways and vacant spaces as linkages from parking to the downtown, installing vibrant and prominent signage, lighting, murals and other creative place-making strategies to create a sense of vibrancy and safety.
Parking Program Communications and Information	
1	Add information to the City’s website and the City’s newsletter blast pertaining to on-street parking rates and time limitations, frequently asked questions (FAQ’s) related to parking, the reasons and rationale for parking enforcement and time limits, as well as links to off-street parking information to the City’s parking program communications. Provide more parking-related information to educate the public and business owners regarding parking in the downtown.
2	Produce a bi-lingual parking brochure and e-brochure that provides valuable parking information, such as parking locations, number of parking spaces, parking rates, and time limitations, etc. to residents, downtown customers, commuters and visitors.
3	Consider the use of social media outlets such as Facebook and Twitter as a cost-free strategy to connect with the public and convey any parking events or changes related to the City’s parking.
Transportation Demand Management (TDM) Strategies	
1	Explore car share, bike share and e-scooter options for alternative modes of transportation.
2	Explore the option of implementing a city-wide shuttle / jitney program or a municipal ride hailing program for Plainfield residents and employees who opt to not drive to the train station.
3	Consider incentivizing parking and mobility management for major employers through the implementation of alternative transportation programs.
TOD Parking Structure Design	
1	Develop a centralized parking facility to support multiple projects / share parking.
2	Incorporate best practice planning and design considerations for new structured parking.
3	Incorporate sustainable parking strategies to new parking structure design.

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Appendices

Appendix A: Parking Comments from the “City of Plainfield Master Plan Public Engagement” Online Survey

Figure 3: Question 19 Parking Comments, Tuesday, May 26, 2020 (12:00PM)

19. Which days/times do you typically park in the Downtown? **(Select all that apply)**

	Weekday	Saturday	Sunday
Morning (before 10am)	48% Weekday	33% Saturday	19% Sunday
Mid-day (10am-2pm)	65% Weekday	23% Saturday	12% Sunday
Afternoon (2pm-5pm)	62% Weekday	23% Saturday	15% Sunday
Evening (after 5pm)	31% Weekday	46% Saturday	23% Sunday
All day (at least 8 hours)	50% Weekday	33% Saturday	17% Sunday

27 respondents

Source: “City of Plainfield Master Plan Public Engagement” Online Survey Responses, 2020.

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Figure 4: Question 20 Parking Comments, Tuesday, May 26, 2020 (12:00PM)

20. In your opinion, what is your perception of parking in Plainfield?					
	Excellent	Good	Neutral/No Opinion	Fair	Poor
Availability of parking in the Downtown	3% Excellent	12% Good	25% Neutral/No Opinion	20% Fair	40% Poor
Parking space locations relative to your intended destination	2% Excellent	18% Good	35% Neutral/No Opinion	20% Fair	25% Poor
Communication of where parking is located	- Excellent	21% Good	30% Neutral/No Opinion	18% Fair	32% Poor
Cost of parking	7% Excellent	21% Good	36% Neutral/No Opinion	13% Fair	23% Poor
Ability to pay for parking	- Excellent	21% Good	43% Neutral/No Opinion	20% Fair	16% Poor
Security of parking lots	2% Excellent	7% Good	40% Neutral/No Opinion	25% Fair	25% Poor
Condition of parking lots/spaces	- Excellent	9% Good	38% Neutral/No Opinion	23% Fair	30% Poor
On-street parking in residential neighborhoods	3% Excellent	28% Good	21% Neutral/No Opinion	21% Fair	28% Poor
61 respondents					

Source: "City of Plainfield Master Plan Public Engagement" Online Survey Responses, 2020.

Appendix B: Asbury Park's PILOP Ordinance

§2-87.PAYMENT IN LIEU OF PARKING IN THE CENTRAL BUSINESS DISTRICT (CBD). [Ord No. 2017-6]

The payment in lieu of parking shall be \$15,000 per space. All units that are deeded affordable per HUD standard for Monmouth County for a minimum of ten (10) years shall pay fifty (50%) percent (\$7,500) of the fee per space. The proceeds shall be deposited into a fund established solely for the acquisition, development, expansion or capital repair of public and municipal parking facilities, traffic- or transportation-related capital projects, the provision or operating expenses of transit facilities designed to reduce reliance on private automobiles, programs to facilitate carpooling or ride sharing, and creating a consistent streetscape for all user groups utilizing all modes of transportation by introducing context-sensitive design elements at intersections and corridors, such as parking meters, wayfinding signage, kiosks, trails, sidewalks, crosswalks, streets and similar improvements that connect users to public and municipal parking facilities throughout the City. The proceeds of such fund shall not be considered a part of the municipal general fund.

Appendix C: Plainfield's Shared Parking Ordinance

- Subsection J of § 17:9-42: In all zone districts, except the Central Business District (CBD) and the North Avenue Historic District Zones, there shall be provided, at the time that any building or structure is erected, enlarged, increased in capacity or has a change of use, parking spaces in accordance with the requirements of the following schedule.
 1. Consistent with the principles for TODD, the proximity to and availability of mass transit and the pedestrian orientation of development in the TODD Zones, parking requirements that are otherwise required for the uses set forth in the schedule are modified to reduce and eliminate the number of parking spaces required, with the specific intent of regulating parking through zoning rather than as a design and performance standard. Nevertheless, the concepts for shared parking and use of on-street parking in the Residential Site Improvement Standards are incorporated into the schedule.
 2. Consistent with the principles for TODN, the proximity to and availability of mass transit and the pedestrian orientation of development in the TODN Zones, parking requirements that are otherwise required for the uses set forth in the schedule are modified to reduce and eliminate the number of parking spaces required, with the specific intent of regulating parking through zoning rather than as a design and performance standard. Nevertheless, the concepts for shared parking and use of on-street parking in the Residential Site Improvement Standards are incorporated into the schedule.
- Subsection S of § 17:9-42 (TODD Zones):
 1. In the TODD/TD Zones, on-site parking spaces for residential units and any other parking that is provided must be on site.
 2. In all other TODD Zones, on-site parking is not required. Parking requirements and optional parking shall be provided by one of the following options, or a combination of the following options: (1) on-site parking; (2) purchase of long-term parking permits from the City Parking Bureau that must be renewed in order to retain Certificates of Occupancy, in which case the property owner bears the obligation of obtaining the permits and providing them to the tenants; or (3) contribution to a public parking deck.
 3. Shared parking is encouraged in all TODD Zones and is required for the residential component of all mixed use developments. The methodology to calculate the number of shared parking spaces shall be that found in the most recent publication of the Urban Land Institute Shared Parking or approved equivalent.

4. Alternative parking standards to those shown in the Table of Parking Regulations shall be accepted if the applicant demonstrates these standards better reflect local conditions. Factors affecting minimum number of parking spaces include household characteristics, availability of mass transit, urban versus suburban location, and available off-site parking resources.
 5. The approving authority may reduce the minimum number of parking spaces required where the applicant can demonstrate the following to the Board's satisfaction:
 - a. Variations in the accumulation of vehicles by hour, by day, or by season; or
 - b. Relationships that exist among the land uses that result in visiting multiple land uses on the same auto trip; or
 - c. Another shared parking approach.
 6. A developer of new commercial and mixed use construction or residential rehabilitation, that requires the provision of parking spaces, may undertake a study, conducted by a transportation planner or engineer, to determine the modal split for travel by its employers and visitors. Based on the expected distribution of travel modes, the approving authority shall determine the parking requirement applicable to the proposed development. The authority can reduce the actual provision of parking spaces by requiring the applicant to pave, construct or pay for, through the parking structure mechanism, only the number of parking spaces determined necessary, based on the agree-upon results of the modal split study.
 7. Where possible, connections or provisions for future connections to abutting parking lots serving retail or service uses shall be shown on the site plan.
- Subsection T of § 17:9-42 (TODN Zones):
 1. In the TODN/PSR1 and PSR2 Zones, parking spaces for residential units must be on site.
 2. In all other TODN Zones, parking requirements shall be satisfied by one of the following options, or a combination of the following options: (1) on-site parking; (2) purchase of long-term parking permits from the City Parking Bureau that must be renewed in order to retain certificates of occupancy, in which case the property owner bears the obligation of obtaining the permits and providing them to the tenants; or (3) adjacent to the property via cross-easements/long-term leases in order to create a seamless shared parking experience for patrons and residents in the area.
 3. Shared parking is encouraged in all TODN Zones and is required for the residential component of all mixed use developments. The methodology to calculate the number of shared parking spaces shall be that found in the most recent publication of the Urban Land Institute Shared Parking or approved equivalent.
 4. Alternative parking standards to those shown in the Table of Parking Regulations shall be accepted if the applicant demonstrates these standards better reflect local conditions. Factors affecting minimum number of parking spaces include household characteristics, availability of mass transit, urban versus suburban location, and available off-site parking resources.
 5. The approving authority may reduce the minimum number of parking spaces required where the applicant can demonstrate the following to the Board's satisfaction:
 - a. Variations in the accumulation of vehicles by hour, by day, or by season; or
 - b. Relationships that exist among the land uses that result in visiting multiple land uses on the same auto trip; or
 - c. Another shared parking approach.
 6. A developer of new commercial and mixed use construction or residential rehabilitation, that requires the provision of parking spaces, may undertake a study, conducted by a transportation planner or engineer, to determine the modal split for travel by its employers and visitors. Based on the expected distribution of travel modes, the approving authority shall determine the parking requirement applicable to the proposed development. The authority can reduce the actual provision of parking spaces

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- by requiring the applicant to pave, construct or pay for, through the parking structure mechanism, only the number of parking spaces determined necessary, based on the agree-upon results of the modal split study.
7. Where possible, connections or provisions for future connections to abutting parking lots serving retail or service uses shall be shown on the site plan.

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Appendix D: Transit Municipalities' Downtown Commuter Parking Permit Rates

Table 4: Transit Municipalities' Downtown Commuter Parking Permit Rates						
Municipality	Population (2018)	Lot #	Resident \$	Non-Resident \$	Daily Parking \$	
Plainfield	50,693	NJ Transit Lot	NA	NA	\$4/day	
		5	\$360/yr	\$420/yr	\$2/day	
		6	\$360/yr	\$420/yr	\$2/day	
		Netherwood	\$120/quarter	\$120/quarter	\$4/day	
Westfield	29,881	3	\$696/yr	No Parking	\$5/day	
		6	\$420/yr	No Parking	NA	
		8 (employee)	\$600/yr	NA	NA	
Cranford	24,169	1	\$600/yr	\$600/yr	NA	
		2	\$600/yr	\$780/yr	\$0.50/hr	
		3	\$600/yr	No Parking	NA	
		4	NA	NA	\$6/day	
		5	\$600/yr	\$600/yr	NA	
Elizabeth	128,885	1	\$1,800/yr	\$1,800/yr	\$10/10 hrs	
		3	\$1,800/yr	\$1,800/yr	\$12/10 hrs	
		4	\$1,800/yr	\$1,800/yr	\$12/10 hrs	
Metuchen	14,382	7, 11	\$460/yr	\$460/yr	\$5/12 hrs - Lot 7	
		3	\$1,000/yr	\$1,000/yr	NA	
		4, 5, 6	\$1,000/yr	\$1,000/yr	\$5/12 hrs	
		8	\$460/yr	\$1,000/yr	NA	
Morristown	19,145	1, 3	\$1,200/yr \$1,920/yr - premium package	\$1,200/yr \$1,920/yr - premium package	\$6/day	
		2	\$1,200/yr \$1,920/yr - premium package	\$1,200/yr \$1,920/yr - premium package	\$6/day	
New Brunswick	56,100	3	\$2,100/yr	\$2,100/yr	\$22/day	
		4	\$1,920/yr	\$1,920/yr	\$20/day	
Rahway	29,880	Deck	\$1,200/yr	\$1,200/yr	\$12/24 hrs	
		F	\$1,020/yr	\$1,020/yr	NA	
		H	\$1,020/yr	\$1,020/yr	\$7/12 hrs \$9/24 hrs	
		Street	NA	NA	\$7/14 hrs \$10/24 hrs	
Woodbridge	100,187	1, 2, 3, 4	\$480/yr	\$480/yr	\$3/day - Lot 4	

Source: Timothy Haahs and Associates, Inc., 2020.

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Appendix E: Transit Municipalities' On-Street Parking Rates

Table 5: Transit Municipalities' On-Street Parking Rates

Municipalities	Population (2018)	On-Street Rate
Plainfield	50,693	\$0.50/hr
Elizabeth	128,885	\$1.50/hr
New Brunswick	56,100	\$1.50/Hr -1st and 2nd hour \$2.00 - 3rd hour \$3.00 - 4th hour \$4.00 - 5th hour \$5.00 - 6th hour \$6.00 - 7th hour \$7.00 - 8th hour
Hoboken	53,455	\$2.00/hr-\$3.60/hr
Fort Lee	37,921	\$1.00/hr - Zone A \$0.50/hr - Zone B
Montclair	38,676	\$1.00/hr
Westfield	29,881	\$0.75/hr
Rahway	29,880	\$1.00/hr
Cranford	24,169	\$0.50/hr
Morristown	19,145	\$1.00/hr
South Orange	16,743	\$0.50 - \$1.00/hr
Metuchen	14,382	\$0.50/hr
Somerville	12,202	\$1.00/hr (3-hour limit)

*Note: Municipalities are displayed by total population (2018) from largest to smallest.

Source: Timothy Haahs and Associates, Inc., 2020.

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Appendix F: Parking Payment Equipment and Technology Budget Costs

Table 6: Capital Costs and Annual Recurring and Warranty Expenses

Type	Unit Price
Pay Stations	\$6,950
Installation - Pay Stations	\$550
Single Meters	\$518
Double Meters	\$743
Installation-Single Meters	\$25
Installation-Double Meters	\$40
Handheld	\$199
Total Capital Cost	N/A

Annual Software, Airtime and Credit Card Set Up Fees	
Pay Stations	\$57/unit/month
Single Meters	\$7/meter/month
Double Meters	\$13/meter/month
Handheld	\$40/unit/month
Total Annual Recurring Fees	N/A

Annual Warranty (Labor+Hardware+Software) after Year 1	
Pay Stations	\$550/year
Single Meters	\$35/year
Double Meters	\$35/year
Total Annual Warranty	N/A

Source: Timothy Haahs and Associates, Inc., 2020.

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Appendix G: Frequently Asked Questions

1. Is there a fee for parking?
2. What type of parking is available?
3. Is parking free at any time?
4. When does free parking start and end?
5. How do you pay for parking?
6. When and where do you pay for parking?
7. How long can you park at a meter space?
8. How do the meters work?
9. Do you have to put the meter receipt in your car to leave the lot?
10. What is the penalty for not paying the meter?
11. What is the penalty for overfeeding the meter?
12. What happens if the meter runs out before the car is removed?
13. What is the process for repayment on a meter refund slip?
14. What is the process for a refund if the meter gave no refund slip?

Appendix H: Electric Scooter Sample Ordinances

Sample Ordinance 1 for Electric Scooters – Hoboken, NJ

ELECTRIC SCOOTERS IN HOBOKEN – APPLICABLE RULES AND REGULATIONS

Several state and local laws govern electric scooter usage in Hoboken. Specifically, local ordinances regulate electric scooters in the following ways:

- Where to ride: E-scooter users are required to ride in the street and are permitted to ride in the city’s bike lanes and on multi-use paths. All e-scooter users must yield to pedestrians and other slower-moving street users.
- Where to park: E-scooters must park at either bike racks or on the sidewalk in the furnishing zone (the area of the sidewalk closest to the curb that provides space for items such as bus shelters, benches, street trees, and utilities). The City, in partnership with electric scooter operators, is gradually implementing designated scooter parking areas in the street or daylighting space at inbound legs of intersections. Never park a scooter where it obstructs pedestrian access on sidewalks or at crosswalks. Any scooters parked in this area pose a safety hazard and limit mobility for pedestrians and people with disabilities and will be removed.
 - Riding on the sidewalk: E-scooter users are prohibited from riding on the sidewalk.
 - Speed limits: All e-scooters must obey a speed limit of 18 MPH.
 - Age restrictions: All e-scooter riders must be 18 years or older.
 - One rider per scooter: Only one person can ride an e-scooter at a time.
 - Rental restrictions: The terms of agreements with e-scooter share companies (Lime and Ojo) require that all rentals must be made by the rider of the scooter.

The use of helmets is strongly encouraged.

Sample Ordinance 2 for Electric Scooters – Memphis, TN

The City of Memphis, TN has already drafted a “Shared Mobility Ordinance” in June of 2018 to address bicycles, electric-assist bicycles, or electric scooters. A portion of the ordinance is shared below and the full ordinance can be found at www.memphistn.gov. The Ordinance was drafted to “establish rules and regulations relating to the operation of and regulation of bicycle, electric-assist bicycle, and electric scooter sharing programs” as follows:

WHEREAS, pursuant to Article 40 Section 353 of the Memphis City Charter, the City Council shall have the power to pass, for the government of the City, any ordinance not in conflict with the Constitution or laws of the United States or of the State of Tennessee; and

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WHEREAS, the City Council has the power to pass any ordinance regulating the assessment, levy, and collection of all City taxes not inconsistent with the provisions of the Constitution and the laws of the United States and the State of Tennessee; and

WHEREAS, the City Council finds that this ordinance is not inconsistent with the provisions of the Constitution and laws of the United States and the State of Tennessee; and

WHEREAS, the City seeks to promote shared mobility in the short and long term to promote greater connectivity, access, and quality of life and recognizes shared mobility is essential to improve air quality, reduce motor vehicle traffic, and promote equitable and accessible systems of transportation; and

WHEREAS, the City Council finds it is in the public's interest to establish policies and procedures for bicycle, electric-assist bicycle, and electric scooter sharing programs to improve mobility options while protecting health, safety, and general welfare of individuals and the community at large.

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF MEMPHIS, that the findings and recitations set out in the preamble to this ordinance are found to be true and correct and they are hereby adopted by the City Council and made a part hereof for all purposes.

BE IT FURTHER ORDAINED that the various sections of this ordinance are severable, and that any portion declared unlawful shall not affect the remaining portions.

APPENDIX B:

SOCIAL SERVICE PROVIDERS

City of Plainfield - Social Services Providers

<u>AGENCY</u>	<u>ADDRESS</u>	<u>PHONE</u>
Afterschool & Summer Programs		
Agape House of North Jersey, Inc.	401 Greenbrook Road, North Plainfield, NJ 07063	(877) 684-2008
Boys & Girls Club of Union County	530 West Seventh Street, Plainfield, NJ 07060	(908) 822-8672
Faith Tabernacle Church	1301 West Front Street, Plainfield, NJ 07063	(908) 757-6358
Open Gates to Fly Enrichment School of Tutoring, Inc.	207 East Fifth Street, P.O. Box, 2667, Plainfield, NJ 07060	(908) 755-0300
Plainfield Action Services, Mayor's Task Force on Youth	510 Watchung Avenue, Plainfield, NJ 07060	(908) 753-3582
Plainfield Community Outreach, 21st Century Program	600 Cleveland Avenue, Plainfield, NJ 07060	(908) 756-7897
St. Mark's Episcopal Church Grassroots CDC	1430 Park Avenue, Plainfield, NJ 07060	(908) 754-9483
Second Street Youth Center	200 Plainfield Avenue, Plainfield, NJ 07060	(908) 561-0421
United Plainfield Community Development, United Church of Christ Congregation	220 West Seventh Street, Plainfield, NJ 07060	(908) 755-8658
Civic Groups		
Frontiers International, Inc., Plainfield Club Frontiers International Inc. (Plainfield Chapter)	737 West Eighth Street, Plainfield, NJ 07060	
Hillside Avenue Historic District	966 Hillside Avenue, Plainfield, NJ 07060	(908) 358-4585
National Council of Negro Women (NCNW) Plainfield/Scotch Plains Section	1350 Myrtle Avenue, Plainfield, NJ 07063	(732) 221-8509
Gentleman Making Changes		
National Pan-Hellenic Council of Central Jersey	P.O. Box 2617, 1080 Arlington Avenue, Plainfield, NJ 07060	
Alpha Kappa Alpha Sorority Inc., Theta Phi Omega Chapter	P.O. Box 5259, Plainfield, Nj 07060	
Alpha Phi Alpha Fraternity, Inc., Zeta Nu Lamda Chapter	P.O. Box 5454, Plainfield, NJ 07061	
Delta Sigma Theta Sorority, Inc., Central Jersey Alumnae Chapter	P.O. Box 694, South Plainfield, NJ 07080	

Iota Phi Theta Fraternity, Inc., Alpha Xi Omega Graduate Chapter	P.O. Box 10802, New Brunswick, NJ 08906	
Kappa Alpha Psi Fraternity, Inc., Plainfield Alumni Chapter	P.O. Box 5069, Plainfield, NJ	
Omega Psi Phi Fraternity, Inc., Omicron Chi Chapter	P.O. Box 1434, Plainfield, NJ 07061	
Phi Beta Sigma Fraternity, Inc., Chi Sigma Chapter, Northern New Jersey Alumni	P.O. Box 158, Orange, NJ 07051	
Phi Beta Sigma Fraternity, Inc., Lambda Lambda Sigma Chapter	P.O. Box 5531, Trenton, NJ	
Sigma Gamma Rho Sorority, Inc.: Delta Kappa Sigma Alumnae Chapter	P.O. Box 65, Piscataway, NJ 08855	
Zeta Phi Beta Sorority, Inc., Eta Omicron Zeta Chapter	P.O. Box 187, Plainfield, NJ 07060	
Plainfield Chamber of Commerce	320 Park Avenue, Plainfield, NJ 07060	(908) 757-5155
Van Wyck Brooks Historic District	P.O. Box 2618, Plainfield, NJ 07060	
Childcare Services - Preschools		
Al & Jean's Children	912 South Avenue, Plainfield, NJ 07060	(908) 412-8222
B's Nurturing Neighborhood	427 West Seventh Street, Plainfield, NJ 07060	(908) 222-1603
BUF-Health & Human Services	403 West Seventh Street, Plainfield, NJ 07060	(908) 561-0123
Dawn to Dusk Childcare Center	1504 West Third Street, Plainfield, NJ 07060	(908) 561-9706
H.O.P.E.S. Cap Inc., Head Start Program	7-9 Watchung Avenue, Third Floor, Plainfield, NJ 07060	(908) 769-1090 Ext. 1701
King's Daughters Day School	502 West Front Street, Plainfield, NJ 07060	(908) 756-7788
Little Hearts Learning Centers	400 Cleveland Avenue, Plainfield, NJ 07060	(908) 755-7555
Little Hearts Learning Centers (second location)	631 East Front Street, Plainfield, NJ	
Neighborhood House Association	644 West Fourth Street, Plainfield, NJ 07060	(908) 757-7100
Neighborhood House Association (second location)	321 East Front Street, Plainfield, NJ	
Playhouse Child Development LLC	1101 South Avenue, Plainfield, NJ 07060	(908) 412-8909
Precious Steps	20 Washington Avenue, Plainfield, NJ 07060	(908) 755-5055
Second Street Youth Center-Preschool	200 Plainfield Avenue, Plainfield, NJ 07060	(908) 561-0421
Step One Academy LLC	222-224 East Fifth Street/233 East Fifth Street, Plainfield, NJ 07060	(908) 753-8252 / (908) 753-8253

Toddler Learning Center	420-422 East Sixth Street, Plainfield, NJ 07060	(908) 769-8593
Washington Community School	427 Darrow Avenue, Plainfield, NJ 07060	(908) 731-4230
Disability Services		
Division of Developmental Disabilities Community Services Office - Plainfield Office	110 East Fifth Street, Plainfield, NJ 07060	(908) 226-7800
Economic Empowerment/Employment Referrals		
Catholic Charities	505 South Avenue, Cranford, NJ 07106	(908) 497-3966
One Stop Career Center	200 West Second Street, Plainfield, NJ 07060	(908) 412-7980
Proceed Inc.	1126 Dickinson Street, Elizabeth, NJ 07201	(908) 351-7727 Ext. 204
Urban League of Union County	288 North Broad Street, Second Floor, Elizabeth, NJ 07207	(908) 351-7171
United Way of Greater Union County	33 West Grand Street, Elizabeth, NJ 07202	(908) 351-7171
Venture & Venture	102 East Front Street, Plainfield, NJ 07060	(908) 561-9600
Family Success Center, Plainfield Public Schools	209 Berckman Street, Plainfield, NJ 07060	(908) 731-4272 Ext. 5237
Homefirst Inc. Family Success Center	905 Watchung Avenue, Plainfield, NJ 07060	(908) 753-4002 Ext. 19
Plainfield Action Services	510 Watchung Avenue, Plainfield, NJ 07060	(908) 753-3582
Education		
Plainfield Board of Education, Community Engagement Liason	1200 Myrtle Avenue, Plainfield, NJ 07060	(908) 731-4333
Act-So Plainfield National Association for the Advancement of Colored People (NAACP) Youth Project	Whitney Allen Young Apartments, Community Room, 300 Central Avenue, Plainfield, NJ 07063	(908) 941-6545
Community Engagement Liaison Plainfield Board of Education	1200 Myrtle Avenue, Plainfield, NJ 07060	(908) 757-7171
Edison Job Corps Academy	500 Plainfield Avenue, Edison, NJ 08820	(732) 985-4800 Ext. 134-3532
New Covenant Christian Association, Inc.	716 Watchung Avenue, Plainfield, NJ 07060	(908) 756-3322
New Jersey Youth Corps, Youth Enrichment Services (NJYC of Plainfield)	40 West Jersey Street, Elizabeth, NJ 07202	(908) 659-5177

Open Gates to Fly Enrichment School of Tutoring, Inc.	207 East Fifth Street, P.O. Box 2667, Plainfield, NJ 07060	(908) 755-0300
Plainfield Board of Education	950 Park Avenue, Plainfield, NJ 07060	(908) 731-4390 Ext. 4282
Plainfield Community Outreach 21st Century Program	600 Cleveland Avenue, Plainfield, NJ 07060	(908) 756-7897
Plainfield Public Library Literacy Program	800 Park Avenue, Plainfield, NJ 07060	(908) 757-1111 Ext. 112
Venture & Venture	102 East Front Street, Plainfield, NJ 07060	(908) 561-9600
Emergency Assistance Services		
American Red Cross Tri-County Chapter (ARCTCC)	321 Elm Street, Westfield, NJ 07060	(908) 232-7090
Catholic Charities	505 South Avenue, Cranford, NJ 07106	(908) 497-3966
The Elizabeth Coalition to House the Homeless	118 Division Street, Elizabeth, NJ 07201	(908) 355-2060
Family Promise Union County	402 Union Avenue, Elizabeth, NJ 07206	(908) 289-7300 Ext. 11
Family Success Center, Plainfield Public Schools	209 Berckman Street, Plainfield, NJ 07060	(908) 731-4272 Ext. 5237
Fish Hospitality Program, Inc.	456 New Market Road, Piscataway, NJ 08854	(732) 968-5957
Homefirst Inc. Family Success Center	905 Watchung Avenue, Plainfield, NJ 07060	(908) 753-4002 Ext. 19
Plainfield Action Services	510 Watchung Avenue, Plainfield, NJ 07060	(908) 753-3582
English as a Second Language		
Angels in Action	209 West Second Street, Plainfield, NJ 07060	(908) 333-5656 Ext. 732
El Centro Hispanoamericano	525 East Front Street, Plainfield NJ 07060	(908) 753-8730
Family Success Center, Plainfield Public Schools	209 Berkman Street, Plainfield, NJ 07060	(908) 731-4272 Ext. 5237
Plainfield Public Library	800 Park Avenue, Plainfield, NJ 07060	(908) 575-1111
Family Counseling Services		
Catholic Charities	505 South Avenue, Cranford, NJ 07106	(908) 497-3966

Cooperative Counseling Services, LLC	1050 Route 22 West, Mountainside, NJ 07092	(877) 652-7624
Community Access Unlimited	80 West Grand Street, Elizabeth, NJ	(908) 354-3040
Family & Children's Services	40 North Avenue, Elizabeth, NJ 07028	(908) 352-7474
Family Success Center, Plainfield Public Schools	209 Berckman Street, Plainfield, NJ 07060	(908) 731-4272 Ext. 5237
Families and Communities Together (FACT)	1170 Route 22 West, Mountainside, NJ 07092	(908) 789-8500
Family Support Organization of Union County	1010 Park Avenue, Plainfield, NJ 07060	(908) 755-0090 Ext. 12 & 15
Homefirst Inc., Family Success Center	905 Watchung Avenue, Plainfield, NJ 07060	(908) 753-4002 Ext. 19
Planned Parenthood of Central and Greater Northern New Jersey	123 Park Avenue, Plainfield, NJ 07060	(908) 756-3736
Second Street Youth Center Foundation, Inc.	200 Plainfield Avenue, Plainfield, NJ 07060	(908) 561-0421
Student Intervention and Family Support Services, Plainfield Public Schools	504 Madison Avenue, Plainfield, NJ 07060	(908) 731-4200 Ext. 5381
Union County Psychiatric Behavioral Healthcare, Inc. (Outpatient)	117-119 Roosevelt Avenue, Plainfield, NJ 07060	(908) 756-6870
Union County Youth Services Bureau	288 North Broad Street, Suite 3-A, Elizabeth, NJ 07208	(908) 558-2520
United Family & Children's Society	305 West Seventh Street, Plainfield, NJ 07060	(908) 755-4848
Visions Community Development Corporation	350 Leland Avenue, Plainfield, NJ 07062	(908) 668-0212 Ext. 206
YMCA Union County	1131 East Jersey Street, Elizabeth, NJ	(908) 355-1500 Ext. 29
Housing Services		
Cedarbrook Park Apartment	1272 Park Avenue, Plainfield, NJ 07060	(908) 756-5656
Covenant Manor	623 East Front Street, Plainfield, NJ 07062	(908) 791-9430
The Elizabeth Coalition to House the Homeless	118 Division Street, Elizabeth, NJ 07201	(908) 355-2060
Faith, Brick & Mortar Inc.	164 East Front Street (Rear), Plainfield, NJ 07060	(908) 756-5774
Fish Hospitality Program, Inc.	456 New Market Road, Piscataway, NJ 08854	(732) 968-5957
Greater Plainfield Habitat for Humanity, Inc.	2 Randolph Road, Plainfield, NJ 07060	(888) 557-6032 Ext. 8

Homefirst Inc. Family Success Center	905 Watchung Avenue, Plainfield, NJ 07060	(908) 753-4002 Ext. 19
HomeSharing, Inc.	120 Finderne Avenue, Bridgewater, NJ 08807	(908) 526 4663
Housing Authority of Plainfield	510 East Front Street, Plainfield, NJ 07060	(908) 769-6335 Ext. 605
New Jersey Citizen Action	744 Broad Street, Suite 2080, Newark, NJ 07102	(973) 643-8800 Ext. 210
Proceed, Inc.	126 Dickinson Street, Elizabeth, NJ 07201	(908) 351-7727 Ext. 204
State of New Jersey Section 8	200 West Second Street, Plainfield, NJ 07060	(908) 731-7000
United Plainfield Housing Corporation	300 Central Avenue #16, Plainfield, NJ 07060	(908) 753-6499
Urban League of Union County	288 North Broad Street, Second Floor, Elizabeth, NJ 07207	(908) 448-0694
Legal Advocacy-Immigrant Services		
Angels in Action	209 West Second Street, Plainfield, NJ 07060	(908) 333-5656 Ext. 732
Catholic Charities	505 South Avenue, Cranford, NJ 07106	(908) 497-3966
Central Jersey Legal Services	60 Prince Street, Elizabeth, NJ 07208	(908) 354-4340
El Centro Hispanoamericano	535 East Front Street, Plainfield, NJ 07060	(908) 753-8730
Latin American Coalition, Inc.	410 Watchung Avenue, Plainfield, NJ 07060	(908) 753-7155
Medical Services and Maternal Health		
Holy Redeemer Home Cae	354 Union Avenue, Elizabeth, Nj 07206	(908) 352-5694
Hyacinth AIDS Foundation	107 Park Avenue, 3rd Floor, Plainfield, NJ 07060	(908) 755-0211
JFK Medical Center Muhlenberg Harold B. & Dorothy A. Synder Schools	1200 Park Avenue, Plainfield, NJ 07060	(908) 668-2400
Neighborhood Health Services Corporation	1700 Myrtle Avenue, Plainfield, NJ 07060	(908) 753-6401
Plainfield Connections	1200 Park Avenue, Plainfield, NJ 07060	(908) 668-2862
Planned Parenthood of Plainfield	123 Park Avenue, Plainfield, NJ 07060	(908) 756-37036
Partnership for Maternal & Child Care of Northern New Jersey	33 West Grand Street, Elizabeth, NJ 07202	(908) 353-7171 Ext. 105

United Way of Greater Union County	33 West Grand Street, Elizabeth, NJ 07202	(908) 353-7171
Reentry Programs for Ex-Offenders		
Reconnections	200 West Second Street, Plainfield, NJ 07060	(908) 757-9090 Ext. 7311
Senior Citizen Services		
AristaCare at Norwood Terrace	40 Norwood Avenue, Plainfield, NJ 07060	
Cedarbrook Park Apartments	1272 Park Avenue, Plainfield, NJ 07060	(908) 756-5656
Easter Seals, One Stop Career Center	200 West Second Street, Second Floor, Plainfield, NJ 07060	(908) 412-3703
JFK Medical Center-Adult Medical Day Program	3 Progress Street, Suite 103, Edison, NJ 08820	(908) 912-1910
Plainfield Senior Citizen Service Center	400 East Front Street, Plainfield, NJ 07060	(908) 753-3506
Plainfield Shut-In Council	725 Marshall Place, Plainfield, NJ 07062	(908) 753-6739
Meals on Wheels	1025 Pennsylvania Avenue, Linden, NJ 07036	(908) 486-5100
UC Paratransit System	79 West Grand Street, Elizabeth, NJ 07202	(908) 241-8300
Substance Abuse Services		
Alertop	510 Watchung Avenue, Plainfield, NJ 07060	(908) 753-3082
Centerpath Community Wellness	117-119 Roosevelt Avenue, Plainfield, NJ 07060	(908) 756-6870
God, Culture & Community Services	1185 Hillside Avenue, Plainfield, NJ 07060	
Narcotics Anonymous	Plainfield, NJ	1-800-992-0401; (732) 933-0462
Prevention Links, Inc.	121-125 Chestnut Street, 3rd Floor, Suite 301, Roselle, NJ 07203	(732) 381-4100
Proceed Inc.	1126 Dickinson Street, Elizabeth, NJ 07201	(908) 351-7727 Ext. 204
United County Psychiatric Behavioral Healthcare, Inc. (Outpatient Program)	117-119 Roosevelt Avenue, Plainfield, NJ 07060	(908) 756-6870

Sexual Awareness		
Hyacinth Aids Foundation	107 Park Avenue, 3rd Floor, Plainfield, NJ 07060	(908) 755-0021
Iris House	630 East Front Street, Plainfield, NJ 07060	(908) 561-5057
Union County Rape Crisis Center	300 North Avenue East, Westfield, NJ 07090	(908) 233-7273
Spiritual Services/Houses of Worship		
Agape House of North Jersey, Inc.	401 Greenbrook Road, North Plainfield, NJ 07063	(877) 684-2008
Bethel Presbyterian Church	300 East Fifth Street, Plainfield, NJ 07060	(908) 755-5390
Calvary Baptist Church of Plainfield	322-324 Monroe Avenue, Plainfield, NJ 07063	(908) 561-5167
Calvary Full Gospel Church	1001 South Second Street, Plainfield, NJ 07063	
Calvary Revival Center	635 East Third Street, Plainfield, NJ 07060	(908) 754-0819
Christian Fellowship Gospel Church	225 Johnson Avenue, Plainfield, NJ	(908) 769-6887
Christian Science Church	P.O. Box 5619, 905 Prospect Avenue, Plainfield, NJ 07061	(908) 756-4669
Church of God Saints of Christ Third Tabernacle	1518 West Third Street, Plainfield, NJ 07063	(908) 757-2666
Church of the Living God Pentecostal Tabernacle, Inc.	434 East Fourth Street, Plainfield, NJ 07060	(908) 226-1449
Community Church of God	417 West Sixth Street, Plainfield, NJ 07060	(908) 754-8288
Covenant United Methodist Church	631 East Front Street, Plainfield, NJ 07060	(908) 756-2684
Crescent Avenue Presbyterian Church	716 Watchung Avenue, Plainfield, NJ 07060	(908) 756-2468
Faith Christian Outreach Center	533 West Fifth Street, Plainfield, NJ	(908) 754-2332
Faith Tabernacle Church	1301 West Fourth Street, Plainfield, NJ 07063	(908) 757-6358
First Christian Assembly	718 Central Avenue, Plainfield, NJ 07060	(908) 755-8460
The First-Park Baptist Church	315 West Seventh Street, Plainfield, NJ 07060	(908) 756-5322
First Unitarian Society of Plainfield	724 Park Avenue, Plainfield, NJ 07060	(908) 756-0750
Genesis Seventh-Day Adventist Church	300 East Fifth Street, Plainfield, NJ 07060	(866) 710-7051
Gospel of Grace Fellowship International Ministries	1001 South Second Street, Plainfield, NJ 07060	(908) 561-8282
Grace Episcopal Church	600 Cleveland Avenue, Plainfield, NJ	(908) 756-1520
Greater Refuge Church of Christ	600 Grant Avenue, Plainfield, NJ 07060	

House of Prayer Church of God in Christ	641 South Second Street, Plainfield, NJ 07060	(908) 561-8666
Kings Temple Ministries	232 East Front Street, Room 26, Plainfield, NJ 07060	(908) 222-8414
Masjidullah Plainfield	321 Grant Avenue, Plainfield, NJ 07061	(908) 561-6797
Messiah Lutheran Church	630 East Front Street, Plainfield, NJ 07062	(908) 755-4525
Metropolitan Seventh-Day Adventist Church	1003 West Fourth Street, Plainfield, NJ 07063	(908) 561-0141
Miracle Baptist Church	225 Leland Avenue, Plainfield, NJ 07062	(908) 561-6612
Mt. Olive Baptist Church	216 Liberty Street, Plainfield, NJ 07060	(908) 754-3539
Mt. Zion AME Church	630 East Front Street, Plainfield, NJ 07060	(908) 753-9411
New Covenant Church of God	225 East Seventh Street, Plainfield, NJ 07060	(908) 226-0223
Rose of Sharon Community Church	825 West Seventh Street, Plainfield, NJ 07063	(908) 561-9070
Ruth Fellowship Ministries, Inc.	733 South Second Street, Plainfield, NJ 07060	(908) 412-0500
Shiloh Baptist Church	515-521 West Fourth Street, Plainfield, NJ 07060	(908) 754-3353
St. Luke's RC Church	300 Clinton Avenue, Plainfield, NJ	(908) 754-8811
St. Mary's RC Church	516 West Sixth Street, Plainfield, NJ 07060	(908) 756-0055
St. Mark's Episcopal Church	1430 Park Avenue, Plainfield, NJ 07060	(908) 754-9483
Third Tabernacle Church of God Prophecy	306 East Front Street, Plainfield, NJ 07062	
Upper Room Full Gospel Church	600 Cleveland Avenue, Plainfield, NJ	
The United Presbyterian Church	525 East Front Street, Plainfield, NJ 07060	(908) 756-2666
Youth Services		
Agape House of North Jersey, Inc.	401 Greenbrook Road, North Plainfield, NJ 07063	(877) 684-2008
Boys & Girls Club of Union County	530 West Seventh Street, Plainfield, NJ 07060	(908) 822-8672
Plainfield Action Services, Mayor's Task Force on Youth	510 Watchung Avenue, Plainfield, NJ 07060	(908) 753-3582
North Plainfield Community Girl Scouts	201 Grove Street, East, Westfield, NJ 07090	(908) 518-4422
Project Kids Challenge	401 Grant Avenue, Plainfield, NJ 07060	
Union County Youth Services	288 North Broad Street, Suite 3-A, Elizabeth, NJ 07208	
United Family & Children's Society	305 West Seventh Street, Plainfield, NJ 07060	(908) 755-4848

Urban League of Union County Young Professionals	288 North Broad Street, Elizabeth, NJ 07202	(908) 351-7200
Youth Council Teen Center	724 Park Avenue, Plainfield NJ 07060 (Meeting Area)	
The Family and Community Engagement Corp	1240 East Seventh Street, Plainfield, NJ 07060	(908) 397-1985
Yes Girl, Inc.		
Division of Child Protection & Permanency (DCP&P)	200 West Second Street, Fourth Floor, Plainfield, NJ 07060	(908) 754-0952