

Borough of Leonia

Master Plan

Borough of Leonia, New Jersey
March 2022



2022 Leonia Master Plan

Adopted by the Borough of Leonia Planning Board
on March 23, 2022

Administered by the
Borough of Leonia Planning Board

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



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INTRODUCTION AND BACKGROUND

Why Make a Plan?

The Borough of Leonia is a historic and creative community that balances its quaint small-town feel while being located in one of the busiest and densest regions in the country. This balance has manifested itself in the form of tight-knit residential neighborhoods with an excellent system of schools, convenient public transit and plentiful recreational opportunities. Even now, the Borough continues to work with its county, regional and state partners to expand on its assets to increase the standard of living for its residents.

Leonia residents have excellent access to major regional commuting corridors, I-95 and the George Washington Bridge, which further attract families looking to be close to New York but wanting a more laid-back community. Given the community's suburban feel, the tax base is primarily made up of residential taxpayers with limited light industrial uses along Willow Tree Road and commercial/office uses along Broad and Grand Avenues.

There are emerging trends that warrant a fresh look at the Borough's Master Plan such as changes in demographics, housing and retail. All these different trends affect the current and future economic situation in the Borough. A point of focus is the Borough's downtown where some commercial uses along Broad Avenue thrive, the Borough lacks an economically vibrant and diverse downtown

commercial district. This lack of vibrancy coupled with the limited amount of land zoned for commercial uses results in a more homogenous tax base, which is putting greater pressure on the residential property owners. As a fully developed municipality, any new type of development will need to come from the rehabilitation and redevelopment of outdated and obsolete parcels. Leonia's surrounding neighbors have successfully utilized these development tools to meet the commercial and residential needs of today and have attracted new investment and residents to their communities. Areas along Grand and Broad Avenues have the potential to become successful mixed-use districts as they share characteristics of traditional town centers with locally owned businesses that cater to the Borough's population and appeal to consumers from outside of the Borough. However, significant automobile congestion and mismanaged parking discourage additional use of these areas. This inhibits the ability to create more engaging shopping districts where people walk at their leisure, enjoy an attractive streetscape with amenities, and experience what the Borough's businesses have to offer.

Other external forces, such as the economic uncertainty brought on by the COVID-19 pandemic and affordable housing mandates, require close looks at modernizing future land use and development decision-making. Changing housing preferences and an aging population are additional factors to consider when updating the Borough's land use policies. There are opportunities to provide

housing that meets the evolving market demands of Millennials and Baby Boomers, and early Gen-Z starting to reach adult age. Mixed-use Residential/Commercial development in the aforementioned commercial districts can provide living spaces that meet modern preferences, while simultaneously re-energizing these locations. Still, there is recognition that residents have concerns for overdevelopment, and as a result, any development or redevelopment should be mindful of community character and the characteristics of why people wanted to live in the Borough in the first place.

This new Master Plan guides planning and decision-making for the important aspects of a high quality of life in the Borough - appropriate land use; quality transportation infrastructure for pedestrians, bicyclists, transit users, and motorists; preservation of the Borough's past while balancing modern building trends; access to quality parks and open spaces as well as community facilities including schools, parks, emergency services and others; and strategic economic growth in commercial areas. The Master Plan addresses these topics as it seeks to build on the community's assets, identifying strategies to address ongoing issues and opportunities, while positioning the Borough of Leonia as a desirable place to live, work, and visit for the next 10 years and beyond. Further, the new Master Plan gives the community the legal basis for control over future development, as well as land use planning policy and serves as the basis for the Zoning Ordinance.

Authority

The Borough of Leonia adopted its last Master Plan in 2002 and conducted a Re-examination of the Master Plan in 2010 and 2020. The Municipal Land Use Law (MLUL), pursuant to NJSA 40:55D-89, requires a municipality to reexamine its Master Plan every ten years. The 2020 Reexamination Report recommended adoption of a new Master Plan as significant changes have occurred in the Borough since the adoption of the last full Master Plan in 2002. The 2022 Comprehensive Master Plan is in accordance with the statutory requirements.



Planning Process

This document, as mentioned earlier, included a robust public outreach process (explained in more detail in the Community Engagement and Public Participation section of this report). In addition to this was an extensive review of planning materials. Plans and studies prepared by the Borough of Leonia and reviewed as part of this Master Plan effort include:

- 2002 Master Plan
- 2010 Community Facilities Element
- 2010 Master Plan Reexamination Report
- 2013 Sustainability Element
- 2015 Area in Need of Redevelopment/ Rehabilitation Study
- 2020 Master Plan Reexamination Report
- Borough of Leonia Zoning Ordinance

In addition to reviewing the above planning materials drafted by the Borough of Leonia, other plans in the region and the state were reviewed. They are discussed under the **Relationship to Other Plans** section of this report.

Plan Organization

The Master Plan is organized into the following Elements:

Plan Organization:

Introduction and Background explains the purpose of the Master Plan, the source of its authority from the New Jersey statutes, direction on how to implement the recommendations resulting from this Master Plan, and the Borough of Leonia's overall vision statement, goals, and objectives. This section includes a discussion of Borough-wide demographic trends and the relationship of the Borough to relevant planning documents and studies.

Community Engagement and Public Participation discusses the importance of community engagement in the planning process and summarizes the public outreach activities that occurred for this Master Plan including meetings of the project steering committee, public workshops, public survey, use of PublicInput.com, and the draft plan review process.

All Elements provide a checklist of recommendations; a discussion of planning trends and policies affecting the element topic; and a discussion of planning-related issues.

Land Use Element addresses community form and land development of Leonia. This element forms the basis of decision making related to zoning and planning permitted uses and development standards in the Borough.

Circulation Element provides a multi-modal review of the Borough's transportation network. This element addresses the needs of pedestrians, bicyclists, transit users, and motorists, addressing more specific issues such as cut-through traffic.

Open Space and Recreation Element identifies physical and programmatic improvements to Leonia's parks and trail facilities while improving recreational opportunities.

Sustainability Element examines current and ongoing sustainability initiatives.

Economic Development Element provides a qualitative analysis of the Borough's several commercial areas and provides recommendations for improving these areas, ripe for opportunity.

Community Facilities Element examines civic facilities and institutions including, school buildings, emergency services including police, fire, and EMS, other safety concerns, borough services and buildings and arts and culture.

Historic Preservation Element inventories existing and identifies opportunities for historic designations and preservation.

Appendices include a Master Plan Public Engagement Survey Report and associated Public Outreach documents (i.e. flyers, meeting summaries).

Plan Implementation

The Master Plan is a guiding document for multi-disciplinary planning and investment in the Borough of Leonia for the next 10+ years. Master Plans are recognized as evolving documents and may be amended by the municipal Planning Board at any time to fit current trends or changed circumstances. In ten years, the Planning Board must pursue either a Master Plan Reexamination Report or may choose to undertake a new comprehensive Master Plan. The Master Plan is built on prior planning efforts and initiatives, a comprehensive analysis of existing conditions, and future opportunities. The recommendations result from an analysis of existing conditions and recognition of future opportunities are included in a checklist format at the end of each Element. These recommendation checklists are designed for the purpose of “checking off” or tracking recommendations over the next 10-year period as a way to measure progress. Each recommendation is supplemented with four features:

- **Recommendation** states the recommendation.
- **Responsible Party or Partner** identifies the Borough entities or other agencies that will have a role in implementation.

- **Timeframe** estimates the amount of time to implement the item. It is categorized as either short-term (1-2 years), mid-term (2 to 5 years), long-term (5-10+ years), or ongoing (continuous).
- **“Check off” box** is a blank box for the Planning Board to “check off” the recommendation once completed. The Planning Board is also encouraged to provide a date of completion.

Plan Implementation

	<i>Recommendation</i>	<i>Responsible Party</i>	<i>Timeframe</i>	<i>Check Off Box</i>	<i>Year Completed</i>
Recommendation Category					
1	Element Recommendation	Borough and/or partner	Short Medium Long Ongoing	✓	insert year

Overall Goals & Objectives

In the Municipal Land Use Law, a Master Plan must include a “*statement of objectives, principles, assumptions, policies, and standards upon which the constituent proposal for the physical, economic and social development of the municipality are based.*”

Through its goals and objectives statement, the Master Plan sets out a vision for the community in the coming years. The Borough of Leonia Master Plan expresses these statements as a set of goals for each element. These elements and their goals are described in the following pages.

Land Use Element Goals

1. **Maintain the character of established neighborhoods in the Borough**
 - a. Develop design and bulk standards consistent with established residential areas that match Leonia’s architectural history.
 - b. Promote greater diversity of housing options while maintaining existing character of Borough’s residential neighborhoods.
2. **Promote growth in appropriate areas that meet current and future land use trends**
 - a. Encourage mixed-use development opportunities in commercial district to promote more vibrant downtown area.
 - b. Utilize redevelopment designation to provide greater housing options and meet future affordable housing obligations in the Willow Tree Road/Fort Lee Road/Grand Avenue corridor.
 - c. Right-size parking ratios to reflect current and future trends.
 - d. Promote transit-oriented development at potential light rail station on Fort Lee Road in the redevelopment areas.
3. **Promote policies that encourage older residents to “age-in-place”**
 - a. Allow accessory dwellings as an affordable option to allow Leonia residents to “age-in-place.”
 - b. Continue to seek options to provide affordable age-restricted housing.
 - c. Provide for a mix of uses and services within walking distance of entire Borough.
4. **Review zoning districts regulations to align land uses with the Borough’s development goals**
 - a. Incentivize improvements along the Broad Avenue corridor.

- b. Consider allowing for greater densities west of Grand Avenue to allow for uses such as senior housing, mixed-use development and other uses.

Circulation Element Goals

1. **Provide a safe and efficient transportation system.**
 - a. Provide adequate capital funding for roads and associated projects.
 - b. Identify and address roadway safety issues.
 - c. Coordinate with Bergen County and NJDOT to implement projects on roads under their jurisdiction.
 - d. Promote traffic calming in key locations to discourage cut-through traffic.
2. **Encourage mobility by all modes.**
 - a. Coordinate with Bergen County and NJ Transit to expand and diversify the types of public transportation available to Borough residents.
 - b. Where they can be accommodated, develop new bicycle and pedestrian facilities along Borough roadways.
 - c. Improve pedestrian safety at signalized intersections and at other areas of safety concern.
 - d. Pursue grants to finance transportation improvements.
3. **Strengthen connections to the Borough’s historic assets, parks and community facilities.**
 - a. Develop programs which encourage residents to walk and bike locally to key locations in the Borough.
 - b. Develop facilities and routes that enhance connectivity to Borough facilities.
 - c. Coordinate with Bergen County on greenway connections to regional points of interest.

Economic Development Element Goals

1. **Maintain attractive and thriving business and commercial districts.**
2. **Transform Fort Lee Road corridor to become a gateway into the Borough.**
3. **Ensure Broad Avenue has the vitality and critical mass to become a competitive downtown.**
4. **Create a diverse and unique economic development environment.**

Sustainability Element Goals

1. Increase resident, business, and school commitment to sustainable actions.
2. Increase energy efficiency in government buildings and encourage residents and businesses to do the same with educational programs and financial incentives.
3. Promote sustainable building practices.
4. Implement policies that work towards achieving local and state-level climate change goals.

Open Space, Parks, and Recreation Element Goals

1. Maintain and enhance quality of life by providing accessible recreation, retaining community character and preserving important natural resources.
2. Provide close-to-home park and recreation opportunities for residents.
3. Protect local water resources and biodiversity and ensure future resiliency.
4. Provide for park, recreational, and open space facilities that are accessible to all residents of all ages and abilities and provide a variety of activities and amenities.

Community Facilities Element Goals

1. Provide a new municipal building that is high quality and can meet the current and future needs of the community.
2. Utilize the arts and creative placemaking to activate public spaces and enhance commercial areas.
3. Continue to support the excellence in education of the Borough's school district as a focal point for the Borough's students and parents.
4. Ensure high quality and responsive public works, safety, security and emergency response services.

Historic Preservation Element Goals

1. Preserve the local historic bucolic landscape and older, historic-rich buildings.
2. Encourage public access to cultural and historical sites.
3. Balance new development with historic preservation efforts of significant landscapes and buildings.
4. Promote education and engagement of the public to foster a culture of historic appreciation.



Background

Population Characteristics

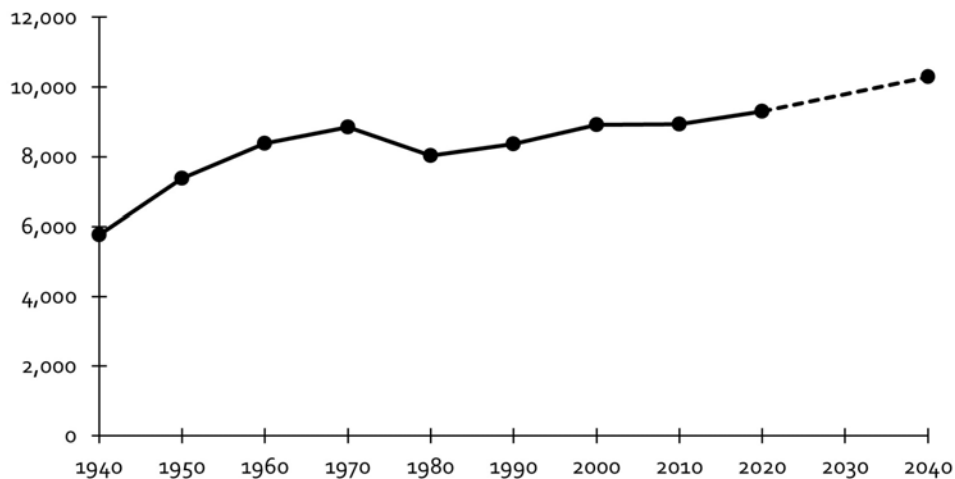
The following discussion of the Borough’s demographic conditions relies largely on the latest available data at the time of this report, Census 2020 data, which as of writing only included a limited amount of data on the current conditions in the Borough. As a result, more detailed data from the 2019 American Community Survey (ACS) 5-year Estimates (collected from years 2015-2019), is used where possible instead of using Decennial Census data.

Since the preparation of the Borough’s last Master Plan and Reexamination Report documents, there have been significant changes to population demographics and other factors affecting how people live, work, travel, and play in the community. It is important to understand demographic conditions and population trends in order to better reflect the lifestyles of Borough of Leonia residents. Doing so helps identify and address growing problems or potential areas of concern which can help to comprehensively plan for Leonia’s future. These unique population characteristics are identified by comparing the Leonia’s demographics over time and to those of the county and the state.

Historic Development and Population Growth

The Borough of Leonia experienced a population boom between 1940 and 1970 with people moving to the suburbs right outside of New York City. The population experienced a drastic decline from 1970 to 1980. After 1990, the population steadily began to rise through 2020. Leonia’s population in 2020 was 9,304 residents, which was a 4.11% increase from 2010 when the population was 8,937. The North Jersey Transportation Planning Authority’s (NJTPA) population forecast predicts that the total population of Leonia will continue to grow into the year 2045 to 10,290 residents. This projected 15.14% increase in population from 2010 signifies the potential need for a range of development activities, including additional housing, infrastructure, and transportation improvements in order to meet the needs of all current and future residents over the next twenty-five years.

Chart 0.1: Leonia Population Growth 1940-2040



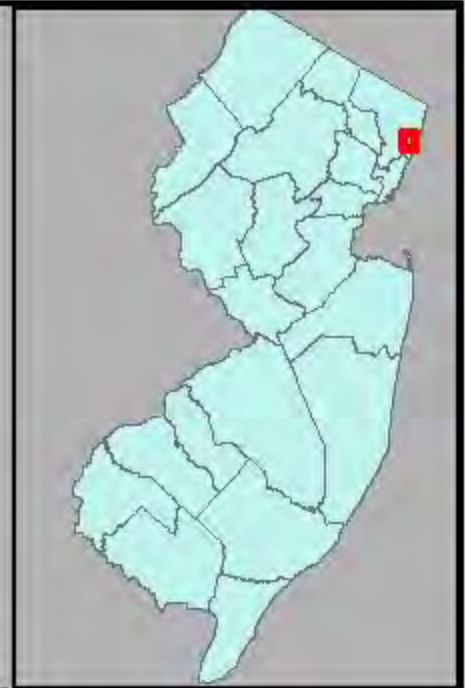
BOROUGH OF LEONIA

Surrounding Municipalities Map

Created by PFC
5/18/2020
Sources: NJGIN



0 0.25 0.5 1 Miles



Age

In addition to the population increase from 2010 to 2019, the age of residents has changed significantly in Leonia. By breaking down the population by age, the Borough will have a better sense about what the needs are for current and future residents and enact policies to meet those needs. Policies may also need to be implemented that try to create a different mix of age cohorts to create a healthy community that involves all generations.

Chart 0.2: Leonia Age Pyramid - 2019

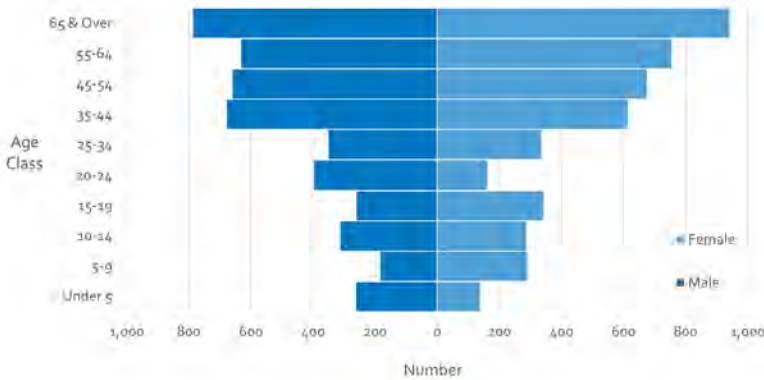
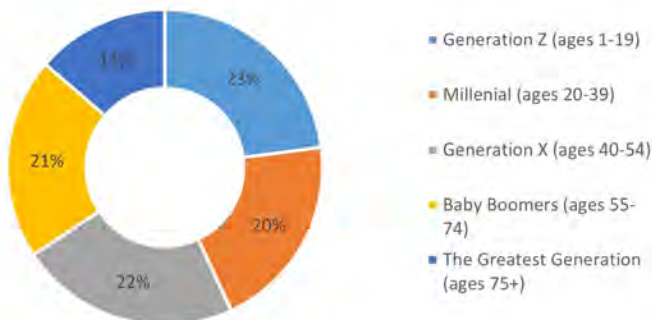


Chart 0.3: Generation Breakdown, Leonia - 2019



Millennials

The Millennial generation (generally, people born between 1980 and 2000) is the largest living generation of people in the United States. As of 2021, the ages of people in this generation range between 21 and 41 years old. While Millennials make up the largest portion of the national population, the story is a little different in Leonia. Millennials make up only about 20% of the population, lower than the national average of approximately 27% (2019, ACS). In 2019, the largest age cohort in Leonia was Generation Z totaling at almost 23% of the population, while those aged 40 to 54 are tied for the second largest age cohort alongside Millennials at around 22%. The core age group of Millennials, aged between 25 and 34, make up a comparable portion of Leonia's population. It can be concluded that Leonia's population is distributed evenly amongst three generations compared to the nation as a whole, although the Millennial generation at 20% of the population is slightly lower compared to the national average.

Generally, Millennials living preferences include rental units, downtown amenities, and transit service. A 2014 Urban Land Institute (ULI) survey of Millennials found 50% are renters (635 of 1,270), and two-thirds of respondents reported they are very satisfied or satisfied with being a renter.¹ The ULI's Millennial report also notes one-third rent in an urban area (419 of the 1,270 survey respondents). Roughly one-third (36.6%) of occupied housing units in Leonia are renter occupied, which can help to explain why Leonia's population is relatively evenly distributed across generations.

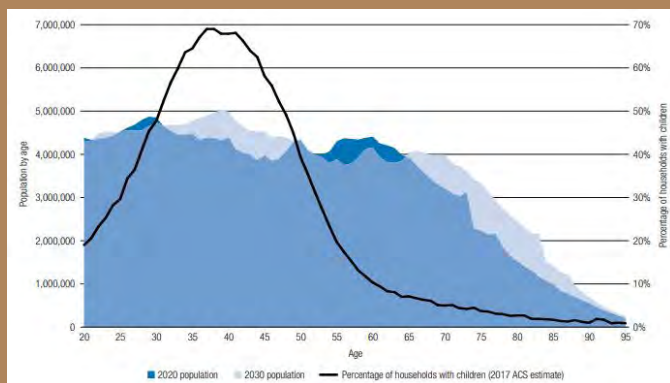
Millennials also tend to use public transportation and other modes at a higher rate than previous generations. In a survey of Millennials from the Rockefeller Foundation and Transportation for America², 54% of respondents said they would consider moving to another city if it had more and better transportation options, and two-thirds identified access to high quality transportation as one of their top three criteria when choosing a place to live. Eighty percent (80%) said that it is important to have a wide range of transportation options, such

¹ Lachman, M. Leanne, and Deborah L. Brett. Gen Y and Housing: What They Want and Where They Want It. Urban Land Institute, 2015. <http://uli.org/wp-content/uploads/ULI-Documents/Gen-Y-and-Housing.pdf>

² Goldberg, David. "The Rockefeller Foundation Millennials Survey." Transportation for America. April 22, 2014. <http://t4america.org/2014/04/22/survey-to-recruit-and-keep-millennials-give-them-walkable-places-with-good-transit-and-other-options>.

as public transportation, bike- and car-sharing, and pedestrian-friendly streets.

However, as this generation ages, these preferences could change. A more recent report published by the ULI in 2020 acknowledged that the millennial generation is now reaching a demographic tipping point with many members of this generation entering into peak child rearing years with roughly half (47.6%) of millennial households having children.³ Conversely, home-ownership rates households between the ages of 25 and 34 (40.3%) remains far below the rate before the Great Recession (49.9% in 2005). The rate for the slightly older age cohort (59.8%), those between 35 and 44, is also well below pre-Great Recession rate (70% in 2005).⁴ As a predominantly owner-occupied, single-family community, Leonia appears to be a prime housing market for the aging Millennial generation given its location and amenities.



It remains somewhat unclear how the preferences of the Millennial generation will change over time. Some of their preferences may be more influenced by financial considerations. The national average student-loan debt for a person who graduated in 2019 is \$28,950, one percent higher than the 2016 average. However, the New Jersey state average student loan debt for a graduate of the Class of 2019 is \$33,566, 7th highest in the nation.⁵ The higher than average debts may impact a person's ability to afford a car, save for a down payment on a home, or start a family. For example, the US Census Bureau found that young adults are marrying at lower rates than previous generations, marrying on average between 28 and 30 years

3 Ducker, Adam, Jack Ross and Matthew Harrop. Family Renter Housing: A Response to the Changing Growth Dynamics of the Next Decade. Urban Land Institute, 2020. <https://knowledge.uli.org/en/Reports/Research%20Reports/2020/Family%20Renter%20Housing>

4 Ducker, Adam et al.

5 <https://ticas.org/posd/home>

old⁶ and economic security plays a role in marital decisions.⁷ As Millennials' incomes increase, they marry and start a family, and save more money, the question remains on whether Millennials will continue to prefer to rent and eschew car ownership, or whether they will look to move to more suburban areas to own homes and drive an automobile to work. One potential scenario is that Millennials with children will choose to rent in suburban communities to take advantage of the school system and other recreational amenities. This dynamic is something that the Borough should monitor as it fits the profile of a municipality that is attractive to this generation.

Baby Boomers

The baby boomer generation is the second largest generation of living people in the United States (generally people born between 1946 and 1964). In Leonia, baby boomers make up 20.7% of the population, which is slightly higher than the national average of approximately 18.1% (2019, ACS). In the year 2000, the 55-64 age cohort and the 65 and over age cohort represented 9.8% and 13.7% of the total population, respectively. Although the exact age group categories are different from the years 2000 and 2018, it can be concluded that the general age group of the baby boomer generation has increased drastically. By the year 2030, all baby boomers will have reached the typical age of retirement. By the year 2035, the US Census Bureau projects for the first time in US history, older adults will outnumber children.



6 <https://www.census.gov/newsroom/press-releases/2018/families.html>

7 <https://www.census.gov/library/working-papers/2018/demo/SEHSD-WP2018-09.html>

Gender

The Borough of Leonia has about the same number of females (50.1%) as males (49.9%). This is more balanced than both the County and the State, New Jersey has 48.9% males and 51.1% females, and Bergen County has 48.5% males and 51.5% females.

Housing

While the number of housing units in the Borough of Leonia has been stable (3,476 housing units per 2020 Census), a changing population has resulted in a new housing demand. The younger adults waiting to marry and have kids and the older population looking to age in place have formed a new housing demand profile which includes a higher proportion of smaller, multi-family units, a larger proportion of rental units, and units that are affordably priced. While Leonia does provide some of these offerings, the Borough should look to further meet this demand.

- In Leonia, median household sizes have slightly increased between 2012 and 2019, using 5-year estimates, from 2.61 to 2.73 which is on trend with Bergen County. New Jersey, however, experienced a decline from 2.70 to 2.69.
- 34.93% of 2019 households had children under the age of 18 compared to the previous 5-year period from 2008 to 2012 where 38.5% of 2012 households had children under 18 (-6.54% decline). People living alone in 2019 stayed the same when compared to 2012, at approximately 21%.
- 64.83% of all residential units in the Borough of Leonia are single-family detached or attached homes and 21.50% are units in buildings with five or more units – a somewhat diversified housing stock. While Leonia has a single-family household majority, the Borough's housing unit sizes are also largely diversified. 59.96% of the Borough's housing stock has three or more bedrooms compared to a 40.04% share of smaller units (0-2 bedrooms). Diversified housing sizes ensures that there is a variety of housing that fits the needs of all household types (i.e. singles, couples no children, families with children).
- According to NJ Construction Reporter data, in the past decade (2010-2020) the Borough of Leonia has experienced a net gain of 51 housing units across one-, two- and multifamily units (demolition permits versus certificate of occupancy permits issued). Much of the development has been concentrated in multi-family units as there has been little construction of single-family units. The Borough may wish

to make zoning changes to reflect the change in demand for different housing types.

- The Borough of Leonia also has a majority of owner-occupied housing units (63.40%) where only approximately 36.60% of the housing stock in the Borough is renter-occupied. More than one-quarter of renter-occupied housing units in Leonia are in attached or detached single family homes (36.83%), and more than one-third are in buildings with five or more units (37.21%).
- Housing affordability is also of concern for the Borough. Experts generally agree that homeowners should spend no more than 30 percent of their income on housing costs. When more than 30 percent of income is spent on housing, it is considered unaffordable. Accounting for owners and renters, 79.03% of the Borough of Leonia's households earning less than \$75,000 annually spent more than 30% on housing costs whereas only 22.8% of households earning more than 75K spent more than 30% on housing costs. The affordability gap is large and the Borough should continue to take housing affordability into consideration.

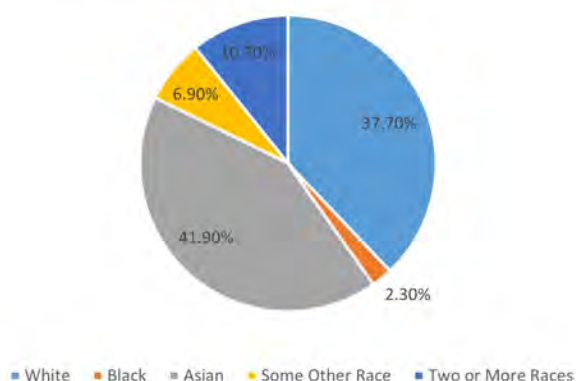
Multi-Generational Households

A key demographic trend that has been increasing nationwide is the share of Americans living in multi-generational households. This statistic is associated with homes with two or more adult generations living in the same home, excluding adults under the age of 25 to avoid the potential for some college students living at home. In 2016, the percentage of multi-generational households increased to an all-time high of 20% of the United States population. This growth has been experienced on both ends of the generational spectrum; 33% of adults ages 25 to 29 lived with their parents, while 24% of adults ages 55 to 64 and 21% of adults ages 65+ lived with their children. As this trend continues, one way to accommodate the needs of these households is with the permitting of Accessory Dwelling Units (ADUs). In Leonia, approximately 2.8% of households have three or more generations living in one house. This is less than the Bergen County average of 6% and the state average of 5%.

Race

The Borough of Leonia has a rather diverse population with 37.7% of the population being white. Leonia has significant Asian population that represents 41.9% of the population. The remaining population is either mixed race, black, or some other race. This racial breakdown shows that the Borough is more diverse than both Bergen County and the State of New Jersey. The changes in demographic data indicate that Leonia's population is also trending more diverse. The Borough has seen a decline in the number of white residents while the black, Asian, Hispanic and mixed-race populations have all seen increases, with growth especially concentrated in the Asian population whose share of the population has increased by six (6) percentage points since 2010.

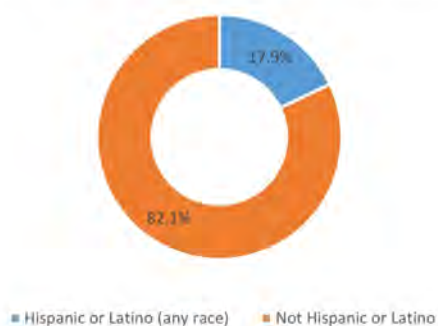
Chart 0.4: Population Racial Breakdown



Hispanic or Latino Population

According to the 2020 Decennial Census data, 17.9% of the total population identified themselves as being Hispanic or Latino. This is an increase from 16.6% from the 2010 Census. Persons of Hispanic origin can be of any race; origin is defined as ancestry, nationality, group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival to the United States. According to the 2020 data, the Borough of Leonia has a slightly lower percentage of people identifying as Hispanic than Bergen County (21.4%), and New Jersey (21.6%).

Chart 0.5: 2020 Leonia Hispanic Population



Asian Population

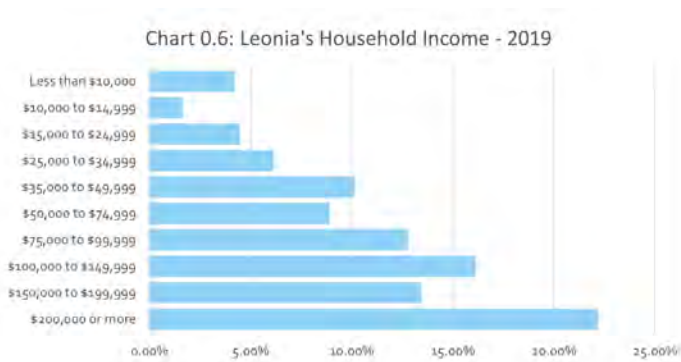
The percentage of Leonia residents who identified themselves as being Asian was 41.9% in 2020, making it the largest demographic group in the Borough. Leonia's Asian population percentage was significantly higher than both the Bergen County percentage (16.6%) and the New Jersey percentage (10.2%). Residents identifying as Asian are also the fastest growing population group in Leonia increasing from 2,354 in 2010 to 3,006 in 2020, a 27.7% increase in the past decade. Leonia's Asian population is far from being a monolith as Leonia has residents that were either born in or are descendents of people from South Korea, China, India, Japan and several other Asian countries. While census data might group these different people together, it is important to remember from a planning perspective that residents within this group will have varying needs and perspectives.

Foreign Born

A significant proportion of Leonia residents are foreign-born. The foreign-born population represents 40.9% of the total population of Leonia (3,718 residents). Leonia has a significantly higher percentage of foreign-born residents compared to Bergen County (30.81%), and New Jersey (22.44%). The population of the top ten largest groups of foreign-born people in Leonia is very diverse and representative of various regions of the world. A significant plurality of the foreign-born population (44.09%) were born in South Korea. No other country represented greater than 10% of the foreign-born population. The remaining foreign-born population is from China (7.28%), India (6.02%), Japan (3.11%), Guatemala (2.74%), the Philippines (2.50%), Ecuador (2.50%), Peru (1.93%) and Russia (1.66%). Of the foreign-born population who have entered the United States and are living in Leonia, 61.6% have become naturalized US citizens which is less than Bergen County (63.9%), and more than New Jersey (56.5%).



Income and Poverty



The 2019 median household income is slightly higher in Leonia (\$102,250) than the County (\$101,144). Very high-income households, or households with incomes equal to or greater than \$150,000, make up more than one-third (35.62%) of households in the Borough of Leonia, more than Bergen County (31.85%), and the state's share (24.17%).

The federally set poverty line is a specified dollar amount considered to be the minimum level of resources that are adequate to meet basic needs - the percentage of those living below the poverty line or poverty threshold is called the poverty rate. Residents living below the poverty line typically place greater needs on services provided by the Borough, county, non-profits, or other organizations. In the Borough of Leonia, 5.4% of the population for whom poverty status is determined is below the poverty level (493 individuals), lower than the county, state, and national poverty rates in 2019 (6.7%, 10.0%, and 13.4%, respectively). However, the poverty rate in Leonia decreased in 2019 when compared to 2012 5-year estimate data from the U.S. Census Bureau (8.9%).

- 2019 poverty rates for all races except Black or African American alone, decreased when comparing to 2012 5-year estimates.
- 2019 poverty rates for all education attainment levels except for those with less than a high school degree, decreased when comparing to 2012 5-year estimates.

Relationship to Other Plans

The Municipal Land Use Law requires municipal master plans “include a specific policy statement indicating the relationship of the proposed development of the municipality as described in the master plan to: (1) the master plans of contiguous municipalities, (2) the master plan of the county, and (3) the State Plan adopted pursuant to the State Planning Act and (4) the district solid waste management plan required pursuant to the provisions of the “Solid Waste Management Act.” Reviewing planning documents of neighboring municipalities and other jurisdictions with influence in the Borough of Leonia is important to the development for the Master Plan.

Englewood

The City of Englewood (Bergen County) is located to the north of the Borough of Leonia. Interstate-95, a major US Highway, divides both municipalities in the east-west direction. Englewood borders Leonia’s entire northern boundary.

The boundary does not follow a strict street line and travels through various properties and roadways. Englewood’s One-Family Residence (R-E) zone district borders Leonia’s Residential Single Family (R-3) and Multiple Family (B) zones. Both zone districts are developed in a similar style (approx. 5,750 square foot lot sizes) with predominantly single-family homes. The land uses in these zone districts are compatible with one another.

Englewood’s Multiple Residence (RM-C) zone district borders Leonia’s Parkland District (P) zone. The majority of the Parkland District (P) zone district exists as a park which backs up to single-family residences in Leonia and cuts off at Interstate-95 before reaching Englewood. The zones are compatible and will not have a negative impact on one another.

Englewood’s Open Space (OS) zone district borders Leonia’s Single Family (A2). These zone districts are compatible and will not negatively impact one another. Englewood last prepared a Master Plan in March 2014 which was most recently amended as of February 19, 2015. The Borough of Leonia’s land use pattern and existing regulations are consistent with existing and zoned development in Englewood.

Fort Lee

The Borough of Fort Lee borders Leonia’s eastern boundary. The two municipalities are divided by Jones Road as well as a portion of North Bergen Boulevard. The municipal boundary does not follow a strict street line or any natural features. The area along the border in both municipalities is zoned almost entirely for residential uses.

Leonia’s Single Family (A2) district border’s Fort Lee’s One Family Residential (R-2A) zone and One & Two Family Residential (R-3) zone. All three districts are zoned for detached single family dwellings. Fort Lee’s One Family Residential (R-2A) district is the municipality’s mid-range density residential district characterized by minimum lot sizes of 6,000 square feet. These zone districts will not negatively impact one another.

The Borough of Fort Lee last adopted its Master Plan in May 1988 and had its last Reexamination on May 16, 2011. Leonia’s development and regulations are consistent with existing and zoned development in Fort Lee.

Palisades Park

Palisades Park borders all of Leonia’s southern boundary. The municipal boundary does not follow a strict street line or any natural features. The area along the border in both municipalities is zoned almost entirely for residential uses. A portion of Leonia’s southern boundary is zoned for the Single Family (A-3) and Multiple Family (B) zone which borders Palisades Park’s One and Two Family Residential (AA) district. These zones are compatible with one another.

Palisades Park last adopted a Master Plan in 1993 and completed a Master Plan Reexamination on May 25, 2000. The 2003 Master Plan recommends single-family residential development along the Leonia-Palisades Park border. Leonia’s development and existing regulations are consistent with existing and zoned development in Palisades Park.

Ridgefield Park

The Borough of Leonia is separated from the village of Ridgefield Park by Overpeck Creek, where Leonia’s entire western boundary is part of Overpeck County Park.

Ridgefield Park borders a small portion of Leonia’s southwestern boundary. The municipal boundary follows the natural features of the Overpeck Creek.

The area along the border in both municipalities is similarly zoned and consists of the Overpeck County Park. Ridgefield Park's northeastern boundary that is zoned for Single-Family Residential District (R-1) which borders Leonia's Single Family (A-2).

Ridgefield Park last adopted its Master Plan on September 21, 2009. Leonia's development and existing regulations are consistent with existing and zoned development in Ridgefield Park.

Teaneck

Teaneck is separated from Leonia by Overpeck Creek. Both municipalities' Master Plans call for the preservation of open space along the creek.

Teaneck borders a majority of Leonia's western boundary. The municipal boundary follows the natural features of the Overpeck Creek. The area along the border in both municipalities is almost entirely consistent of Overpeck County Park. The area along the border in both municipalities is zoned entirely for residential uses. Teaneck's southeastern boundary is zoned for Residential Single Family (R-S) which borders Leonia's Single Family (A-2).

Teaneck last adopted its Master Plan Reexamination on April 14, 2017. Leonia's development and existing regulations are consistent with existing and zoned development in Teaneck.

Bergen County Solid Waste Management Plan

The Solid Waste Management Act (NJSA 13:1E-1) requires that each solid waste management district create a plan that includes suitable sites for solid waste disposal as well as a disposal strategy for the district. The Bergen County Solid Waste Management Plan is the agenda-setting document for solid waste disposal based upon the rules and regulations set forth in New Jersey's Statewide Solid Waste Management Plan.

There are no privately-owned regulated locations for recycling activities in Leonia. The Bergen County Solid Waste Management Plan is therefore compatible with the Leonia Master Plan.

2011 Vision Bergen

The Visioning Component of the Bergen County Master Plan was developed as a common vision that transcends municipal boundaries. It outlines the issues most amenable and relevant to the visioning process to empower small local governments to work together on initiatives that are often too large for each

of them to tackle individually. This plan reflects the priorities of local, state and regional stakeholders.

Vision Bergen describes Leonia as a borough in the southern region of the county. The plan analyzes how a majority of its NJ TRANSIT buses are routed in the southern region. The plan notes future transit improvements, including the extension of the Hudson Bergen Light Rail line. The plan also highlights Leonia's low-density residential zones. Leonia along with Fort Lee make up most of the southeast regions' low-density single-family land. However, the Visioning Component expressed too much land is dedicated and zoned for such uses and is undesirable. The plan touches on housing demolition in the southern region and in Leonia specifically, the borough having one of the highest demolition rates in the County.

Bergen County adopted the Visioning Component alongside the Master Plan in June 2011. Leonia's development and regulations are consistent with the goals of Vision Bergen.

2001 New Jersey State Development and Redevelopment Plan

In 1986, the New Jersey Legislature passed the New Jersey State Planning Act, which created the State Planning Commission and required the preparation and adoption of the State Development and Redevelopment Plan (the "State Plan"). The most current adopted plan is dated March 1, 2001. The purpose of the State Plan is to:

Coordinate Planning Activities and establish statewide planning objectives in the following area: land use, housing, economic development, transportation, natural resource conservation, agriculture and farmland retention, recreation, urban and suburban redevelopment, historic preservation, public facilities and services and intergovernmental coordination (N.J.S.A. 52:18A-200(f), the State Planning Act).

The State Plan uses a policy map to differentiate areas from highest growth to lowest growth based on information, such as natural resources, sewer availability, etc. These differentiations are called planning areas, which range from PA1-Metropolitan to PA-8 state park. The Borough of Leonia lies fully within the Metropolitan Planning Area (PA1). The SDRP specifies that PA1 areas shall be the locations for the majority of the state's future growth through expansions, infill, and redevelopment. The SDRP promotes growth within existing urbanized areas, preferably in the form of compact development with ready access to existing infrastructure, including

transit systems. The Borough of Leonia is almost entirely suburban with only a few commercial areas. The PA1 area should:

- Provide for much of the state's future redevelopment;
- Revitalize cities and towns;
- Promote growth in compact forms;
- Stabilize older suburbs;
- Redesign areas of sprawl; and
- Protect the character of existing stable communities.

This Leonia Master Plan is consistent with the State Plan.





COMMUNITY ENGAGEMENT

The Master Plan cannot be written, nor recommendations made without input from the people who live, work, and visit Leonia. Without variable public input, this document will not accurately represent the wants and needs of Leonia residents. Throughout the year-long Master Plan process, the Borough and its consultants, H2M (the “Master Plan Team”), worked hard to obtain ideas, opinions, feedback, and concerns, using online engagement and a community workshop. This collaborative approach provides community insight on the future of the Borough of Leonia

Key to the success of this community outreach initiative was the partnership between the Borough and the consultants developing this Master Plan. Without the Borough promoting the project by tapping into its existing communication tools such as its Nixle alerts, its social media accounts and website, and through the individuals that believed in the project and became “ambassadors” of the plan, this project’s community engagement outreach would not have been as successful. The following section describes the public outreach process in the development of this Master Plan.

Master Plan Sub-Committee

At the launch of the project, a Master Plan Sub-Committee comprised of members of the Borough’s Planning Board and Borough Staff was formed to frame the outline for the development of the Comprehensive Master Plan. Advisory Committee members include:

- Pat Botten, Planning Board Member
- William Russell, Planning Board Member
- Ira Gold, Planning Board Member
- Andrea Wardrop, Borough Administrator

Online Engagement

The Master Plan Team established an online presence of the Master Plan through a project-specific webpage (<https://publicinput.com/leoniacmp>). The website contained a wide range of information regarding the project, including a flyer describing the project, frequently asked questions, the workshop date and location, summary reports of the workshop and survey results, and links to an online survey. Leonia also promoted the workshops and the project through announcements on the Borough’s website, Nixle account and social media pages.

Surveys

To gain valuable feedback in the most convenient format for project participants, a Master Plan Survey was developed in an online format. Survey responses were collected for approximately three months. Given the diversity of the Borough, the survey was available to Borough residents in English, Spanish, Korean, and Traditional Chinese to accommodate residents who may not be native English speakers. During the survey period, 831 respondents completed the survey and provided 6,244 individual comments. A summary of the survey results can be found in **Appendix A**.

Workshops

The Master Plan Team held a series of public meetings and workshops at different stages of the Master Plan development in order to collect public input.

Public Workshop

The Master Plan Team hosted the master plan community workshop on October 20, 2021. The Team engaged with over 40 residents at the meeting, held from 7PM to 9PM, at the Leonia High School Cafeteria. The community workshop summary was posted online on the project website for public viewing.

A detailed explanation of the workshop's format and comments received can be found in **Appendix B**.

Planning Board and Council Interim Check-ins

The Master Plan Team attended a Planning Board meeting halfway through the planning process, on August 25, 2021 to discuss the details of the first public workshop and ongoing work on the Master Plan.

The Master Plan Team then gave a presentation on the draft version of the Master Plan to the Planning Board on January 26, 2022 to gather comments from Board members. The presentation used at this meeting can be found in **Appendix C**.

Draft Plan Review

The draft Master Plan was thoroughly vetted and reviewed by the Master Plan Advisory Committee, Planning Board, and the public. In compliance with New Jersey State statutes, the Planning Board held at least one public hearing for the draft Master Plan. During the 10-day notice period, the draft was posted online for public review.





LAND USE ELEMENT

Introduction

The Land Use element is one of the required elements of any new Master Plan. It establishes a framework for growth and development and is the basis of a municipality's zoning code. Land use policies determine several aspects of a community include population density, the availability of housing, and the location of commercial, mixed-use and open space locations. A good balance of land uses can help a community meet its goals for health, safety, and quality of life.

The Borough of Leonia's historical land use patterns have evolved over time from a primarily farmland community on the banks of Overpeck Creek to a predominantly residential community that provides residents with a wealth of commuting connections to New York City. Most residential neighborhoods became defined by modest detached single-family residential lots with various multifamily units spread in certain areas of the Borough. The existing light industrial uses along the western border can be attributed to the proximity of the freight rail line and the roadway connectivity to the NJ Turnpike. Broad Avenue, which cuts through the heart of the Borough, provides opportunities for commercial and mixed-use parcels to give the Borough its traditional downtown. Opportunities to expand housing and commercial uses exist along the Broad Avenue corridor as well as Grand Avenue. Various changes, both economic and demographic, require that the Borough review

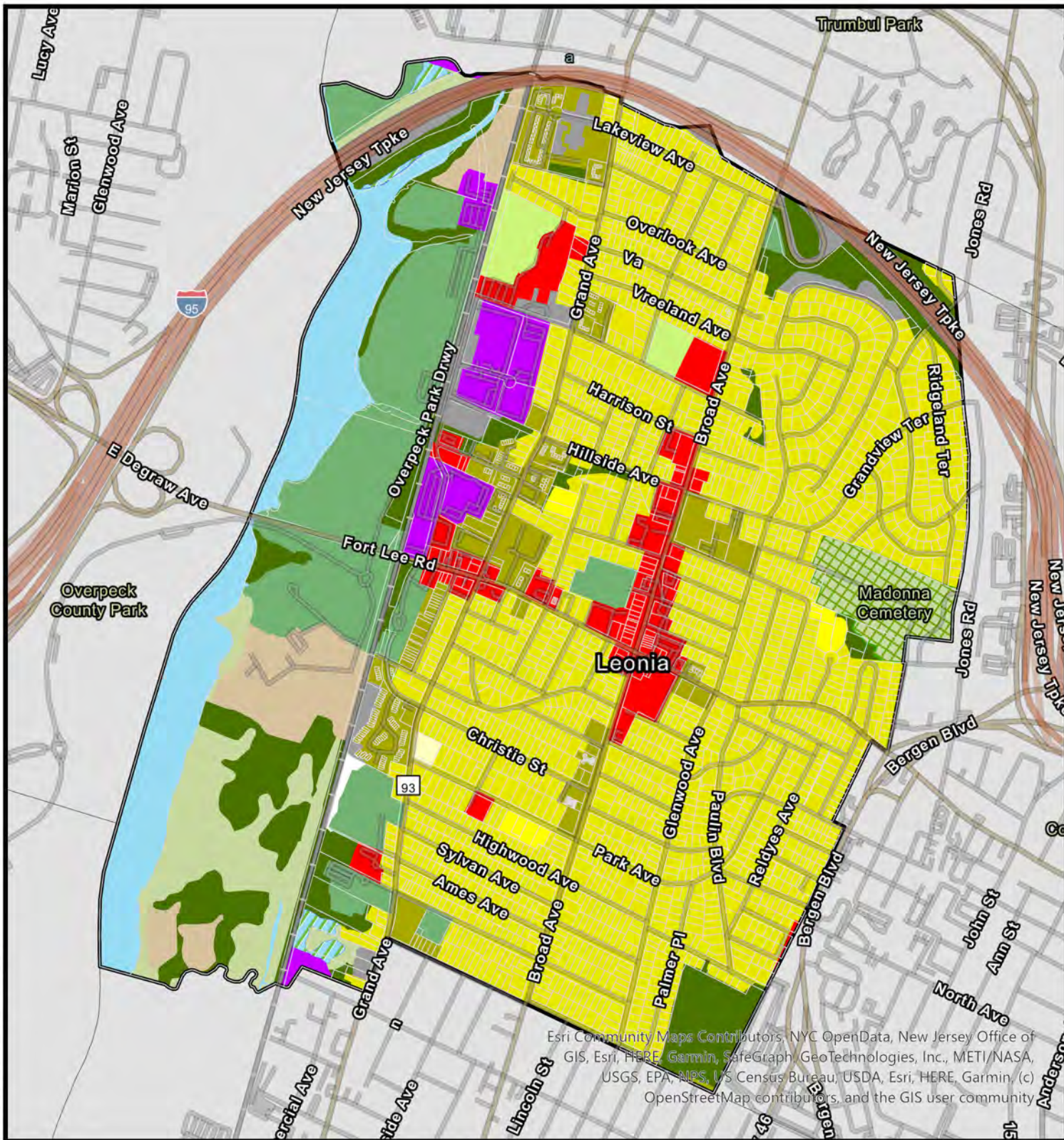
its existing land use regulations to allow the Borough to thrive and meet the challenges of the twenty-first century. This new Land Use element, as a part of Leonia's Master Plan, is intended to make the land use and zoning recommendations that meet the needs of the Borough of Leonia with an outlook towards potential future economic and demographic changes.



Goals and Objectives

1. Maintain the character of established neighborhoods in the Borough
 - a. Develop design and bulk standards consistent with established residential areas that match Leonia's architectural history.
 - b. Promote greater diversity of housing options while maintaining existing character of Borough's residential neighborhoods.
3. Promote growth in appropriate areas that meet current and future land use trends
 - a. Encourage mixed-use development opportunities in commercial district to promote more vibrant downtown area.
 - b. Utilize redevelopment designation to provide greater housing options and meet future affordable housing obligations in the Willow Tree Road/Fort Lee Road/Grand Avenue corridor.
 - c. Right-size parking ratios to reflect current and future trends.
 - d. Promote transit-oriented development at potential light rail station on Fort Lee Road in the redevelopment areas.
3. Promote policies that encourage older residents to "age-in-place"
 - a. Allow accessory dwellings as an affordable option to allow Leonia residents to "age-in-place."
 - b. Continue to seek options to provide affordable age-restricted housing.
 - c. Provide for a mix of uses and services within walking distance of entire Borough.
4. Review zoning districts regulations to align land uses with the Borough's development goals
 - a. Incentivize improvements along the Broad Avenue corridor.
 - b. Consider allowing for greater densities west of Grand Avenue to allow for uses such as senior housing, mixed-use development and other uses.

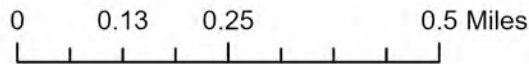




Esri Community Maps Contributors, NYC OpenData, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, EPA, MFS, US Census Bureau, USDA, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Land Use

- Water
- Wetlands
- Forest/Shrubland
- Fields
- Cemetery
- Recreational Land
- School Athletic Fields
- Altered Lands & Transitional Areas
- Rural Residential
- Low-Density Residential
- Medium Density Residential
- High-Density Residential
- Commercial
- Industrial
- Transportation



Borough of Leonia

Land Use Map

H

2

architects

119 Cherry Hill Road #110
Parsippany, NJ 07054
862-207-5900
www.h2m.com

M

+

engineers

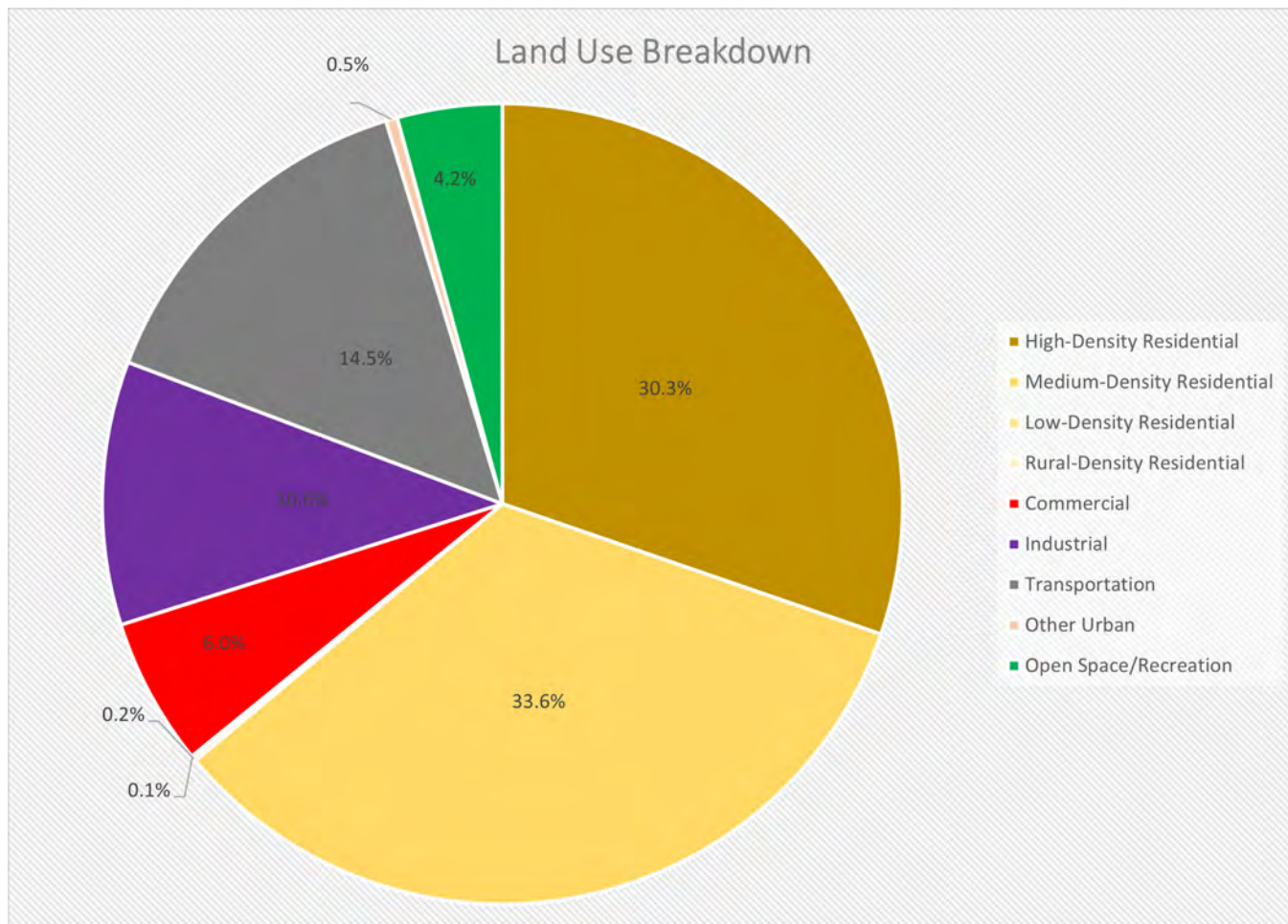
Land Use Patterns

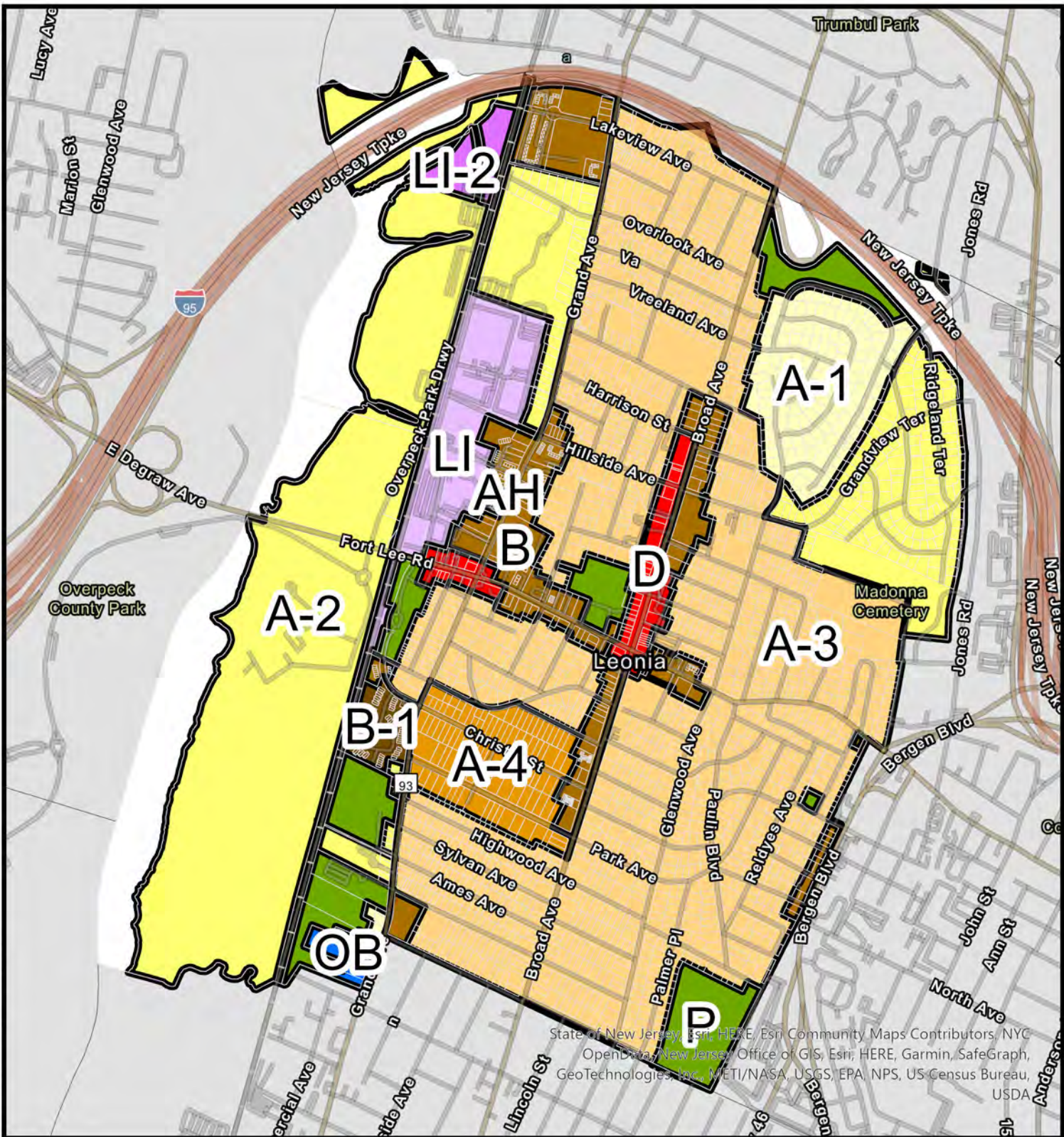
Given Leonia's close proximity to New York City, it is unsurprising that the Borough's land use breakdown shows it with very little vacant space. According to New Jersey's 2015 Land Use/Land Cover data from the State's Department of Environmental Protection (NJDEP), less than five percent (4.2%) of Leonia is made up of Natural Lands and land classified as Cemetery, Athletic Fields & Recreational Land, Water, and Wetlands. These land uses are located primarily along the western edge of the Borough (Chart 1.1 and Map 1.1). Nearly two-thirds (64.5%) of the Borough's land is used for some type of residential use, with these residential uses being high- and medium-density in character according to NJDEP's definition. One of the most significant land use types in Leonia is land dedicated to transportation. Nearly fifteen percent (14.5%) of the Borough's land is used for transportation, primarily due to the New Jersey Turnpike and the existing rail line. Between residential uses, transportation uses and open space, very little land is available for commercial and industrial uses. Industrial uses account for 10.6% while commercial uses account for 6.0%.

Value of Land Use Categories

NJ Property Tax provides a database of property tax records for all municipalities in New Jersey. The table below shows the assessed value of the various land uses in the Borough. From the table, it is evident that the tax base for the Borough is overwhelmingly from residential uses. Residential uses account for 86.0% of the total ratable value while apartment uses account for 5.7% of total ratable value. The table also highlights the lack of commercial and industrial uses in Leonia. These uses encompass only 69 parcels and make up 7.9% of the total ratable value.

	<i>Value of Assessment</i>	<i>% of Total Ratable Value</i>	<i>Number of Parcels</i>
Vacant Land	\$5,404,100	0.4%	49
Residential	\$1,065,767,800	86.0%	2,440
Commercial	\$75,426,400	6.1%	64
Industrial	\$22,454,500	1.8%	5
Apartment	\$70,884,800	5.7%	31
Total	\$1,239,937,600		

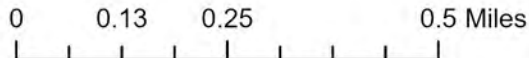




State of New Jersey, Esri, HERE, Esri Community Maps Contributors, NYC Open Data, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Zoning Districts

- A-1 - Single-Family Dwelling
- A-2 - Single-Family Dwelling
- A-3 - Single-Family Dwelling
- A-4 - Single-Family Dwelling
- B - Multiple-Family Dwelling
- B-1 - Multiple-Family Dwelling
- D - Business
- LI - Commerce and Light Industry
- LI-2 - Commerce and Light Industry
- AH - Affordable Housing
- OB - Office Building
- P - Parkland



Borough of Leonia

Zoning Map

H	2	<p>architects</p> <p style="text-align: center;">+</p> <p>engineers</p>	<p>119 Cherry Hill Road #110 Parsippany, NJ 07054 862-207-5900 www.h2m.com</p>
M			

Zoning

Zoning in Leonia consists of eight residential districts including Single-Family Dwelling Districts (A-1, A-2, A-3, A-4), Multiple-Family Dwelling Districts (B, B-1), an Affordable Housing District (AH), and a Senior Citizen Housing District (SH). The remaining five zones are comprised of the Business District (D), Office Building District (OB), Commerce and Light Industry Districts (LI, LI-2) and a Parkland District (P). These various zones provide for different uses, densities, setbacks among several other regulations common with zoning practices. These differences will be discussed in greater detail below.

All the regulations continue to be updated to balance the Borough's desire to maintain the historic character of Leonia while allowing it to adapt with emerging trends in land use.

Single-Family Dwelling Districts (A-1, A-2, A-3 and A-4)

The Borough's four Single-Family Dwelling Districts (A-1, A-2, A-3, and A-4) largely make up the residential portion of Leonia. The district does not allow for any accommodation to be used for transient occupancy. In A-2 and A-3 Districts only, accessory uses customarily incident to residential, provided that they do not include any activity commonly conducted for profit.

Lot sizes for each respective district varies. Single-Family Dwelling District's (A-1) minimum lot area is 10,000 square feet (or just under one-quarter acre), making it the least dense district. Single-Family Dwelling District (A-2) requires 8,000 square feet and District A-4 requires a similar minimum lot area of 7,500 square feet. Single-Family Dwelling District (A-3) calls for a 5,000 square foot minimum making it the densest zoning district.

A home professional office is permitted only in units within these zones that are located on Broad Avenue, Grand Avenue, or Fort Lee Road, in which the resident of the unit is a physician, dentist, lawyer, architect, professional engineer, professional planner, accountant, podiatrist, optometrist, chiropractor, acupuncturist, osteopath, psychologist, or physical therapist. Home professional offices do not permit more than two persons be employed on the premises, and the office cannot occupy more than half of the area of one floor.

Home occupations are permitted in these residential zones as well but shall be clearly secondary to the use of the dwelling for living purposes. The home occupation cannot change the character of the dwelling unit or have any exterior evidence of such secondary use, other than a permitted identification sign. Occupations, such as a typist or an instructor in violin, piano or other individual instrument, which offer direct personal instruction or services on an individual basis are permitted as home occupations. There shall not be more than six individuals for instruction at any one time on the premises.

Multiple-Family Dwelling Districts (B, B-1)

The Multiple-Family Dwelling Districts of Leonia make up the smallest portion of the Borough's residential zoning. The district provides for the development of a wide range of multi-family dwelling units, including apartments and condominiums. The standards of the districts are intended to ensure that new residential projects are compatible with the scale and character of existing single-family and multiple-family residential neighborhoods.

In Multiple-Family Dwelling District (B) all dwellings are required to have a minimum lot area of one acre for multiple family development. Multiple-Family Dwelling District (B-1) calls for a larger minimum lot area of five acres. In terms of density, both districts allow no more than eight dwelling units per acre, or no more than 24 bedrooms per acre of lot area. This high-density residential category encompasses those portions of the municipality that are characterized by two- and three-story multi-family developments. They range from two to four family dwelling units to garden apartments.

Affordable Housing District (AH)

The purpose of the Affordable Housing District is to provide the opportunity within certain areas of the Borough for the development of high-density housing for families of moderate income; and further, to do so with sensitivity to the historic and aesthetic character of the Borough's existing neighborhoods.

The only permitted principal and accessory uses shall be multi-family dwellings primarily to be used for affordable housing. Affordable housing shall be defined as those housing units which are sold or rented to a person or persons of low or moderate income who qualify pursuant to the regulations of the Project Funding Agencies, the Housing Development Corporation of Bergen County and the Council

on Affordable Housing as individuals who could purchase low and moderate housing. All permitted accessory uses shall be those uses which are clearly incidental to the principal use of affordable housing, including but not limited to off-street parking, recreation areas or facilities, fences, signs and other customary accessory uses. Occupancy by any boarders in single-family dwellings is prohibited.

Senior Citizen Housing District (SH)

Adopted in 2006, the district was created in response to the growing demand for senior accommodations around the country. It is purposed for one or more dwelling units intended and specifically designed to provide well-constructed and adequate housing for persons 62 years of age or older ("senior persons").

Per district regulations, a senior citizen housing development may also contain recreational facilities, exercise facilities, laundry facilities for common by residents, living area for common use by residents, office space for use of employees, workshops, central kitchen facilities, and one dwelling unit to be occupied by the superintendent of the senior citizen housing development and the superintendent's family. A senior citizen housing development may include an outdoor area for passive recreation, including but not limited to sidewalks, walking paths and outdoor seating.

The district is located on Hillside Avenue off of Broad Avenue and Glenwood Avenue. It houses the Leonia Retirement Housing Corporation that serves to provide affordable senior living to the community.

Business District (D)

The Business District in Leonia is centrally located on Broad Street from Crescent Avenue to Harrison Street and zones for business uses of a strictly retail sales and service type. The district is diverse, with a concentration of banks, offices and commercial services, and draws customers from all parts of the borough. Along Fort Lee Road on the Grand Avenue intersection contains a secondary business district that serves the community on a smaller scale. The stores in this district handle a wide range of shopping goods and convenience goods and services for nearby residents.

Office Building District (OB)

This district is intended to provide an environment exclusively for and conducive to the development and protection of administrative facilities and business office centers, wherein the normal development of mixed commercial uses would not be appropriate. This employment-heavy zone is comprised of several blocks located at the southwestern most corner of the Borough on Grand Avenue adjacent to the Palisades Park Border. The zone permits professional, business and government offices and medical offices that are limited to no more than two doctors dispensing health services. Medical offices containing three doctors or more shall be permitted only if they provide a private twenty-four-hour per day ambulance service. The district also allows for public open space and recreation.

Commerce and Light Industry Districts (LI, LI-2)

The district is intended for light industrial and office park uses that accommodate a variety of manufacturing, assembly, storage of durable goods, and related activities. Both districts must conform to set performance standards. Minimum lot size for both Commerce and Light Industry Districts (LI, LI-2) is 40,000 square feet. Both districts permit the same uses, however the Commerce and Light Industry District (LI-2) additionally outlines guidelines for highway billboards and similar large-scale signage.

Parkland District (P)

The Parkland District regulations were developed in recognition that a significant portion of the Borough's land area is devoted to municipal and regional parklands, and recreation facilities. The Parklands District is designed to encourage full utilization of the Borough's recreational potential while protecting the natural character of these lands and preserving them for future generations. The Borough's parkland is characterized by two types of facilities, municipal and regional.

Land Use Concerns

High Density Development in Neighboring Municipalities

In the 2002 Master Plan, there were concerns about the effect of Englewood's redevelopment plan. Since the adoption of Englewood's redevelopment plan, Englewood's redevelopment efforts have been realized through substantial new construction, particularly in the downtown and southern areas of the municipality. As a result, Englewood's population has increased by about 5.6% since 2010. The extent of the impacts on Leonia has not been measured, but it is likely and anecdotal information would suggest that traffic has increased as a result. This may be attributed to the lack of expansion in public transit services, namely the northern expansion of the Hudson-Bergen Light Rail, that could have accommodated the traffic generated due to this development.

Since 2010, there has been significant redevelopment activity in neighboring Palisades Park and Fort Lee. As a result of the redevelopment activity, these municipalities are seeing much higher rates of growth in population and construction activity compared to Leonia with Fort Lee's population increasing by about 5.2% and Palisades Park by about 7.8%. These new developments have also led to a greater diversification in the tax base for these municipalities, which is not something that has occurred in Leonia during the same time period. Previous Master Plans have indicated the lack of diversification in the Borough's tax base particularly the lack of commercially zoned land. This issue persists as of the current iteration of the Borough's Master Plan and remains something that the Borough needs to address. Given that redevelopment activity is now occurring on several bordering municipalities, the Borough may want to consider taking similar redevelopment actions in areas of the Borough that could accommodate this growth and intensification of uses. The Borough should consider making changes to the zoning code that would help to mitigate some of the effects of these neighboring changes while still encouraging controlled, sustained growth within the community.

Redevelopment of Fort Lee Road/Grand Ave area

The Local Redevelopment and Housing Law (LRHL) grants New Jersey municipalities the authority to designate areas in need of rehabilitation or in need of redevelopment given that they meet specific statutory

criteria. The LRHL also provides a process for the preparation and implementation of redevelopment plans for designated areas. The Fort Lee Road and Grand Avenue area is identified as an area in Leonia that has been investigated for redevelopment or rehabilitation. However, there has not been a redevelopment plan adopted for this area. Additionally, the Borough has directed investigations of additional areas around the existing redevelopment area.

"Redevelopment Planning" is a term used to describe both redevelopment and rehabilitation activities and is a regulatory land use tool used to benefit the general public by addressing environmental, economic, social and physical conditions of communities in need of

***Redevelopment** is a process to rebuild or restore an area in a measurable state of decline, disinvestment, or abandonment. Redevelopment may be publicly or privately initiated but is commonly recognized as the process governed by the Local Redevelopment and Housing Law and undertaken in accordance with a redevelopment plan adopted by the municipality. If used correctly, it can transform an underutilized or distressed area into an economically viable and productive part of the community.*

***Rehabilitation** is an undertaking, by means of extensive repair, reconstruction or renovation of existing structures, with or without the introduction of new construction or the enlargement of existing structures, in any area that has been determined to be in need of rehabilitation or redevelopment, to eliminate substandard structural or housing conditions and arrest the deterioration of the area.*

revitalization. It contains certain tax incentives and other tools that may spur new life into an area. The Leonia Borough Council on May 19, 2014 adopted Resolution 2014-126, which authorized the Planning Board to conduct a preliminary investigation and public hearing to determine whether an area known as the Fort Lee Road and Grand Avenue Redevelopment Study Area met the statutory criteria to qualify as an "area in need of redevelopment". The area included twenty-two (22) properties of approximately 4.2 acres located along Fort Lee Road and Grand Avenue. The study was undertaken with the intent to comprehensively revitalize the Study area to address a number of Borough's issues and priorities, including: stimulating economic development, alleviating persistent traffic congestion along Fort Lee Road and Grand Avenue,

reducing the high vehicle accident rate in the Study Area, increasing the supply of parking and shared parking opportunities, beautifying the area, enhancing connectivity with Overpeck Park, and providing an area where surrounding residents can easily walk or ride a bike to shop eat, and enjoy a vibrant commercial node. The conclusion of the study was that the area qualified as an “area in need of rehabilitation” with a smaller area along Fort Lee Road designated as an “area in need of redevelopment”. On November 30, 2015, the Leonia Borough Council passed Resolution 2015-189 designating twenty-two (22) properties within the Fort Lee Road and Grand Avenue area as an Area in Need of Redevelopment. As of writing, this is the only area in the Borough that has received this designation.

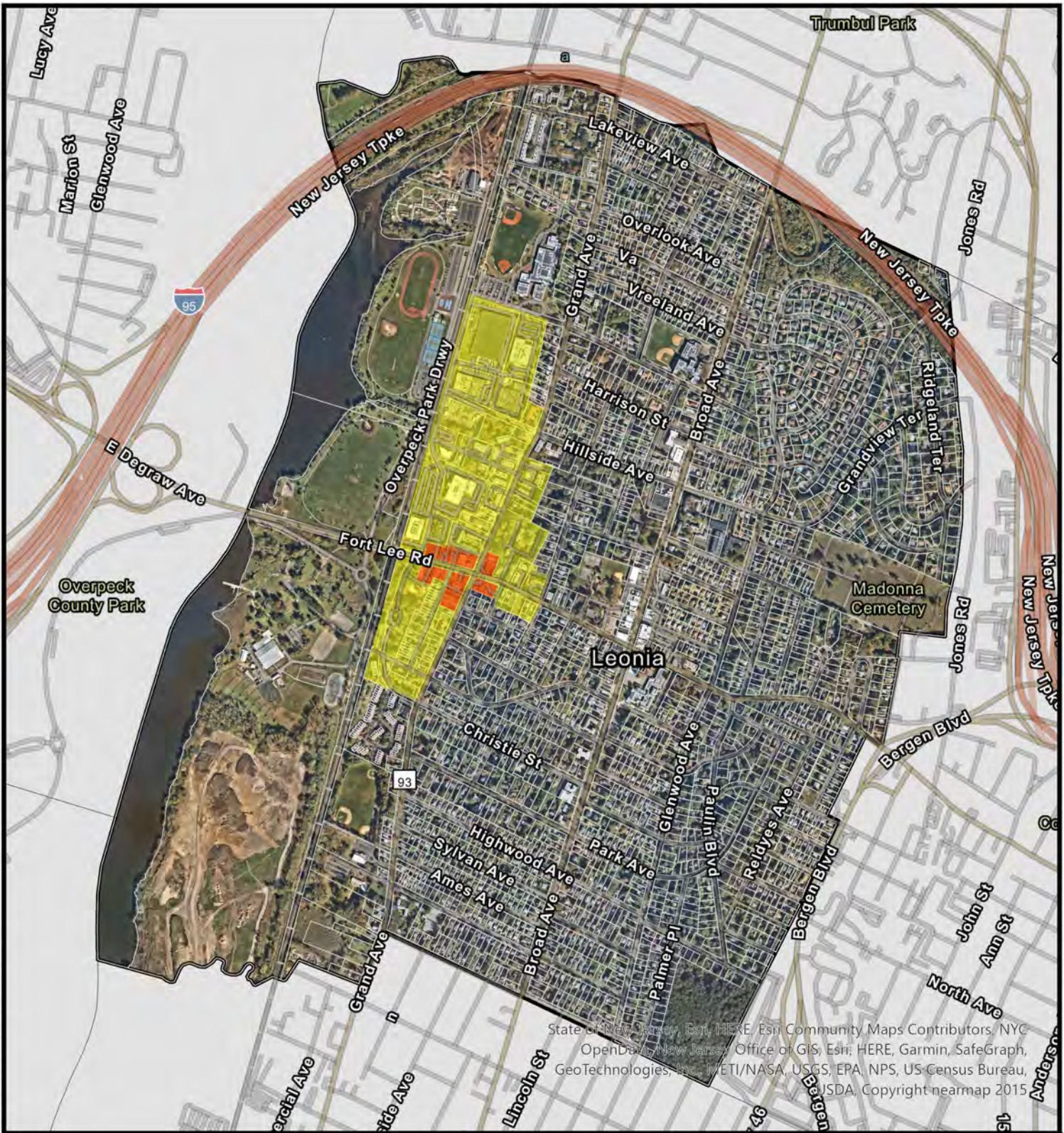
With the preliminary funding and design of the proposed light rail stop located adjacent to Fort Lee Rd. and the associated parking structure across the tracks in Overlook Park, Leonia made the decision to be proactive and designate specific properties at the intersection of Grand Avenue and Fort Lee Rd as an Area in Need of Redevelopment and the entire study area as an Area in Need of Rehabilitation. Given its location along a major road and the area’s current land uses, the area has the potential to support a greater intensity of use.

On September 5, 2018, Leonia Borough Mayor and Council adopted two Resolutions. Resolution 2018-200 authorized the Planning Board to conduct an updated condemnation redevelopment study of the Fort Lee Road and Grand Avenue area. As a part of the updated study, the area encompassed 31 properties. The newly included properties contained properties north along Grand Avenue and on Schor Avenue. The updated redevelopment investigation looks to accomplish the same goals as the 2015 Preliminary Investigation Report as they remain equally as relevant. Shortly after beginning the condemnation redevelopment study, residents voiced their concerns about the potential use of eminent domain by the Borough. As a result, officials have passed subsequent resolutions, most recently Resolution No. 2021-187, that have changed the designation to non-condemnation redevelopment. If the area is found to meet the criteria, the redevelopment area would be expanded northward along Grand Avenue.

The second resolution adopted by Leonia’s Mayor and Council was Resolution 2018-201,

which authorized the Planning Board to conduct a preliminary investigation and public hearing to determine whether the Willow Tree Road area, which consists of eleven (11) parcels, meet the statutory criteria to qualify as a non-condemnation “area in need of redevelopment”. The designation of this area could help to diversify the housing stock by allowing senior housing and the possible consolidation of the Kulite Facilities, opening surface parking for potential infill development. The Borough is currently undertaking a study to determine whether specific properties in the area would meet criteria for designation as an area in need of redevelopment. This study is an update to the 2015 study and is currently being prepared.

Recently, Resolution No. 2021-187 added the two parcels on the corner of Grand Avenue and Station Parkway to be a part of the Area in Need of Redevelopment study. This resolution and Resolution 2018-201 expanded the redevelopment area beyond the area on Fort Lee Road and Grand Avenue that were designated as a Redevelopment Area pursuant to Resolution 2015-189.

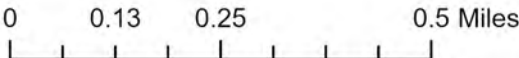


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- Area in Need of Rehabilitation
- Redevelopment Area

Borough of Leonia

Designated Areas in Need of Redevelopment/Rehabilitation Map



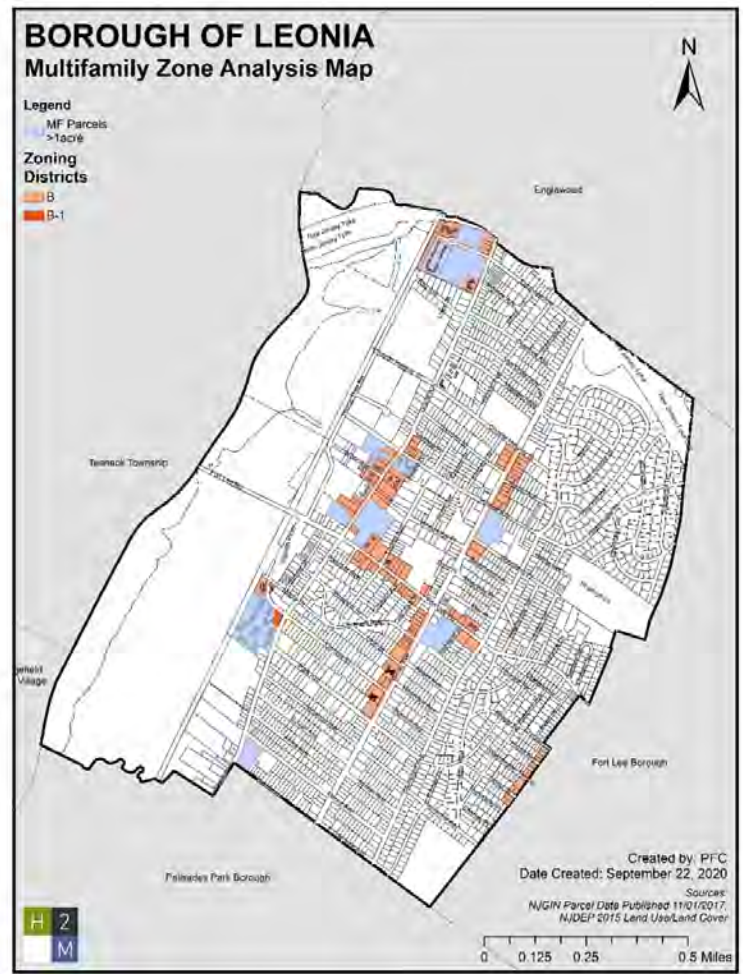
H	2	architects	119 Cherry Hill Road #110 Parsippany, NJ 07054 862-207-5900 www.h2m.com
M	+	engineers	

Downtown

The downtown in Leonia comprises of several blocks along Broad Avenue from Crescent Avenue to Harrison Street. This area of the Borough is zoned as D-Business. Land uses in the downtown consist primarily of one- and two-story buildings with commercial uses on the ground floor and residential uses on the upper floors of buildings with more than a single story. Much of the commercial uses are small retail stores, hair and beauty salons and small restaurants. There are a few national chains along Broad Avenue including CVS Pharmacy, Dunkin Donuts and H-Mart to name a few. Most of the buildings in the downtown front the street with parking in the rear of the buildings. This helps to create a walkable environment for residents and visitors alike.

Multifamily Zones

The two Multifamily zones in Leonia cover large portions of Broad and Grand Avenue as well as several blocks along Fort Lee Road and the eastern border with the Borough of Fort Lee. These areas of the Borough are zones as either B-Multifamily or B1-Multifamily. Much of the development in these areas of the Borough have come in the form of medium-density garden style apartments that are low-rise and offer rental options to Leonia households. Even though the intent of the zone is to encourage multifamily development, there are many lots that contain single-family homes. The recent development trend in the Borough is the development of this zone for higher density multifamily development. An issue that applicants for development are facing is the requirement that any development that is larger than a two-family home must have a minimum lot area of one acre. Despite the requirements for a minimum lot area of one acre, there are only eleven (11) lots that are zoned for Multifamily that meet this criteria, and these are the lots that have already been developed. The only way for a developer to fulfill the current zoning's requirement is to purchase several adjacent lots and consolidate them into one lot. The zoning as it is currently written is either preventing development from occurring in this area or is creating a scenario where applicants must apply for variances to build the type of developments that the Multifamily Zone is intended for.



Given that there are several underutilized properties in the zone based on the allowable density, it is likely that the trend of development occurring in this zone will continue. The areas of the Borough that are currently zoned for multifamily development are also areas that are best serviced by public transit. The use of public transit could help mitigate any potential adverse impacts that increased density could have in the Borough while also increasing the use of transit, which could in turn help lead to future improvements in service. The Borough should change its regulations of the Multifamily zones to help diversify its housing stock and make development more likely in areas of the Borough that can accommodate this growth. Please refer to the **Future Land Use Guide** for recommendations that can be made to the current regulations to achieve these goals.

Development Trends

Table 1.1: Residential Building Permits in Leonia - 2008-2020

Year	1 & 2 Family	Multifamily	Total Units	Total Value
2008	0	33	33	\$ 5,506,700
2009	1	0	1	\$ 24,000
2010	0	0	0	\$ --
2011	1	0	1	\$ 432,500
2012	1	0	1	\$ 398,300
2013	1	0	1	\$ 514,700
2014	3	0	3	\$ 1,270,600
2015	0	0	0	\$ --
2016	1	2	3	\$ 4,333,301
2017	2	0	2	\$ 938,600
2018	0	0	0	\$ 603,500
2019	0	12	12	\$ 90,000
2020	5	0	5	\$ 2,867,631
Total	15	47	62	\$ 16,979,832

As **Table 1.1** shows, development in the Borough over the past decade plus has been focused primarily on multifamily units. This trend mirrors many statewide trends that indicate a growing demand for multifamily units. Given these trends towards multifamily development and the significant lack of single-family development, the Borough should look for areas of the Borough that could accommodate additional multifamily development. The Borough can still preserve its predominantly single-family character while still allowing for a greater mix of housing development.

Recent land use changes

While there have been a great deal of land use changes and redevelopment in the municipalities that surround Leonia since the 2010 Re-examination Report, there have been far fewer land use changes in Leonia since 2010. Based on property tax data, the land use classification twenty-seven (27) parcels in the Borough changed status. Of these changes, about one-third (30%) of the changes were from either vacant land or another land use to residential. About another third (33%) of the changes were from either residential or some other land use to vacant land. There were an additional twenty-six (26) new parcels that were created that did not exist in 2010. Given that there was no major rezoning of the zoning districts in the Borough in the past decade and that the Borough is nearly completely built-out, the lack of

land use changes that have occurred since 2010 is not surprising.

Projects in the pipeline

Taking a look at recent developments and projects that have been approved by the Planning Board can be a good indicator of where the Borough's built environment is headed. The following recent major development projects are examples of investments for Leonia's future and may contribute to population growth and economic activity for residents and businesses.

- 1. 401 Grand Avenue:** An applicant received Planning Board approval to replace a single-family home located in the Multifamily Zone with a five-unit townhome development. The applicant needed variances for violations of the Multifamily Zone's regulation on lot area, lot frontage, front yard setback, side yard setback, building height, building length, building coverage, curb cut width, density and the number of bedrooms per acre. The original application for development for the lot was for a six-unit townhome development.
- 2. 446 Grand Avenue:** An applicant received Planning Board approval to construct a twelve-unit multifamily development. The applicant needed variances for violations of the Multifamily Zone's regulations on lot area and density among other variances.



National Land Use Trends

Evolution of the Central Business District

In the past decade, the way Americans shop has drastically changed. The rise of Amazon and online shopping, delivery services, and direct-to-consumer brands has given consumers more choices than ever in how and where they shop. It is up to communities with downtowns to adapt and plan for the new generation of downtown dwellers and shoppers. Ensuring a successful central business district means creating live-work-play environments that balance retail, housing and office. A quality downtown is one factor that attracts new residents to move into a community, for this 24/7 type experience. Municipalities across New Jersey such as Morristown, Somerville and Montclair have seen their populations rebound in the past decade or so because their downtowns provide the kinds of amenities and live-work-play qualities that attracts residents and visitors alike.

Even prior to the pandemic, the most in-demand suburban developments were those built around transit hubs, both rail and bus. The enhancement of Leonia's downtown is about maintaining its sense of history while looking to the future and creating a balance of residential growth, retail, and office space. While most survey respondents reported using a downtown business or service, respondents expressed their desire for a more vibrant downtown; in an average month, 68% of respondents said they either shop, eat, conduct personal banking/finance business, or use government services downtown, but 73% said that either lack of restaurants or shops or lack of businesses/services are barriers to enjoying downtown. Similar concerns were expressed at the October 20, 2021 community workshop where residents expressed a lack of variety and diversity of businesses and restaurants in the downtown area.

Downtowns are the heart of many communities, including Leonia. Downtowns are not just about one idea, but a balance of ideas, spaces and uses. With "experiential retail" on the rise, community gathering spaces, such as a community green or arts and cultural venues, can set downtowns apart from one another. To attract residents, workers, and visitors, the Borough should leverage its many assets including its location, arts and culture scene, vibrant open spaces and dense residential community to have a downtown that reflects the unique characteristics of the community.

Live

The ongoing effects of the pandemic coupled with the aging of the Millennial generation will likely further the migration of households from urban cores to suburban cores. Places that are poised to perform the best in the coming years will be able to provide walkable, urban-type downtowns with quality open spaces and excellent school districts. Leonia must enhance its existing "good bones" such as a walkable commercial district, suburban lifestyle in close proximity to mass transit and New York City, quality architecture and thriving arts community.

Work

The pandemic has also forced many workers to work at home, many for the first time, calling into question the need for significant office space. It is likely that the need for physical office space will reduce and that smaller-scale offices will be more desirable. Similarly to the suburban mall, suburban office parks located far away from residential neighborhoods are likely to be hurt most by this changing work pattern while office spaces in downtown and mixed-use areas that are surrounded by residential neighborhoods will maintain their relevance. Other important considerations for municipalities are to ensure flexibility with regards to home occupations and professional offices, which are on the rise as a result of the pandemic.

Play

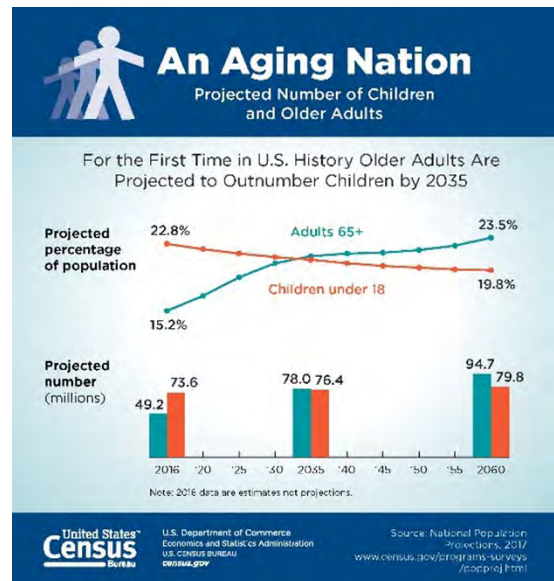
The COVID-19 pandemic has shown that pre-existing trend to shop away from large shopping malls and regional shopping centers will continue at an accelerated rate while downtown commercial districts that can provide a greater experience have a better chance of surviving. It is likely that more retail shops and downtowns will become places that offer experiences versus goods, and more development will offer a mixture of housing and retail to satisfy consumer demand for locations that provide a variety of housing and convenient shopping with multimodal transportation connections.

Aging-in-Place Policies

The U.S. Census Bureau projects that by 2030, one in five Americans will be 65 years or older and by 2035 the number of adults over the age of 65 will outnumber the number of children under the age of 18. However, Leonia is ahead of the nation in the percentage of the population that is above 65 years old. According to 2018 5-year estimate data, the over-65 population as a percentage of the Borough's total population was 17.5%, which is significantly higher than the percentage in 2010 (15.1%), both of which are above the over-65 population in New Jersey, increasing from 13.5% to 15.5% over the same time period. The aging demographics in Leonia create a challenge for the Borough in maintaining its population due to the high cost of living. Between the high property taxes and the cost of maintaining the older detached single-family homes that are most common in Leonia, seniors may be more likely to move out of the Borough to downsize to more affordable options elsewhere.

Regardless of the affordability challenge that older Leonia residents have for staying in the Borough, Leonia has many characteristics that would make it a good place for senior citizens to age in place. New Jersey Future's 2014 "Creating Places to Age in New Jersey" gave Leonia a score of 4 out of 4 on the quality of places for older populations, ranking it on par with neighboring Englewood and Fort Lee. The report gave Leonia high marks for certain development characteristics that promote independent living and age-friendly development such as a well-connected street network and access to public transportation. However, it does lack certain characteristics such as a wide mix of uses in its downtown and the lack of destinations per square mile. While this recognition does show that Leonia has significant characteristics that make it a quality community to age in place, the Borough can make several changes that can make it much better. With its compactness and "good bones", the Borough should concentrate on diversifying its future housing stock particularly in zones that could accommodate a wide range of housing typologies. This will help ensure that Leonia is well supplied with the types of housing people are likely to want as they age, and at prices affordable to retirees.

Affordability is arguably the biggest impediment to older residents for staying in the Borough. New Jersey Future did a follow up study to the 2014 report looking at the housing affordability for residents over the age of 65 in municipalities that scored well for

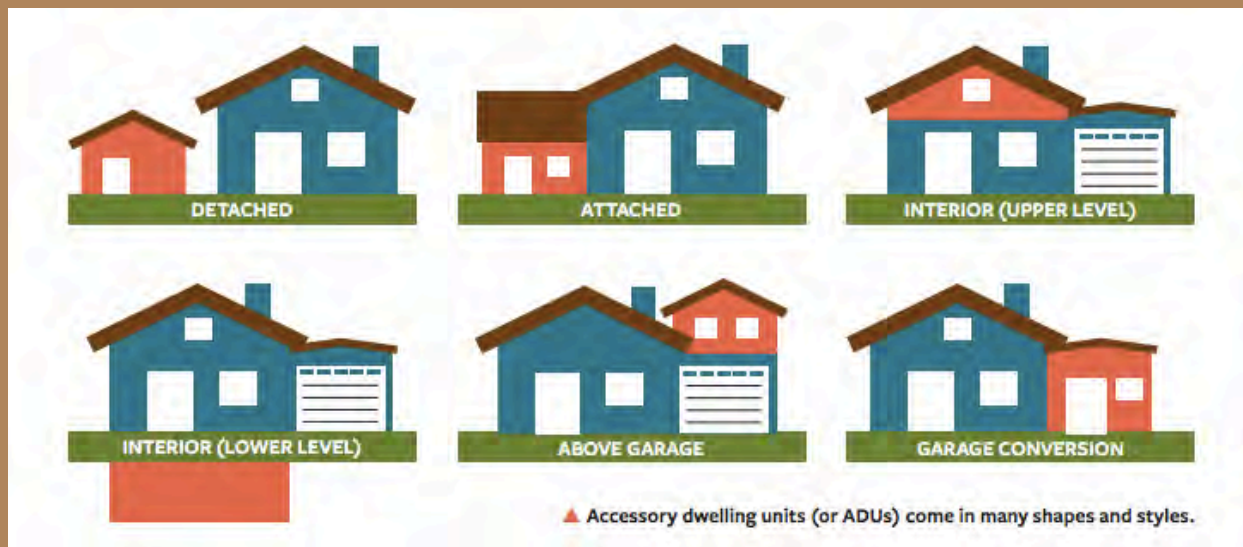


"aging-in-place". Leonia was shown to have a higher percentage of cost-burdened homeowners over the age of 65 compared to the statewide average. This is primarily due to the predominance of single-family detached homes, both modest and larger, as these are more costly to maintain over time and the higher property taxes that come with them. Changing land use policies to allow for a greater housing typology in the Borough would allow Leonia to be more affordable to older residents, encouraging them to remain in the Borough.

Leonia has already taken some steps to accommodate this trend. It has encouraged the construction of senior housing through rezoning of a portion of the Borough to be strictly for age-restricted housing. Multifamily zoning in the Borough also provides opportunities for smaller housing units that require less maintenance costs and can be rented. However, the predominance of single-family zoning throughout the Borough limits the amount of housing options that seniors looking to downsize may have to continue to remain in the Borough.

Solutions do exist to allow for older Leonia residents to affordably remain in the Borough while continuing to maintain the existing character of Leonia's single-family neighborhoods. One of these options is to allow accessory dwelling units (ADUs), or more commonly known as granny flats or in-law suites, in all single-family residential zones. As the population continues to age, communities across the country are legalizing ADUs as a way to accommodate the population. They are particularly gaining popularity in municipalities in New Jersey. Princeton has recently adopted an ordinance to legalize ADUs in all of its residential zones. ADUs also appear to be a popular

Accessory Dwelling Units come in varying forms, as shown in the below graphic from the AARP's 2019 Guide to Accessory Dwelling Units. As is evident from the graphic, accessory apartments can be regulated so as to not disrupt the character of existing residential development, while at the same time, the Borough could write reasonable regulations permitting accessory apartments without impacting neighboring properties.



Source: AARP, 2019, ABCs of ADUs

housing type for older residents. Other municipalities in New Jersey including Maplewood and South Orange have also adopted or are in the process of adopting ordinances to allow for greater adoption of ADUs. As more municipalities in the region continue to adopt these types of ordinance, the Borough may want to consider monitoring their progress to see if it will be feasible for Leonia.

Based on public outreach efforts for this Master Plan, it appears that Leonia residents are willing to take similar steps that nearby municipalities have taken to legalize ADUs. 66% of survey respondents said that they were in favor of making it easier to incorporate an accessory dwelling unit into an existing single-family property and 55% of respondents said they would be in favor of such units as a way to help senior residents remain in Leonia. This strong support for these types of units should encourage the Borough to take steps to loosen its regulations on ADUs. The Borough is fortunate to have several municipalities and counties in the region that have created these ordinances that the Borough can learn from and adopt an ordinance that would best fit Leonia.

When designing regulations for ADUs it is important for Leonia to strike a balance between the desire to legally permit such units in the Borough while also preventing unwanted development. For example, the Borough should change the minimum living floor area for a 0-1 bedroom unit as many ADUs are less than 650 square feet. Additional regulations could be around the maximum height of an ADU or the maximum living floor area. New York's Westchester County Department of Planning approved a model ADU ordinance in 2019 that seeks to allow for the creation of additional accessory units without negatively impacting the existing character of the County's residential neighborhoods. The Borough may wish to use the model ADU ordinance as a basis for a change to the ordinance to encourage the construction of ADUs in Leonia. While it is unlikely that ADUs would become a widely utilized form of housing, this could provide older residents with a few more options when they are deciding whether or not it is feasible to continue living in their community as they get older.

Given the changing demographics and recent events it is likely that aging-in-place policies will continue to increase in popularity over time. Over the last fifty years or so, seniors who are unable to maintain older homes or able to live independently have moved to long-term care facilities. Facility-based long-term care services include board and care homes (also called group homes), assisted living facilities, nursing homes, and continuing care retirement communities. The current COVID-19 pandemic has tragically shown the vulnerabilities that these types of facilities have on the elderly population. As of writing, deaths of residents and workers at nursing homes have accounted for over 40% of the deaths related to the virus in the State. COVID-19 outbreaks in congregate settings has caused occupancy at assisted living facilities and independent living centers to decline by more than 2.5% in both the second and third quarters of 2020 while the number of occupied beds at skilled-nursing properties has dropped by just over 12% since the start of the year.¹ While the pandemic has been an historically unique event and assisted long-term care facilities will continue to operate to serve elderly residents in need, it is likely that municipalities such as Leonia will want to consider making policy changes that allow elderly residents to live within the community while still being able to receive care.

Communities from California to Florida have seen an uptick in homeowners' interest in building ADUs on their properties after witnessing the devastation that Covid has had on older residents, particularly those in congregate settings. Municipalities across the country are relaxing their regulations to make building these units more feasible to capture this trend. ADUs can be one of the most cost-effective ways that the Borough could encourage older residents to remain in the Borough. These types of housing do not place a significant extra amount of burden on the infrastructure compared to a new senior housing development as the new units would be built into an already existing structure that is attached to the sewer line and can be serviced by the same waste removal as the existing housing unit.

Accessory dwelling units can also play a public health role. An accessory apartment would allow the elderly to live with family, instead of in a long-term care facility, while giving both the primary resident and their relative(s) privacy and the ability to shelter-in-place in different units that have their own bathroom and kitchen. By allowing accessory apartments for elderly residents, the Borough will help to strengthen

¹ From: <https://www.wsj.com/articles/multigenerational-living-covid-11605196694>

Case Study: Town of Huntington, NY

The Town of Huntington, NY, a suburban community on Long Island, has had an accessory dwelling unit ordinance in its zoning code since 1991. This has been utilized to provide affordable housing options in single-family neighborhoods. The Town has continuously updated the zoning ordinance including in 2019 where it amended the ordinance to allow the homeowner to live in either the ADU or the primary home. This change was primarily made to allow seniors to continue to afford living in their community as they could generate more rental income from renting out the main house while living in the smaller unit. Some highlights of the ordinance that help protect neighboring residents are that ADUs must have a minimum living area of 300 square feet and a maximum of 650 square, the unit cannot be more than two bedrooms and the homeowner must live on the property.

the family-oriented community that residents enjoy while fostering a multigenerational community that has a diversity of age groups.

The Borough should also begin to develop programs that can provide services for seniors continuing to live in Leonia. These would be initiatives such as creating programming to involve residents of all generations, to prevent the feeling of isolation that seniors may feel from those programs typically geared toward the younger age cohorts.

Mixed-Use

While mixed-use buildings originated in downtown settings, typically as public uses on lower floors such as retail shops, restaurants, or businesses, with more private uses on upper floors such as apartments, hotel rooms, or office space, mixed-use buildings are becoming increasingly popular outside of downtowns. In 2019, NJ Transit and the City of Bayonne announced plans for a private-public partnership that would transform the large parking lot at the 34th Street Station on the Hudson-Bergen Light Rail line (HBLR) into a mixed-use development that combines residential units with retail, office and public uses.

The COVID-19 pandemic has further exacerbated the ongoing decline of regional retail centers such as suburban malls and strip commercial retail. As a response to this trend, developers and public officials are looking to redevelop these locations into more mixed-use developments with smaller retail footprint and more residential units that can support the retail in a growing age of e-commerce. New Jersey

already has plenty of examples of this occurring. The pre-1960s era Monmouth Mall in Eatontown is being transformed into a “live, work, play” shopping mecca with a mix of apartments, shopping, dining, entertainment uses, and medical office space. Similar trends to recreate the typical “Main Street” feel are happening across the country.

One of the reasons why this may be growing is the desire to create more walkable and pedestrian-oriented places. Recent demographic and market trends have pushed the need and desire for smaller scale housing units in suburban locations with downtown amenities, but within close proximity to and convenient access to major employment centers. Developers and property owners are also interested in mixed-use developments as they help to increase the number of revenue streams while building sites that people want to go to. In addition to combining uses in the same building, mixed-use developments work to create pedestrian friendly environments with uninterrupted pedestrian connections and public amenities. Mixed-use developments are a vital part of any community’s downtown and commercial corridors. Given Leonia’s close proximity to New York City and its compact suburban development with a traditional downtown, there is ample opportunity for the Borough to take advantage of these trends. Changes to land use policies to further promote mixed-use development at the proper scale for the Borough would give Leonia the opportunity to thrive in the changing residential and commercial real estate environment.

Transit Oriented Development

Transit-Oriented Development (TOD) is the practice of creating vibrant, walkable, mixed-use communities surrounding transit options. This allows people to choose the best option for each trip: walking and cycling for local errands, convenient and comfortable public transit for travel along major corridors, and automobile travel to more dispersed destinations. People who live and work in such communities tend to own fewer vehicles, drive less, and rely more on alternative modes.

TOD is an approach to mobility that focuses not on transportation links but supporting individuals who may not own a car or elect not to drive. While development has concentrated around transportation centers, such as train stations, TODs better align these transportation routes with development, capitalizing on these transit nodes by creating compact, walkable locations that can increase transit

ridership while simultaneously increasing economic viability of TOD destinations.

Ten Principles for Successful Development Around Transit (ULI, 2003)

1. Make it Better with a Vision
2. Apply the Power of Partnerships
3. Think Development when Thinking about Transit
4. Get the Parking Right
5. Build a Place, Not a Project
6. Make Retail Development Market Driven, Not Transit Driven
7. Mix Uses, but Not Necessarily in the Same Place
8. Make Buses a Great Idea
9. Encourage Every Price Point to Live around Transit
10. Engage Corporate Attention

Case Study: Hackensack, NJ

Hackensack has seen considerable redevelopment of its downtown area in the past decade with the projected addition of 3,500 new multifamily units being brought to market by 2021. While much of this development is recent, it has come after extensive planning including a 2013 TOD report for the City in partnership between NJIT and NJTPA. This development is concentrated along the City’s train stations and bus terminal. Hackensack has successfully utilized PILOT agreements to increase annual tax revenue by \$7 million from these new developments. Despite significant differences between Hackensack and Leonia, the example set by nearby Hackensack indicate how utilizing the principles of transit-oriented development can increase the economic vitality of previously struggling downtown areas and commercial corridors.

Future Land Use Guide

Areas Recommended for Change

Grand & Broad Avenue

The Grand Avenue and Broad Avenue corridors provide ample opportunities for changes to allow for greater densities and intensity of uses. These areas are located adjacent to the Borough's business zones and an increase in density would provide the critical mass needed to support those businesses. A change in density would likely incentivize the improvement of existing underutilized or non-conforming parcels rather than create wholesale changes to the area. Consequently, the Borough should consider rezoning areas of the Borough including Grand Avenue, Broad Avenue and Spring Street as a part of the Multifamily zone. Based on walk-throughs of this area of the Borough, it is evident that there are currently several formerly single-family homes that have been subdivided to create non-conforming two- and three-family housing structures. These tend to be located just outside of the Multifamily zone along Grand Avenue to the north and south. The same is true of Broad Avenue and Spring Street where there are several nonconforming housing units located just outside of the existing Multifamily zone. It is recommended that the Multifamily Zone boundaries be extended to the north and south along Grand Avenue, north along Broad Avenue and all of Spring Street as shown in the **Future Land Use Map**.

These changes would help to legalize the currently non-conforming two- and three-family homes that exist along these corridors. It could also help to promote additional housing in the Borough where the existing infrastructure and transportation systems could support the increase in housing units. While many of the existing single-family homes in these areas will remain as the same use, the change in zoning could allow for the rehabilitation of properties that are showing signs of disinvestment. Additional housing units through this type of development could help to increase the economic viability of the Borough's commercial districts as both extensions of the multifamily zone would be within relative walking distance of these commercial corridors.

Additional changes to these areas could come through the use of redevelopment and/or rehabilitation. The Grand Avenue area already has a redevelopment area and a rehabilitation area while the Broad Avenue area does not have any designation. The Borough is currently investigating expanding the redevelopment areas along Grand

Avenue and should continue to explore the use of redevelopment in this area as other properties could meet the redevelopment criteria. Particular attention should be paid to office buildings that have seen a noticeable decline in demand due to the Covid-19 pandemic. Office vacancies were already high prior to the pandemic and it is likely that moving forward these property types may continue to underperform relative to other property types. The Broad Avenue corridor, considered the Borough's downtown, could also benefit from a rehabilitation designation that would incentivize property owners to improve their buildings and create a more vibrant environment that would attract both residents and visitors alike. Moving forward, the Borough should consider strategically utilizing the tools provided by the LHRL in order to effectively plan and create vibrant mixed-use areas that can help to diversify the tax base and improve quality of life in Leonia.

Fort Lee Road/Grand Avenue

Certain parcels in the Fort Lee Road/Grand Avenue area have been designated by the Borough as an Area in Need of Redevelopment. Because of its location as a gateway to Leonia, the Borough should prioritize the redevelopment along this corridor. Public outreach efforts show strong support from residents to redevelop the area. Survey responses indicate that a significant majority (80%) of respondents believe the Borough should encourage redevelopment of the area. Of the 80% respondents, 41% of respondents strongly encourage the Borough to do so while the remaining 39% responded encouraging the Borough to redevelop the area.

Recently, the Borough worked with Karp Strategies to provide economic development analysis of this area of the Borough. That study came to the following conclusions:

- The area is defined by many smaller parcels that are not in common ownership, making the grouping of these parcels difficult. If the grouping of smaller parcels for one larger development is not possible, the Borough should attempt to work with existing property owners to redevelop on a smaller, parcel by parcel approach.
- The Borough should explore the utilization of PILOT agreements to spur the redevelopment.
- Additional tactics to increase the potential of redevelopment would be to allow for higher density development. Increasing the allowable floors from three stories to four or five stories would create the potential for redevelopment

without creating many adverse impacts on the rest of the Borough. Given the geography of the Borough, a five-story building in this area would not impact sight lines for existing residential zones that are located further east where the land slopes up significantly.

One unknown for this feasible redevelopment of this area is the northern extension of the Hudson-Bergen light rail line (HBLR). If the light rail plans were to come to fruition, it would greatly increase the chances of redevelopment of this area because of the proximity to the station. This would also increase the chances for first floor retail uses with upper floor residential. Support from the federal government is likely needed for the project to be brought to fruition. The federal government recently passed legislation aimed at investing in the nation's infrastructure which could ultimately trickle down to funding for the northern extension of the HBLR if it were to pass. The Borough should consider discussion with officials both locally and at the state level to support funding opportunities for the HBLR extension.

In addition, the Borough should also move forward in the redevelopment process through the development of a redevelopment plan for the existing Area in Need of Redevelopment and work to finalize the investigation studies to expand the redevelopment areas. As a part of this process, the Borough may want to consider further public outreach to engage residents about the type of development that they would like to see take place in the area.

Multifamily Zones

As addressed earlier in the Land Use Plan, the Multifamily Zone's current regulations do not adequately address the existing land uses and densities that exist in the zone. Furthermore, existing regulations inadvertently discourage the redevelopment of several properties in these zones that are showing signs of aging structures and are in need of significant investment. Recent Planning Board decisions reveal that multiple variances were required to redevelop existing properties containing single family developments.

There are several different changes that the Borough could potentially make to the current zoning regulations that could make it easier for property owners to redevelop existing properties and make investment in currently aging structures more likely. The Borough may want to consider revising the ordinances to make it easier for property owners to redevelop existing properties that in turn would enable them to consider investing and updating the

existing aging structures. It is suggested that these could include basing the minimum lot area on the type of residential development rather than the current blanket one-acre lot size irrespective of the type of development. Similarly, the required lot frontage could depend on the type of residential development. The same regulations would go for lot frontage. Additionally, the Borough should simplify the building height to be 35 feet regardless of the number of stories.

The Borough may want to consider increasing the allowable density for townhome development from 8 dwelling units per acre to 10 dwelling units per acre. For other multifamily development, the Borough may want to consider increasing the allowable density to 20 dwelling units per acre. While this may seem like a significant increase in density, the existing density of several multifamily developments in the zone would indicate that this is not actually much of a change. For example, there are at least three multifamily developments on Grand Avenue that have densities of greater than 15 dwelling units per acre while two additional multifamily developments are just under the 15 dwelling units per acre density. Infrastructure

	<i>Existing Zoning</i>	<i>Proposed Zoning</i>
Minimum lot area	1 acre*	Two-family: 7,500sf Three & Four-family: 15,000sf >Four-family & Townhome: 21,780sf
Townhome Development Allowable Density**	8 du/acre	10 du/acre
Multifamily Development Allowable Density	8 du/acre	20 du/acre
Front-yard setback	25 feet	25 feet
Rear-yard setback	35 feet	35 feet
Side-yard setback	15 feet	15 feet
Building height	35 feet (two-stories)	35 feet
Max building coverage	20% (30% w/accessory building)	Townhouse: 25% Other: 20% (30% w/accessory building)
Minimum living floor area	0-1 bedroom: 825sf 2 bedroom: 1,050 sf 3 bedroom: 1,275 sf	--
Parking spaces	2 spaces/du	Townhouse: 2 spaces/du 0-1 bedroom: 1 space/du 2 bedroom: 1.5 spaces/du 3 bedroom: 2 spaces/du
* Two-family home is excluded from one-acre minimum lot area ** Current zoning does not distinguish between townhome and multifamily development		

improvements, particularly for public transit, is likely to be an important consideration when discussing the impacts that these suggested changes could have on the Borough.

The above table highlights the recommendation for the Borough to both allow for a create separate regulations for multifamily units and townhome units. Current zoning regulations do not distinguish the two. However, regulating the two uses differently will help to create the desired development pattern for this area by allowing for different densities based on the type of development. The following definitions for townhome should be added to the zoning code:

TOWNHOUSE STRUCTURE

A structure of three to six single-family attached homes (dwelling units), each of which has its own access to the outside and is in single and separate ownership.

TOWNHOUSE DWELLING UNIT

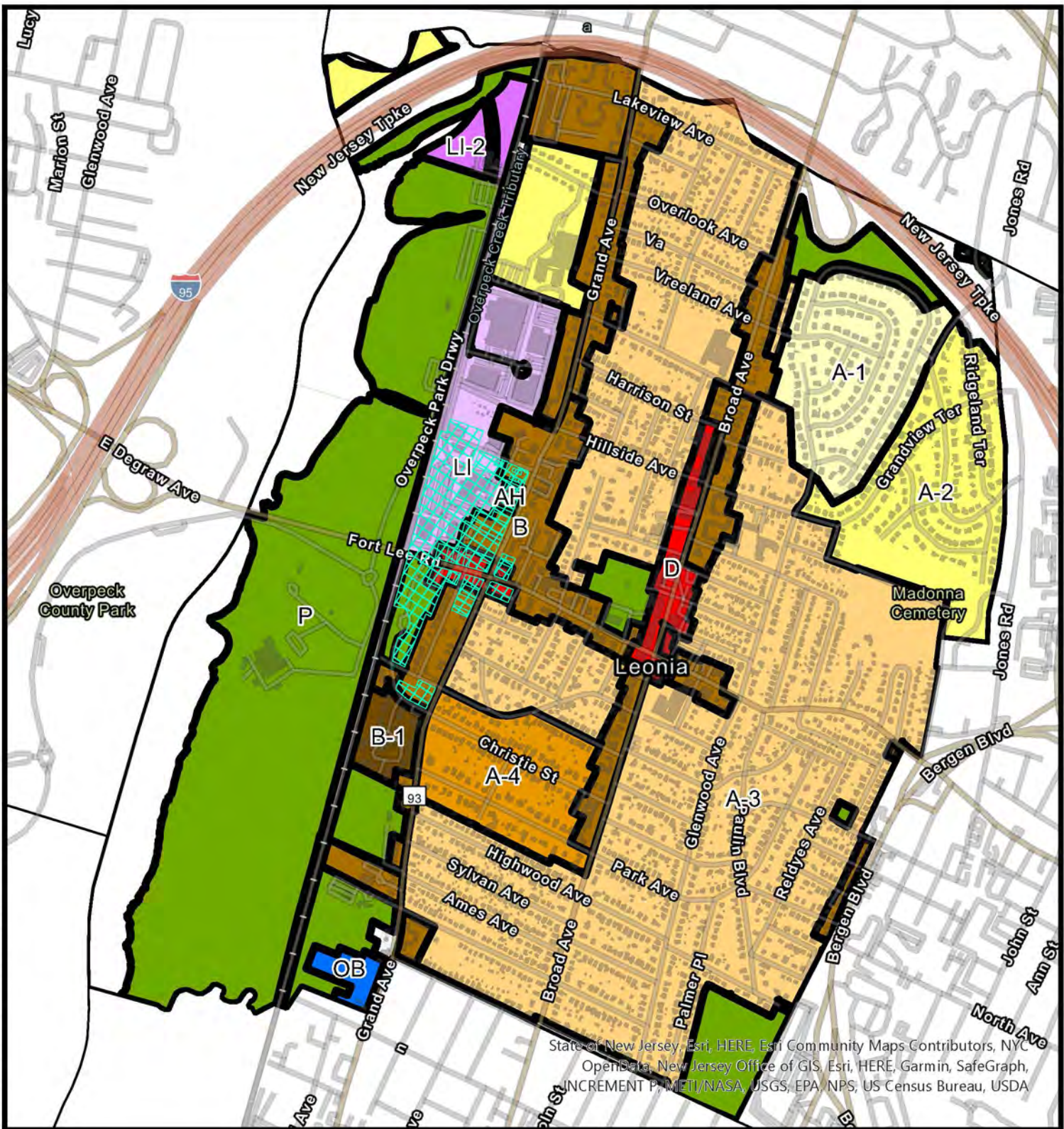
One of a series of single-family units attached by a common wall between it and the adjacent unit or units together with individual front and rear entrances and yards designed as an integral part of each unit.

Off-street parking requirements for multifamily developments are another aspect of the zoning code that the Borough may wish to review. One issue is the lack of differentiation between the parking needs of units of different sizes. For example, a one-bedroom unit on average requires a different number of parking spaces compared with a two bedroom unit. A likely result of a change of parking requirements based on unit size would likely decrease the number of parking spaces needed. This change could decrease the amount of impervious surface and also encourage residents of these new developments to utilize the public transit system rather than simply drive to every destination, which could help to mitigate the potential additional traffic that could come from future development.

Affordable Housing Overlay Zone

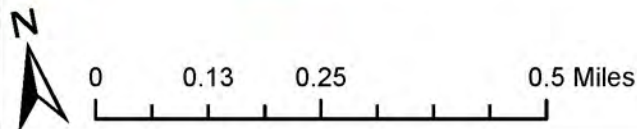
In order to meet the Borough's fair share of affordable housing, the Borough should consider the creation of an affordable housing overlay zone. Many municipalities across the State utilize overlay zones to meet their obligation with zoning regulations that give potential density bonuses or other benefits such as an easing of parking requirements to developers in exchange for providing affordable housing units as a part of any multifamily development. A potential location for an affordable housing overlay zone should be areas that are best serviced by public transit.

As noted previously, the overwhelming majority of residents in Leonia live within a quarter mile walking distance of a bus stop. However, locations along Broad Avenue, Grand Avenue and Fort Lee Road provide the best opportunities for affordable housing to be built given that higher density developments are already located in these areas and that they are the locations of the bus stops for the Borough. Joining the principles of transit-oriented development to affordable housing can provide significant benefits to both the Borough and lower-income residents as lower-income households are more likely to utilize public transportation and own fewer cars than higher-income households. The Borough may want to consider utilizing an affordable housing overlay zone to couple the goals of increasing the number of affordable housing units with the goal of providing greater transit-oriented development.



State of New Jersey, Esri, HERE, Esri Community Maps Contributors, NYC OpenData, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Zoning Districts	
	A-1
	A-2
	A-3
	A-4
	AH
	B
	B-1
	D
	LI
	LI-2
	OB
	P
	Area in Need of Redevelopment



Borough of Leonia

Future Land Use Map

architects
 +
engineers

119 Cherry Hill Road #110
 Parsippany, NJ 07054
 862-207-5900
www.h2m.com

District Regulations

Parking Regulations

Parking regulations in the D- Commercial District along Broad Avenue are arguably one of the biggest inhibitors of the rehabilitation and investment in the downtown area. One of the greater inhibitors to mixed-use development in the D-Commercial District is the minimum parking requirements for dwelling units in this District. The current regulations require that the property owner must provide a minimum of two (2) parking spaces for every dwelling unit regardless of the size of the dwelling unit or the number of bedrooms. This makes it more unlikely that a property owner would consider adding dwelling units above a first floor commercial unit. This can be a detriment to the overall vitality of commercial corridor because it prevents a greater number of residents from living above these commercial uses, which is seen as critical to vibrant downtowns as discussed earlier. The Borough should lower this parking regulation and consider basing the minimum number of parking spaces on the number of bedrooms in each dwelling unit.

Additional parking regulations should be reviewed to make providing a minimum number of parking spaces more likely. The Borough should also incentivize property owners in the D-Commercial District to mix the uses in their buildings. A way of doing this would be to allow for shared off street parking. A larger discussion of the parking regulations for the Borough including an expanded discussion of the sharing of parking spaces is detailed in the **Circulation Element** of the Master Plan.

Bulk Standards

Despite being more of a use regulation, the bulk standards for residential dwellings in the Broad Avenue D-district should be reviewed. The current standards require that a dwelling unit with 0-1 bedrooms must have a minimum living floor area of 825 square feet and a dwelling units with 2 bedrooms must have a minimum living floor area of 1,050 square feet. These minimum living area requirements are outdated given the trends of the size of new rental units across the country. In 2018, the national average of square footage for a studio apartment was 514 square feet, 757 square feet for a



one-bedroom unit and 1,130 square feet for a two-bedroom unit.² Considering that the northeast region has on average units that are 2.6% smaller than the national average, it is safe to assume that new apartment units in northern New Jersey are several square feet smaller than the national average. The Borough should think about lowering the minimum living floor area requirements in order to increase the likelihood that property owners would include residential units above commercial spaces. This should include having a separate minimum living area for studio apartments that are apart from one-bedroom dwelling units. The Borough could either have a separate lower minimum living area for the Broad Avenue district or lower the minimum living floor area for multifamily dwelling units Borough-wide. In the end, the property developer and the real estate market will dictate the size of units, but providing this standard may increase opportunity for construction of appropriately sized units.

Residential District Permitted Uses

As discussed in the Zoning section, all of the Borough's single-family residential districts (the A Districts) permit uses that would generally be classified as professional offices and home occupations. However, the Borough does not currently have clear definitions for these types of commonly known and utilized uses. As a result, the Borough should create clear definitions for these uses.

In addition to creating definitions for these two uses, the Borough should review the existing requirements for both home occupations and professional offices within the A Districts. The ordinance was last amended in 1998 therefore it may be imperative to examine the existing ordinances to update them to the current conditions. It is particularly pertinent given the significant increase in working from home that has been brought on by the Covid-19 pandemic. With working from home likely to continue with relatively high frequency, the Borough should review the ordinances to allow for a greater number of Leonia residents utilizing their properties as home offices.

When reviewing this part of the zoning code, the Borough should review restrictions such as the location of the residence within Leonia and the types of professional offices that would be allowed.

Additionally, the Borough should consider off-street parking requirements and design regulations for Professional Offices.

Another outdated aspect of the zoning ordinance that the Borough may wish to review is the regulations regarding the storage of boats and vehicles, particularly commercial and recreational vehicles. These types of recreational crafts have also grown in popularity recently, which is due in part to how the pandemic has upended parts of daily life. This aspect of the ordinance was last amended in 2002 and the Borough may want to consider updating the ordinance to reflect the multiple different types of recreational vehicles and crafts that have been developed and modified in the nearly 20 years since the ordinance was updated. Other aspects to consider would include location of storage and the maximum size of vehicle that is able to be stored in residential districts.

Regulation of Cannabis Use

On February 22, 2021, Governor Murphy signed into law P.L. 2021, c. 16, known as the "New Jersey Cannabis Regulatory, Enforcement Assistance, and Marketplace Modernization Act", which legalized the recreational use of marijuana by adults and established a comprehensive regulatory and licensing scheme for commercial recreational cannabis operations, use and possession. The state law also created an opt-in or opt-out timeline whereby municipalities in the state had 180 days to take action to regulate cannabis operations based on the new statutes. Failure to act would prevent municipalities from banning the operation of one or more of the classes of cannabis establishments for 5 years. Given the short time period to decide and the uncertainties regarding the uses, the Borough adopted Ordinance 2021-06 to opt-out. However, the Borough has the opportunity to opt-in and allow any of the various types of classes of cannabis establishments at any time. Consequently, the Borough may want to examine the option of permitting certain classes of cannabis establishments in certain parts of the Borough, particularly as it observes how municipalities who have permitted these uses perform with these establishments. The Borough should investigate the use of certain restrictions such as distance from school properties, places of worship, compatibility with surrounding uses, etc.

² From: <https://www.rentcafe.com/blog/rental-market/us-average-apartment-size-trends-downward/>

Climate Change Vulnerability Assessment

On February 8, 2021, Governor Murphy signed into law an amendment to the Municipal Land Use Law (N.J.S.A. 40:55D-28) requiring any Land Use Plan Element to include a Climate Change-Related Hazard Vulnerability Assessment. This section was completed using FEMA best management practices for hazard mitigation planning and is consistent with the New Jersey's 2021 Climate Change and Resiliency Strategy.

The Assessment is required to include:

1. Analyze current and future threats to, and vulnerabilities of, the municipality associated with climate change-related natural hazards including but not limited to increased temperatures, drought, flooding, hurricanes, and sea-level rise.
2. Include a build-out analysis of future residential, commercial, industrial, and other development in the municipality, and an assessment of the threats and vulnerabilities identified in (1) above related to that development.
3. Identify critical facilities, utilities, roadways, and other infrastructure that is necessary for evacuation purposes and for sustaining quality of life during a natural disaster, to be maintained at all times in an operational state.
4. Potential impacts of natural hazards on components and elements of the Master Plan.
5. Strategies and design standards available to reduce or avoid risks associated with natural hazards.
6. Policy statement on the consistency, coordination, and integration of the climate-change related hazard vulnerability assessment with any existing or proposed natural hazard mitigation plan, floodplain management plan, comprehensive emergency management plan, emergency response plan, post-disaster recovery plan, or capital improvement plan.

The Borough of Leonia is an inner-ring suburban community which is mostly residential from a land use standpoint. Leonia is located in southeastern Bergen County located atop the Palisades, a line of steep cliffs located along the west side of the Hudson River. The western side of the Borough is bordered by Overpeck Creek. Borough is home to tree lined streets and a traditional downtown in the center of

the municipality. One defining feature of the Borough is the significant incline from Overpeck park in the west to the Borough's eastern border with Fort Lee. A portion of the overall municipality is within an identified Flood Hazard Area (FHA) totaling approximately 256 acres in area, or roughly one-quarter of land area in Leonia. However, the overwhelming majority of this area of the Borough is publicly owned, namely Overpeck Park. As a result, only 0.3% of land area that is privately owned or vacant is located within the flood hazard area, significantly decreasing the potential for property damage due to flooding. Based on the most current FEMA derived effective FIRM for Bergen County dated 2017 there are approximately 67 structures and 120 properties located in the 100-year (1%) floodplain and 500-year (0.2%) floodplain. Additionally, only a small percentage of Leonia's population, buildings, or critical facilities are within a floodplain. As such, the current and most significant future threats include thunderstorm, severe storm, hurricane/tropical storm, and nor'easter/severe winter storm related threats. This report also addresses drought and increased temperatures as required above, however these were not identified as major threats to Leonia. Sea level rise will not have a major impact on Leonia since the overwhelming majority of the Borough is located at elevations high enough from bodies of water to have any significant impact. However, the westernmost areas of the Borough could be affected by sea level rise, particularly in a higher rise scenario.

Analysis of Current and Future Threats

Leonia is located in southeastern Bergen County and is generally not subject to coastal related natural hazards like sea level rise or storm surge. However coastal storms like Hurricanes present a high impact hazard as it relates to wind impacts because of the tree lined streets along with significantly wooded residential lots throughout the community and storm surge as was experienced during Hurricane Sandy. As such, High-winds, Severe Storms, and Ice/Winter Storms have a high potential to impact Leonia. Based on the 2020 Bergen County Hazard Mitigation Plan (HMP) the following hazards are of concern for Bergen County as a whole, each of which have potential impacts for Leonia:

<i>Hazard Type</i>	<i>Identified Hazard or Concern?</i>
Coastal Erosion	Yes
Dam and Levee Failure	Yes
Drought	Yes
Earthquake	Yes
Flood	Yes
Geological Hazards	Yes
Hurricane and Topical Storms	Yes
Nor-easter	Yes
Severe Weather	Yes
Winter Storms	Yes
Wildfire	Yes
Cyberattack	Yes
Terrorism	Yes

The Bergen County HMP recommends several mitigation strategies for the Borough to take to address these hazards. These recommendations, among several others, include changes to mitigate against flooding along Willow Tree Road with particular focus on the Leonia High School in addition to potentially work with homeowners living in the floodplain to acquire funding to elevate their homes.

Increased Temperatures/Extreme Heat and Cold

While not identified as one of the major threats to Leonia according to the 2020 Bergen County Hazard Mitigation Plan; addressing increased temperatures is a requirement of P.L.2021, c.6. According to NOAA National Centers for Environmental Information, New Jersey’s annual average temperatures have increased by 3° over the past century, and it is predicted that heat waves will become more intense in the future. While temperatures are variable on a year-to-year basis; for example if you were to compare 2019 to 2020 there is not that much of a difference, however when looked at over a period of 100 years or more it is evident that there is an overall increase in temperature as shown in Figure 1 below prepared by NOAA in 2016. This analysis has been corroborated by the New Jersey State’s Climatologist office who put forth an analysis in January of 2021. This analysis shows that since 1885 70% of the five highest temperature months have occurred since 1990. This same study shows that none of the top five coldest months have happened since 1990.

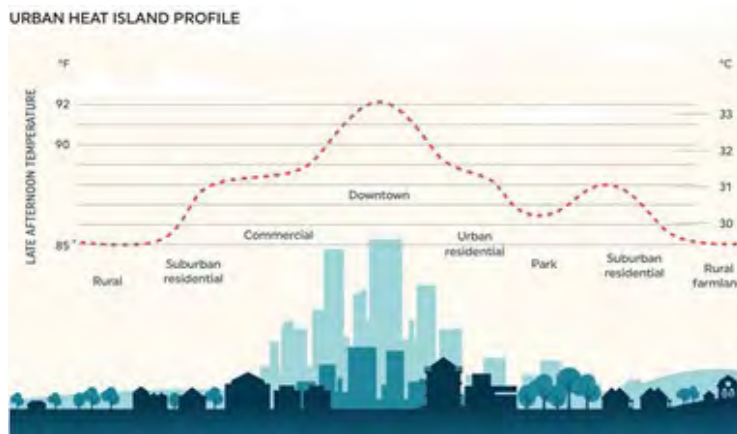
Typically, hazard mitigation planning addresses extreme heat or extreme cold as it relates to NCDC extreme events. In this case the 2020 Bergen County HMP identified extreme heat and extreme cold as hazards with low impact for the county as a whole. The document also notes that inland urban areas are more vulnerable to heat waves due to the urban heat island effect. While Leonia is in a more urbanized region of the county, its extensive tree coverage likely mitigates this effect substantially. 2020 Bergen County HMP had not identified extreme heat as a major concern to Leonia.

Occurrences of Extreme Temperature

The 2020 Bergen County HMP identified that there were 16 instances of extreme heat events from 1995-2016 and three extreme cold events during the same period. Bergen County and Leonia have a high probability of experiencing extreme heat, and it is almost certain that there will be a period of extreme heat in Bergen County every summer. Record-setting cold temperatures are expected to decrease.

Vulnerability Mitigating Risk

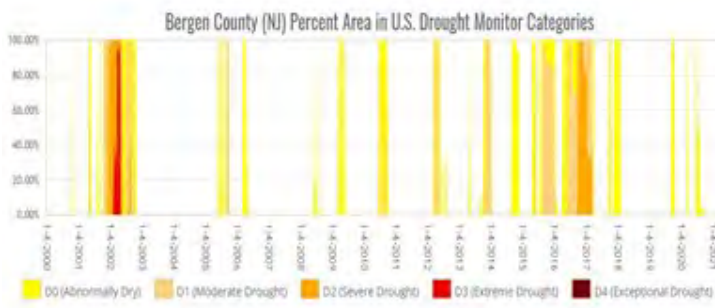
As indicated above, excessive heat or cold is not a major health threat in Leonia. In accordance with data gathered from the NJ Climate Change Resource Center at Rutgers University, Leonia can expect to see temperature increases of up to 10 additional days of heat in excess of 95° through 2030. These conditions can be exacerbated with the heat island effect which is more prevalent in highly urbanized communities. Leonia has a significant amount of tree cover and green spaces. However, as future growth happens, Leonia should take careful consideration to balance growth with the inclusion of green spaces including trees and other vegetative cover.



Drought

NOAA defines drought as “a period characterized by long durations of below normal precipitation. Drought conditions occur in virtually all climatic zones, yet characteristics of drought vary significantly from one region to another, relative to normal precipitation within respective regions. Drought can affect agriculture, water supply, aquatic ecology, wildlife, and plant life. Drought is a temporary irregularity in typical weather patterns and differs from aridity, which reflects low rainfall within a specific region and is a permanent feature of the climate of that area.”

According to NOAA’s National Integrated Drought Information System database, Bergen County has experienced one extreme drought event in the period from 2000 to 2021.



Droughts are characterized between D1- Moderate Drought to D4- Exceptional Drought. Since 2000, Bergen County has experienced ten drought events. Of those 10, seven were moderate droughts, two were severe droughts and one was considered an extreme drought.

Leonia Projected Temperature Increase						
Year	Moderate Emissions (RCP 4.5)			High Emissions (RCP 8.5)		
	2030	2060	2090	2030	2060	2090
Change in Days Above 95 Degrees (Days)	+5 to +10	+11 to +20	+11 to +20	+5 to +10	+21 to +30	+41 to +50
Change in Cooling Degree Days (Degree Days)	+200 to +400	+400 to +600	+600 to +800	+200 to +400	+800 to +1000	+1400 to +1600
Change in Max. Temp. July (° F)	+2° F to +3° F	+4° F to +5° F	+5° F to +6° F	+2° F to +3° F	+6° F to +8° F	+8° F to +12° F
Average Max Temp in July (° F)	86° F to 90° F	91° F to 95° F	91° F to 95° F	86° F to 90° F	91° F to 95° F	96° F to 100° F

While droughts can have detrimental effects on different types of communities, agricultural communities are the most susceptible to direct impacts of drought. Leonia, being a built-out community with little to no agricultural activity, may not necessarily be susceptible to drought. However, the impacts of drought could potentially affect water supply. In a future scenario of extreme and exceptional drought, the Borough may need to consider certain mitigation efforts to conserve water.

Mitigation efforts can include moratorium on watering of lawns and washing of cars among other non-essential uses. Setting up of water conservation tactics such as rain collection systems are another way of ensuring efficacy in water usage.

Hurricane, Nor'easter, Severe Storms, Winter Storm

Leonia, specifically, and eastern Bergen County, more generally, primarily experience extreme storm events associated with winter weather. According to the National Oceanic and Atmospheric Administration (NOAA)'s Storm Events database, between 2016 and 2020 Leonia and eastern Bergen County experienced 36 severe weather events, seven of which were associated with winter storms. The other 29 events involved strong wind (11), high wind (5), excessive heat (4), heavy snow (4), winter weather (4), and tropical storm (1).



D0 - Abnormally Dry

- Crop growth is stunted; planting is delayed
- Fire danger is elevated; spring fire season starts early
- Lawns brown early; gardens begin to wilt



D1 - Moderate Drought

- Irrigation use increases; hay and grain yields are lower than normal
- Honey production declines
- Wildfires and ground fires increase



D2 - Severe Drought

- Specialty crops are impacted in both yield and fruit size
- Producers begin feeding cattle; hay prices are high
- Warnings are issued on outdoor burns; air quality is poor



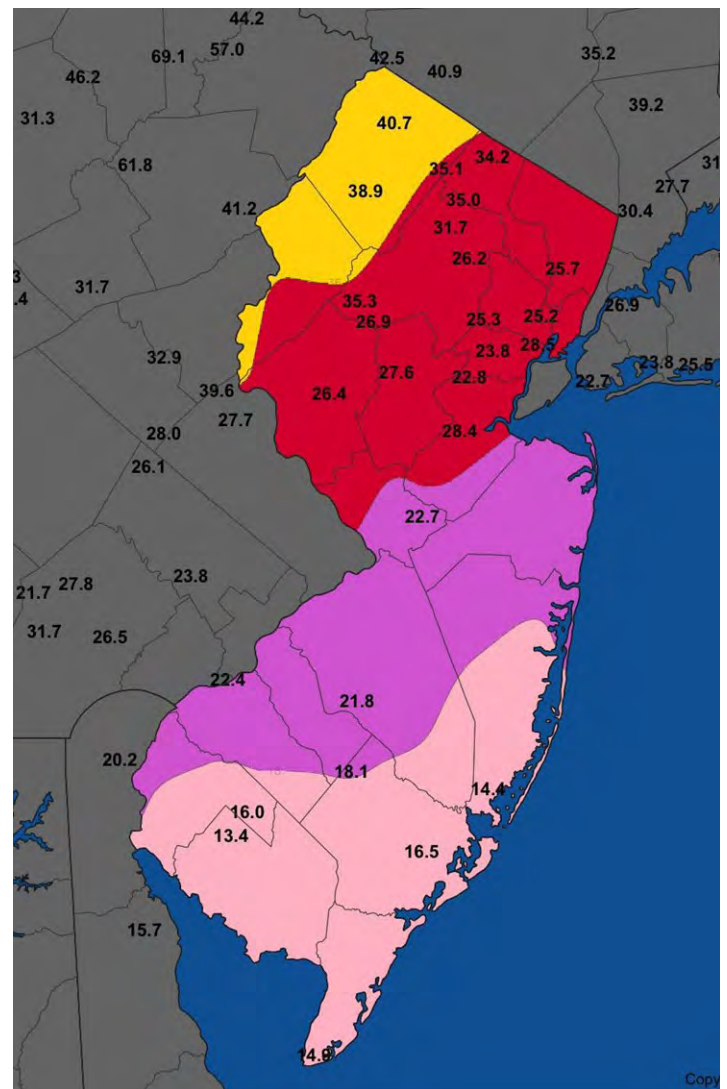
D3 - Extreme Drought

- Crop loss is widespread; Christmas tree farms are stressed; dairy farmers are struggling financially
- Well drillers and bulk water haulers see increased business
- Water recreation and hunting are modified; wildlife disease outbreak is observed



D4 - Exceptional Drought

- New Jersey has experienced little or no exceptional (D4) drought, so there are no D4-level drought impacts recorded in the Drought Impact Reporter.



Normal Seasonal Snowfall, 1981 to Present.
Source: ONJSC Rutgers University

In New Jersey, winter storms include blizzards, snow storms, and ice storms. Nor'easters are also a common type of storm that may occur during winter months within the State of New Jersey. Winter weather impacts include lost productivity, traffic accidents, downed trees, medical events (such as heart attacks), and hypothermia (which rarely causes any significant or long-term problems). Traffic accidents and road closures due to wintry conditions are the most likely to cause damage. Projecting future vulnerability to Leonia from winter weather events are difficult due to climate change. As the State's 2019 Hazard Mitigation Plan describes, there are two climate change trends affecting winter weather. On the one hand, rising temperatures in New Jersey are likely to decrease the number of days when the temperature is cold enough for winter weather, but on the other hand, the New Jersey climate has gotten wetter. As a result, there are likely to be fewer winter storms, but the intensity of those storms are likely to be greater. In order to mitigate the adverse impacts of winter storm events, the Borough should ensure that there is adequate green space and vacant area where snowfall during a winter storm can be cleared off the roadways by the Borough's public works personnel. It is also important that the Borough maintains adequate roadway and sidewalk widths to have enough area for snowplows to be able to deposit the snow from the main driving area of the roadway during a winter storm event.

Wind Damage

Significant damage can occur from high winds associated with severe weather events like hurricanes, nor'easters, tropical storms and winter storms. FEMA classifies this threats as high wind. High wind events occur annually, often several times per year. The risk is present all across Bergen County, with all municipalities equally likely to be impacted. There are no wind hazards that are unique to Leonia. Though the probability of Leonia experiencing a high wind event is high, impacts are expected to be minimal, and it is not a high priority concern.

Wind Damage Impacts and Vulnerabilities to the Hazard

Leonia is a typical residential community, predominated by balloon-frame and unreinforced masonry residential structures, the majority of which have gable or hip roofs. As discussed in the Bergen Hazard Mitigation Plan, wind profiles in this area of the country indicate a relatively low potential for severe events, and adequate construction techniques and building codes have generally sufficed to keep risks low. There are two main sources of potential wind damage in such communities: (1) structural damage to residential and non-residential buildings, and (2) power losses, mainly due to trees falling on above-ground lines. There are established methodologies for completing general risk assessments for these hazards.

Hazus is a regional multi-hazard loss estimation model that was developed by FEMA and the National Institute of Building Sciences. Hazus methodology is an established methodology to assess potential risk to existing structures in the scenario of high-wind and flooding events. These high-winds are projected to occur during extreme weather events that could potentially affect Leonia such as Nor-easters, tropical storms and hurricanes. Based on Hazus model data, it is projected that roughly no residential structures would experience moderate damage in a 10-year probabilistic wind event. No residential and nor commercial structures would experience minor damage. In a 100-year probabilistic wind event, four residential structures would experience severe damage, and about 653 residential structures (about 28% of all residential structures) would experience moderate damage. An additional 12 residential structures and about one commercial structure would experience minor damage.

Table 1.2 below summarizes the projected losses related to a straight-line event for both the 50-year and 100-year event in Leonia. Projected damages are the cumulative total of seven discreet categories: building damages, contents damages, inventory loss, relocation costs, business income lost, rental income lost and wages lost.

Occupancy Class	10-Year Risk	100-Year Risk
Residential	\$0	\$38,743,490
Commercial	\$0	\$21,860
Industrial	\$0	\$2,840
Others	\$0	\$5,400
Totals	\$0	\$38,773,600

There are several recommendations that the Borough could adopt to mitigate the potential damage from high winds in a severe weather event. The Borough should adhere to the most up-to-date building codes to ensure the highest quality of construction. The Borough should have an active tree inventory that includes an assessment of tree conditions and a prioritization list for trees that should be removed given their potential to cause damage to utilities and structures in a high wind event. Where feasible, the Borough should move utilities underground to make them less susceptible to outages in high wind events. The Borough should also have backup generators for all critical facilities.

Flood Hazard

There is localized flooding during storm events, such as severe thunderstorms, nor'easters, and sometimes hurricanes/tropical storms in Leonia. Flooding most often occurs in or near the three areas as described below:

- 1. Broad Avenue** – In the northern end of Leonia there is a long and narrow floodway which crosses Broad Ave and runs down through a residential area. Though there are more than a dozen properties affected, most of them only have a small portion identified as flood hazard areas. This flood area has its origin in Flat Rock Brook, which is located in Englewood.
- 2. Willow Tree Road** – The area near Willow Tree Road on the western side of Leonia, across from the entry and exit to the NJ Turnpike in Teaneck, experiences flooding from Overpeck Creek. Though the floodway does not cover a large number of properties, there are several commercial and industrial properties with at least a portion of their parcel affected.
- 3. Meadowview Court** – This area on the western end of the Borough adjacent to Sylvan Park experiences flooding from Overpeck Creek. The floodway includes several residential properties, all of which are townhomes within the Meadow View at Leonia Luxury Townhomes development.

One of the best resources for determining flood risk in a jurisdiction is Flood Insurance Rate Maps (FIRMs), which are produced by FEMA. The FIRM is the official map of a community on which FEMA has delineated both the special flood hazard areas (1% annual chance of flooding) and the risk premium zones applicable to the jurisdiction. The effective FIRM date

for Bergen County is August 28th, 2019, and is shown in Figure 1.1. The Preliminary FIRM was released for Bergen County on May 5th, 2017. The Preliminary FIRM was not changed and was adopted as the Effective Firm in 2019.

Current FEMA guidance uses the term extent as analogous to potential severity. The extent of the flood hazard in Leonia is relatively minor. The areas discussed above have experienced fairly shallow and low-velocity flooding at various times in the past, and in this case this is the best indicator of extent in the future. The most flood-prone areas of the jurisdiction can expect to experience flooding of a foot or two maximum (occasionally), with more frequent rain events causing a few inches of inundation at low spots, and those adjacent to culverts and stream channels. The current engineering design standard for the jurisdiction is a 25-year event (i.e. one with a 4% annual chance of occurring), so events more significant than that have the potential to inundate areas.

Leonia has 120 properties and 67 structures located in 100- year (1% annual) and 500-year (0.2% annual) floodplain. Although these figures offer some insight into the flood hazard in this jurisdiction, they are not particularly reliable as a risk indicator because in many cases structures and infrastructure (where the risk-producing impacts occur) are not located in the specific areas that are in the floodplain. Another potential indicator of the damage that could occur as the result of flooding events is to review the number of FEMA repetitive loss properties and the cumulative amount of money paid out for flood damaged properties. The Borough of Leonia has a relatively small number of repetitive loss properties and damage caused by repetitive flooding. In Leonia, there have been 398 total losses that have resulted in \$205,025 of total payments from the National Flood Insurance Program. There are currently zero repetitive loss properties in the Borough. It should be noted that these numbers were calculated prior to the final property loss numbers from the NFIP as a result of damage caused by Tropical Storm Ida.

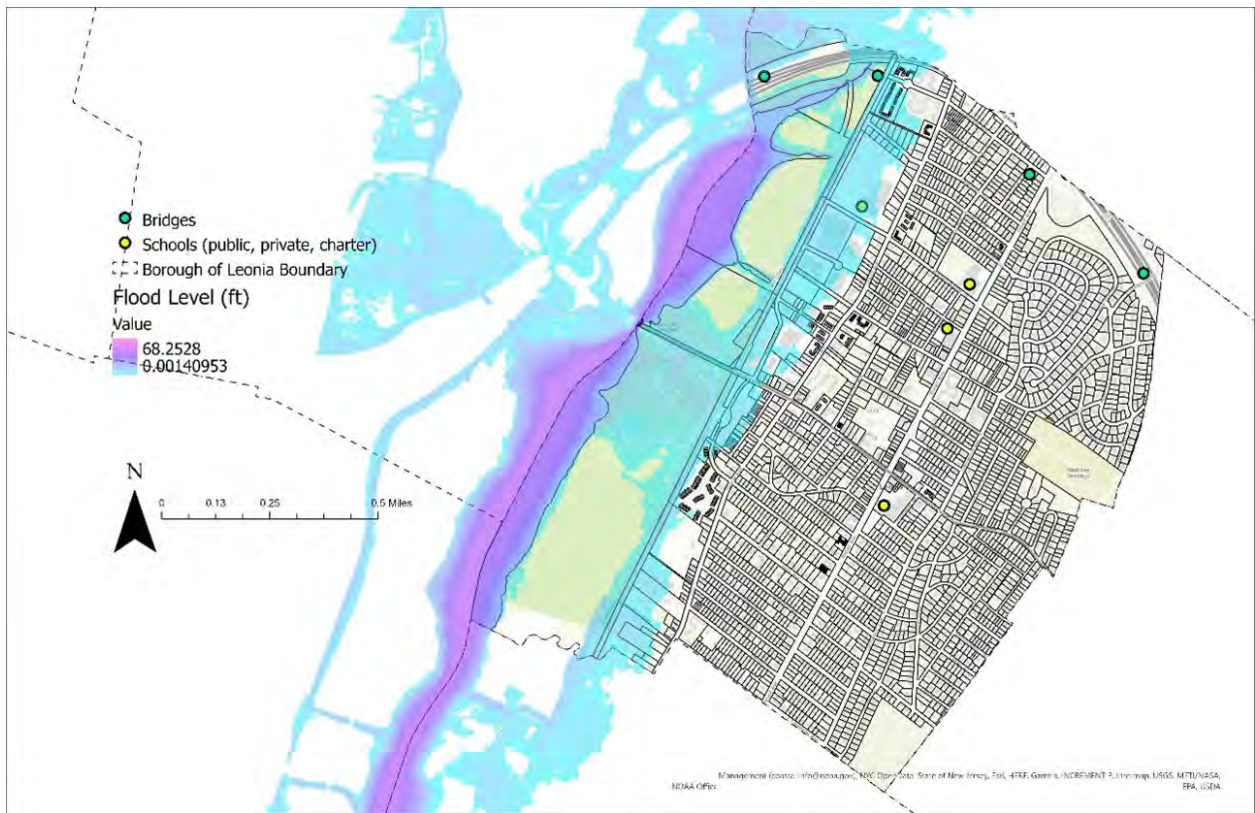


Figure 1.1: Bergen County HMP Flood Level Map

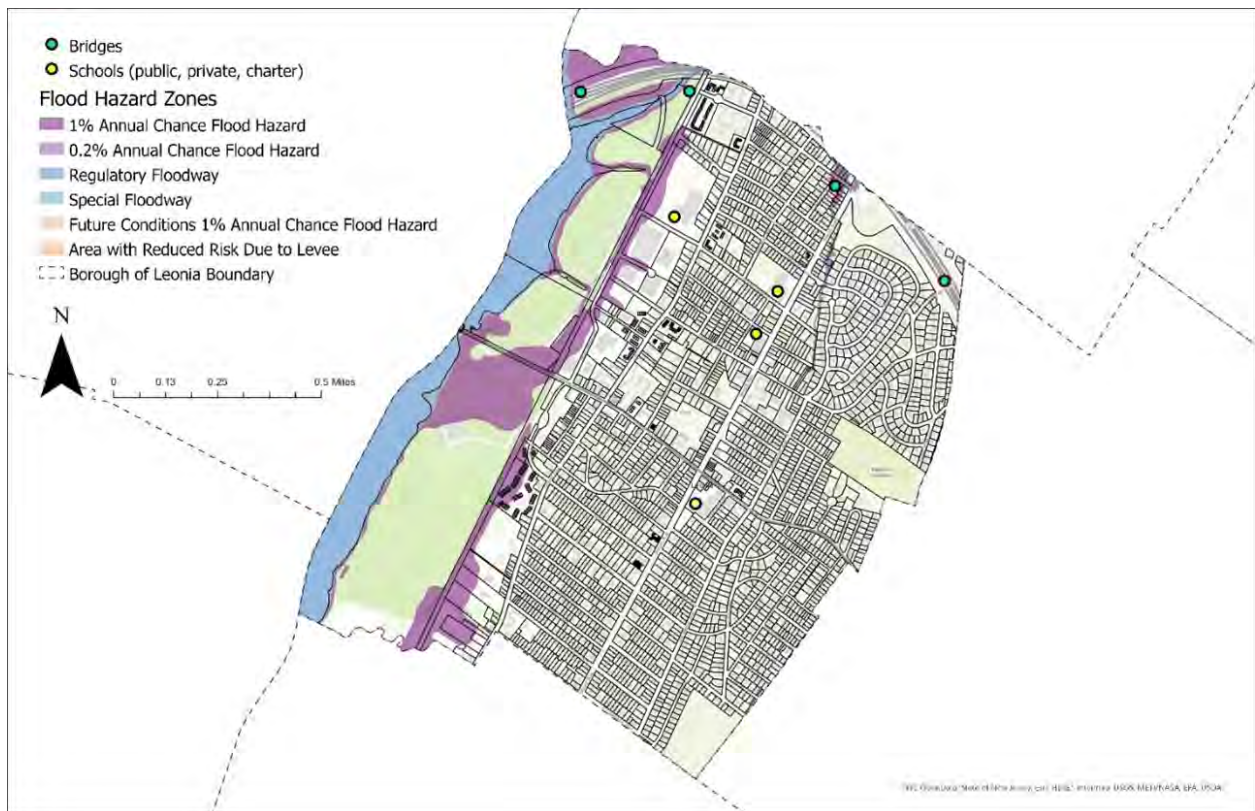


Figure 1.2: Overall Leonia Flood Zone Map



Figure 1.3: Broad Avenue Flood Zone

Figure 1.3 shows the affected properties in the Broad Ave Flood Zone in the northern portion of Leonia. The flood zone shows that several properties are entirely vulnerable to flooding, though most have only a small portion of their property within the flood zone. For many of the properties, this means they may experience flooding in their backyard.

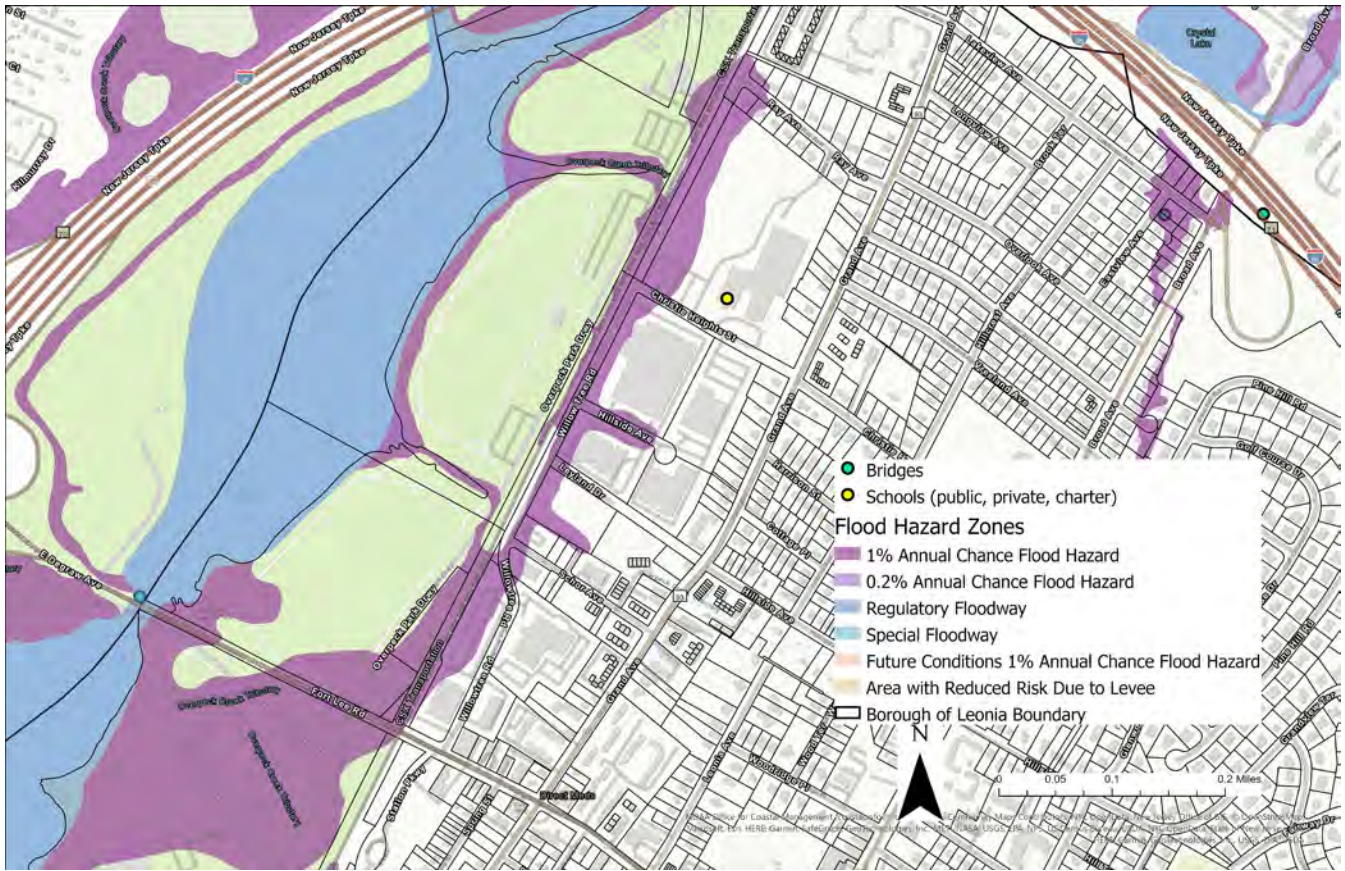


Figure 1.4: Willow Tree Road Flood Zone

The Willow Tree Road Flood Zone contains mostly open space in Overpeck Park, though this zone is important in that portions of Willow Tree Road and Fort Lee Road are within the flood zone. This piece of infrastructure is critical to reinforce as it is one of the main connections to Interstate 95. This will be discussed in greater detail in the **Evacuation Routes** section. Aside from this, the Willow Tree Road Flood Zone poses minimal damage risk as such on the properties that it does cover; there are few structures affected. However, one major structure that is affected by the flood plain in this area is the Leonia High School building. In recent times, the building has experienced flood damage where it previously had not due to the increasing intensity of storms. This was evidenced during the remnants of Hurricane Ida which caused damage to over 90% of the first floor of the high school and caused the district to have to postpone the first day of classes.



Figure 1.5: Meadowview Court Flood Zone

The Meadow View Court Flood Zone shows, compared to the other zones discussed, a higher potential for flood damage. The flood hazard area shows many townhouses well within the 1% annual flood chance area.



An important trend to note for future mitigation planning is the potential for sea level rise. Despite not being a coastal community, the map below details a projected two-foot sea level rise scenario. While the rise in the water level of Overpeck Creek and its tributaries does not show a significant impact on existing buildings, it is likely to increase the extent of the floodway beyond what the current FEMA data shows. Consequently, the efforts detailed in the **Mitigation Strategy** section for the area west of Grand Avenue become increasingly important.



Figure 1.6: Two-Foot Sea Level Rise Scenario. Source: NJFloodMapper

Build-out Analysis

Development Trends

As an older suburban community in the New York metropolitan area, Leonia is left with little vacant land available for development. The Existing Land Use Patterns section of this Plan identifies the little amount of vacant land in the Town has based on most recent property tax data.

Since 2008, the Borough has seen building permits issued for 61 new residential units, most of these in multifamily structures with some one- and two-family units. The development trends highlight the low amount of residential development in the Borough over the past decade-plus.

Number of Housing Units Authorized by Building Permits for New Construction

Year	1&2 Family	Multifamily	Total
2008	0	33	33
2009	0	0	0
2010	0	0	0
2011	1	0	1
2012	1	0	1
2013	1	0	1
2014	3	0	3
2015	0	0	0
2016	1	2	3
2017	2	0	2
2018	0	0	0
2019	0	12	12
2020	5	0	5
Total	14	47	61

Source: NJDCA Construction Reporter, Housing Units

Build-out Analysis

A Build-out analysis was performed as a part of the planning process for the Land Use Plan to understand potential impact that redevelopment, largely concentrated in the Grand Avenue and Fort Lee Road area, could impact the Borough. The build-out analysis projects the following increase in the number of residential units and commercial square footage over the lifetime of the Land Use Plan:

Parcel Area (Sq Ft)	# of Residential Units	Commercial Area (Sq Ft)
309,912	225	77,973

The Land Use recommendations that would affect future build-out in Leonia are concentrated in along the western end of the Borough. These areas, with some exceptions, are generally outside of any type of floodways although are located near them. The Borough intends to promote redevelopment projects that are located in areas outside of the flood zones and encourage the utilization of green stormwater infrastructure to improve the management of stormwater from current conditions. Additionally, the Borough intends to implement the actions detailed in the County’s HMP that would help to lessen the frequency and severity of flooding that occurs in the Willow Tree Road area to ensure that redevelopment projects that occur in the area will be created with sustainability and resiliency in mind. Impacts from extreme weather events such as flooding are already occurring in certain areas of the Borough, which may be attributed to the current land uses and inadequate mitigation efforts against flooding from local streams and waterways. The Borough’s updated stormwater regulations are a step towards mitigation. Any redevelopment will need to be compliant and will enhance stormwater management efforts. Recommendations made in this Plan pertaining to land use are intended to represent actions taken that would improve upon the current stormwater management situation in the areas west of Grand Avenue where flooding from extreme rainfall is being exacerbated by poor land use.

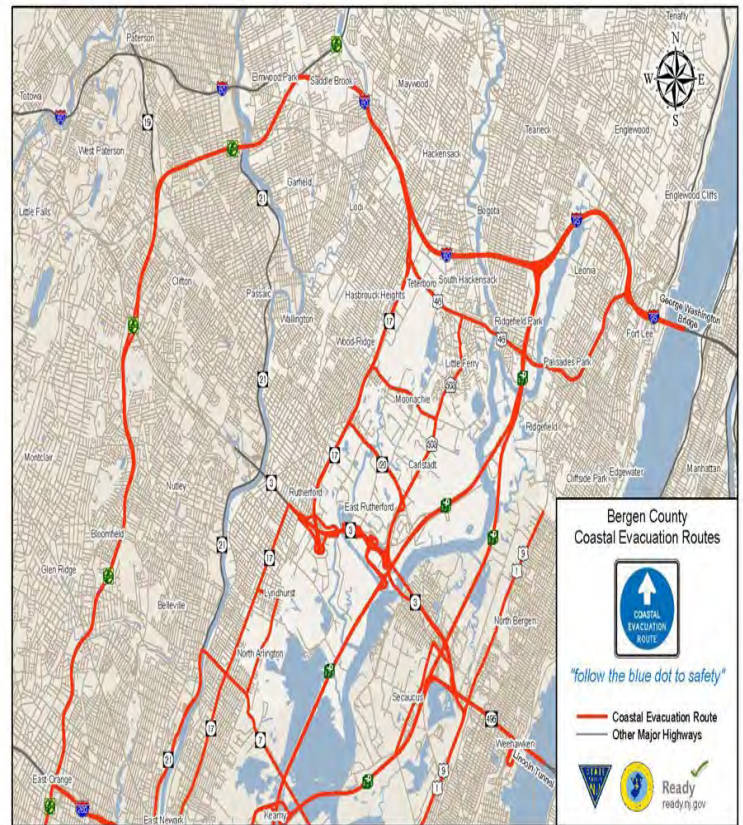
Given the little amount of vacant land existing in Leonia, most significant development activity would occur through redevelopment. The existing designated redevelopment areas of Leonia are all located outside of the current flood zones. As discussed earlier in this chapter, the Borough recently adopted a stormwater ordinance to comply with NJDEP’s new stormwater rules. As a result, it

is likely that new development that has to comply with these updated stormwater rules could improve stormwater drainage and lessen the chances of localized flooding in Leonia. This is especially true in the redevelopment areas where new development through a redevelopment plan that incorporates green stormwater infrastructure and the necessary public improvements to drainage and flood mitigation will result in an improved situation from what currently exists today.

Evacuation Routes

The New Jersey Office of Emergency Management identifies US Routes 46 Interstates 95 and 80, the New Jersey Turnpike, and the Garden State Parkway among other major roadways as the main evacuation routes for Bergen County (as shown in Figure 7). The evacuation routes in Bergen County are focused primarily on the communities between The Hackensack and Passaic Rivers. Leonia and several of its neighboring communities are not likely to experience much disruptive flooding as most of the area is outside of the designated flood zones. Local streets within the Borough are unlikely to be directly affected by sea level rise, flooding, and severe storm events, though some of the main routes do cross flood zones.

However, in the unlikely event of a severe storm, it is prudent that local roadways are clearly directed to the designated evacuation routes in Bergen County. Broad Avenue, a local roadway that runs north-south through the center of the Borough, is the main route out of Leonia to I-95 that leads to I-80. This roadway does not cross over any identified flood zones. Fort Lee Road, a County roadway running east-west through the center of Leonia, is another major route leading to the designated evacuation route to I-95. However, this route crosses a major floodway from Overpeck Creek. The Borough may want to consider working with Bergen County to ensure that the bridge will be able to withstand any extreme weather event requiring evacuation out of Leonia. Going eastbound, Fort Lee Road is unaffected by any major floodways due to its increased elevation, which would ensure safe passage to US-46 in the event of severe weather requiring evacuation out of the Borough.



Source: New Jersey Office of Emergency Management

Emergency Facilities

In Leonia, the critical facilities for emergency response include a volunteer fire station, a police station, and gas stations. Borough Hall, the central location of the Office of Emergency Management, is located at 312 Broad Avenue in the center of Leonia.

- Police Department at 1 Wood Park

The Fire Department in Leonia is volunteer-based with staff members including a Fire Chief, Deputy Chief, Captain, and five Lieutenants.

- Volunteer Fire Department at 1 Borough Place

Potential Emergency Services

The Homeland Infrastructure Foundation – Level Data (HIFLD) is a subcommittee within the Department of Homeland Security (DHS) that is responsible for collecting geospatial data from all levels of government, processing it for uniformity and quality, and sharing with the end user. According to the emergency shelter data, there are two locations within Leonia that are potential shelters in case of emergency. These are facilities identified by either FEMA or the American Red Cross as places that can potentially house people in case of a disaster or emergency. The two locations are the Leonia High School and Leonia Middle School buildings.

Gas Stations

Gas service stations are an important resource in case of power outage and during other emergency events. There are two gas stations located in Leonia with several additional gas stations located across the municipal border in neighboring Englewood, Fort Lee and Palisades Park. The two gas stations in Leonia are located near the center of the Borough along Broad Avenue.

Leonia Critical Facilities

The 2020 Bergen County HMP identified the following critical facilities in Leonia.

Facility	Address
Leonia High School	100 Christie Heights St
Borough Hall	312 Broad Ave
Leonia Recreation/Shelter	370 Broad Ave
Leonia Retirement Housing Corporation	270 Glenwood Ave #1
Leonia Middle School	500 Broad Ave
Anna C. Scott Elementary School	100 Highland Street
St. John's School	260 Harrison Street
Leonia Fire Department	312 Broad Ave
Leonia Police Station	1 Wood Park
Leonia Public Library	227 Fort Lee Road

Potential impacts of natural hazards on components and elements of the Master Plan

The Borough intends to promote redevelopment projects that are located in areas away from the flood zones. The recommendations of the Land Use element focus on development along Broad Avenue and in the areas around the redevelopment sites, which are located away from the recognized flood hazard areas. Additionally, the recommendations are intended to promote resiliency and ensure that future development will be able to withstand significant damage that affects the older built out areas along known floodways. In fact, it is likely that the recommendations in combination with recently passed Borough ordinances such as the new stormwater management ordinance and ordinances around solar panels are likely to help mitigate any potential impacts of future extreme weather events. Additional recommendations are proposed below to deal directly with efforts to mitigate any potential harm resulting from natural hazards.

Borough of Leonia Mitigation Strategy

This section contains the strategies and recommendations that are intended to reduce or avoid risks associated with natural hazards. These recommendations are consistent with and in addition to the mitigation strategies identified by Bergen County in the 2020 Hazard Mitigation Plan. Refer to **Appendix 29** of the **Bergen County Hazard Mitigation Plan** for the County's mitigation strategies for the Borough.

- Work with the school district to deepen drainage ditch between the railroad and Willow Tree Road to lessen the frequency and severity of flooding at Leonia High School.
- Coordinate with NJDEP and Bergen County on dredging of Moore Creek.
- Purchase and install flood gates at Leonia High School to prevent flooding.
- Acquire, elevate, or floodproof structures in flood-prone areas, with a focus on repetitive loss properties.
- Attempt to balance growth with the inclusion of green spaces including of trees and other vegetative cover.
- In the event of extreme future drought, consider a moratorium of watering of lawns and washing of cars among other non-essential uses and setting up of water conservation measures such as rain collection systems are another way of improving the efficient use of water.

- Borough should ensure that there is adequate green space and vacant area where snowfall during a winter storm can be deposited from Borough roadways by the Borough's DPW.
- Maintain adequate roadway and sidewalk widths to have enough area for snowplows to be able to deposit snow from the main driving area of the roadway in the event of a winter storm.
- Adhere to the most up-to-date building codes to ensure the highest quality of construction.
- Maintain an active tree inventory that includes an assessment of tree conditions and a prioritization list for trees that should be removed given their potential to cause damage to utilities and structures in a high wind event.
- Where feasible, the Borough should move utilities underground to make them less susceptible to outages in high wind events. The Borough should also have backup generators for all critical facilities.
- Ensure that all critical facilities have backup generators
- Work with Bergen County to ensure that the bridge that crosses this floodway will withstand an extreme weather event that requires evacuation out of Leonia.
- A policy statement regarding consistency, coordination, and integration of the Vulnerability Assessment with various existing or proposed plans

A policy statement regarding consistency, coordination, and integration of the Vulnerability Assessment with various existing or proposed plans

Leonia participated in Bergen County's 2020 Hazard Mitigation Plan. It is the Borough's intention to continue to prepare for future hazards in a manner consistent with the 2020 HMP. The Borough's Master Plan is intended to be consistent with and effectuate the Bergen County 2020 HMP.

Land Use Element Recommendation Plan

Directions

“Check off” a completed recommendation and mark the year of completion as a way to measure progress.

Short Term: complete in 1-2 years; **Mid Term:** complete in 3-5 years; **Long Term:** complete in 10+ years.

Land Use Plan

	<i>Recommendation</i>	<i>Implementing Party</i>	<i>Timeframe</i>	<i>Completed</i>	<i>Year Completed</i>
Land Use					
1	Review existing land-use patterns and their compatibility with the zoning map, and make zone boundary changes as needed	Planner, Planning Board	Short-term		
2	Change designations of zoning districts to better reflect the permitted uses in each district (i.e. R-1 for low-density, single-family residential, MF-1 for multifamily residential, etc.)	Planner, Planning Board, Borough Council	Short-term		
3	Use redevelopment tools on existing underutilized sites, including lots on Grand Avenue and Broad Avenue	Borough Council, Planning Board, Planner	Short- to Medium-term		
4	Update Chapter 290 of the Municipal Code as needed	Planner, Borough Council	Ongoing		
5	Amend Leonia Municipal Code to coincide with changes to the Municipal Land Use Law (MLUL)	Planning Board, Planner, Borough Council	Ongoing		
6	Utilize a Payment in Lieu of Taxes (PILOT) agreement for the existing and future redevelopment areas that will help to encourage a reuse of the site that could allow for greater intensity uses and work towards meeting the Borough’s fair share of affordable housing requirements	Planning Board, Borough Council	Short- to Medium-term		
7	Adopt a redevelopment plan for the Grand Avenue/ Fort Lee Road redevelopment area	Planning Board	Short-term		
8	Rezone Overpeck Park area as Parkland rather than the current A2-Single Family Zone	Planning Board, Borough Council	Short-term		
9	Update regulations with the issuance of liquor licenses to make it easier for potential businesses to gain and use licenses	Borough Council	Short-term		
10	Develop programs that can provide services for seniors continuing to live in Leonia	Borough Administrator	Ongoing		
Residential					
11	Analyze the bulk standards in single-family zone and determine whether action should be taken to redefine bulk standards to preserve neighborhood character	Planner, Planning Board	Short-term		
12	Extend the B Multifamily Zone north and south along Grand Avenue	Planning Board, Borough Council	Short- to Medium-term		

Land Use Plan

	<i>Recommendation</i>	<i>Implementing Party</i>	<i>Timeframe</i>	<i>Completed</i>	<i>Year Completed</i>
13	Extend B Multifamily Zone north along Broad Avenue	Planning Board, Borough Council	Short- to Medium-term		
14	Have the B Multifamily Zone include the Spring Street area	Planning Board, Borough Council	Short- to Medium-term		
15	Review lot sizes in the Multifamily zone and consider changes to the code that would encourage the consolidation of lots	Planner, Planning Board	Short-term		
16	Develop strategies to allow for a greater housing typology with the focus on aging-in-place policies to allow seniors to continue to live in Leonia	Planner, Planning Board, Borough Council	Short- to Medium-Term		
17	Monitor adjacent municipal development trends along the border with Leonia and adopt new land use policies that promote neighborhood preservation while supporting controlled, sustained growth within the Borough	Planner, Planning Board, Borough Council	Medium- to Long-Term		
18	Create definitions for “professional business” and “home occupation”	Planner, Planning Board, Borough Council	Short-Term		
19	Study the potential for allowing professional businesses and home occupations in all areas of the residential districts	Planner, Planning Board, Borough Council	Short-Term		
20	Consider developing new regulations for the storage of commercial and recreational vehicles and boats	Planner, Planning Board, Borough Council	Short-Term		
Commercial and Business Zones					
21	Conduct an investigation study to determine the Broad Avenue corridor as an Area in Need of Rehabilitation to allow for façade improvements and property upkeep as well as design standards for signage	Planner, Planning Board, Borough Council	Medium-Term		
22	Review and revise parking regulations to allow for greater investment in the Borough’s commercial corridors	Planner, Planning Board	Short- to Medium-Term		
23	Consider other regulatory changes to the zoning along Broad Avenue to incentivize new development	Planner, Planning Board, Borough Council	Short- to Medium-Term		
24	Monitor activity in the OB Zone and consider taking regulatory action to improve underutilized properties in the zone	Planner, Planning Board	Ongoing		
25	Monitor commercial cannabis activity in other municipalities and study the potential for allowing certain classes of establishments in the Borough	Planning Board, Borough Council	Short- to Medium-Term		
Land Use Ordinance					
26	Develop and implement new bulk controls such as building coverage limits and enhanced use regulations to strengthen existing land use pattern against the intrusion of incompatible land uses in its single-family neighborhoods	Planner, Planning Board, Borough Council	Medium-Term		

27	Review lot sizes in the Multifamily zone and adjust regulations to become more compatible with the size of the lots in the district	Planner, Planning Board, Borough Council	Medium-to Long-Term		
28	Develop a Floor Area Ratio that limits the development of overly large dwellings on small lots	Planner, Planning Board, Borough Council	Short- to Medium Term		
29	Analyze the Borough's steep slope areas to find if issues regarding development in steep slopes are still relevant	Planner, Planning Board	Short-Term		
Vulnerability Assessment					
30	Work with school district to deepen drainage ditch between the railroad and Willow Tree Road	Borough Administrator, Board of Education	Short		
31	Coordinate with NJDEP and Bergen County on dredging of Moore Creek	Borough Administrator, NJDEP, Bergen County	Short to Medium		
32	Purchase and install flood gates at Leonia High School	Borough Administrator, Board of Education	Short to Medium		
33	Acquire, elevate, or floodproof structures in flood-prone areas	Borough Administrator, Borough Council	Medium to Long		
34	Ensure adequate green spaces within new development	Planning Board	Ongoing		
35	In the event of extreme future drought, consider a moratorium of watering of lawns and washing of cars among other non-essential uses and setting up of water conservation measures such as rain collection systems are another way of improving the efficient use of water.	Borough Council	Ongoing		
36	Ensure that there is adequate green space and vacant area where snowfall during a winter storm can be deposited from Borough roadways by the Borough's DPW.	Planning Board	Ongoing		
37	Maintain adequate roadway and sidewalk widths to have enough area for snowplows to be able to deposit snow from the main driving area of the roadway in the event of a winter storm.	Planning Board	Ongoing		
38	Adhere to the most up-to-date building codes to ensure the highest quality of construction.	Planning Board	Ongoing		
39	Maintain an active tree inventory that includes an assessment of tree conditions and a prioritization list for trees that should be remove given their potential to cause damage to utilities and structures in a high wind event.	Shade Tree Commission	Ongoing		
40	Where feasible, the Borough should move utilities underground to make them less susceptible to outages in high wind events.	Borough Administrator	Medium to Long		
41	Ensure that all critical facilities have backup generators	Borough Administrator	Short		

42 Work with Bergen County to ensure that the bridge that crosses this floodway will withstand an extreme weather event that requires evacuation out of Leonia.

Borough Administrator,
Borough Council

Short to
Medium

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Introduction

Transportation is a critical component for the quality of life for Leonia residents. An efficient system ensures residents can travel to work, school, and services reliably and safely; that businesses can get their goods for purchase, or manufacturers can ship their goods as well. The Borough has a mature transportation network, generally built out over the past 100+ years. While the municipality has evolved from farming to a suburban community, roadways like Grand Avenue, Fort Lee Road and Broad Avenue have retained their form and function providing local and regional mobility. Other roads gradually filled in and more homes were developed, either in a grid-like network, or conforming to the natural landscape which includes some changes in topography, especially along the eastern end of the Borough. Leonia's location in southeastern Bergen County, a mere five miles from New York City and surrounded on its northern border by the New Jersey Turnpike that leads to the George Washington Bridge poses increasing challenges to a safe and efficient transportation system. Well thought out plans, involving multiple modes of transportation, with the understanding of their impact on land use, economic development and sustainability are needed to improve transportation and in turn the high standard of living in Leonia.

In the Borough of Leonia, residents travel mostly by automobile. However, a relatively high number of workers who live in the Borough take public transit for their commute. Plans at both the State and County levels have called for increasing public transit options in the Borough, particularly the northern extension of the Hudson-Bergen Light Rail. This expansion, which has been in talks for over a decade now would give residents reliable access to job centers in Hudson and Bergen Counties with connecting options to New York City. The addition of a light rail line through the Borough would also present greater opportunities for transit-oriented development (TOD) as discussed in the Land Use element. During the Master Planning process, residents expressed significant interest in the expansion of the light rail system into the Borough as well as the Borough making improvements to bicycling and walking, particularly as they relate to accessing Leonia's downtown commercial district and recreational opportunities in Overpeck County Park. The Circulation Element of the Master Plan inventories Leonia's transportation assets, identifies potential issues and opportunities for the system, and advances strategies to enhance the community's transportation network while recognizing the connection between transportation, land use and economic development.

Goals

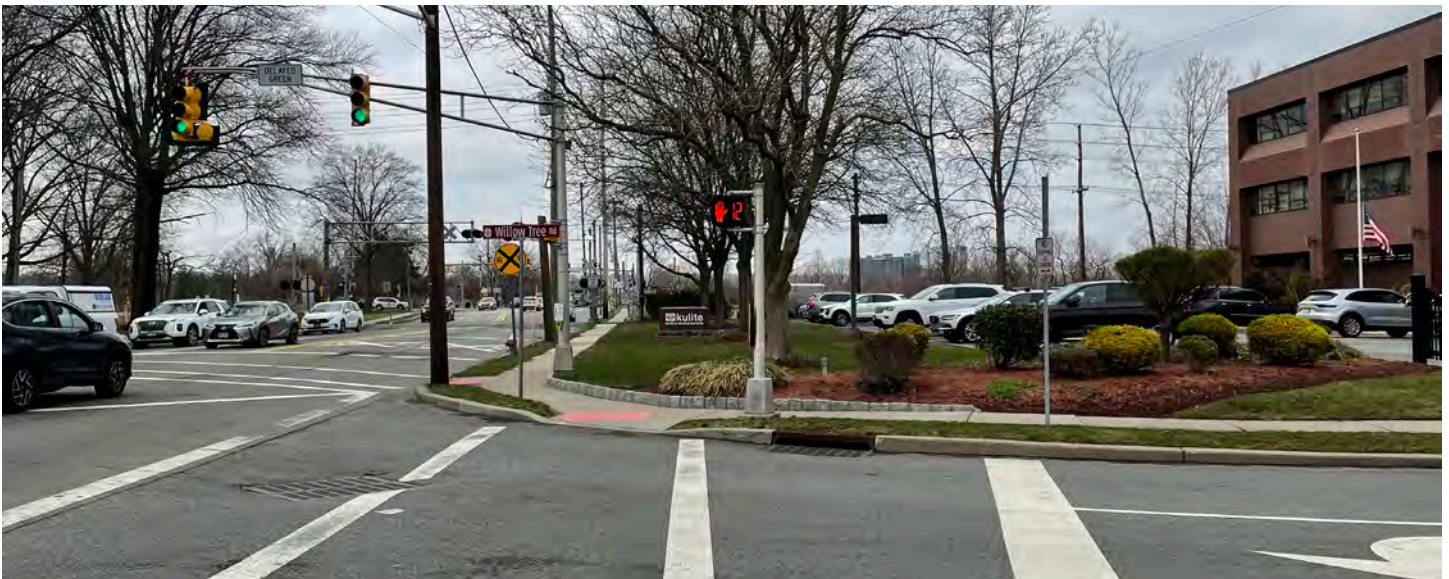
1. Provide a safe and efficient transportation system.
 - a. Provide adequate capital funding for roads and associated projects.
 - b. Identify and address roadway safety issues.
 - c. Coordinate with Bergen County and NJDOT to implement projects on roads under their jurisdiction.
 - d. Promote traffic calming in key locations to discourage cut-through traffic.
2. Encourage mobility by all modes.
 - a. Coordinate with Bergen County and NJ Transit to expand and diversify the types of public transportation available to Borough residents.
 - b. Where they can be accommodated, develop new bicycle and pedestrian facilities along Borough roadways.
 - c. Improve pedestrian safety at signalized intersections and at other areas of safety concern.
 - d. Pursue grants to finance transportation improvements.
3. Strengthen connections to the Borough's historic assets, parks and community facilities.
 - a. Develop programs which encourage residents to walk and bike locally to key locations in the Borough.
 - b. Develop facilities and routes that enhance connectivity to Borough facilities.
 - c. Coordinate with Bergen County on greenway connections to regional points of interest.

How the Borough of Leonia Travels

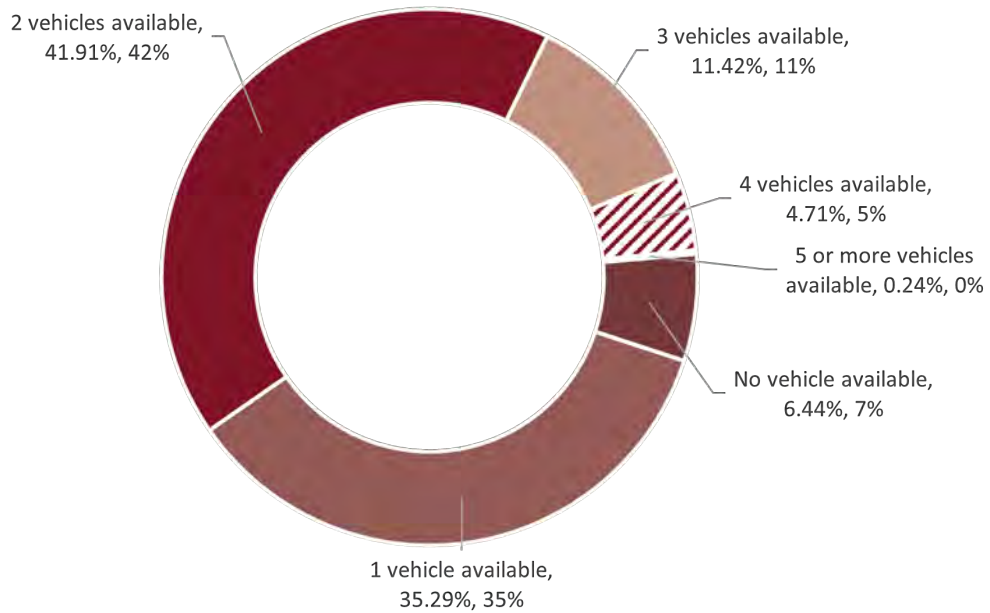
United States Census data provides important insight into the mobility needs of Leonia's residents. This data may not indicate the usage or reliance on certain modes of transportation outside of commuting to work. The Census also does not reflect changes in mode of transportation. So, while a worker 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 Borough travel.

Car Ownership

Access to a vehicle is a much more common for households in the Borough of Leonia compared to Bergen County and New Jersey. Only about 6.4% of Leonia households lack access to a vehicle, which is slightly less than the percentage of Bergen County (8.3%) and New Jersey (11.5%). About 35% of Leonia households have one automobile available, which is roughly the same as the County and State percentages. The number of Leonia households that have access to two vehicles (41.9%) is slightly higher than the percentage of County households (39.1%) and New Jersey households (36.1%). Despite its close proximity to New York City and the quality access to public transit, Leonia households have high levels of car ownership.



Leonia Vehicle Ownership - 2019



Modes of Transportation

Given that households in Leonia have more access to an automobile compared to both the County and the State, it is unsurprising that the predominant mode of transportation for workers (4,543) is the automobile. Almost three-quarters (74.6%) either drive to work alone or carpool with others. Carpooling is a much more common mode of transportation in the Borough (14.8%) compared to the County (7.2%) and the State (8.0%). Given the relatively high carpooling numbers, the share of those workers who drove to work alone (59.9%) is roughly 10% lower than the Bergen County percentage (68.4%), and just over 12% lower than the New Jersey percentage (71.2%).

The second most common mode for commuting was public transportation at 16.6%. This mode was slightly more common among Leonia workers compared to Bergen County's workers (15.7%) and across New Jersey (11.7%). Given that there is no rail service in the Borough, it is not surprising that bus usage

was the most popular form of public transportation (13.9%), which was slightly higher than the Bergen County percentage (11.2%) and New Jersey percentage (6.1%). It is likely that the much discussed Northern Expansion of the Hudson-Bergen Light Rail with a station in Leonia would increase the amount of commuting by public transportation as it would provide a greater diversity of public transit options. However, until the expansion is actually built, the Borough should focus on improving bus transit reliability and access as a way to improve public transportation in Leonia. Residents of Leonia also tend to walk less to work (1.8%) compared to other workers in the County and State. Given, lack of commercially zoned areas in the Borough, this is not surprising. Additionally, Leonia residents are less likely to work from home (4.6%) compared to the County and State percentages. The Borough should monitor how work from home evolves as many residents who previously never worked from home were forced to work from home due to the COVID-19 pandemic.



Places of Work

Nearly 33% of all workers from Leonia work outside of New Jersey compared to 24% of Bergen County workers, which indicates that nearly one-third of Leonia workers commute to New York City for employment. Of the 1,477 people who work outside of New Jersey, 44.6% take public transportation.

These percentages indicate that Leonia workers are reliant on good interstate public transportation service and facilities. Those who work in New Jersey are much more likely to drive either alone or carpool.

Commute Time

The average travel time to work for Leonia workers is 33.6 minutes. This is slightly higher than the average travel times for Bergen County and New Jersey workers. Almost one-quarter of Leonia workers have a commute that takes longer than one hour, slightly higher than the County percentage and much higher than the State percentage. At the same time, Leonia workers have a higher share of short commutes (less than 15 minutes) at 24.5% compared to that of the County (19.8%) and the State (20.9%). It is unclear why this is as very few Leonia workers actually work in the Borough. About 27% of Leonia workers have a commute between 20 and 34 minutes. This is lower than both the County (32.9%) and the State (32.6%) percentages.



Roadway Jurisdictions State

Interstate 95

Interstate 95 (I-95) is an Interstate Highway that connects the entire east coast of the United States from Maine to Miami. The New Jersey portion of I-95 constitutes the New Jersey Turnpike and starts from the George Washington Bridge just east of Leonia to the Pennsylvania border in Florence Township. Despite the highway arching along the northern border of the Borough, there is no direct entrance ramp to get onto I-95 in Leonia. Residents need to travel north on Broad Avenue into Englewood if they wish to travel on I-95 South and can either enter I-95 North via the entrance ramp in Teaneck or via US-46 in Fort Lee. Exit 71 on I-95 North provides access into Leonia via Broad Avenue.

Grand Avenue (Route 93)

Despite being a state highway, NJ Route 93 is a relatively low-speed road with a 30-mph speed limit. In Leonia, NJ-93 is Grand Avenue, which is a two-lane roadway that consists of primarily residential use, both single- and multi-family. There are some commercial uses, especially near the intersection of Grand Avenue and Fort Lee Road. There are additional commercial and office uses from the Fort Lee Road intersection south to the Palisades Park border.

Bergen County's visioning summary for the County Master Plan identified Grand Avenue in Palisades Park as an area with a high number of pedestrian involved accidents. While these pedestrian involved accidents were located in Palisades Park and not Leonia, nevertheless, the Borough should be cognizant of this finding identified in the County's Master Plan.

County Roads

Fort Lee Road (County Route 56)

County Route 56 is a heavily trafficked County roadway with a relatively low speed limit of 25 mph. In Leonia, Route 56 is Fort Lee Road, which for all of the area east of Grand Avenue is a two-lane roadway. This area consists of a mix of single- and multi-family residential use as well as commercial and public uses. To the west of Grand Avenue, Fort Lee Road is a four-lane roadway with commercial uses along both sides of the road. This area of the municipality is designated as an Area in Need of Redevelopment. Part of the intention of the designation is to incentivize roadway safety improvements and pedestrian infrastructure enhancements.

Municipal Roads

All other roads are owned and maintained by the Borough of Leonia. The Borough should ensure its roads are well maintained and in a good state of repair.

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 surrounding land uses 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 urban areas. The interstate in the Borough of Leonia is I-95, which provides access to New York City via the George Washington Bridge.

Freeways/Expressways

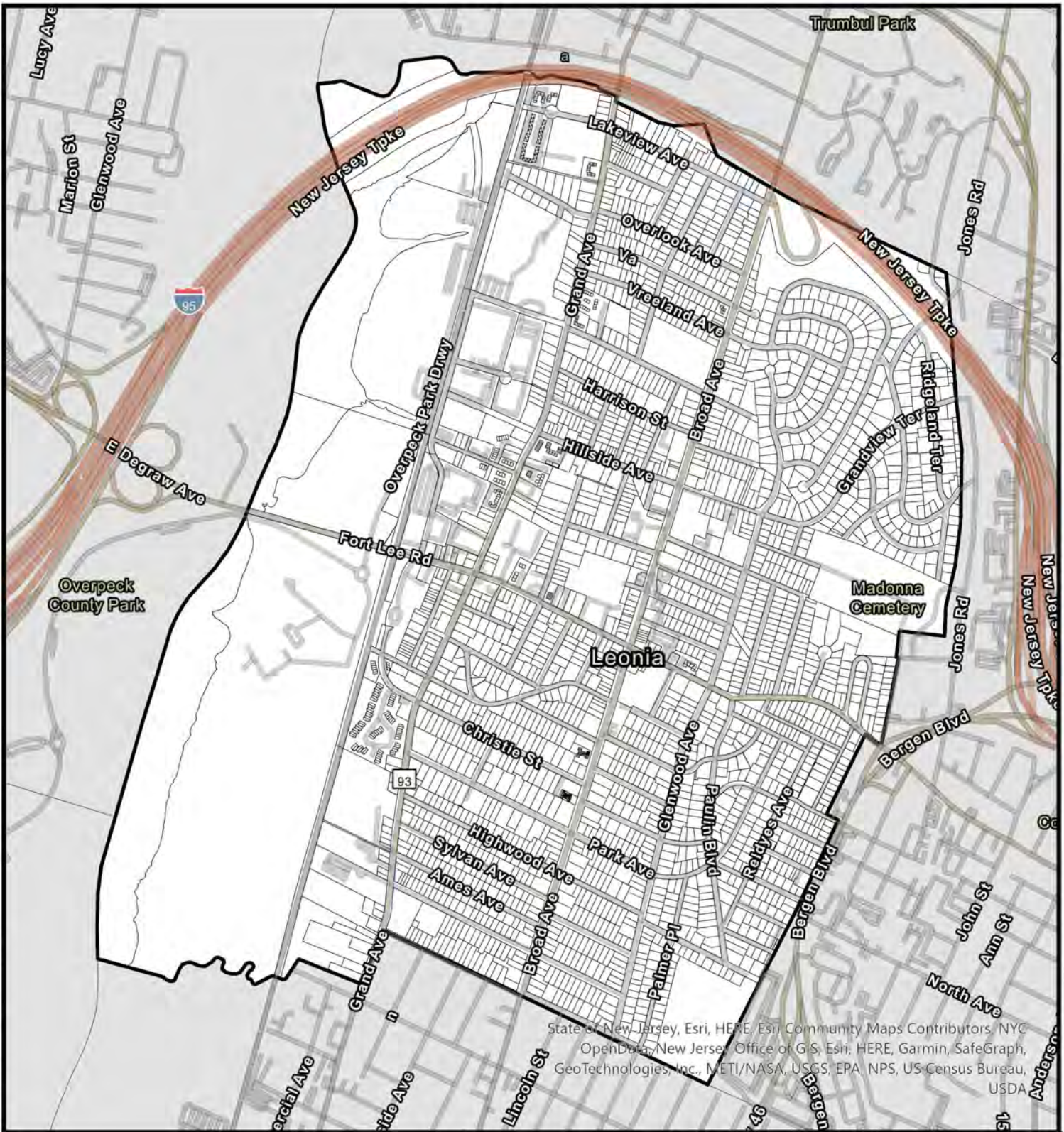
Freeways and expressways serve a purpose similar to that of interstates. These roads are intended to provide high levels of mobility, have limited access via ramp locations, and are not intended to directly serve adjacent land uses. There are no freeways or expressways in Leonia.

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. State Route 93 (Grand Avenue) is classified as a principal arterial in Leonia.

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. In the Borough of Leonia, Broad Avenue and Fort Lee Road are classified as minor arterials. Broad Avenue



State of New Jersey, Esri, HERE, Esri Community Maps Contributors, NYC OpenData, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

-  Parcels
-  Leonia Boundary
-  Surrounding Municipalities

0 0.13 0.25 0.5 Miles



Borough of Leonia

Road Map

H	2	architects + engineers	119 Cherry Hill Road #110 Parsippany, NJ 07054 862-207-5900 www.h2m.com
M			

is Borough-owned while Fort Lee Road is a Bergen County roadway.

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.” All Major Collectors are Borough-owned and include Glenwood Avenue, Hillside Avenue and Grandview Terrace.

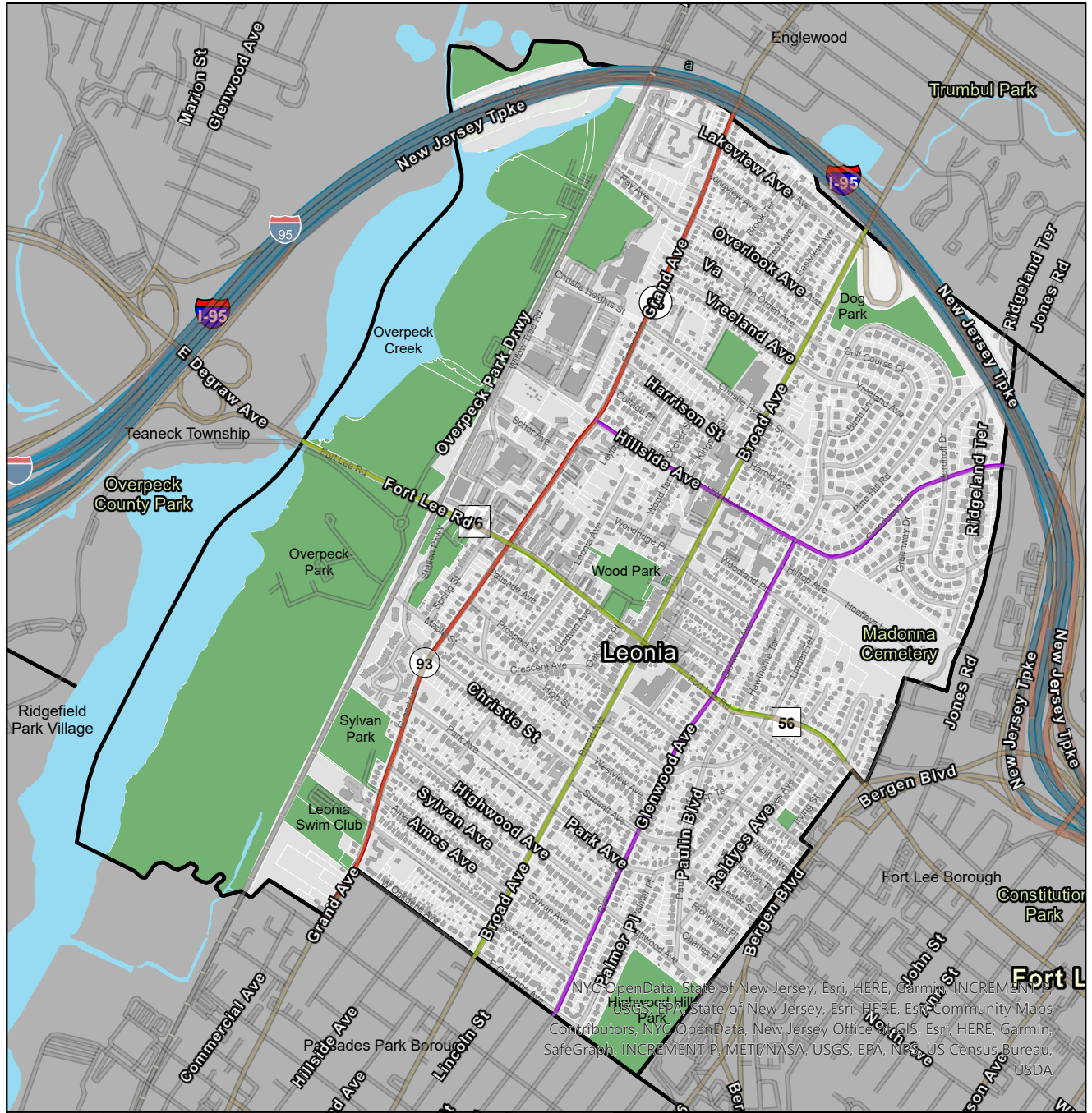
Minor Collectors

Compared to major collectors, minor collectors may have less travel lanes than major collectors, lower traffic volumes, and are shorter connections between local roads and arterials. There are no roadways classified as minor collectors in the Borough.

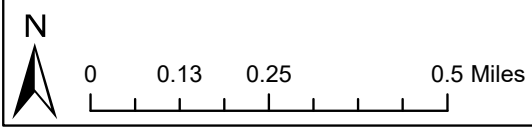
Local Roads

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.





- Interstate
- Major Collector
- Minor Arterial
- Other Principal Arterial



Borough of Leonia

FHWA Classification Map

<div style="background-color: #76923c; color: white; padding: 5px; display: inline-block;">H</div> <div style="background-color: #4f7942; color: white; padding: 5px; display: inline-block; font-size: 2em; margin: 0 5px;">2</div> <div style="background-color: #2e5496; color: white; padding: 5px; display: inline-block;">M</div>	architects + engineers	119 Cherry Hill Road #110 Parsippany, NJ 07054 862-207-5900 www.h2m.com
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NYC OpenData, State of New Jersey, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, NPS, US Census Bureau, USA

Existing Conditions

Public Transportation Rail

The Borough of Leonia currently does not have rail service of any type despite its location near New York City. Plans have been in the works for over ten years of a northern extension of the existing Hudson-Bergen Light Rail system that is operated by NJ Transit. The northern extension plans would extend the line that currently ends in the Township of North Bergen in Hudson County for ten miles up to the Englewood Health hospital in neighboring Englewood. The line would utilize the existing freight line used by CSX with plans for the Leonia station to be located in the Fort Lee Road/Overpeck Park area as shown in the map below. The extension of the light rail line would give residents an added form of alternative transportation to employment centers in Jersey City, Hoboken and Englewood as well as connections to transit lines into New York City.



The HBLR has been an extremely popular mode of transportation in Hudson County with ridership increasing by 12.8% since 2015. It is likely that the extension into Bergen County would have a similar effect. The added line would likely help to reduce roadway congestion in the Borough and create opportunities for transit-oriented development in the Grand Avenue area of the Borough. However, little action has been taken in recent years as a funding formula for the project's estimated \$2 billion price tag has yet to be agreed upon as well as an environmental study completed by the Federal Transit Authority (FTA). NJ Transit is still committed to completing the project, but it remains to be seen when the line will ultimately be constructed. In late 2021, the federal government passed legislation aimed at investing in the nation's infrastructure which could ultimately trickle down to funding for the northern extension of the HBLR if it were to pass. The Borough should press officials both locally and at the state level to support funding opportunities for the HBLR extension.

NJ Transit Bus

Despite not having rail access to New York City, Leonia is still well serviced by public transit because of its bus service. There are five (5) bus routes that have stops in Leonia. All of the bus routes through Leonia travel along either Fort Lee Road or Broad Avenue. As the above map shows, almost all of the Borough is within a one-quarter mile distance from a bus stop, indicating that it is easy for Leonia residents to walk to and use this form of public transportation to get to their destination. The Borough should continue to work with NJ Transit to make sure that residents are able to have reliable access to employment and educational centers in New York City and Bergen County. Leonia should also work with County and State partners to expand bus services such as the proposed Bus Rapid Transit (BRT) lines. The following table details each bus route in Leonia:

County	Location	Route 166	Route 182	Route 751	Route 755	Route 756
Bergen	NYC (Port Authority)	X				
	NYC (GWB Bus Terminal)		X			
	Fort Lee	X	X	X	X	
	Teaneck	X	X	X	X	X
	Bogota		X	X	X	
	Hackensack		X	X	X	X
	Leonia	X	X	X	X	X
	Dumont	X				
	Bergenfield	X				X
	Tenafly	X				
	Englewood	X				X
	Ridgefield Park	X		X		
	Paramus			X	X	X
	River Edge			X	X	X
	Edgewater			X	X	
	Cliffside Park			X		
	New Milford					X
Hudson	North Bergen			X		

- Route 166 (Cresskill-Bergenfield-New York)** – The Route 166 bus runs north-south and takes passengers from Leonia to the Port Authority Bus Terminal in Manhattan. There are 24 stops in Leonia that are all located on Broad Avenue. The route has 14 inbound stops and 10 outbound stops and is one of the most heavily used bus routes in all of New Jersey with a projected average of 13,198 daily trips in fiscal year 2019, marking an 11.6% increase in trips since 2015. The total trip duration for this route from Leonia to the Port Authority takes approximately 37 minutes.
- Route 182 (Hackensack-New York GWB)** - The Route 182 bus goes from the Hackensack Bus Terminal to the George Washington Bridge Bus Terminal in Upper Manhattan. There are 12 stops in Leonia that are all located on Fort Lee Road. The route has six inbound and six outbound stops. The Route 182 bus is another popular bus route with an average projected daily ridership of 1,021 in 2019, a 10.5% increase since 2015. The total trip duration for this route from Leonia to the GWB Bus Terminal takes approximately 22 minutes. Commuters can then take the A Train to arrive at places of employment in Manhattan.
- Route 751 (Paramus-Cliffside Park-Edgewater)** - The Route 751 bus goes from Bergen Community College to the Edgewater Commons Mall. The route travels on Fort Lee Road and Broad Avenue. The route has 14 stops with seven inbound stops and seven outbound stops. NJ Transit has contracted the amount of service on this route, which has resulted in a significant reduction in daily trips. The total trip duration for this route is approximately 85 minutes.
- Route 755 (Paramus-Fort Lee-Edgewater)** – The route 755 bus takes riders from Bergen Community College to Edgewater Commons Mall. The route goes east and west through Leonia along Fort Lee Road. There are six outbound stops and six inbounds stops in Leonia. NJ Transit has contracted the amount of service on this route, which has resulted in a significant reduction in daily trips. The trip duration from Leonia to the Edgewater Commons Mall is approximately 25 minutes and approximately 55 minutes to Bergen Community College.
- Route 756 (Englewood Cliffs-Fort Lee-Paramus)** – The Route 756 bus travels from

Palisades State Park in Englewood Cliffs to Bergen Community College. The route travels along Fort Lee Road from the east and heads north along Broad Avenue. There are six stops on Fort Lee Road with three inbound and three outbound stops while there are 14 stops on Broad Avenue with seven inbound stops and seven outbound stops. NJ Transit has contracted the amount of service on this route, which has resulted in a significant reduction in daily trips. The total trip duration is 57 minutes.

Rockland Coach

Rockland Coach is a private transit provider that provides another commuting option to Leonia commuters traveling to New York City. The route for Rockland Coach buses travels along Grand Avenue and arrives at the Port Authority Bus Terminal. The trip from Leonia takes between 30 and 45 minutes depending on traffic conditions.

Public Transit Facilities

The quality of public transit facilities in the Borough depends on where the transit stop is located in the Borough. Bus stops located on Broad Avenue and Fort Lee Road that are within the downtown area have bus shelters that allow riders to sit on benches and be protected from inclement weather. Outside of the downtown, stops on Broad Avenue have green painted benches that are not protected from rain, snow or excessive heat. The same is true of bus stops along Fort Lee Road. The reason for this type of treatment is likely due to these stops being less utilized compared to the stops in the downtown area of the Borough. However, given the relatively high utilization of the public transit system by Leonia commuters, the Borough should work with NJ Transit to install bus shelters at frequently used transit stops that are located outside of the downtown area. Additionally, some of the benches are also in better shape than others with some having very worn out paint and the wood being chipped away over time. The Borough should take inventory of the benches at the transit stops and consider replacing the more worn out wooden benches with newer metal benches that are better able to withstand the elements.



Bus Rapid Transit Expansion

The NJDOT Complete Streets Design Guide defines Bus Rapid Transit (BRT) as “a high-capacity, lower-cost alternative to fixed route rail that can dramatically improve transit mobility and transform communities from auto-centric to multimodal friendly”. BRT routes can operate in mixed-traffic or have dedicated lanes in addition to other infrastructure improvements such as platform level boarding and transit signal priority that decrease the potential for delays. In 2017, Bergen County commissioned a Bus Rapid Transit Implementation Study to develop a system of BRT routes that would help to reduce roadway congestion and complement the existing public transit routes in the County. The Study developed a route that travels through Leonia and can take Leonia residents to important employment and educational centers in Englewood, Hackensack, Paramus and Paterson with transfer connections that can take users to the Meadowlands Complex and Secaucus Junction. The proposed route would travel along and include a stop on Broad Avenue. The Study recommended that the route be a part of the initial implementation phase and was projected to be the most utilized route.

Traffic Circulation

Network circulation is critical to the quality of life of Leonia residents, business owners and workers who travel to and from Leonia every day. An efficient and effective system must be in place so people can get to work, school, shopping, healthcare and other services. At the same time, safety is an essential factor. Mobility and safety must work in conjunction with each other for the system to function properly.

Congestion

Addressing issues related to congestion is a critical part of achieving efficiency. Intersections are a major issue related to congestion. There may be challenges to addressing intersections issues since Leonia only has control over local roads, while the State has jurisdiction on Route 93 (Grand Avenue). The Borough is fortunate in many ways in that the main roadway through the center of Leonia, Broad Avenue, is under the jurisdiction of the municipality. This is important because for the downtown area to be successful, it must rely on high levels of pedestrian traffic and the ability to access the area easily and for visitors to feel safe walking around and between stores and while crossing the street. It is in this area that the importance should be placed on the pedestrian safety and mobility rather than to maximize the speed at which a driver moves through the corridor. The Borough should work to make Broad Avenue more walkable through traffic calming measures, streetscape amenities, and other public realm improvements. These are discussed in greater detail in the **Streetscape Guidelines** section of this element.

One of the more contentious areas of circulation in the Borough is the congestion on Fort Lee Road. Because the Turnpike circles around the northern boundary of the Borough before going across the George Washington Bridge, some commuters from outside the Borough use Fort Lee Road as a cut-through to avoid being stuck in traffic waiting to access the Bridge. Given the jurisdiction of Fort Lee Road, the Borough is somewhat limited in what it is able to do in order to mitigate the congestion that occurs from New Jersey commuters doing this. The end result of this congestion is decreased mobility for residents and an overall decline in the quality of life for residents. In 2018, the Borough Council attempted to mitigate the traffic by passing an ordinance that barred outside residents from driving on residential streets as a cut through to the George Washington Bridge during peak commuting hours. Residents received tags for their cars that would indicate that



they are Leonia residents. The ordinances passed in 2018 were struck down in 2020.

Despite the setback to Leonia's efforts, the Borough should continue to work with partners at the County and State level on measures that will further reduce congestion such as better traffic signaling and encouraging alternative forms of transportation that can decrease the demand for the limited amount of road space leading into New York. The Borough should also work with the County to install red light or traffic cameras at intersections on Fort Lee Road. This is especially important as the Borough prioritizes the redevelopment of the Fort Lee Road area. An economic analysis report performed by Karp Strategies recommended significant streetscape and traffic signaling efforts to this area to help mitigate the potential addition of traffic demand for this area as a result of redevelopment. This would include improved signal timing as well as efforts to extend Christie Heights Road to Grand Avenue. While efforts to manage traffic are necessary, greater prioritization should be for alternative forms of transportation that reduce vehicular congestion.

Safety

Along with addressing issues of congestion, safety is a critical issue for Leonia residents, and intersection safety for drivers, pedestrians and bicycles were remarked on often during the public outreach process for the Master Plan. From 2014-2018 there were approximately 1,197 vehicular crashes reported in the Borough of Leonia. This equals approximately

0.66 crashes per day. Excluding the crashes that occurred on Interstate-95, the majority of the crashes occurred on Fort Lee Road. These crashes were concentrated at the intersections with Grand Avenue and Broad Avenue. The intersection of Grand Avenue and Fort Lee Road experienced the highest concentration of crashes with 170 vehicular crashes. Smaller concentrations of crashes occurred around Leonia High School and in the downtown area along Broad Avenue.

Pedestrian and bicycle crashes are also a concern in the Borough. From 2014 to 2018, there were a total of 27 pedestrian and bicycle involved crashes in Leonia. Similar to the auto crashes, Fort Lee Road experienced the overwhelming majority of these crashes. The intersection of Fort Lee Road and Broad Avenue saw the highest concentration with seven pedestrian involved crashes and one bicyclist involved crash. The intersection of Fort Lee Road and Grand Avenue experienced six pedestrian involved crashes during the same time period. Discussion of pedestrian and bicycle safety improvements are discussed later in this element.

Transportation and Land Use

In many Master Plans, transportation and circulation are separately addressed from the municipality's land use. However, it is increasingly known that land use and transportation are inextricably linked together. The type of land use determines how much traffic is generated from that property, or how much parking is required based on expected utilization. Additionally, the location of land uses in relationship to each other also influence how the transportation is used, as people may be more apt to walk, bicycle, or drive depending on a variety of conditions. A well-planned community can also be more transit supportive and sustainable, developing at densities and in proximity to service where residents or employees will use public transportation. Leonia's community form with a variety of housing types and densities with transit lines that cut through its main commercial corridor provides a great opportunity to consider both planning topics together.

Public Transit Use

Arguably no other form of transportation is interlinked with land use more than public transportation. In order for public transportation to be feasible, there is a minimum amount of residential density that is needed. Without a large number of people living relatively close together coupled with a variety of destinations that those people need to go to, there would be little use for public transit. The below graphic from the Metropolitan Council details the average minimum density needed for various types of public transportation. Transit agencies across the country are recognizing this link between land use and transportation and are working to promote greater densities along transit routes. In recent years, NJ TRANSIT has been increasingly interested in promoting mixed-use developments centered around frequently used transit stops that are often located in or near downtown commercial corridors. This strategy not only increases transit ridership numbers but also helps to revitalize many underutilized commercial corridors and downtowns along its transit lines.

Leonia could be well served to promote greater densities along its bus lines and proposed location of the Hudson-Bergen light rail station. Almost all of Leonia's residents, with the exception of those living in the far northeastern and southeastern sections of the Borough, live within a quarter-mile of a bus stop. Because of this, it is not surprising that Leonia commuters have relatively high bus utilization at 15.4% compared to 11.0% of Bergen County

commuters and 6.2% of New Jersey commuters. With significant congestion in southern Bergen County and the high cost of driving into New York City between tolls, parking costs and New York City's new "congestion pricing" makes public transportation a very viable option for residents. It is likely that any mixed-use development in Leonia would increase the use of public transit, making it even more viable than it already is in the Borough. Additional densities could allow for more frequent service as well as increasing the feasibility of countywide bus-rapid transit as was proposed in the 2017 Bergen County BRT Study that would connect Leonia to Englewood Hospital as well as Hackensack University Medical Center and Garden State Plaza.

Table 1. Average Minimum Residential Density Requirements (dwelling units per acre)

Right-of-Way Type	Transit Type	Geography	Urban Center	Urban	Suburban	Suburban Edge / Emerging Suburban Edge
Fixed or Dedicated Transitway	Light Rail Transit Commuter Rail Dedicated BRT	half-mile radius	50	25	20	15
Highway Transitway (MnPass / HOV)	Highway BRT	half-mile radius	25	12	10	8
Shared Rights-of-Way	Arterial BRT	quarter-mile radius	15	15	15	15
	Local Bus Routes on High Frequency Network	quarter-mile along route	10	10	10	10

Source: Metropolitan Council, Local Planning Handbook

Additional transit options such as the proposed northern expansion of the Hudson-Bergen Light Rail line also become more feasible with greater densities around its stops. As the above graphic shows, the minimum density within a half-mile radius of the station should be around 20-25 dwelling units per acre. The proposed location of the Leonia station would be along the western edge of the Borough near Fort Lee Road. Currently, there is some mixed-use in the area as well as some multifamily housing, but arguably, the density in this area of the Borough would likely need to increase to help support the light rail system. The Borough is working to address this by designating parcels along Fort Lee Road and Grand Avenue as an Area in Need of Redevelopment. As mentioned in the Land Use element of the Master Plan, the Borough should also rezone Spring Street and Grand Avenue south of Fort Lee Road as Multifamily to allow for an increase in density that would help support light rail service in the Borough. Within the Grand Avenue redevelopment plan, there should be guidelines with regards to improving walking and biking connections between the redevelopment area and the proposed location of the HBLR transit station. A comprehensive planning approach to development in this area of the Borough would consider including the interrelationship between

land use and transportation in order to create mixed-use development that offers residents an opportunity to commute and travel to other destinations without the need for a private vehicle. This process would benefit all Leonia residents as it would add to the tax base without straining the existing roadway system.

Traffic Generation

Existing through traffic on Fort Lee Road and Broad Avenue is a major concern. These roadways along with Grand Avenue are where residents are most concerned about the level of traffic and the safety of these roadways. Additional roadways that residents had concerns with regards to safety and traffic include Glenwood Avenue, Woodland Place and Park Avenue. These roadways are located in residential neighborhoods, and the Borough may want to investigate the feasibility of adding speed bumps on these roads to force drivers to slow down and be less reckless.

Parking Management and Supply

Parking management and the supply of parking in Leonia has been a long-standing issue in the Borough particularly as it relates to the Broad Avenue commercial corridor and the potential redevelopment of the Grand Avenue/Fort Lee Road area. This issue touches on several aspects of the Master Plan including land use and economic development in addition to transportation. As a part of the economic development focus on the Broad Avenue corridor and the redevelopment areas, the time is ripe for the Borough to do a thorough review of its parking requirements to prevent them from being an impediment to any future rehabilitation or redevelopment to the corridor. It is crucial that the Borough get the amount of parking right.

Permit Parking

The Borough requires residents to have permit parking so that residents are able to park on the street at various points of the day. The Borough restricts on-street parking in Leonia to only residents or individuals that are guests of a Leonia resident or work in Leonia during the hours of 9:00am to 11:00am. Additionally, only individuals with a resident tag or a guest tag are permitted to park on the street during overnight hours.

Similar to other municipalities in New Jersey with a traditional downtown, the Borough does currently have a municipal public parking lot located at Elm Place. Municipal parking lots can provide for

additional parking space at dedicated locations to help alleviate parking conditions in the downtown area. The Borough requires that drivers who wish to park in the Elm Place Parking Lot apply and pay for a parking fee. A parking permit for non-commercial vehicles requires an annual fee of \$200 and a parking permit for commercial vehicles requires an annual fee of \$1,200.

Shared Parking

The Urban Land Institute defines shared parking as “parking spaces that can be used to serve two or more individual land uses without conflict or encroachment.” Different uses require parking at different types of the day. For example, in a mixed-use property where the first floor is occupied by a commercial tenant and the upper floor(s) is occupied by a residential tenant, the residential tenant will typically require parking in the evening and overnight after regular work hours while the commercial tenant would require parking available during the day for employees and customers. Allowing these different tenants to share the parking throughout the day, based on the need, reduces the chance for the oversupply of parking that a property owner may need to provide. Table 2.1 below shows how a shared parking scheme would work. By allowing a property owner to share parking among different uses, this could encourage the owner to redevelop the property by adding a second or third floor of residential units. This could add residents along the Broad Avenue corridor which could in turn increase the amount of potential patrons to the businesses along the corridor.

Table 2.1: Example of Shared Parking Analysis

<i>Time of Day</i>	<i>Parking Need (Residential)</i>	<i>Parking Need (Retail)</i>	<i>Actual Parking Need</i>
12am-6am	25	0	25
6am-12pm	18	15	33
12pm-6pm	12	20	32
6pm-12am	25	5	30

Current parking regulations allow for shared parking among different property owners in the Broad Avenue commercial zone at a sponsored off-street parking facility that is within 300 feet walking distance of the property. However, shared parking in a building containing different uses is not allowed under current parking regulations in the Borough. Under the Borough’s ordinance, if a property owner has a building that has an upper floor residential unit and a commercial use on the first floor the owner must provide the two (2) parking spots for each dwelling

unit and the required parking spots for whatever use it may be despite the fact that these uses require parking at different times of the day. This works to unnecessarily increasing the amount of parking that a property owner must provide. By adopting a shared parking policy that recognizes the need for parking for different times of the day based on different uses, the Borough could improve the economic vitality of the commercial corridor while also becoming more pedestrian friendly.

Right Sizing Parking

Determining the number of parking spaces required in a downtown area such as Leonia's can be challenging. Drivers will always want to have as much convenience as possible when deciding where to park. However, there are more factors that need to be considered when determining how much parking a property owner must provide. The availability of transit as well as walking and biking should also be considered. Given the residential neighborhoods' close proximity of the Broad Avenue commercial corridor, it is likely that many residents would choose to walk to a retail or restaurant destination rather than drive - as long as the pedestrian infrastructure in the Borough makes them feel safe to do so. The Borough also does not want to provide so much parking that it takes away from the vibrancy of a traditional downtown. Parking regulations should also not be a hindrance to property owners who may want to rehabilitate their buildings but won't because they can't provide the additional parking. A balance is needed to find the right amount of parking supply for the downtown area.

One driver of imbalanced parking supply relative to actual site utilization (which leads to a number of unnecessary spaces) is the required parking ratios associated with general businesses found within the Borough's zoning code. This is especially evident in locations where there is relatively high turnover in parking spaces, like banks (listed as banking and savings institutions) which requires one space per 300 square feet or 8 for every teller window, whichever is greater. In reality, because of the availability of online banking, direct deposit, or even drive-thru services, the actual retail aspect of the bank is limited, and only a percentage of the actual floor area is used for customers and employees. As a result, this parking ratio should be adjusted as part of the zoning code update. Additional uses that should be reviewed for adjustments include offices, restaurants and retail stores, for example. The potential for on-street parking on Broad

Avenue and nearby streets should also factor into the consideration for parking requirements for new developments and businesses, especially for commercial uses on the ground floor.

Payment in Lieu of Parking (PILOP)

Parking spaces, particularly spaces in a parking structure, are very costly to construct. According to the national real estate consulting firm WGI, the 2019 national average cost of a structured parking space was \$21,500 with the high-cost New York metro area having an average cost of about \$28,400. These high costs of structured parking can make a mixed-use/multifamily development unfeasible or can cause the rents for tenants to be very high as the developer passes on the costs to them. However, a parking structure may be preferable to surface parking spaces in areas where a municipality may want to encourage walkability, public transit use, etc. In order to balance the costs and benefits of structured parking, many municipalities are starting to adopt a Payment in Lieu of Parking (PILOP) program.

A PILOP program involves giving a developer the option to replace a required parking space based on the municipality's land use ordinance with a fee paid to the municipality. The municipality will then use these fees to construct or maintain a public parking facility with reserved spots for tenants of the development and the general public. These fees can help to decrease the number of parking spaces for the municipality and can incentivize development that may otherwise not be feasible because of the high cost of structured parking. Neighboring Fort Lee passed an ordinance in 2007 establishing a PILOP program giving developers an option to replace a structured parking space by paying \$20,000 per spot. The City of Hackensack passed an ordinance in 2015 that has a tiered fee program where replacing a parking space for an affordable rental unit costs \$2,500 while it costs \$9,000 per spot for a for sale condominium unit among other types of uses. The Borough should consider instituting a PILOP program to incentivize development particularly in the Grand Avenue redevelopment areas.

Bicycling and Walking 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 lanes, 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 Borough of Leonia adopted a Complete Streets Policy Resolution in July 2018. While the policy itself is not a prerequisite to improving bicycling and walking conditions throughout the Borough, it is an indication that the Borough 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 municipality like Leonia which is located in one of the most densely populated regions of the country, it is imperative that Leonia 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 Leonia has the necessary infrastructure that could provide for a network of complete streets. Leonia should begin implementing Complete Streets policies such as dedicated bike lanes and protected cycleways could help the Borough become more sustainable and improve quality of life.

COVID-19 and Open Streets

The COVID-19 pandemic hit New Jersey and Bergen County especially hard. For months, businesses and restaurants were closed to help slow the spread of the virus. As regulations were eased, many cities and smaller towns began to expedite permitting for outdoor dining and expanded retail services. The move to outdoors was the result of public health experts finding that outdoor activity was much safer compared to indoor activities, especially for activities such as eating and drinking in indoor restaurants where masks could not be worn by patrons at all times. Towns felt that allowing businesses to operate outdoors would help ease the economic burden on small businesses and in turn allow their main street commercial corridors to recover more quickly. On June 18, 2020, the Borough passed Resolution 2020-140 that allowed restaurant owners to apply for a temporary permit to move their restaurant dining outdoors.

It is likely that the desire for outdoor spaces may continue even as the pandemic subsides. During the public survey, a large majority (73%) of residents wanted to see the continuation of outdoor dining. In January of 2021, Governor Murphy and the state legislature passed a bill to allow for expanded outdoor dining for businesses to operate across the state that will last through 2022. Given the success of the program, the Borough should look to continue allowing outdoor dining in the future.



Case Study: Princeton, NJ

During the peak of the pandemic and even at present, the Municipality of Princeton in Mercer County converted Witherspoon Street from a two-way to a one-way street to allow restaurants and businesses to have expanded outdoor business that complies with social distancing regulations. The businesses have added to the atmosphere by decorating the areas in front of their businesses. The municipality has since created a redesign plan for the street to incorporate many of the changes that were made as a result of the pandemic.

Existing Bicycle Facilities

Comprehensive bicycle infrastructure can expand opportunities for employment and recreation for all residents. The Borough's existing bicycle facilities consist entirely of the multi-use path in Overpeck County park. This path offers significant recreational opportunities for Leonia residents as it continues across Overpeck Creek into Teaneck. While this provides excellent recreational opportunities for residents, especially in a region as dense as southeastern Bergen County, the bicycle facility does not provide for improved safety for bicyclists on Leonia's streets. Cities and towns across the state and country are exploring partnerships that focus on the access to bicycling on their roadways.

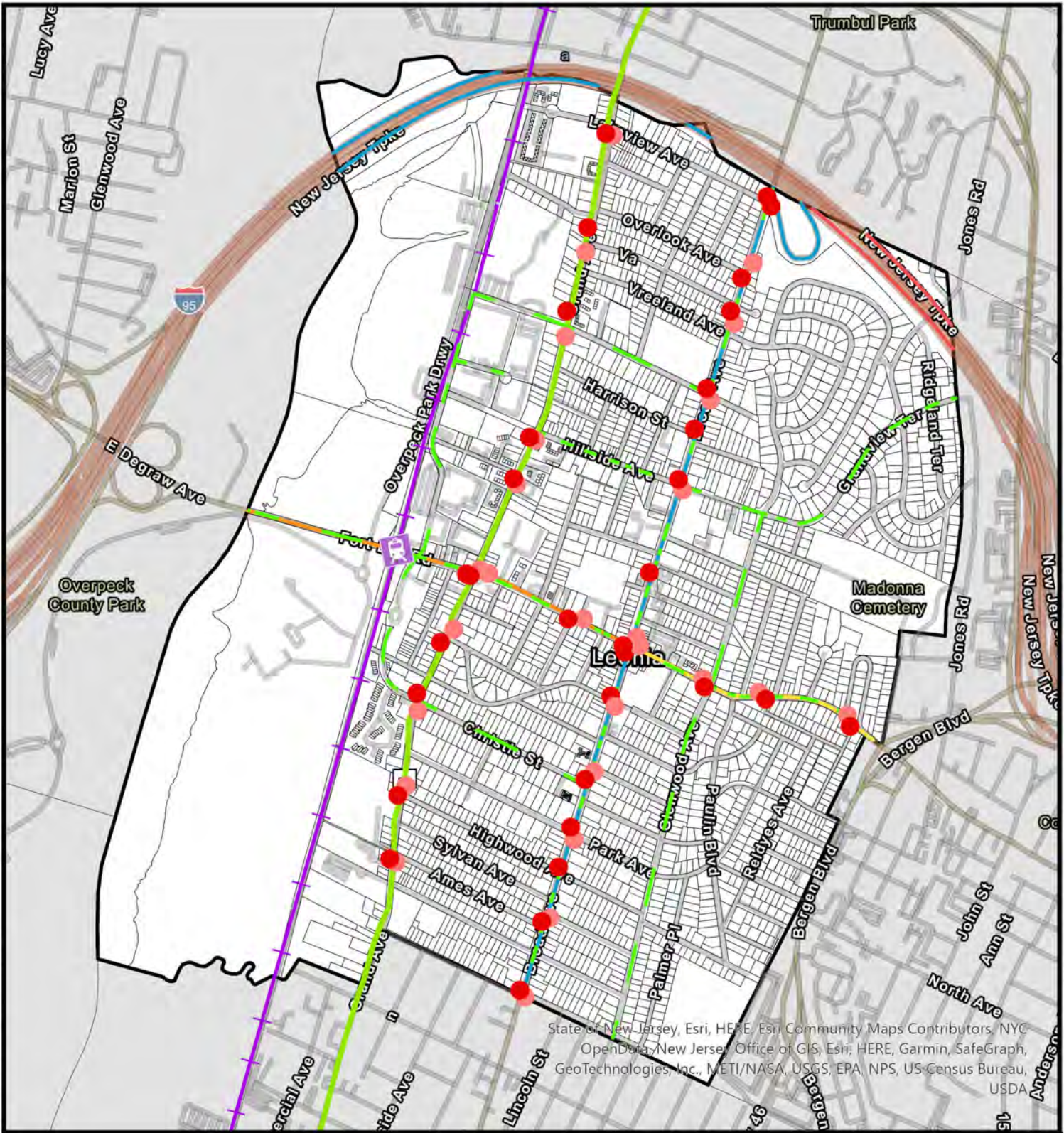
Developing a Bicycle Route System

Leonia, with significant streetscape improvements, can become a highly bikeable community because of its relative density, numerous parks, close connection to major destinations and grid network of roadways. Given the existing conditions, there is tremendous opportunity to establish a formalized bike route system within the Borough that connects residential neighborhoods to schools, parks, the downtown and nearby 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 2.4** provides a potential bicycle route system to be implemented throughout the Borough of Leonia that can connect to regional bicycle networks. This proposed bicycle network attempts to provide achievable yet ambitious routes that will greatly improve access to the Borough's schools and commercial areas while working to discourage automobile traffic in the Borough that will in turn improve the quality of life for Borough residents. Specific styles of treatments that correspond to the map are described in the following sections.

Creating a bicycle route system for a Borough with the size and location of Leonia requires considering the greater regional context. In June 2020, The Regional Planning Association (RPA) released its Five Borough Bikeway report detailing a plan to create a 425-mile "network of protected, continuous, high-capacity, priority bike lanes that allows for timely, safe, and predictable bike travel for a variety of types of bike journeys". The RPA's plan includes connecting the protected bike path of the George Washington Bridge to the Hudson River greenway bicycle path and other protected bicycle lanes leading to Midtown and Lower Manhattan. Connecting the Borough to the George Washington Bridge and the Palisades State Park was a critical goal of a 2019 plan commissioned by NJTPA in partnership with Sustainable Jersey and the Alan M. Voorhees Transportation Center at Rutgers University. The Plan gave the Borough three options to pursue to connect Overpeck County Park to the George Washington Bridge and Palisades State Park. The "Central Alternative" goes along Fort Lee Road in the Borough and connects to the Bridge on Main Street in Fort Lee. The two alternatives are less direct routes that avoid the more heavily trafficked Fort Lee Road and avoid some of the steeper grades in the Borough. However, because the alternatives are less direct, they are longer routes which makes them less appealing than using aggressive tactics on Fort Lee Road to make it a safe road for residents.

Additionally, the 2019 Bergen County Parks Master Plan calls for a greenway along Fort Lee Road that would connect Overpeck Park to Palisades Park. The benefit of a bicycle route on Fort Lee Road is that it could discourage some of the cut through traffic that the Borough deals with at peak traffic hours while promoting bicycling through the Borough. It is recommended that the Borough work with Bergen County to use aggressive tactics on Fort Lee Road and work with the Borough of Fort Lee to promote the use of bicycles on this route as an alternative form of transportation.



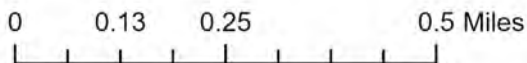
State of New Jersey, Esri, HERE, Esri Community Maps Contributors, NYC OpenData, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Bus Route

- 153
- 166
- 182
- 751
- 755
- 756
- Rockland Bus

Bus Stop

- Inbound
- Outbound
- HBLR Extension
- Proposed Station Location
- - - Leonia Proposed Bike Network



Borough of Leonia

Bicycle & Public Transit Map

H 2 architects 119 Cherry Hill Road #110
 Parsippany, NJ 07054
 862-207-5900
 www.h2m.com

+ engineers

Bicycle and Pedestrian Mobility

In any well-developed community, especially one such as Leonia with several regional arterial roadways, transportation options should be provided that extend beyond the automobile. This involves the accommodation of safe bicycle and pedestrian travel throughout the Borough. Bike and pedestrian travel should be encouraged for local destinations, such as parks, schools, and the Downtown, and to reduce overall roadway congestion. Three key components to encourage the use of biking and walking for transportation, rather than simply recreation, is to make that form of travel **safe, easy, and attractive**. This involves ensuring infrastructure is available and in good condition, that a resident can safely cross the roadway at key locations, and the experience is enjoyable so they will want to do it again.

E-bikes and E-scooters

Technological advances in mobility can help non-vehicular mobility options to become more popular in the Borough despite the challenges posed by the terrain. Recently, these include electric bicycles (e-bikes) and electric scooters (e-scooters). Both are becoming a desired form of local transport since they combine the personal mobility of a bicycle or scooter while adding overall speed and reduced level of physical effort. Standard class e-bikes have small electric motors that assist users while they are pedaling to help them traverse small and large inclines, in essence giving them a slight boost at a level that the user is comfortable with. The increased speed and the decrease in the amount of energy a rider needs to expend greatly increases the distance and frequency that a user will ride. Distances and terrains that previously discouraged residents from traveling by bike now are possible thanks to the assist that e-bikes offer to users. In recent years, sales of e-bikes show that they have significant staying power. According to the market research firm NPD, the sales of e-bikes in the first quarter of 2019 grew by over 90% over the same time period the previous year, and the current pandemic has pushed their popularity even further with several companies that sell e-bikes reporting sales increases of over 100% since March 2020 compared to the prior year.¹ Equally important to note is that survey results of e-bike users shows that purchasing an e-bike makes it much more likely that the owner uses the bike on a daily or weekly basis compared to standard bikes.² Given these sale trends and the growing popularity of this form of

1 From: <https://www.theverge.com/2020/5/14/21258412/city-bike-lanes-open-streets-ebike-sales-bicyclist-pedestrian>

2 From: <https://www.bicycling.com/skills-tips/a20044021/13-things-about-e-bikes/>

transportation, it is critical for municipalities such as the Borough to plan for ways to accommodate them safely. Developing an implementable bicycle route network and adopting complete streets policies are two ways that Leonia can derive increased public benefits from new mobility technologies.

In 2019, New Jersey passed legislation permitting the use of low-speed e-bikes and e-scooters (low-speed is defined as a maximum of 19 miles per hour for e-scooters, and up to 20 miles per hour for e-bicycles before the electronic assistance ceases). These devices may likewise be allowed to ride on sidewalks as long as they do not impede the movement of pedestrians, and on bicycle paths. The City of Hoboken was the first New Jersey municipality to roll out an e-scooter. The program has been extremely successful as more than 21,000 individual riders have used them while making more than 66,000 trips. As these opportunities arise, Leonia may wish to consider the overall ramifications of introducing new modes of transportation around its community, and thoughtfully consider regulations that encourage their use, but also ensure they do not present a safety or mobility issue for other modes of transportation.



Safety Improvements

Survey results show that the vast majority (79%) 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 Leonia much more pleasant and enjoyable for residents. The type of treatment needed largely depends on the type of roadway that the Borough 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 Borough 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 are 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 Borough where on-street parking is important to retain, and there is still a desire to acknowledge a bicycle route. One example of this is the section of Broad Avenue from Hillside Avenue to Crescent Avenue. The benefit of using sharrows for this section of Broad Avenue is that the Borough is able to maintain its angled parking on the eastern

side of the roadway. However, in order to safely encourage biking along Broad Avenue, the Borough should convert the angled parking to rear angled parking. Rear angled parking would protect bicyclists on Broad Avenue as drivers would leave these spaces facing the street rather than backing onto the travel lane which makes it more difficult to see bicyclists. This would benefit bicyclists because they would not have to worry about doors being swung open into the area in which they are biking and would be more highly visible to those coming in and out of parking spaces. While this would remain a concern on the western side of the street, the 2-foot buffer between the parking lane and the bikeway would help to minimize this potential.



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. Sections of Broad Avenue are very wide at nearly 50 feet in width. Despite the speed limit for the roadway only being 25 miles per hour, drivers may feel compelled to drive faster because rider roadways encourage drivers to speed. The Borough could make significant streetscape changes that would make Broad Avenue a safer roadway for bicyclists and pedestrians.



The above graphic shows how bike lanes on Broad Avenue could accomplish this. The Borough could install 5-foot bike lanes on both sides of Broad Avenue and install a 4-foot median in the center of the roadway to separate the two lanes of traffic. These steps would help to narrow the travel lanes, which in turn would compel the cars to slow down. The 4-foot buffer in the middle of the roadway would allow pedestrians crossing Broad Avenue a break between crossing the two lanes of car traffic. This refuge for pedestrians, referred to as a “pedestrian island” adds safety to individuals attempting to cross busy roadways. Given that there are several bus stops along Broad Avenue, residents are very likely to have to cross Broad Avenue to get from the bus stop back to their homes. Please refer to the Safety section for a larger discussion of medians.

The current width of Broad Avenue from Crescent Avenue to Oakden Avenue and from Hillside Avenue to I-95 allows the Borough to further experiment with

the mix of a median, travel lanes and bike lanes. The NJDOT Complete Streets Design Guide recommends that a pedestrian island be at least six feet wide. In order to accomplish this, the Borough could decrease the width of the two travel lanes to ten feet. This would greatly improve pedestrian safety as it would give pedestrians a larger island in the middle of the Avenue and decrease the distance that pedestrians would be exposed to car traffic as they cross the street. Ten-foot wide travel lanes would also come closer to the general standard for travel lane widths. The Institute of Transportation Engineers’ ITE Traffic Engineering Handbook, 7th Edition states, “Ten feet should be the default width for general purpose lanes at speeds of 45 mph or less”. If the Borough wishes to decrease the speed of vehicular traffic and in turn increasing safety for pedestrians and bicyclists, the Borough should consider using the ten-foot wide standard for its travel lanes as it considers expanding the bicycle network.



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 exists in Leonia is the trail through Overpeck Park. While this trail helps to attract residents to the park, there is very little connectivity to other existing bicycle infrastructure. While residents may feel comfortable bicycling to the Park on residential streets, there is likely some concern with biking along Fort Lee Road to get to the bike trail. The Borough should consider making streetscape changes to Fort Lee Road that improves the bicycle safety to encourage greater use of the shared use path in Overpeck Park. Given that Fort Lee Road can be a high-volume roadway at certain times of the day, the Borough may want to construct a physical barrier such as bollards to separate bicycle traffic from automobile traffic. The Borough may wish to work with Bergen County to implement this safety improvement along Fort Lee Road.

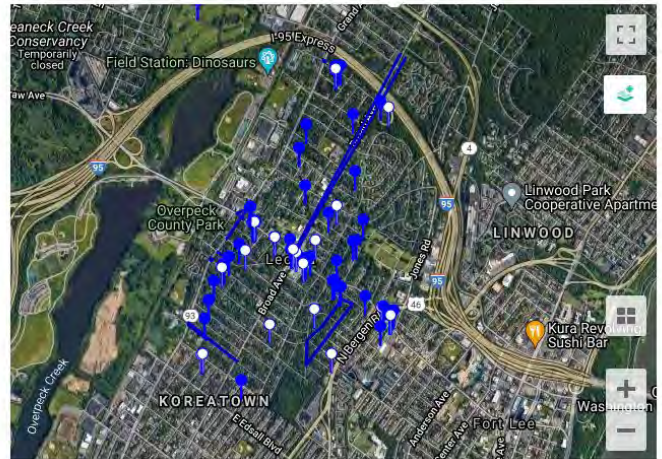
Walkability

Given the relative density of services and amenities to the residential areas of the Borough, Leonia has an excellent opportunity to enhance the quality of life of residents through improved walkability. As noted earlier, the overwhelming majority of residents live within a quarter mile of a bus stop while most residents live within a half a mile of the Broad Avenue commercial corridor. Improvements to pedestrian safety are critical to encouraging residents to make shorter trips to commercial areas and transit stops 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 primarily along Grand Avenue and Fort Lee Road. These are roadways that experience the highest levels of through-traffic given their location in the greater context of the regional transportation system. These are also not locally controlled roadways, which means that the Borough will have to work with its partners at the County and State level to improve safety for all users of these two roadways. Safety improvements along Grand Avenue were especially pointed out by residents as many try to cross the road on their way to either Overpeck Park, the pool, and the high school.

Additionally, the area around the intersection of Broad Avenue and Fort Lee Road is considered an

unsafe area for drivers, walkers and pedestrians. However, it is important for the Borough to improve the safety around this intersection in order to attract pedestrians and bicyclists into the downtown area. If residents feel unsafe because of the vehicle traffic, it will be harder for businesses to attract customers. 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 Leonia's downtown and mixed-use areas.

5. Are there intersections or other locations where you feel unsafe, either as a driver, pedestrian, or bicyclist? Please provide the location and the reason why in the comments section below.



Sidewalk Infrastructure

Leonia residents heavily rely on good pedestrian infrastructure not just as a part of their commute to work but also to walk to necessary services and goods on the Broad Avenue corridor. While Leonia households have good access to vehicles, pedestrian connections from its residential neighborhoods to its commercial corridors are essential to create a vibrant downtown area. Since Leonia is an older, walkable suburban community, sidewalks have been developed in all parts of the Borough. While maintenance of sidewalks is the responsibility of the property owner, the Borough recognizes the importance they play in ensuring a mobile community. The Borough should consider taking inventory on the conditions of the sidewalks around Leonia 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. Leonia 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 Leonia, the Borough 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.

Streetscape Guidelines

Safety

The Borough should implement safety enhancements in streetscape design when capital improvements for roadways are needed. When redesigning certain roadways, Leonia 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 that drivers travel is to decrease the roadway width allotted to vehicular travel. In Leonia, 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 the Borough's local roadway, Broad Avenue. Residents identified this roadway as having several intersections that were disconcerting with drivers speeding and thus flouting traffic laws.



Broad Avenue has been identified as a roadway that could serve as a part of the Leonia's bicycle network. The Borough should implement a roadway treatment that both improves bicycle facilities along the roadway and acts as a traffic calming measure. By calming the traffic along the major commercial corridor in the community, it is likely that residents will feel more comfortable walking along the corridor. The more pedestrians walking along the corridor will make it more likely that they will stop in and shop or dine at the shops and restaurants located along

Broad Avenue. While this strategy has an economic development aspect to it, streetscape actions taken on Broad Avenue could be used as a template for future streetscape treatments on other local roadways. Given the dense, walkable character of the Borough's grid system and its location along a major commuting route into Manhattan, particular focus should be placed on devising ways to have drivers slow down. This will create an environment where the safety of the Borough's residents who are most likely to be walking and biking along local roadways are prioritized over the commuter from other towns traversing through the Borough.

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 more common concerns for Leonia residents was the lack of adequate lighting in the downtown area. This made residents feel uncomfortable, especially while they crossed the street due to low nighttime visibility to drivers not being able to see them. To promote greater usage of the downtown area and overall pedestrian safety, the Borough should add pedestrian scale lighting along Broad Avenue and nearby areas. Leonia 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. The Borough may want to consider decorative street lights to enhance the streetscape.

Medians

Medians, or pedestrian islands, 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 six feet wide and six feet long. Medians also give the pedestrian respite when crossing between the lanes of vehicular traffic creating an overall improved pedestrian experience.

Crosswalks

Crosswalks are a primary way to improve safety and visibility for pedestrians and bicyclists. There are several potential roadway treatments that Leonia 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.

Speed Humps

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 typically three to four 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.

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, permission from NJDOT is required to implement “vertical treatments” on Grand Avenue, a state roadway.

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.

Funding Sources

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

Federal Resources

CDBG for Streets and Sidewalks

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. In 2018, Leonia was awarded a \$920,000 TAP grant to help fund the Broad Avenue Complete Streets Improvement project. Solicitations for applications open in May and applications are due in August. The grant is only available in even numbered years (i.e. 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 Borough received

Local Aid monies for roadway improvements for Broad 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, 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).

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, municipal governments, and schools are eligible to apply to the program. The types of projects funded include infrastructure projects for the planning, designing 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 2019, the Safe Routes to School program awarded the Borough of Leonia and Leonia Middle School with its Gold certificate with the recognition being valid for three years.

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 into 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. 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 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 the 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 thirteen 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 proposed systemic safety improvements. Counties are limited

to two applications per cycle and meet several programmatic requirements.

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 complete a specific task related to a Complete Streets initiative.

Street Smart Campaign

Street Smart 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.

Circulation Element Recommendation Plan

Directions

“Check off” a completed recommendation and mark the year of completion as a way to measure progress.

Short Term: complete in 1-2 years; **Mid Term:** complete in 3-5 years; **Long Term:** complete in 10+ years.

Circulation Plan

	<i>Recommendation</i>	<i>Implementing Party</i>	<i>Timeframe</i>	<i>Completed</i>	<i>Year Completed</i>
General					
1	Maintain and annually update an ongoing plan for capital improvements to the circulation system.	Borough Council, Engineer	Ongoing		
2	Work with County and State partners on transportation measures that can alleviate congestion in and around the Borough, particularly along Fort Lee Road.	Borough Council, Bergen County, NJDOT	Ongoing		
3	Ensure mobility improvement measures align with changes to the Borough’s land use.	Planning Board, Borough Council	Ongoing		
Roadway					
4	Implement safety enhancements in streetscape design when capital improvements for roadways are needed.	Engineer, Borough Council	Ongoing		
5	Continue to pursue NJDOT Local Aid money for local road projects.	Administrator	Ongoing		
6	Work with the County to install red light cameras on Fort Lee Road.	Borough Council, Bergen County	Short to Medium		
7	Investigate feasibility of implementing speed bumps on identified residential streets	Engineer, Borough Council	Short to Medium		
8	Explore the potential to extend Christie Heights Road to Grand Avenue.	Engineer	Medium to Long		
Bicycle and Pedestrian					
9	Improve pedestrian safety on Broad Avenue through pedestrian infrastructure improvements.	Borough Council, Engineer	Short to Medium		
10	Consider implementing the safety improvements described on pages 95 to 96.	Borough Council, Engineer	Short to Long		
11	Implement a bike route system through Leonia, linking the route to Overpeck Park bike trails.	Borough Council, Engineer	Short to Long		
12	Work with Bergen County and Fort Lee to create a greenway that connects Overpeck Park to Palisades State Park.	Borough Council, Engineer	Medium to Long		
13	Create pathway connections to connect the Broad Avenue CBD to adjacent parks and recreation areas.	Borough Council, Engineer	Short to Medium		

Circulation Plan

	<i>Recommendation</i>	<i>Implementing Party</i>	<i>Timeframe</i>	<i>Completed</i>	<i>Year Completed</i>
14	Implement Complete Streets changes to Broad Avenue.	Borough Council, Engineer	Short		
15	Add high visibility crosswalks and RRFBs at major pedestrian crossing locations and where pedestrian connections are encouraged.	Engineer, Public Works	Short to Medium		
16	Add proper and visible signage and wayfinding that should be provided directing pedestrians toward Broad Avenue CBD and parking areas.	Engineer, Public Works	Short to Medium		
17	Work with New Jersey Transit, the Board of Education and Bergen County to construct an elevated or underground pedestrian crossing at the proposed HBLR line to connect Leonia High School to Overpeck Park.	Borough Council, Engineer, Board of Education, NJ Transit	Medium to Long		
18	Increase the number of bike racks, particularly along the Bike Network routes on Broad Avenue.	Public Works	Short to Medium		
19	Coordinate with the Leonia School District to maintain and continue to improve upon the District's Safe Routes to School program to encourage school-aged kids to walk to school.	Borough Council, Board of Education	Ongoing		
20	Develop and implement streetscape improvement guidelines that can be used for cohesive improvements in the Downtown during new development projects or a TAP grant application.	Engineer, Planner	Short to Medium		
21	Include guidelines in the Grand Avenue Redevelopment Plan that improve walking and biking conditions between the area and the proposed HBLR transit station.	Planning Board, Planner	Short		
22	Work with Bergen County and Fort Lee to promote the use of alternative forms of transportation along Fort Lee Road.	Borough Council, Bergen County	Medium to Long		
23	Add pedestrian scale lighting along Broad Avenue and nearby areas.	Borough Council, Public Works	Medium		
Public Transportation					
24	Continue to support efforts for the northern expansion of the HBLR line.	Borough Council	Ongoing		
25	Improve available amenities at bus stops, adding bus shelters, trash containers, etc. where needed.	Public Works	Medium		
26	Support efforts for the Bergen County Bus Rapid Transit route through Leonia.	Borough Council	Ongoing		
27	Take inventory of the condition of bus stop benches and make improvements where necessary.	Public Works	Short to Medium		

Parking

28	Develop a shared parking zoning ordinance to permit new developments to coordinate for additional parking offsite when available and reduce on site parking requirements.	Planning Board, Borough Council	Short		
29	Reduce required parking ratios for multifamily residential uses to better reflect parking need based on size of units.	Planning Board	Short		
30	Reduce required parking ratios to reflect modern parking standards, particularly for offices, restaurants, retail stores, shopping centers, and banks.	Planning Board	Short		
31	Develop a waiver system for businesses to meet parking requirements in the proposed CBD districts where the applicant may demonstrate there is an adequate supply of publicly available parking to meet the business' needs.	Planning Board	Short to Medium		
32	Consider instituting PILOP program to incentivize development in the Grand Avenue redevelopment area.	Planning Board, Planner	Short to Medium		



ECONOMIC DEVELOPMENT ELEMENT

Goals

1. Maintain attractive and thriving business and commercial districts.
2. Transform Fort Lee Road corridor to become a gateway into the Borough.
3. Ensure Broad Avenue has the vitality and critical mass to become a competitive downtown.
4. Create a diverse and unique economic development environment.

Downtowns across New Jersey are reevaluating their assets to become more competitive during the national shift toward e-commerce and the dramatic changes brought on by the COVID-19 pandemic. The Borough of Leonia is taking proactive steps to ensure that it remains competitive against other New Jersey downtowns and malls, and to be the locational choice for new and existing businesses.

Introduction

The consensus in Leonia has been that its major asset is its location and transportation access, which includes convenient access to regional bus service and the potential northern expansion of the Hudson-Bergen Light Rail. The Borough's transit opportunities, however, are not the only driver of economic development for Leonia. The community has a wealth of assets including Overpeck County Park, a diverse population with high spending potential and a vibrant arts community. The Borough should leverage and maximize its traditional main street, creative placemaking potential, and access to high-quality open space. Leonia should also continue to capitalize on its existing assets, partner with local business owners and non-profits, improve shoppers' experience in the public realm, diversify the downtown by introducing housing, and actively market commercial areas to a wider customer base.

The Economic Development Element provides an overview of Leonia's economy and economic development potential. It looks at various aspects including the labor force, employment trends, the retail and service base and identifies existing State and local resources that are available to the Borough. Throughout the Element, there is discussion about opportunities and constraints that exist in addressing the Borough's economic development challenges. The Element concludes with recommended goals and strategies that may be implemented to address economic issues and concerns.

Economic Profile

A successful economic development strategy should consider labor force characteristics, local industry characteristics, local economic conditions, and physical characteristics, as described further below.

Labor Force Characteristics

Between 2000 and 2019, there was a 7.7% decline of the Borough's labor force³, as compared to the 2.9% increase in the County and a 4.9% increase in the State respectively. Additionally, Leonia has seen a 12.8% decline for those who were unemployed and actively seeking employment during the same time period, as compared to the County and State which saw a 4.8% and 0.9% decrease, respectively. At the height of the recession in 2010, the unemployment rate in Leonia stood at 7.5%, which while being the highest it had been over the period was still lower than the 8.0% and 9.5% at the County and State, respectively. Prior to the economic impact of the COVID-19 pandemic, the economy in Leonia had bounced back even stronger (2.1%) than its pre-recession unemployment rate, faring better than the State (3.6%) and the County (2.9%). Census data indicates that there are 2,014 employees working in Leonia, resulting in a jobs to residents ratio of about 0.22.

³ Leonia's labor force is defined as those over the age of 16 who are employed and those who are unemployed but actively seeking employment, which excludes the retired and institutionalized individuals.

The Covid-19 pandemic has caused significant economic hardship in Leonia and throughout the state. The economic shutdown needed to slow the spread of the deadly virus caused tremendous job losses in March and April 2020, which ended the prolonged economic recovery from the Great Recession. Since the beginning of May 2020, there has been more or less steady job growth, but this has not come very close to replacing all the job losses statewide across New Jersey. The State of New Jersey ended 2020 with a net year over year job loss of over 300,000.⁴ Bergen County has not been affected as badly as other parts of the state as it ended 2020 with an unemployment rate of 6.8%, which was significantly higher than in 2019 but not as high as the rate at end of 2010.

However, the economic fallout of the pandemic has not been felt evenly across different sectors. The leisure and hospitality sector has faced the harshest downturn by far with professional and business services also being significantly impacted. Given Leonia's workforce characteristics discussed below, it is unlikely that residents were as affected as the state as a whole. However, the economic recovery continues to be very dynamic and the economic outlook has improved significantly as mass vaccination efforts took off and daily life began to return to something more closely resembling normal.

⁴ New Jersey Department of Labor and Workforce Development, Division of Workforce Research and Analytics, Labor Market Information Update for December 2020

Table 3.1: Annual Average Labor Force Estimates 2000-2019

	2000	2005	2010	2015	2018	2019
Leonia						
Labor Force	4,892	4,881	4,612	4,535	4,462	4,517
Employment	4,783	4,748	4,266	4,362	4,334	4,442
Unemployment	109	133	346	173	128	95
Unemployment Rate	2.2%	2.7%	7.5%	3.8%	2.9%	2.1%
Bergen County						
Labor Force	468,400	465,800	478,900	479,400	474,700	482,038
Employment	453,500	448,400	440,500	456,900	458,630	467,946
Unemployment	14,800	17,400	38,400	22,500	16,070	14,092
Unemployment Rate	3.2%	3.7%	8.0%	4.7%	3.4%	2.9%
New Jersey						
Labor Force	4,282,100	4,391,600	4,555,300	4,530,500	4,432,500	4,493,100
Employment	4,123,700	4,194,900	4,121,500	4,267,900	4,250,800	4,333,300
Unemployment	158,400	196,700	433,900	262,600	181,700	159,800
Unemployment Rate	3.7%	4.5%	9.5%	5.8%	4.1%	3.6%

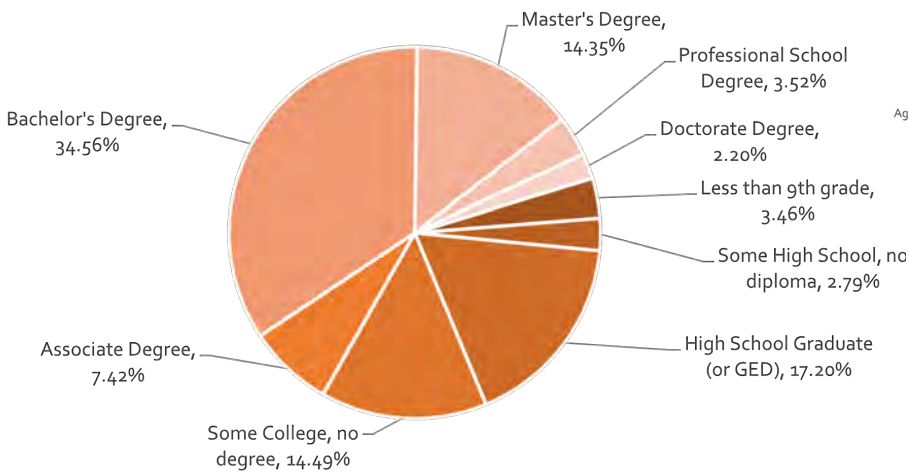
Source: New Jersey Department of Labor and Workforce Development, Annual Municipal Labor Force Estimates 2010-2019

The Borough should monitor the economic outlook as this dynamic situation continues to play out and anticipate trends that are likely to develop, such as continued remote work, as the pandemic subsides.

Educational Attainment

Leonia residents aged 25 and over are well educated, with about 94% of residents having received a high school degree, and 62% of residents continuing on to receive a degree from a higher education institution. The level of education for Leonia residents is higher than both Bergen County and the State, although Bergen County residents have a larger share of residents with degrees from both high school and higher education institution than the State.

Chart 3.1: Educational Attainment-Leonia 2019



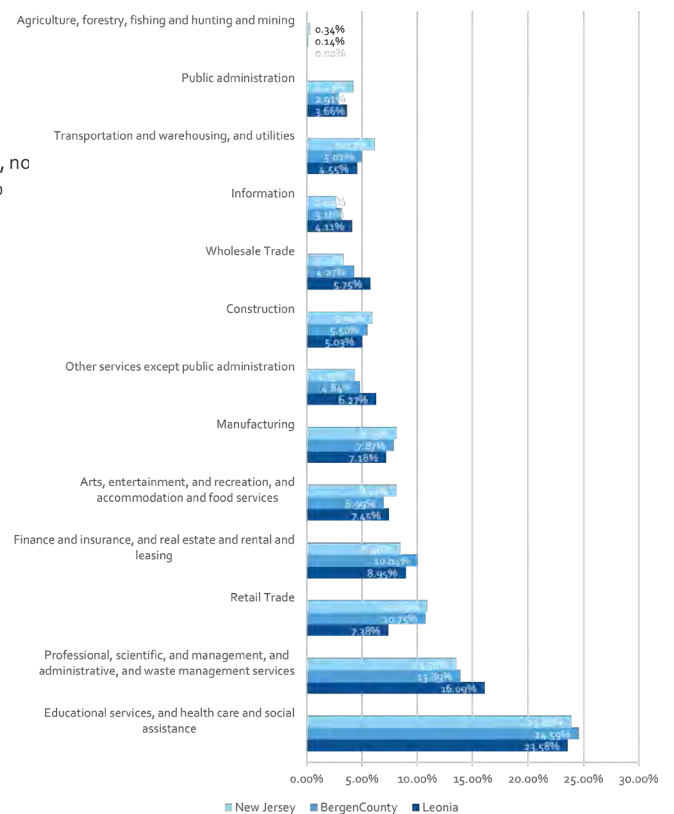
According to the “New Jersey Department of Labor and Workforce Development’s 2018-2028 Employment Projections for NJ”, however, jobs with moderate educational requirements for entry will lead the way (postsecondary non-degree award; some college no degree).⁵

Industry Employment

Leonia residents were primarily employed in the following industries in 2019:

1. Educational Services, and Health Care and Social Assistance;
2. Professional, Scientific, and Management, and Administrative and Waste Management Services;
3. Retail Trade;
4. Finance and insurance, and real estate and rental and leasing
5. Arts, entertainment, and recreation, and accommodation and food services

Chart 3.2: Employment by Industry (Civilian Employed 16+ yrs old)



⁵ New Jersey Department of Labor and Workforce Development, Division of Workforce Research and Analytics, 2018-2028 Industry Employment Projections

These industries together accounted for approximately 63% of resident employment. According to the “New Jersey Department of Labor and Workforce Development’s 2018-2028 Employment Projections for NJ”, the top five industries listed above are projected to grow into 2028 in NJ except for Retail Trade which is projected to decline by 1.6% between 2018 and 2028 across the state. This decline is expected to be especially pronounced for cashiers and advertisers. Leonia residents in the Retail industry should be prepared for potential job cuts in this and may need to consider whether a shift to the Innovation economy would be beneficial. This would likely be in areas such as warehousing and distribution sectors, which have grown significantly due to the trend towards e-commerce.

According to the 2028 projection, the *Educational & Health Services* industry sector will see the biggest job gain across the State, gaining by 6.1 and 18.5% depending on the specific sub-sector. Professions in the Life Sciences and Management positions are likely to have a steady increase of around 8% during this time period. Business and finance sectors are projected to grow around 6%.⁶

⁶ New Jersey Department of Labor and Workforce Development, Division of Workforce Research and Analytics, 2018-2028 Industry Employment Projections

Table 3.2: Occupation by Industry - 2019 (Civilian Employed 16+ years old)

Industries	Industry Total	Occupations				
		<i>Management, business, science, and arts occupation</i>	<i>Service Occupations</i>	<i>Sales and office occupations</i>	<i>Natural resources, construction, and maintenance occupations</i>	<i>Production, transportation, and material moving occupations</i>
Total	4,593	55.21%	15.89%	19.05%	4.70%	5.14%
Educational services, and health care and social assistance	1,083	66.48%	21.24%	7.76%	0.55%	3.97%
Professional, scientific, and management, and administrative, and waste management services	739	83.36%	6.90%	8.12%	0.00%	1.62%
Retail Trade	339	21.83%	7.67%	67.85%	0.00%	2.65%
Finance and insurance, and real estate and rental and leasing	411	64.72%	0.00%	35.28%	0.00%	0.00%
Arts, entertainment, and recreation, and accommodation and food services	330	63.94%	0.00%	6.36%	0.00%	29.70%
Manufacturing	231	10.39%	0.00%	6.49%	83.12%	0.00%
Other services except public administration	342	34.50%	61.11%	4.39%	0.00%	0.00%
Construction	209	62.68%	0.00%	19.14%	0.00%	18.18%
Wholesale Trade	189	70.37%	0.00%	20.11%	9.52%	0.00%
Information	264	31.06%	0.00%	67.42%	0.00%	16.67%
Public administration	168	61.31%	0.00%	22.02%	0.00%	16.67%
Transportation and warehousing, and utilities	288	20.14%	74.31%	4.17%	0.00%	1.39%
Agriculture, forestry, fishing and hunting and mining	0	0.00%	0.00%	0.00%	0.00%	0.00%

Occupational Outlook

According to the "New Jersey Department of Labor and Workforce Development's 2014-2024 Employment Projections for NJ", Professional and Service occupations will dominate job growth through 2024, gaining 74,500 and 92,400 jobs, respectively. Home Health Aides and Laborers and Freight, Stock, and Material Movers, Hand will see the greatest projected change (+15,800 and +11,500 jobs, respectively). Production occupations, however, will see a job loss (-5,050).

Occupational concentrations such as white- and blue-collar workers can be a gauge of a market's taste preferences. Most employed Borough residents held white collar positions (74.3%), which is higher than the percentage for Bergen County (72.5%) and higher than the State (65.3%). Leonia residents were mostly employed in for-profit jobs (71.7%).

Chart 3.3: Leonia Employment by Class of Worker - 2019 (population 25+ yrs old)

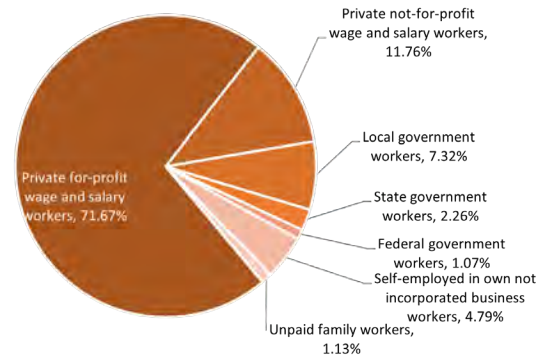


Table 3.3: 2019 Occupation by Classification (Civilian Employed 16+ yrs old)

	Leonia		Bergen County		New Jersey	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Civilian Employed 16+ yrs old	4,593	100.00%	480,028	100.00%	4,422,491	100.00%
Blue Collar	236	5.14%	41,354	8.61%	505,703	11.43%
White Collar	3,411	74.27%	347,758	72.45%	2,887,239	65.29%
Service	730	15.89%	61,607	12.83%	712,040	16.10%
Farm	216	4.70%	29,309	6.11%	317,509	7.18%

Source: US Census Bureau, American Community Survey, 2015-2019 5-Year Estimates, S2401: Occupation by Sex for the Civilian Employed Population 16 Years and Over

Employment Inflow and Outflow Analysis

The U.S. Census Bureau's *On the Map Data*⁷ for 2017 shows that only 4.2% of Leonia residents (181) work and reside in the Borough. The remaining 95.8%, or 4,134 residents work outside of the Borough of Leonia.⁸ Of those who live in Leonia and work outside the Borough (per 2015 data), 39% commuted to locations within Bergen County, 33% to New York County (Manhattan), 5% to Hudson County, 4% to Morris County, and the remaining to other surrounding counties in the Tri-State region.⁹



7 Source: On The Map data from <https://onthemap.ces.census.gov/>.

8 Source: On The Map data from <https://onthemap.ces.census.gov/>

9 Source: New Jersey Department of Labor and Workforce Development, New Jersey Worker Flow Files 2001-2015, using 2011-2015 5-Years ACS

As per the *On The Map* data, also shows that 1,833 employees, or 91.0% of the total 2,014 employees in Leonia do not reside in Leonia but travel to the Borough for work. These individuals are potential customers for Leonia businesses. The remaining 181 employees live and work in Leonia. These locally employed workforce are individuals primarily between the ages of 30 and 54 years old (51.2%) and are almost evenly split between males and females, with females slightly outnumbering males (50.8%). Approximately half (49.6%) of the employed workforce in Leonia earn (before taxes or deductions) more than \$3,333 per month (approximately \$40,000 annually). Most of the local workforce were employed in Manufacturing (61.2%); Information (6.3%); and Health Care and Social Assistance (6.3%) NAICs industry sectors. Leonia should recognize the locally employed workforce has a potential customer base and target their needs.

Table 3.4: Profile of Workers Employed in Leonia - 2017

	Count	Percent
Total Primary Jobs: 1,519		
\$1,250 earnings per month or less	160	10.5%
\$1,251 to \$3,333 earnings per month	606	39.9%
More than \$3,333 earnings per month	753	49.6%

Local Industry Characteristics

Leonia will benefit from looking beyond labor force characteristics and looking at local industries.

Employers in Leonia

Leonia has 288 businesses, most of which are retail and service-based businesses. Professional, Scientific, and Technical Services within the Services SIC business code makes up 12.5% of the businesses in Leonia. Only the number of Other Services (16.3%) under the SIC code was higher than the number of Professional, Scientific, and Technical Services. The Borough also has a fairly high percentage of its businesses dedicated to Health Care and Social Services (9.0%). No other category of business was above 7.5%.

Table 3.5: Business Summary

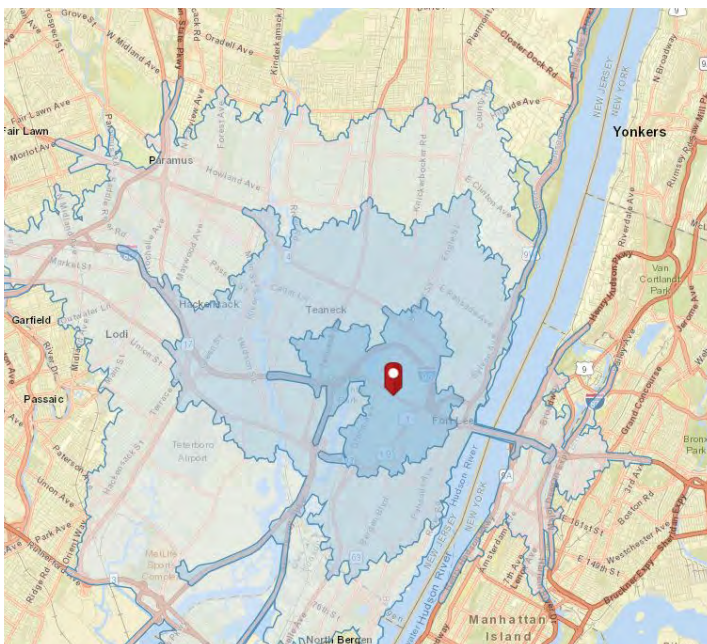
SIC Codes	Number of Businesses	Percent
Agriculture and Mining	1	0.3%
Construction	18	6.3%
Manufacturing	3	1.0%
Transportation and Warehousing	6	2.1%
Wholesale Trade	8	2.8%
Retail Trade: Home, Food, Automobiles, Personal Care	21	7.3%
Retail Trade: Hobby, Media, General Merchandise	9	3.1%
Banking, Finance, and Insurance	17	5.9%
Real Estate and Rentals	8	2.8%
Professional, Scientific, & Technical Services	36	12.5%
Health Care and Social Services	26	9.0%
Accommodation and Food Services	15	5.2%
Arts, Sports, Entertainment, and Recreation	9	3.1%
Administrative and Support and Waste Management and Remediation Services	10	3.5%
Information	8	2.8%
Educational Institutions	17	5.9%
Other Services	47	16.3%
Government	12	4.2%
Unclassified Establishments	17	5.9%

Source: Bergen County Department of Economic Development

Economic Analysis

Buying Power

ESRI's Retail Market Analyst conducted an economic analysis which determined that households within a ten minute drive radius of Leonia's Broad Avenue have the buying power and geographic opportunity to shop on the commercial district. This report estimated that these roughly 91,000 households with a population of almost 240,000 have an estimated retail potential of \$4.0 billion. The analysis looked beyond demographics and analyzed lifestyles, the retail marketplace, retail goods and services expenditures, and a further analysis on potential markets that may identify an optimal tenant mix.



According to ESRI's economic analysis, there is significant potential in the retail market within a 5 minute drive of the downtown area. ESRI estimates that the potential retail spending to be \$942.6 million while the total retail sales is \$856.5 million, creating an opportunity to capture the roughly \$86 million in difference between the potential and the actual amount of retail sales.

Chart 3.4: Leonia's Household Income - 2019

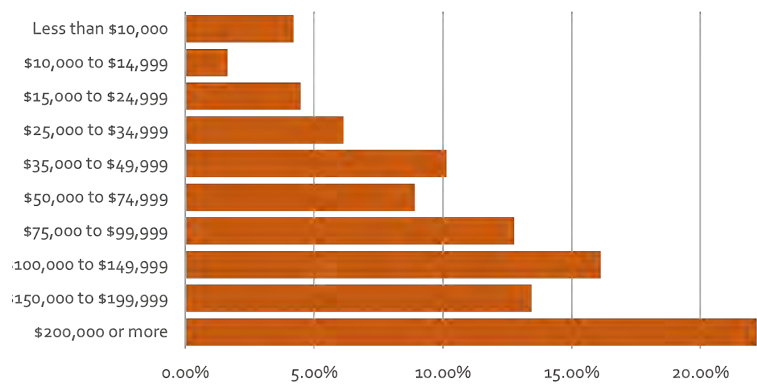


Table 3.6: Leonia Income Comparison

	Median Household Income	Median Family Income	Median Non-family Income	Family Per Capita Income
Leonia	\$102,250	\$125,000	\$43,393	\$53,706
Surrounding Bergen County Municipalities				
Englewood	\$85,899	\$96,455	\$63,447	\$52,920
Fort Lee	\$83,767	\$106,798	\$57,850	\$52,918
Palisades Park	\$68,245	\$78,565	\$47,557	\$33,959
Ridgefield Park	\$86,923	\$109,725	\$44,819	\$39,539
Teaneck	\$111,821	\$135,779	\$47,875	\$49,171

Source: US Census Bureau, American Community Survey, 2015-2019 5-Year Estimates, DP03: Selected Economic

Residential Base

Leonia is a primarily residential community, which as discussed in the Land Use element derives the overwhelming majority of its property tax revenue from residential uses. As a result, the housing market is a main driver of economic growth for the community. As a mostly built-out community, there are very few opportunities for large-scale residential construction projects. However, opportunity does and could further arrive through redevelopment of existing, underutilized properties as discussed in greater detail in the Land Use element.

Construction Characteristics

Over the past 11 years, Leonia has experienced relatively large construction growth for multifamily units and ten (10) for two-or more family units, demonstrated by residential building permits issued by the Leonia Construction Office. Since 2016, the value of such construction has been slightly lower than the value of construction during the 2008 to 2014-time period. With assets including walkability

and public transportation accessibility, Leonia would benefit from higher density living such as townhomes or low- to mid-rise apartments within a mix of other uses. These denser housing types may increase the value of construction. Based on the development trends of the past decade, it is likely that most new development will come from these higher density types of development, which the Borough should plan for.

Table 3.7: Residential Building Permits in Leonia 2008-2020

Year	1 & 2 Family	Multifamily	Total Units	Total Value
2008	0	33	33	\$5,506,700
2009	1	0	1	\$24,000
2010	0	0	0	\$ --
2011	1	0	1	\$432,500
2012	1	0	1	\$398,300
2013	1	0	1	\$514,700
2014	3	0	3	\$1,270,600
2015	0	0	0	\$ --
2016	1	2	3	\$,333,301
2017	2	0	2	\$938,600
2018	0	0	0	\$603,500
2019	0	12	12	\$90,000
2020	5	0	5	\$2,867,631
Total	14	47	61	\$16,979,832

Source: NJ Construction Reporter

Retail & Service Base

Leonia has two primary retail and service based commercial areas in the Borough: the traditional downtown on Broad Avenue and the commercial corridor in the Grand Avenue and Fort Lee Road. The Borough intends to improve the commercial corridor in the Grand Avenue area through redevelopment designations that intend to create mixed-use, transit-oriented development in the area with the anticipation of the northern expansion of the Hudson-Bergen Light rail line, which would locate a transit station in the nearby area.

Traditional Downtown – Broad Avenue

Broad Avenue extends north-south through the Borough’s center. Today, Broad Avenue is typified by its historic buildings, local businesses, and growing utilization of the arts to create a unique, artsy environment. While retail spaces have not experienced significant vacancies that have occurred in other downtowns, there is a general sense from residents that the Broad Avenue corridor is an underutilized area in Leonia.

Broad Avenue serves primarily a local base with a smaller regional customer base. Walkability and proximity to residential neighborhoods were repeated strengths voiced by Borough residents, as many are within walking distance of the many restaurants and service-based retailers such as nail and hair salons.



Broad Avenue attracts customers from a wide area as well, attracting spending from outside of the Borough but also competing with other regional downtown centers (i.e. Englewood and Ridgewood), regional malls, big-box outlets, and increasingly e-trade/e-commerce with online sales. Residents during the public outreach portion of the Master Plan process cited a lack of diversity in the types of businesses and the lack of commercial gathering spaces such as coffee shops or creative spaces as a deterrent from visiting the downtown.

Transit-Oriented Development—Fort Lee Road

The Fort Lee Road area between Willow Tree Road and Grand Avenue acts as a gateway into the Borough for visitors traveling from westward locations. The current conditions of the Grand Avenue/Fort Lee Road are properties that are underutilized and exhibit blighted conditions. With the potential northern extension of the Hudson-Bergen light rail in the area, redevelopment could act as a major catalyst for growth in this area of the Borough.

Current conditions in the Grand Avenue area including small lot sizes, lack of common ownership and congested roadway patterns pose some challenges to the revitalization of the area. Several changes would have to be made to the area to make it more attractive for potential redevelopment. Given the existing market conditions, it may not be feasible for retail to exist in this area. The Borough will need to focus efforts on encouraging the redevelopment of this area, especially on the expansion of the HBLR into Leonia. With an expansion of the light rail system, ground floor retail may become a more feasible option in a redevelopment scenario.

Industrial Base

One of Leonia’s many strengths is its location along the New Jersey Turnpike/ I-95 corridor, the largest industrial corridor in the state of New Jersey. The I-95 corridor is the most critical corridor for industrial and warehouse uses as there is tremendous demand to access what is the largest concentration of population with tremendous buying potential in the entire country, according to a Colliers International report.¹⁰ Although the New Jersey Turnpike/I-95 corridor is considered the typical industrial corridor of the state, demand for land is outstripping the supply of land needed for these uses, which in turn is driving up rent and costs. Leonia is located in the Meadowlands submarket of this corridor, which can reach over 5.5 million households within an hour of travel time. Leonia being one of the last exits in New Jersey before entering New York City via the George Washington Bridge also gives it a locational advantage. This in combination with the Trade, Transportation & Utilities industry sector and the Transportation/Material Moving occupations projected to gain jobs through 2024, Leonia should be ready for the potential redevelopment activity for warehousing and transportation uses to occur in and around the Borough as the Meadowlands sub-region of the I-95 corridor is expected to see continued high demand in these sectors.

Leonia has a small area of the Borough dedicated to industrial uses: the Light Industrial zone is located along Willow Tree Road with convenient access to Grand Avenue and Fort Lee Road. As the growth in e-commerce continues, retailers will continue to look

¹⁰ Source: <https://www2.colliers.com/en/research/2018-us-industrial-planning-the-final-mile-nj-corridor>



for smaller final-mile fulfillment centers that can be located within relatively easy driving distance of large population centers. The location and size of the Light Industrial zone in Leonia makes the area a potentially sought after location for developers of these final-mile centers. From an economic development perspective, this area will likely continue to be an important area of employment for the Borough and help to solidify its tax base.



Economic Development Trends

Downtowns as Center of Place

Economic development practitioners understand the importance of downtowns across the nation supporting business communities, attracting “downtown dwellers”, encouraging arts and culture, and providing activities for residents and consumers with programs like Yoga in the Square (Pittsburgh, PA), Dog Days of Summer (Boonton, NJ) or Gallery Walk (Paseo Arts District, Oklahoma City, OK). Downtowns will continue to thrive as they provide unique experiences not found in Big Box or strip retail of yesteryear.

One way that Leonia can ensure the future of its downtown as a center of place is through placemaking. Placemaking creates public spaces that promote people’s health, happiness, and well-being while also capitalizing on a community’s assets, inspiration, and potential. Creative placemaking can begin simple by focusing on creating an attractive streetscape that would encourage people to walk around and visit the area. The Borough can achieve this with pedestrian improvements, landscaping, attractive signage and awnings, façade improvements, street furniture and public art. Through creative placemaking, Leonia can stand out from other neighboring communities as the unique Borough that it is.

Another strategy for the downtown is branding and marketing. Branding can take a variety of forms, but the most prominent may be banner signs, streetscape improvements, planters, and annual events such as Farmer’s Markets, street festivals, and online marketing presence. The creation of a Broad Avenue advisory committee could help lead to the creation of these various types of events and branding changes that would give Leonia’s Central Business District a sense of identity and place.

Commercial districts are trying to generate activity nodes in the commercial downtowns through attracting residents to live in the area. There is a current trend to live in downtowns as more people are choosing to live in core neighborhoods with walkable amenities. Given the Borough’s compact character, it would be possible to attract residents in nearby residential districts to the Broad Avenue corridor if the corridor became a more attractive and utilized space.

In order to improve upon the underutilized corridor, the Borough should look at its zoning code and regulations around such topics like liquor licenses to ensure that Broad Avenue is a corridor that can attract investment in new buildings, restaurants and services as well as new residents that want to live, work and play in an interesting environment.

Evolution of Retail

Municipalities should look to improve streetscapes, make it easy for shoppers to navigate an area such as finding parking easily, and create an overall pleasant and safe pedestrian environment. Amenities such as wayfinding, resting areas, plantings, lighting, and art/culture/history in strategic locations will encourage shoppers to walk around and shop longer or initiate a second point-of-sale. The implementation of Complete Streets policies should help to improve the pedestrian environment along Broad Avenue. The Borough should also utilize its downtown’s proximity to Overpeck County Park to bring in consumers towards its main downtown area.

Large storefront windows would also augment the shopper’s experience in the public realm, encouraging the impulse to walk around and continue to shop. Another way to encourage walkability among visitors is to ensure safety from roadway traffic. Creating unique place identities through the public realm will attract retailers and will advance

economic viability in these areas. These pleasant shopping experiences are also not limited to downtowns and can be applied through improved site design at shopping centers.

Non-Traditional Workplace

Many downtowns such as Leonia have a need for a diversity of non-residential uses, such as modern office space or work share space to provide alternate goods and services as well as employment opportunities, which will further the diversity of the tax base. The presence of a workforce in the town of Leonia, especially within the Downtown, creates additional disposable incomes that will support the local businesses, especially during the midweek lunch period, where most retailers see a drop in revenue.

The widespread utilization of remote work, particularly for white-collar workers, during the pandemic may potentially give rise to a significant increase in the number of co-working spaces that exist in suburban communities. Given the walkability of the Borough to its downtown and the demographic profile of Leonia workers, the Borough is well positioned to be a municipality that could take advantage of this potential demand. Serendipity Labs, a co-working space management company, operates an 8,500 square-foot co-working space that includes lounges, event spaces and a café in nearby



Ridgewood. The Borough should review its zoning requirements for its business zones to ensure that co-working space is permitted which could help to diversify the uses within downtown Leonia.

Value of Public Transit

Transit premium is a term used to describe the upward effect that high capacity transit (i.e. commuter rail, light rail and bus rapid transit) has on nearby real estate values. A 2019 study done by the National Association of Realtors found numerous economic values to the widespread and reliable availability of public transit modes. According to the study, in locations near high capacity transit, home values increased by 4-24%, rents for dwelling units increased by 2-14% and an increase in the value of office space by 5-42%.¹¹ Residents living near public transit also benefitted from the accessibility of public transit as households spent between \$2,500 and \$4,000 less on transportation, largely because of lower car ownership. Several other studies have shown similar effects depending on the examples looked at. Municipalities across New Jersey have seen this effect with apartments and homes located near NJ Transit rail stations seeing high values and higher rents than more car-oriented locations. Significant new developments are occurring in and around these stations wherever land is available to be developed.

Leonia already benefits from bus transportation to New York City with NJ Transit Route 166 providing service to the Port Authority Bus Terminal in Midtown Manhattan and Route 182 terminating at the George Washington Bridge Bus Terminal. Frequent bus service is likely one of the reasons why households choose to move to the Borough. According to survey results, some of the main draws to Leonia are related to its accessibility; 44% of respondents cited Leonia's proximity to New York, 26% cited access to George Washington Bridge, and 26% said availability of buses were main reasons that they moved to Leonia. Increased access to public transit, particularly the expansion of the Hudson-Bergen Light Rail would provide increased economic value to the areas of the Borough closest to the transit stop and would give Leonia residents greater commuting access to employment centers in Hudson County. Advocating for the northern expansion of the Hudson-Bergen Light Rail was the most popular survey response for how Leonia should improve mobility through the Borough. Borough officials should work with NJ

¹¹ Source: <https://www.nar.realtor/sites/default/files/documents/the-real-estate-mantra-locate-near-public-transportation-10-14-2019.pdf>

Transit and surrounding municipalities to make sure the northern expansion of the HBLR occurs.

Redevelopment in New Jersey

The past decade or so since the Great Recession has shown a shift in development patterns in New Jersey with development moving away from greenfield sites on previously undeveloped land to largely built out areas of the state. An analysis by New Jersey Future shows that roughly two-thirds of the population growth in New Jersey between 2007 and 2018 was concentrated in municipalities that were at least 90% built out.

As a nearly fully built-out municipality, Leonia has the potential to benefit from this statewide trend in infill development. The Borough is taking the right steps to take advantage of this trend by designating areas of the Borough as redevelopment areas. In order to capitalize on the development trend, the Borough should finalize redevelopment plans to encourage new infill development in key areas of the Borough.

It is not only multifamily and mixed-use development redevelopment that could benefit Leonia. As the Colliers International report on Industrial and Warehousing uses along the NJ Turnpike notes, the region around the Meadowlands has significant redevelopment potential for former office buildings and other large industrials sites to be redeveloped to meet the demand for "final-mile" shipping locations.

Post-COVID Trends

The COVID-19 pandemic has created significant uncertainty in the short-term with various prognosticators attempting to predict what a post-pandemic world will look like given the lifestyle changes people have had to make to avoid contracting the virus. One such change is in the increased level of telework, with many workers doing it for the first time and companies reconsidering how often they need workers to be in an actual office. Additionally, bars, restaurants, theaters and many other indoor and clustered venues have been shut down and only tentatively allowed to reopen at significantly reduced capacities. This has caused outdoor public spaces to become increasingly crowded and pose their own health risks to individuals. While these shutdowns and changes primarily affect economic development of cities and regions, they are causing households to reconsider their lifestyles and where they truly want to live. This is true especially in the greater New York metro

area, where New York City was the original epicenter of the COVID-19 outbreak in the United States and experienced some of the worst consequences of the virus. In the weeks and months since the height of the pandemic, City residents, especially wealthy residents with the means of moving, have considered moving out of the City to the surrounding suburbs in the region. Those considering a move to more suburban communities indicate a desire for more space, especially a home office and backyard to help adjust to the new reality of increased telework and the need to maintain social distance.

While it is difficult to predict the implications for future land uses, it is likely that the pandemic will help to further many trends that were already happening. The two long-standing trends that were happening were the Millennial generation moving from cities to the suburbs and the decline of brick-and-mortar retail. The living preferences of Millennials were affecting the housing market even prior to the changes brought on by the pandemic. The Urban Land Institute's *2020 Emerging Trends in Real Estate* report released prior the pandemic in the United States highlighted the growth of suburban communities that it refers to as "hipsturbias". These are suburban communities located just outside of the nation's largest urban areas that have similar urban qualities such as walkability, access to transit, a variety of restaurants and social services, and recreational opportunities. The report highlights nearby communities of Maplewood and Summit in New Jersey and New Rochelle and Yonkers in New York State. Leonia has many of these qualities including bus transit to New York, plentiful recreational opportunities with Overpeck Park and a rather walkable community. A 2019 New York Times profile of the Borough highlights its ability to attract artistic families who are looking for the mix of urban qualities with small town qualities such as small group gatherings and quieter streets. The main quality that the Borough lacks is a vibrant downtown commercial corridor that can draw significant private investment and a greater housing typology that are seen in other successful New Jersey downtowns like Montclair and Westfield. However, Leonia's closer location to the City and the variety of recreational opportunities in Overpeck Park can give it greater advantage to other communities in the area that are attracting Millennials who are moving from New York to the suburbs.

The pandemic has impacted retail establishments hard with many large department stores such as Lord & Taylor and Brooks Brothers filing for bankruptcy. It is not just large retail establishments as local retail establishments also had to spend months closed to customers to prevent the spread of the virus. For retail, it is more difficult to predict what will be the medium- and long-term effects for a downtown commercial corridor like Leonia. It will likely be necessary that the Borough try to promote mixed-use development with particular emphasis on housing units and less emphasis on the commercial square footage of developments. By their nature, downtowns are closer to where many residents live compared to regional shopping malls. All indications point towards shopping malls facing especially difficult times ahead, which could actually benefit many downtown retail locations.

Economic Development Programs & Initiatives

State Resources

New Jersey State Council on the Arts -

The Arts Council is made up of volunteer members and is a division of the New Jersey Department of State. Its mission is to “support, encourage, and foster public interest in the arts; enlarge public and private resources devoted to the arts; promote freedom of expression in the arts; and facilitate the inclusion of art in every public building in New Jersey.” The Council has a minimum annual appropriation \$16 million. For FY2022, New Jersey municipalities with arts and cultural institutions like Leonia were awarded Arts Council grants, including Red Bank, Montclair, and Madison. Grant deadlines for FY2023 are due in January/February 2022. Some of the grants available through the Council include:

- **Arts Project Support (APS)** – Support for single arts events such as concert or theatre production, exhibition or dance performance.
- **General Operating Support (GOS)** – This grant is awarded to NJ-based non-profit, arts missioned organizations to help underwrite the expense of their total operation. These grants are available on a three-year cycle, becoming available in FY2023.
- **General Program Support (GPS)** – The GPS grant may be awarded to units of local government, nonprofits, agencies, or institutions to help underwrite the expense of presenting major, on-going arts programs. These grants are available on a three-year cycle, becoming available in FY2023.

New Jersey Economic Development Authority (NJEDA) –

The NJEDA is an independent state agency that provides access to capital and real estate development assistance to businesses, non-profits, municipalities, and developers. The NJEDA’s mission is to “finance small and mid-sized businesses, administer tax incentives to retain and grow jobs, revitalize communities through redevelopment initiatives, and support entrepreneurial development by providing access to training and mentoring programs.”

EDA programs, like the ones discussed above, are geared specifically for:

- Small and Mid-Sized Businesses;

- Large Businesses;
- Manufacturing Businesses;
- Emerging Technology and Life Science Businesses;
- Energy Resources; and
- Not-for-Profits

New Jersey Business Action Center (NJBAC) –

NJBAC is housed under the New Jersey Department of State and is considered a “one-stop” shop for businesses. NJBAC can provide financing, incentive and regulatory assistance as well as site selection services.

Membership Organizations –

- New Jersey Chamber of Commerce
- New Jersey Business & Industry Association (NJBIA)

Economic Development Element Recommendation Plan

Directions

“Check off” a completed recommendation and mark the year of completion as a way to measure progress.

Short Term: complete in 1-2 years; **Mid Term:** complete in 3-5 years; **Long Term:** complete in 10+ years.

Economic Development Plan

	<i>Recommendation</i>	<i>Implementing Party</i>	<i>Timeframe</i>	<i>Completed</i>	<i>Year Completed</i>
1	Develop a creative placemaking strategy that highlights the unique character of Leonia.	Borough Administrator	Short- to Medium-term		
2	Continue monitoring economic recovery from the pandemic and monitor changing trends in retail and office spaces.	Borough Administrator	Ongoing		
3	Create a branding and marketing campaign that encourages residents to spend time and patronize the central business district.	Borough Administrator	Short- to Medium-term		
4	Review regulatory incentives to encourage new food retail and restaurant establishments in the Borough.	Planning Board, Planner	Short- to Medium-		
5	Improve the economic viability of the Willow Tree Road area.	Planning Board			
6	Encourage public improvements in the redevelopment area.	Planning Board, Borough Council	Short- to Medium-term		
7	Develop strategies to connect the Broad Avenue Corridor to Overpeck Park.	Borough Administrator	Medium- to Long-term		
8	Create a Broad Avenue advisory committee of business and property owners in the corridor.	Borough Administrator; Economic Development Committee	Medium-term		
9	Review zoning regulations to ensure that Broad Avenue corridor can create a Live, Work, Play environment.	Planning Board; Planner	Short- to Medium-term		
10	Utilize Complete Streets improvements on Broad Avenue as an economic development tool.	Borough Administrator; Borough Council			
11	Adopt a redevelopment plan for the Fort Lee Road/ Grand Avenue redevelopment areas.	Planning Board; Borough Council	Short-term		
12	Consider allowing co-working spaces along commercial corridors.	Planning Board; Borough Council	Short- to Medium-term		

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SUSTAINABILITY ELEMENT

Introduction

The New Jersey Municipal Land Use Law (MLUL) provides that the Sustainability Element (N.J.S.A. 40:55D-28) of a Master Plan must:

- 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 stormwater on-site;
- Optimize climatic conditions through site orientation and development.



Sustainability is considered a national policy of the U.S., “to create and maintain conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations.” It is possible to think of sustainability as focusing on People, Planet, and Profit where the emphasis is on the social, economic and environmental. This fulfillment of social, economic and other requirements has been further refined and known collectively as the three E’s or the triple bottom line: a stronger Economy, a healthier Environment, and a more Equitable community.

Sustainability is important because it allows for healthier communities. It delivers results for cleaner soil, water, and air, ensures natural resources are not depleted, and overall, it ensures a nontoxic environment. The Borough of Leonia recognizes the importance of sustainability and its positive effect on Leonia’s residents and natural environment. The Sustainability Element will guide the Borough towards a more sustainable future in accordance with the MLUL. The Element will lay out a set of goals as well as an outline of action steps that the Borough can take in order to achieve these sustainability goals.

Goals

1. Increase resident, business, and school commitment to sustainable actions.
2. Increase energy efficiency in government buildings and encourage residents and businesses to do the same with educational programs and financial incentives.
3. Promote sustainable building practices.
4. Implement policies that work towards achieving local and state-level climate change goals



Climate Change and Greenhouse Gas Emissions

Climate change has been driven by the rapid increase in greenhouse gas emissions over the past two centuries. Despite recent declines in the amount of greenhouse gas emissions emitted nationally, trends in greenhouse gas emissions have not gone at the pace necessary to significantly curb climate change. One of the most positive trends in emissions reductions has been the reduction in greenhouse gas emissions from the electric grid driven primarily by the change from the use of coal to natural gas as well as the increase in usage of renewable energy sources such as wind turbines and solar panels. What used to be the greatest source of greenhouse gas emissions has decreased enough to where the transportation sector has now surpassed electricity as the top source of greenhouse gas emissions. The EPA documented that transportation accounted for 29% of all emissions in 2017 while the electric sector accounted for 28%.¹

Despite positive trends in the electric sector, the transportation sector has actually seen a steady rise in emissions as the nation has recovered from the Great Recession (2007-2009) starting around 2013. In the New York metropolitan area, auto emissions have increased by 27% since 1990 with the continued increase in vehicle miles traveled (VMT) and the increased adoption of SUVs and trucks, which are less fuel efficient compared to sedan models. As an inner-ring suburb in the Tri-State region, Leonia's land use and circulation policies in concert with state partners will play a significant role in the needed reductions in greenhouse gas emissions, particularly from the transportation sector.

In addition to those policies, the Borough should also focus attention on reducing energy consumption and greenhouse gas emissions. The Borough should work with the municipality's energy provider PSE&G to track the amount of carbon emissions that are being emitted by Borough residents and businesses. Leonia should collaborate with Sustainable Jersey to help calculate a baseline on the Borough's current emissions to help understand where its emissions are coming from to develop a strategy to reduce emissions. Tracking the Borough's emissions will allow the Borough to establish baseline municipal emissions and set a goal to reduce those emissions by a certain percentage each year. Sustainable Jersey provides a spreadsheet and tutorial to assist municipalities with calculating municipal greenhouse

¹ Source: https://www.epa.gov/sites/production/files/2019-04/documents/2019_fast_facts_508_0.pdf

gas emissions. Woodbridge Township in Middlesex County is a good example of a municipality that utilized the Sustainable Jersey emissions calculator as a basis for its Climate Action Plan. By calculating these emissions, the Borough will be able to better fine tune the recommended actions needed to efficiently lower its emissions.

Despite efforts to reduce emissions, the Borough will still need to adopt mitigation tactics to help deal with the effects of climate change. These mitigation efforts should include protection from increasingly strong storms, the increase in frequency and intensity of heat waves, and protection against potential blackouts. Hazard mitigation and stormwater management tools that help to mitigate the negative effects of climate change will help create a sustainable future for the Borough. These efforts are discussed in detail in the **Climate Change Vulnerability Assessment** section of the **Land Use Element**.

Sustainability Actions and Incentives

Economy is integral to sustainability. It is identified as one of the three E's in the triple bottom line: a stronger Economy, a healthier Environment, and a more Equitable community. Strengthening economic climates yield high impact benefits such as achieving higher paying jobs, more affordable business-friendly environments, and attracting and retaining workers of all ages.

But beyond these general economic benefits are the benefits of attracting Green Industries and businesses that align with trends in Sustainability Innovation. Sustainability Innovation can be implemented by any business, regardless of industry, through business strategies that achieve economic performance through environmentally and socially aware design and operating practices. As business leaders are understanding that sustainability opportunities represent a frontier for creativity, innovation and the creation of value, places that share in these sustainable values will benefit from incentivizing green business practices and attracting sustainable businesses. The Borough should recognize local businesses with "green" programs to promote the use of sustainable practices in business.

Identifying green economy sectors and high-growth employment opportunities is the first step in supporting green industries and sustainability innovation businesses. Contacting these businesses

to help identify opportunities, assets and needs in the community, such as job shortages and needed skills, will help support these sustainably minded businesses. New Jersey currently ranks fifth among states with the number of green companies, behind leaders California and New York. The New Jersey Department of Environmental Protection (NJDEP) in partnership with Rutgers University's New Jersey Small Business Development Centers (NJSBDC) launched the NJ Sustainable Business Registry in 2014. The NJ Sustainable Business Registry recognizes and promotes sustainable businesses in the state and helps other businesses implement sustainable practices by sharing resources and providing no cost sustainability consultants. Businesses throughout the state can become registered as a Sustainable New Jersey Business if it applies and meets certain criteria. The Borough has no registered green business within its borders while neighboring Fort Lee and Teaneck each have a registered business. The Borough should work with small businesses to promote the NJ Sustainable Business Registry and the benefits of becoming a sustainable business.

An important aspect of developing a green and sustainable economy is to have an educated workforce that understands sustainable practices and green technology. Education of these issues and challenges starts in the school system. In June 2020, the New Jersey Department of Education announced that climate change education will be integrated into the curriculum for every public school in the state starting in the 2021-2022 school year. While New Jersey is seen as a leader in climate change education on the national level, the Leonia School District has consistently led the way locally. The Leonia Board of Education (BOE) has already been at the leading edge of incorporating sustainability policies in Leonia public schools. Under these policies, the Board has earned grant awards that have funded recycling and composting efforts as a way to reduce the school district's waste. Additionally, the BOE has installed solar panels on each of the District's school buildings and has set up a link of the official school website to track the amount of energy generated by the solar panels. As a result of these efforts, the Leonia School District has been recognized by Sustainable Jersey as a sustainability leader among all New Jersey school districts. These efforts complement the efforts by the Borough to become more sustainable, and Leonia should glean sustainable policies and practices from the Board of Education to further Borough-wide sustainability

practices to ensure an increasingly sustainable community.

Energy

Energy Efficiency

According to the U.S. Department of Energy (in 2005), energy can account for as much as ten percent of a local government's annual operating budget. Much of this energy use can be attributed to the energy used by a locality's public buildings. Reducing energy use in public buildings can provide a multitude of benefits, including:

- Reducing greenhouse gas emissions and other environmental impacts
- Reducing energy costs, including saving taxpayer money each year
- Increasing economic benefits through job creation and market development
- Demonstrating leadership
- Improving air quality and productivity in energy-efficient and green buildings
- Engaging the community

Local governments can promote energy efficiency in their jurisdictions by developing and implementing strategies that improve the efficiency of municipal facilities and operations, and further, can lead by example, thereby motivating the private sector and other stakeholders to follow suit. First, local governments should conduct a baseline assessment of energy performance in existing buildings, a practice known as benchmarking. While these assessments can take many forms, local governments, for example, can compare a building's energy performance to the performance of similar buildings across the country. Or, local governments can conduct an energy audit, which compares actual performance of a building's systems and equipment with its designed performance level or the performance level of top performing technologies. Typically prepared by an energy professional, energy audits can be used to prioritize energy efficiency investments. As the Borough continues to explore plans for new spaces for its municipal facilities, the governing body should ensure that the new space will be energy efficient, saving money on operating costs and lessening the Borough's environmental impact.

Streetlights are also a major source of energy usage by municipalities. According to the Department of

Energy, the cost of energy consumed by conventional incandescent and high intensity discharge (HID) streetlights can account for as much as 40% of municipal electric bills. LED lighting is the sustainable lighting alternative. LED lighting is not only energy efficient, it reduces light pollution and protects night sky visibility, reduces maintenance and associated costs, has superior lighting quality since it ensures visibility and safety as well as perceived security, and avoids using highly toxic mercury.

Local governments can also reduce energy consumption in their jurisdictions by developing financing options to help lower the cost of making energy efficiency improvements in new or existing homes. By adopting these energy efficiency policies and programs, local governments will help homeowners save money on their energy bills, and lower greenhouse gas emissions.

The state also provides several financial incentives that the Township can promote to residents and businessowners who are eligible. New Jersey's Clean Energy Program, sponsored by the State of New Jersey Board of Public Utilities, provides state-funded financial incentives. Leonia residents and businesses are eligible to receive these subsidies and low interest loan programs, including:

- Benchmarking: provides an assessment of energy performance, available to municipalities
- Combined Heat & Power (CHP) is a highly efficient technology that recovers heat and uses the thermal energy. Rebates are available for CHP conversion.
- Local Government Energy Audit: provides a thorough analysis of facilities with cost-justified and energy efficient measures and is fully subsidized for municipalities
- New Jersey Home Performance with ENERGY STAR (HPwES): offers residential solutions to reduce a home's energy costs and carbon footprint. Rebates are available for installing energy efficient upgrades, which can save up to 30% on energy costs and increase home comfort, safety, and durability.
- Pay for Performance (P4P) provides incentives for comprehensive, whole-building energy improvements. Pay for Performance program can help save 15% or more on energy consumption and help builders construct a more energy efficient building.

- New Jersey SmartStart Buildings: offers financial incentives for certain projects which can offset some or all of the added cost to purchase qualifying energy-efficient equipment
- Direct Install: created specifically for existing small to medium-sized facilities, the program provides a free energy assessment to cut a facility's energy costs by replacing lighting, HVAC and other outdated operational equipment with energy efficient alternatives. The program pays up to 70% of retrofit costs.

The Borough should construct or rehabilitate its new municipal space using green building best practices. While potentially adding more upfront costs, the new municipal space would save the Borough money on energy costs over the life of the building. The Borough should make clear to residents the financial benefits to constructing a new municipal space using sustainability best practices. It is additionally important for the Borough to educate residents and businesses about the different financial incentives that are available to them to become more energy efficient.

The Leonia School District has been at the forefront of many sustainability initiatives in the Borough. The Board of Education has adopted sustainability practices into its operations, which include installing a food dehydrator to reduce cafeteria waste at the Elementary School, replacing plastic foam lunch trays with cardboard trays, and becoming the first school district in the County to recycle milk and juice cartons. Leonia's schools also regularly earn grants to fund sustainability projects from Sustainable Jersey and other sustainability minded organizations to implement these programs. As a result, the three schools in the District have earned Bronze status in the Sustainable Jersey Schools program. The Borough should follow the strong example of its School District and implement the "actions" that will earn the Borough Bronze status from Sustainable Jersey.

Renewable Energy Sources

There are several different kinds of alternative renewable energy sources including wind energy, geothermal power, solar power, among others. These alternative energy sources are the foundation of a growing clean energy industry in the U.S. In 2018, New Jersey was the nation's sixth-largest producer of electricity from large- and small-scale

solar photovoltaic (PV) facilities, which accounted for about 75% of the state's renewable electricity generation. Significant changes have been made in recent years to increase the level of energy usage that comes from renewable sources. The Clean Energy Act (CEA), which passed in 2018, established a mandate to require 21 percent of all energy sold in the state to come from renewable sources by 2020 with additional commitments to reach 35 percent renewable energy by 2025 and 50 percent by 2030. These changes are most likely to come from the development of wind energy off New Jersey's shoreline and additional installation of photovoltaic panels to produce greater amounts of solar energy.

Leonia has been proactive in its promotion of renewable energy sources. Borough Council passed Ordinance No. 2017-22 in December 2017 that regulates the use of roof mounted solar panels. This ordinance was passed to promote the use of solar energy while standardizing the requirements for roof mounted solar panels. As mentioned earlier, the Leonia School District is a municipal leader in sustainability with its use of solar panels as all three of the school buildings in Leonia have solar panels mounted on their roofs. While the Borough does not have roof mounted solar panels on its municipal buildings, the Borough should utilize solar energy as a part of the planned new municipal space. This will further show the Borough's commitment to sustainability.

The State of New Jersey also provides municipal governments the opportunity to participate in a Government Energy Aggregation (GEA) program as a way to increase the amount of renewable energy used by residents. New Jersey passed the Government Energy Aggregation Act of 2003, which authorizes municipalities and/or counties of New Jersey to establish a GEA, to be enacted through municipal ordinance. Several municipalities in the state have utilized a GEA program to achieve greater usage of renewable energy while reducing the utility bills of their residences. Several Essex County municipalities cooperated to create the Sustainable Essex Alliance Renewable Government Energy Aggregation program to contract with PSE&G to provide residents with 41% renewable energy, which is double the current allotment. Municipalities such as Piscataway and New Brunswick have also created their own GEAs as a way to both increase the amount of renewable energy used and lower the utility costs of residents.

The Environmental Commission has seriously considered a GEA program that would increase the amount of renewable energy used by residents without increasing the monthly energy costs of residents. As of writing this Element, the Borough's plan to pursue a cooperative program with nearby Bergen County municipalities has been unsuccessful. The Borough should continue to seek opportunities to incorporate renewable energy sources into its electric grid.

Green Buildings and Design

According to the NJDEP, in 2018, residential and commercial buildings were the second largest source of the state's greenhouse gas emissions, accounting for 28% of all emissions. The overwhelming majority of energy usage in buildings comes from energy needed to heat homes and water. As a result, it is critical to improve building design for a community to lower its energy consumption and become more sustainable. New construction and buildings undergoing major modifications, therefore, pose an opportunity to integrate sustainability through design.

One of the most well-known sustainability programs out there for green building certification is the Leadership in Energy and Environmental Design (LEED) certification. LEED provides standards for design, construction, operation, and maintenance of green buildings, homes, and neighborhoods that help building owners and operators be environmentally responsible and efficient. There are no LEED certified buildings located in Leonia.

To encourage sustainable developments, municipalities across the nation have been adopting local 'green building codes.' These green building codes go above and beyond the baseline codes adopted by the state. Instead, they update local zoning legislation to incentivize green building practices. For instance, a local government may create an incentive-based density bonus system where in order for a developer to receive increased height or density, they must commit to designing and constructing a building to meet LEED certification requirements, but is not required to apply for actual LEED certification from the United States Green Building Council (USGBC). Leonia may wish to encourage the use of LEED building practices for new developments in exchange for a density bonus. This will help to make the Borough a more sustainable community by promoting green building practices and creating more sustainable land uses.

The Borough can also formalize green design in its zoning ordinance by incentivizing LEED standards in construction and by including green requirements in development review procedures and public education and outreach materials.

WELL Building

WELL building standards go beyond the LEED standards to consider the health of residents to promoting healthy communities.



There are several recent real estate developments that have earned WELL building certification in New Jersey including projects in nearby Maplewood, South Orange and Jersey City.

Housing Type and Energy Usage

The amount of energy used by households largely depends on the types of housing units that exist in a municipality. Energy efficiency and much improved insulation have significantly decreased the amount of energy needed for heating and cooling. According to the U.S. EIA, no housing type has seen its per-household energy use drop greater than larger apartment buildings (apartments with 5 or more units), which fell by 38% since 1980.² The main reason for this is the decrease in the size of units in apartment buildings and the fact that units with shared walls and insulation help to better preserve heat. By comparison, per-household energy use for households living in single-family homes dropped by 15% over the same time period. Consequently,

² Energy Information Administration, Today in Energy, <https://www.eia.gov/todayinenergy/detail.php?id=11731>

single-family homes now consume a greater proportion of all household energy consumption than in 1980 despite accounting for the same share of total households.

Sustainability initiatives by the Borough indicate the need to both improve the energy efficiency of the Borough’s older housing stock and to diversify the housing typology of the Borough to include more housing units in multifamily and townhome developments with shared walls.

Land Use and Sustainability

Land use plays a significant role in the sustainability of a community. Sprawling land use patterns create auto dependency and cause residents to have to drive long distances to get to work, school and other necessary locations. This causes high amounts of vehicle miles traveled (VMT), which in turn increase the amount of greenhouse gas emissions and air pollutants that are released into the atmosphere, further exasperating climate change. The figure below shows how this dynamic plays out in the area surrounding New York City. Denser settlement areas with compact building types that provide viable transit options such as New York City and Hudson County produce far lower emissions of greenhouse gases per household compared to further out suburban areas in Bergen and Westchester Counties.

The map highlights that Leonia performs somewhere

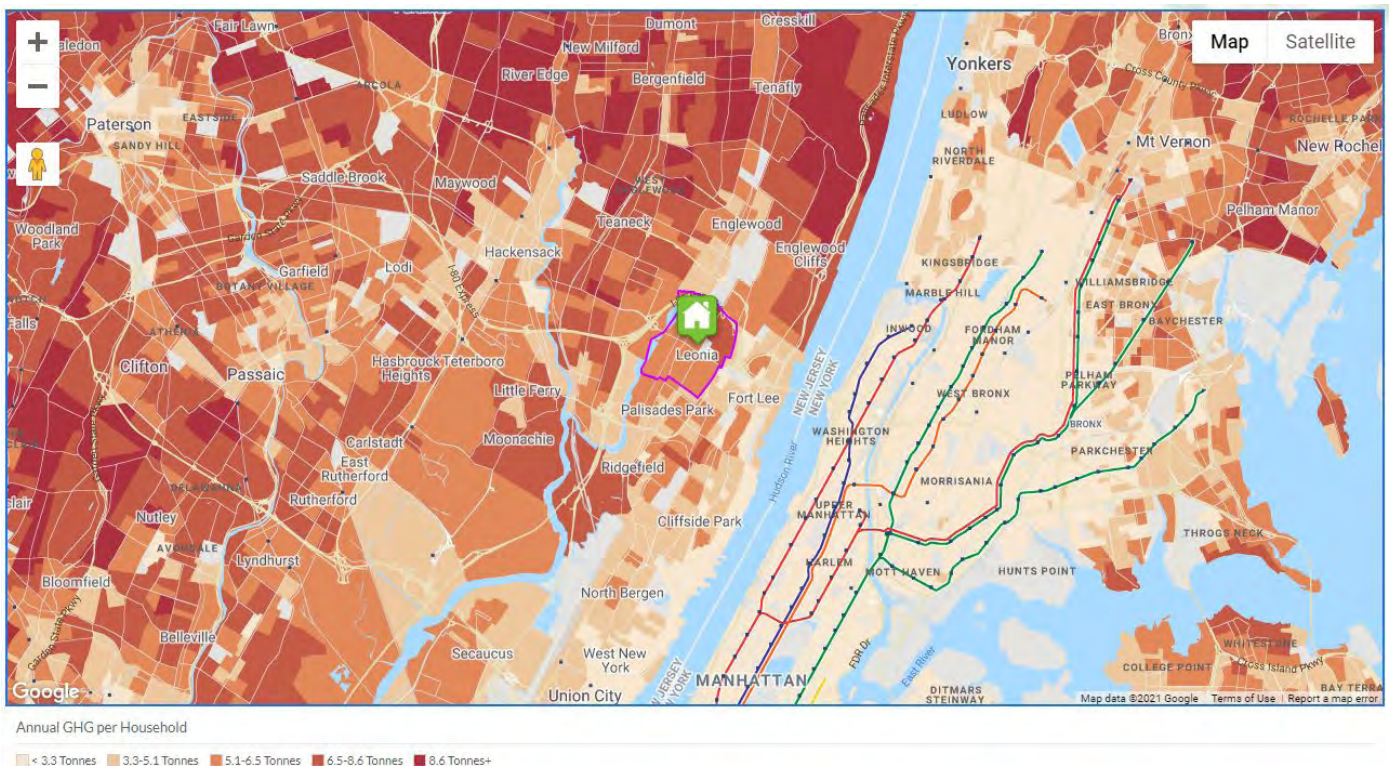
in between these two extremes. This is due to Leonia’s close in location to New York City which provides several transit opportunities for Borough residents. Leonia also does not have a sprawling development pattern that increases greenhouse gas emissions. However, there are opportunities for Leonia to utilize its land use policies to lower its per greenhouse has emissions. By implementing better land use policies, Leonia will be able to reduce the carbon footprint of its residents and become a more sustainable community.

Smart Growth

Smart Growth is a form of growth management that plans for development, attempts to curb urban sprawl and lessen the negative impacts on the environment. There are several environmental benefits of smart growth, including:

- Reducing vehicle miles traveled and decreasing greenhouse gas emissions.
- Incorporating environmental awareness into land use decisions.
- Conserving areas for natural processes of water absorption and filtering.
- Creating links between neighborhoods and areas set aside of nature-based recreation.

The Environmental Protection Agency (EPA) considers smart growth to “cover a range of development and conservation strategies that help



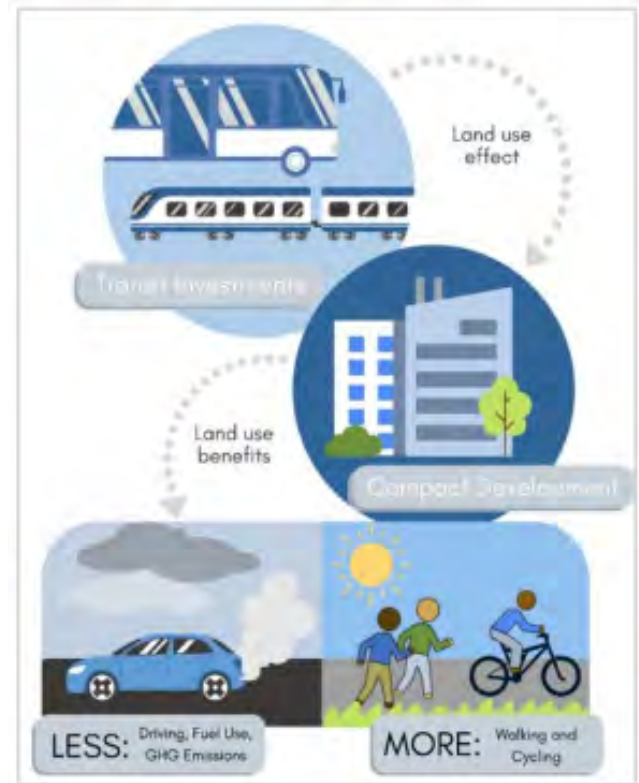
protect our health and natural environment and make our communities more attractive, economically stronger, and more socially diverse.”

The Smart Growth Network has ten (10) basic principles that guide smart growth strategies:

- Mix land uses
- Take advantage of compact building design
- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, farmland, natural beauty, and critical environmental areas
- Strengthen and direct development towards existing communities
- Provide a variety of transportation choices
- Make development decisions predictable, fair, and cost effective
- Encourage community and stakeholder collaboration in development decisions

Practicing Smart Growth policies could help the Borough deal with the effects of natural hazards such as flood risk. The Borough of Leonia has ample opportunities to adopt smart growth policies to positively improve the character of the community and prevent additional sprawl that create additional roadway congestion in town. Leonia is already a compact suburban community with ample public transit options that a high percentage of the Borough’s commuters take advantage of.

Planned initiatives such as the northern expansion of the Hudson-Bergen Light Rail and Bus Rapid Transit in Bergen County would further increase residents’ availability to sustainable forms of transportation. In 2018, New Jersey’s transportation sector accounted for 36% of all the state’s energy usage. The Urban Land Institute found that residents living in one of New Jersey’s designated Transit Villages were more likely to travel to work by public transit or walking and owned fewer cars compared to the state averages. Replacing car trips with trips on public transit not only decreases the amount of carbon emissions by residents but can also decrease the level of congestion that adversely impacts the Borough. From a sustainability framework, the Borough should be lobbying its partners at both the state level (NJ Transit for the HBLR expansion) and the county level



Source: American Public Transportation Association

(for the BRT route) to see these public transportation options expand in the Borough.

As discussed earlier in the Land Use element, the Borough has already attempted to take advantage of the proposed northern expansion of the HBLR with the utilization of the redevelopment designation in the Fort Lee Road/Grand Avenue and Willow Tree Road areas. Additional land use changes should include making it easier for property owners to provide housing units above “active” ground floor uses in the Broad Avenue commercial corridor and increased allowance of multifamily developments in the appropriate areas in the Borough outside of the redevelopment area as indicated in the **Proposed Zoning Map** in the **Land Use** plan.

Land Management

Natural environments can be referred to as a “carbon sink” because of their ability to absorb carbon dioxide from the atmosphere. Better land management including restoration of forests, grasslands, and wetlands, as well as better agricultural management, offers a potentially more cost-effective way of offsetting climate-change pollution through carbon absorption than technological solutions advanced by the energy sector, according to some experts. Parks, recreation and open space facilities also improve water quality, guard against flooding,

maintain scenic views, and protect local species. One way to ensure open space is better managed and maintained is to locally fund environmental protection initiatives.

According to NJDEP land use data, about 4.2% of the Borough of Leonia is open space with most of this area being located on the western edge of the Borough. Leonia, with its unique environmental qualities and ample parkland given its geographic location, has great potential to naturally capture carbon dioxide in these natural sink locations through even better land management practices. Better land use practices will also utilize open space and natural lands to protect against flooding. The Borough should work with Bergen County to improve Overpeck Park in its role to both mitigate flooding from Overpeck Creek and become more of a carbon sink through an increased planting of trees.

Tree Cover

Mature trees absorb water to reduce flooding, reduce greenhouse gases by absorbing more carbon than they release, and move water from the ground into the environment, cooling the Borough through the process of transpiration. While street trees contribute to the aesthetic appeal of streetscapes, they also benefit the community by providing shade to reduce potential heat island effects and increase property values.

A well-managed community forest is backed by several tools and techniques. For instance, a local government might establish a Tree Board and a Tree ordinance, to provide authority over public and private trees using set standards. A tree inventory including locations, species, condition and management of trees would also benefit the community forest. To help in the implementation of some of these techniques, the community may hire a certified arborist, urban forester or consultant as needed to assist in tree inventories, management planning, planting techniques, pruning and tree care, risk tree assessment, tree removal, and tree pest and health issues.

The Borough has done a good deal to promote the health of the trees in the community. The municipality has been designated as a Tree City USA by the National Arbor Foundation since 1990. In addition, on February 3, 2020, the Borough, per Ordinance 2020-05, established a Shade Tree Commission which controls “the regulation, planting and care of shade

and ornamental trees and shrubbery now located, or which may hereafter be planted in any public highway and park or parkway of the municipality, including the planting, trimming, spraying, care and protection thereof.” The Commission is also responsible for administering the Leonia Shade Tree Trust Fund. The recently passed ordinance also requires that a property owner that wants to remove a tree outside of the right-of-way that has a Diameter at Breast Height (DBH) of at least eight (8) inches must be granted a tree removal permit from the Shade Tree Commission and pay a \$350 permit fee, which goes to the Shade Tree Trust Fund. While the Shade Tree Commission and the Shade Tree Removal ordinance are vital resources to maintain Leonia’s street tree inventory and tree canopy, there is more that the Borough could do to proactively improve the health of the community’s trees.

A local government should also consider a forestry management plan with strategies, budgets and plans to meet a long-term community vision. Implementing a community forest management plan demonstrates that a municipality is working to meet the objectives of the New Jersey Shade Tree and Community Forestry Assistance Act of 1996. The Borough of Leonia currently does not have a Community Forestry Management Plan (CFMFP).

The Borough’s Shade Tree Commission should consider implementing one as there are significant benefits to the Borough for having a CFMP. By having a plan, the Shade Tree Commission could establish goals as to the level of optimal tree cover, be proactive in its street tree management through identifying tree cover gaps and strategizing how to finance closing these gaps, be eligible for Community Stewardship Incentive Program grants, and earn liability protection for the municipality under the Shade Tree and Community Forestry Assistance Act. The NJDEP provides Green Communities grants of up to \$3,000 with a 100% required match by the municipality to help fund a CFMP. Municipalities throughout the state including Glen Ridge and Pequannock Township have utilized a CFMP to improve their community forest and tree cover.

Planting trees especially in areas of the Borough where there is little tree cover such as the Grand Avenue and Fort Lee Road corridors will help to increase tree canopy coverage which improves air quality and reduces the urban heat island effect. The Borough should also seek CSIP funding to undertake a tree Inventory, documenting these low coverage

areas and develop a strategy to replace dying trees. Additionally, the Borough should apply for a Green Communities Grant to create a Community Forestry Management Plan for the upcoming 2022-2026 five-year cycle.

Maintenance of open space is a critical topic for the health of Leonia's trees and the community as a whole. It is critical that the municipality maintain the health of trees located in open space as both a tree cover issue and a flood mitigation tactic. Leonia should work with Bergen County to plant and maintain trees in the Overpeck Creek floodplain according to floodplain management best practices.

Transportation

The transportation sector is one of the most critical aspects of any sustainability strategy. As mentioned earlier, the transportation sector has actually seen a steady rise in emissions over the past few years, which has offset significant reductions in emissions from the electric grid. Technological improvements that are and will continue to make vehicles more fuel efficient and utilize electric rather than gas altogether will help to decarbonize this sector, but local governments need to plan for these changes and make policy changes that help to move this process of lowering emission related to transportation forward.

Alternative Modes of Transportation

Supporting alternative modes of transportation other than the automobile and supporting a wide array of transportation choices saves consumers and businesses fuel costs, reduces petroleum use, reduces "tailpipe" emissions (i.e. emissions produced by the vehicle), reduces "well-to-wheel" emissions (i.e. total emissions generated from source to end of vehicle's life), and offers air quality benefits. Alternative modes of transportation other than the automobile include anything from walking, to biking, to e-scooters, motorcycles, bus and train. Leonia residents who utilize alternative modes of transportation are serviced by a relatively reliable bus system, and the Borough's compact grid system allows for most services to be located in relatively easy walking distance for most residents. However, there is more that the Borough can do to support alternative modes of transportation including improving bicycle and pedestrian infrastructure and expanding the reliability and options for public transportation.

One way a municipality can support alternative modes of transportation is to adopt "Complete Streets" policies. As discussed in the **Circulation Element**, the term "Complete Streets" is used to describe a context-sensitive approach to roadway design that considers the needs of all roadway users, including motorists, bicyclists, pedestrians, transit users, and people of all ages and mobility. The New Jersey Department of Transportation (NJDOT) approved a "Complete Streets" policy on December 3, 2009 with the purpose to "create and implement a Complete Streets policy in New Jersey through the planning, design, construction, maintenance and operation of new and retrofit transportation facilities within public rights of way that are federally or state funded, including processed or administered through the Department's Capital Program". NJDOT provides several resources and guidelines for implementing a complete streets policy. The Borough of Leonia adopted a Complete Streets Policy Resolution in July 2018 and has been awarded funding from NJDOT to implement greater Complete Streets initiatives.

North Jersey Transportation Planning Authority (NJTPA), in partnership with Sustainable Jersey, the Voorhees Transportation Center at Rutgers University (VTC), and Together North Jersey provide a Complete Streets Technical Assistance Program that offers municipalities free direct technical assistance to complete a specific task related to advancing a complete streets initiative. The Borough of Leonia has utilized this program to develop the 2019 Transportation Alternatives plan.

Another way to support alternative modes of transportation is to establish a safely accessible bicycle/pedestrian network. This may mean creating a bike or sidewalk network near to schools or connecting parks and recreation facilities. These networks will better reduce vehicular travel to these locations. There currently exists an unofficial walking path between the Leonia High School and the athletic facilities located in Overpeck Park. However, this route requires students and pedestrians to walk across the train tracks, which would be more frequently used once the HBLR is extended into Leonia thus presenting a potential safety issue. As Leonia plans for the expansion of the HBLR, the Borough should work with NJ Transit and the Leonia BOE to create a convenient and safe alternative for students to walk from the High School to Overpeck Park.

Supporting alternative modes of transportation to the personal automobile will help to make Leonia a more sustainable and healthier community.

Electric Vehicle Infrastructure

Electric and natural gas fueled vehicles, otherwise known as “Alternative Fuel Vehicles” (AFVs), will help reduce the Borough’s carbon footprint by decreasing the amount of emissions that come from the transportation sector.

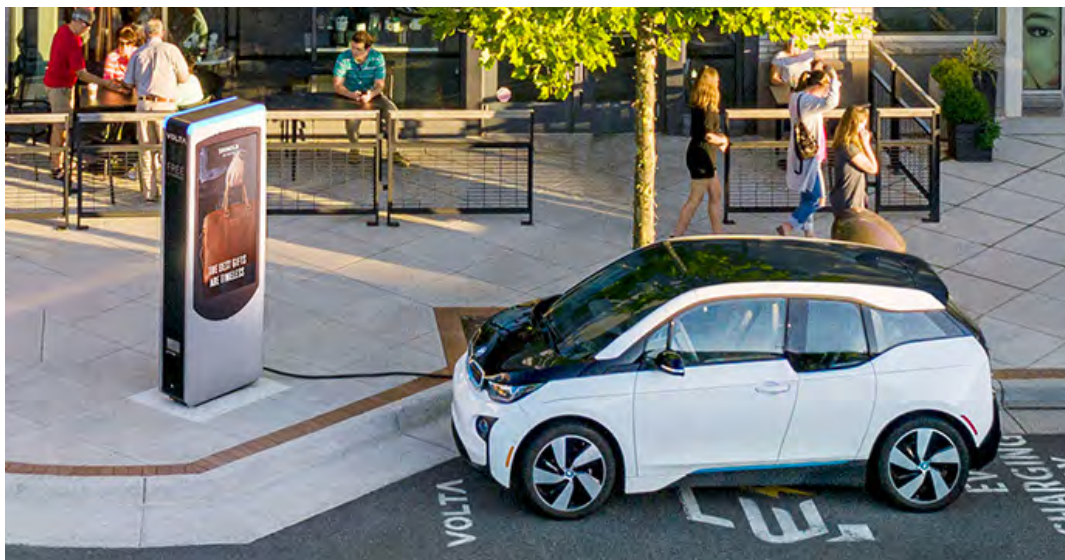
In recent years, significant efforts have been made to increase the use of electric vehicles (EVs). However, there are several barriers that remain for EVs to gain popularity among private users. The cost of transitioning fleets to electric vehicles and installing charging infrastructure, without grant funding, has often been identified as a barrier to adoption. New Jersey has taken recent steps to combat these barriers and make the use of electric vehicles more widespread to meet its ambitious emissions reductions goals. On January 17, 2020, the State adopted electric vehicle (EV) incentive legislation, which set out significant goals to expand the use of plug-in EVs. The measures include adding 400 hundred public fast charging stations at 200 locations along major roadways and throughout New Jersey municipalities by 2025, increasing the number of registered electric vehicles to 330,000 by 2025, and providing an incentive program for residents to purchase and install charging equipment in their homes.

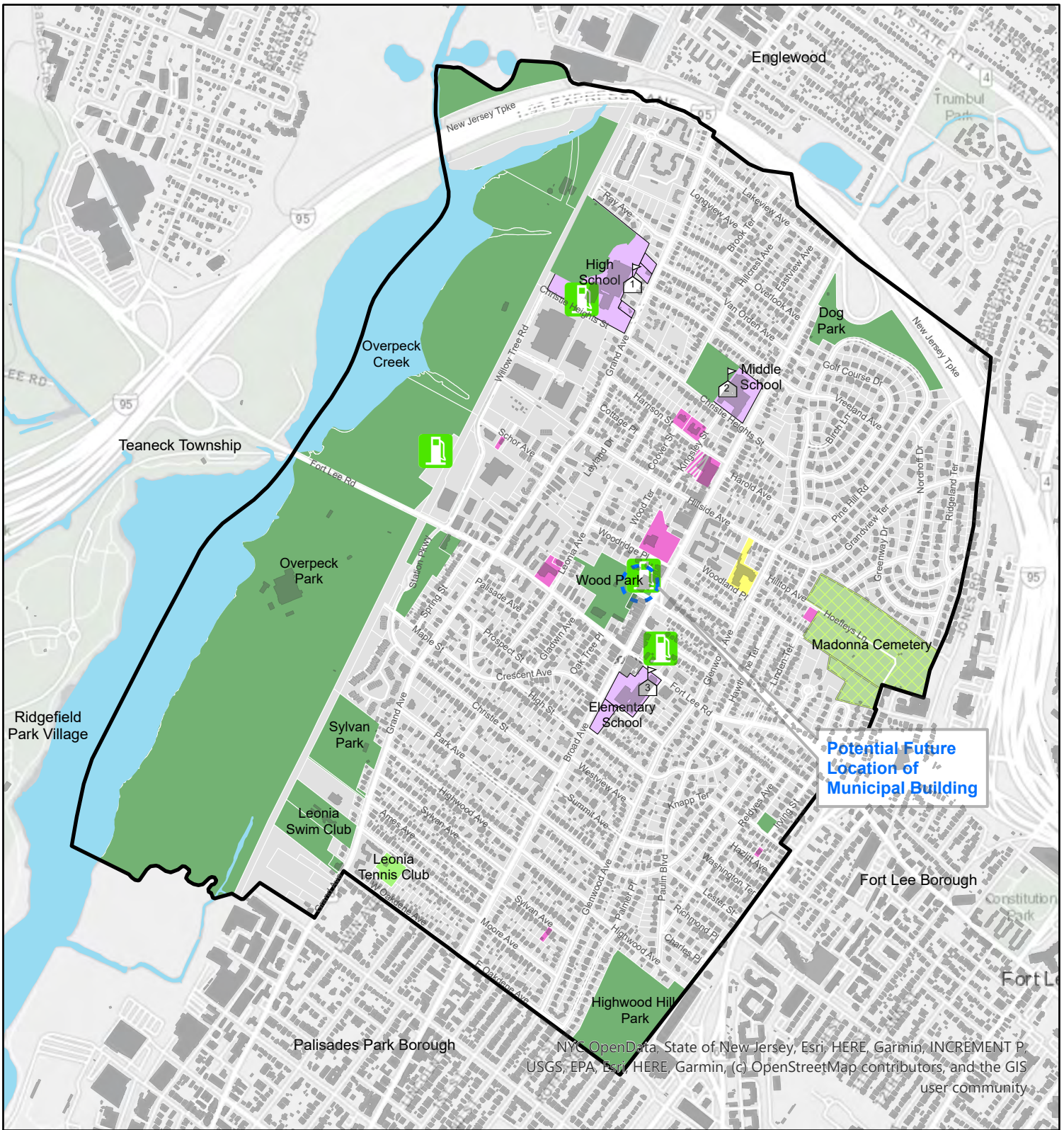
On July 9, 2021, Governor Murphy signed into law Senate Bill S3223, which requires that Electric Vehicle Supply/Service Equipment (EVSE) and Make-Ready parking spaces be designated as a permitted accessory use in all zoning or use

districts and establishes associated installation and parking requirements related to EVSE in all the municipalities in the State. As mandated by this law, DCA published a model statewide municipal EV ordinance on September 8, 2021. The intent of the model ordinance is to ensure consistency statewide in the installation of the required EVSE and Make-Ready parking spaces as well as providing an ordinance that can be easily used with no or minimal amendments by the municipality. The model statewide ordinance is mandatory and has become effective in all municipalities upon DCA publication on September 8, 2021. The model statewide ordinance will enable EV adoption among residents who can’t charge at home and will alleviate “range anxiety” by increasing the proximity of charging infrastructure and giving residents the confidence to drive electric.

Additionally, if desired the Borough may promote the various incentive programs for private residences to adopt the use of electric vehicles including the rebate program for electric vehicle purchases and the incentive program to install EV chargers in their home.

In addition to permitting and incentivizing EV charging stations, the Borough could further expand the availability of charging stations by installing them in publicly owned parking lots. The **EV Charging Stations Map** shows the sites that would make convenient locations for charging stations. Potential locations for installing charging stations include the municipal lot in Elm Place and the parking lot of the new municipal building. The Borough should also work with the Board of Education to install charging stations at the high school and with Bergen County to install charging stations in Overpeck Park.





Potential Future Location of Municipal Building

NYC OpenData, State of New Jersey, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community.

Document Path: \\h2m.com\shares\Projects\LEON_Borough of Leonia\LEON2003 (2020 Master Plan)\GIS\LEON2003\CMP\LEON2003CMP.aprx



Potential EV Charging Station



Public School Properties



0 0.13 0.25 0.5 Miles

Borough of Leonia

EV Charging Stations

H	2	architects + engineers	119 Cherry Hill Road #110 Parsippany, NJ 07054 862-207-5900 www.h2m.com
M			

Concurrent with installing fueling infrastructure, the Borough should look into purchasing additional EVs into the existing fleet. To make this goal financially viable, the Borough should consider joining a purchasing consortium, which may alleviate some of the financial investment.

Anti-Idling Education and Enforcement

Air pollutant emissions are one of the top drivers of global warming and a contributor to serious health issues, such as asthma. One of the biggest sources of idling is local school student drop off and pick up, especially during very hot and cold days.

Providing public education about the adverse impacts of emissions of conventional air pollutants and greenhouse gases resulting from unnecessary idling is necessary to promote the development of alternative ways of getting students to school, including especially the creation of safe routes for walking and biking.

New Jersey has one of the most stringent anti-idling laws, in which vehicles can idle for up to three consecutive minutes. Those in violation of the anti-idling law are cited and fined with a passenger vehicle receiving a \$100 fine for the first offense and fines ranging between \$200 and \$1,500 for subsequent offenses. Anti-idling laws are most likely to be enforced around schools since they are identified as a typical idling location and school-aged children are more sensitive to air pollution emitted by vehicles.

Leonia can play a leading role in reducing air emissions. In addition to promoting walking, biking, public transport and alternative fuel vehicles, the Borough should educate and enforce existing state car idling laws.

Water Conservation and Flood Mitigation

Stormwater Management & Green Stormwater Infrastructure (GSI)

Given the rapidly changing climate causing increasingly intense storms, stormwater management is one of the most critical themes of this sustainability element. Leonia's geography as a steep municipality located near the Palisades to the east and Overpeck Creek to the west makes Leonia less susceptible to major flooding events compared to other municipalities in southern Bergen County, particularly near the Meadowlands. The most recent example of these devastating events was Hurricane Sandy in 2012, which had significant storm surge and caused considerable damage to the Borough's infrastructure. As climate change makes these extreme weather events more likely, stormwater management and green stormwater infrastructure (GSI) are critical implementations needed to put the Borough of Leonia on the pathway towards a sustainable future.

Under natural conditions, precipitation (or stormwater) is absorbed into the ground, where it is filtered, and replenishes aquifers or flows into streams, rivers, and estuaries. In developed areas, impervious surfaces such as pavement and buildings prevent stormwater from naturally soaking into the ground. Stormwater runoff from lawns and streets flow through the storm sewer system carrying loads of pesticides, fertilizers, automotive oil, and grease that directly pollute our streams, rivers, and coastal waters. The resulting rush of stormwater discharge across these impervious surfaces during periods of intense rainfall can also cause infrastructure damage, downstream flooding, and stream bank erosion. Stormwater management can be an effective tool to prevent the unintended consequences of development from negatively impacting the environment. Given the level of impervious surface and its built out environment, the Borough should create a stormwater management plan that balances the needs of residents with the need to address stormwater runoff and downstream flooding.

Green stormwater infrastructure is an adaptable term used to describe an array of products, technologies and practices that use natural systems or engineered systems to enhance overall environmental quality and provide utility services. As a general principle,



Sandy Storm Surge. Source: NJ Flood Mapper

green stormwater infrastructure techniques use soils and vegetation to infiltrate, evapotranspiration, cleanse, and/or recycle stormwater runoff and help resolve environmental issues related to non-point source pollution, water quality and storage. These technologies can simultaneously help improve air quality, reduce energy demands, mitigate urban heat islands, and sequester carbon while also providing communities with aesthetic and natural resource benefits. Some examples of low-impact techniques of green stormwater infrastructure include rain gardens, swales, porous or permeable pavers, and rooftop gardens.



On October 25, 2019, NJDEP adopted new stormwater rules (N.J.A.C. 7:8) to replace the current requirement that major developments incorporate nonstructural stormwater management strategies to the “maximum extent possible” to meet groundwater recharge standards, stormwater runoff quantity standards and stormwater runoff quality standards, with a requirement that green infrastructure be utilized to meet these same standards. The new rules went into effect on March 2, 2021. In essence, the new rules require a more objective review standard for stormwater management than the more subjective “maximum extent possible” by creating a mathematically-based set of standards for projects to comply to with regards to stormwater design. The adopted changes also include changes to the infiltration of captured stormwater. The infiltration through best management practices can now be included in engineering calculations. On March 1, 2021, the Borough adopted Ordinance No. 2021-03 to comply with these new stormwater rules.

This ordinance applies to all major development site plans of one-quarter acre of “regulated impervious surface” subject to Borough approval. The ordinance provides links and guides regarding the use of green stormwater infrastructure and non-structural best management practices (BMPs) that developers and applicants can utilize in order to be in compliance. For example, multi-family housing complexes can utilize green infrastructure, such as porous pavements and rain gardens to capture parking lot runoff, or flow-through planters at gateway entrances or walkways. This is especially important for the Willow Tree Road redevelopment area, which has seen increasingly frequent flooding events. The Borough may wish to amend the existing ordinance to ensure that any development in a redevelopment area would be subject to the new stormwater regulations. This change can represent an improvement upon the existing land use configuration by requiring the inclusion of green stormwater infrastructure to help mitigate against potential flood damage. The Borough may also consider limiting the number of variances granted that would exceed the amount of allowable impervious coverage. It is important for the Borough to reduce the impervious coverage, which makes it more difficult for stormwater to be naturally absorbed, contributing to more frequent flooding events.

Additional considerations to keep in mind for stormwater management is how the Borough manages existing and potential future floodplains.

According to preliminary F evaluation maps (or pFIRMs), the Borough of Leonia has one large floodplain that covers much of the western portion of the municipality caused by potential flooding from Overpeck Creek. According to the 2017 preliminary maps, there are very few structures located in the floodplain as most of the western part of the municipality is Overpeck Park. The lack of impervious surface in Overpeck Park helps to prevent flooding from Overpeck Creek to reach further into the Borough because the natural surface can absorb more of the rainwater. One concern for the Borough is the Leonia High School building being located within the floodplain making it potentially susceptible to damage from flooding, as occurred during Leonia's most recent extreme weather event, Tropical Storm Ida.

Hazard Mitigation

There is a growing awareness that effective hazard mitigation at the community level is needed to reduce losses of life and property. In the past decade alone, New Jersey municipalities have been impacted by severe weather. The Borough of Leonia, as well as other localities, need to understand the potential impacts of floods, hurricanes, tropical storms, and climate disruption to be more resilient and protect against these natural hazards before they hit. Three well-known storm events have affected Leonia residents in the last decade: Hurricane Irene, Superstorm Sandy, and Tropical Storm Ida. By analyzing the local impacts from these storm events and incorporating potential solutions for future storm events into a Capital Improvement Plan, the Borough will be better prepared for emergency situations.

According to the Federal Emergency Management Agency (FEMA), all states are required to have an approved hazard mitigation plan to be eligible to receive disaster recovery assistance and mitigation funding. In 2019, New Jersey adopted its most recent State Hazard Mitigation Plan (HMP), the fourth revision to the initial State HMP adopted in 2005. The goals of the HMP are to protect life, protect property, increase public preparedness and awareness, develop and maintain an understanding of risks from hazards, enhance state and local mitigation capabilities to reduce hazard vulnerabilities, and support continuity of operations pre-, during, and post-hazard events. The implementation of this plan should lead to the development of long-term strategies for risk reduction. The plan recognizes

*“Mitigation is the effort to reduce loss of life and property by lessening the impact of disasters.”
-Federal Emergency Management Agency (FEMA)*

climate change with threat of projected sea level rise and believes that mitigation and adaptation (functionally discussed as hazard mitigation) are solutions.

New Jersey does not fund HMPs for single municipalities and prioritizes funding at the county level. Bergen County's 2015 Hazard Mitigation Plan was approved by FEMA on April 13, 2015. The most recent updated of the HMP was completed by the County in 2020 and received FEMA approval on June 7, 2021. This plan expires on June 6, 2026. Often local governments form local hazard mitigation plan committees to help inform the county of local issues and offer solutions.

Given the number of waterways and the location of developed areas in proximity to these waterways, there is moderate risk of property loss to be caused by major flooding events, particularly along Willow Tree Road and the Leonia High School building. According to the 2020 Bergen County HMP, the Borough of Leonia does not have any properties that suffer repetitive losses nor any properties that suffer severe repetitive property loss. Leonia is unique among Bergen County municipalities to not have any repetitive loss properties in its municipality. Despite the lack of repetitive loss properties, the Borough must still be concerned with flooding as the Bergen County HMP identified Leonia High School as being susceptible to flooding.

Leonia will need to address resiliency as natural hazards become more frequent as flooding occurs, even in less severe storm events. Increased development and impervious surfaces in town adversely affect flooding in Overpeck Creek, for example. Leonia should form a local hazard mitigation plan committee, tasked with identifying natural hazard concerns, resulting issues, and offer solutions. The committee should consult with Bergen County regularly, to ensure these issues, concerns, and mitigation measures are integrated into the Hazard Mitigation Plan.

The Borough should continue to implement mitigation initiatives as outlined in the Bergen County Hazard Mitigation Plan.

Sustainability Funding

Sources

While sustainability initiatives are not typically funded through the municipality's Capital Improvement Program (CIP), other funding sources (i.e. grants, programs) are available.

State Grants

Sustainable Jersey Grant Program

The Sustainable Jersey Grant Program provides grants that are intended to help local governments make progress toward a sustainable future and toward achieving Sustainable Jersey certification. Eligible projects include "actions" that would score a municipality points toward Sustainable Jersey certification. Example projects include addressing renewable energy and green building design, waste reduction, a sustainable master plan, water conservation, natural resource management, energy management, and transportation issues.

Environmental Infrastructure Financing Program

The Environmental Infrastructure Financing Program authorizes the New Jersey Department of Environmental Protection and the New Jersey Environmental Infrastructure Trust to provide low-interest loans for the construction of a variety of water quality protection measures, including wastewater treatment facilities and stormwater and nonpoint source management facilities. The Financing Program also provides loans for activities such as open space land purchase and conservation, remedial action activities and well sealing.

New Jersey Electric Vehicle Workplace Charging Grant Program

The Electric Vehicle Workplace Charging Grant Program provides grants to offset the cost of purchasing and installing electric vehicle charging stations. The program is designed to expand New Jersey's growing network of electric vehicle infrastructure, allowing government agencies to purchase and drive electric vehicles.

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 physically separated bicycle facilities.

In 2019, three municipalities were recipients of the bikeways grants for a total of \$1 million dollars.

Other Grants

Flood Mitigation Assistance Grant Program

The Flood Mitigation Assistance Grant Program (FMA) is a federally funded program through FEMA that provides funding to states, territories, federally-recognized tribes and local communities for projects and planning that reduces or eliminates long-term risk of flood damage to structures insured under the National Flood Insurance Program (NFIP). Local governments must adopt hard mitigations plans as a condition for receiving FMA funding. The Township has been using FMA funding to provide property owners funding to elevate their homes to mitigate damage from flooding.

Sustainability Communities Regional Plan Grant Program

The Sustainable Regional Plan Grant is awarded by the Partnership for Sustainable Communities, which is a partnership between the US Department of Transportation (DOT), the US Environmental Protection Agency (EPA), and the US Department of Housing (HUD). The three agencies formed the Partnership for Sustainable Communities with a commitment to providing access to housing, better transit options, and protecting the environment and reducing our energy dependence. The Sustainable Regional Plan Grant will support metropolitan planning efforts in the North Jersey Transportation Planning Authority (NJTPA) region that support these sustainable planning objectives.

Sustainability Element Recommendation Plan

Directions

“Check off” a completed recommendation and mark the year of completion as a way to measure progress.

Short Term: complete in 1-2 years; **Mid Term:** complete in 3-5 years; **Long Term:** complete in 10+ years.

Sustainability Plan

	<i>Recommendation</i>	<i>Implementing Party</i>	<i>Timeframe</i>	<i>Completed</i>	<i>Year Completed</i>
1	Explore necessary actions to obtain Sustainable Jersey Bronze Certification.	Borough Administrator, Environmental Commission	Short to Medium		
2	Work with PSE&G to track the amount of carbon emissions that are being emitted by Borough residents and businesses.	Borough Administrator, Environmental Commission, PSE&G	Short		
3	Collaborate with Sustainable Jersey to help calculate a baseline on the Borough’s current emissions.	Environmental Commission, Sustainable Jersey	Short		
4	Work with the School District to achieve Sustainable Jersey for Schools status.	Planning Director, Environmental Commission, Leonia School District, Board of Education	Short to Medium		
5	Partner with the NJ Composting Council to implement a local composting program at the Community Garden.	Borough Administrator, Environmental Commission	Short to Medium		
6	Consider opportunities to implement green infrastructure and green streets in capital improvement projects.	Planner, Public Works	Short to Long		
7	Utilize solar panels as a part of the planned new municipal space.	Borough Council	Short to Medium		
8	Install electric vehicle charging stations in the municipal parking lot and the parking lot of the new municipal space.	Borough Council	Short to Medium		
9	Work with the BOE to install electric vehicle charging stations at the high school parking lot.	Borough Council, Environmental Commission, Board of Education	Medium		
10	Work with Bergen County to install electric vehicle charging stations at Overpeck Park.	Borough Council, Environmental Commission, Bergen County	Medium		
11	Encourage the use of LEED building practices for new developments in exchange for a density bonus in specific areas.	Planning Board, Borough Council	Short to Medium		
12	Lobby NJ Transit for the northern expansion of the Hudson-Bergen Light Rail.	Borough Council, NJ Transit	Short to Long		
13	Lobby Bergen County and NJ Transit for adoption of Bus Rapid Transit through the Borough.	Borough Council, NJ Transit, Bergen County	Short to Long		

Sustainability Plan

	<i>Recommendation</i>	<i>Implementing Party</i>	<i>Timeframe</i>	<i>Completed</i>	<i>Year Completed</i>
14	Plan for land use changes that will promote Transit-Oriented Development around proposed transit expansions.	Planning Board, Planner, Borough Council	Short to Long		
15	Consider a forestry management plan with strategies, budgets and plans to meet a long-term community vision.	Shade Tree Commission	Short to Medium		
16	Work with NJ Transit and the Board of Education to create a convenient and safe alternative for students to walk from the High School to Overpeck Park.	Planning Board, Board of Education, NJ Transit	Long		
17	Require new commercial and multifamily developments include electric vehicle charging stations.	Planning Board, Borough Council	Short to Medium		
18	Work with property and business owners in Willow Tree Road to install electric vehicle charging stations in their parking lots.	Planning Board, Environmental Commission	Short to Long		
19	Promote rebate programs for electric vehicle purchases and to install EV chargers in their homes.	Environmental Commission, Borough Administrator	Short to Medium		
20	Educate and enforce existing state car idling laws.	Borough Council, Board of Education	Ongoing		
21	Work with utility company to replace existing streetlights with LED lights.	Borough Administrator, Borough Council	Medium		
22	Work with Bergen County to increase tree planting in Overpeck Park.	Borough Administrator, Shade Tree Commission, Bergen County	Ongoing		
23	Consider purchasing additional electric vehicles to add to the municipal fleet.	Borough Administrator, Borough Council	Medium		
24	Create a stormwater management plan.	Planning Board	Medium to Long		
25	Form hazard mitigation committee.	Borough Council	Medium to Long		
26	Incorporate green stormwater infrastructure into Grand Avenue Redevelopment Plan.	Planning Board, Borough Council	Short		



PARKS & OPEN SPACE ELEMENT

The Municipal Land Use Law (N.J.S.A. 40:55D-5) defines open space as: “Any parcel or area of land or water essentially unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment or for the use and enjoyment of owners and occupants of land adjoining or neighboring such open space; provided that such areas may be improved with only those buildings, structures, streets, and off-street parking and other improvements that are designed to be incidental to the natural openness of the land.”

Goals

1. Maintain and enhance quality of life by providing accessible recreation, retaining community character and preserving important natural resources.
2. Provide close-to-home park and recreation opportunities for residents.
3. Protect local water resources and biodiversity and ensure future resiliency.
4. Provide for park, recreational, and open space facilities that are accessible to all residents of all ages and abilities and provide a variety of activities and amenities.

Introduction

Parks, recreation and open space are critical to communities as they not only improve the quality of life for residents by creating diverse amenity-rich environments, but they also improve water quality, guard against flooding and maintain scenic views. Quality parks and facilities attract visitors, residents and businesses to town, thereby promoting economic activity and overall fiscal health. The Borough of Leonia’s unique location in the dense southeastern part of Bergen County, along Overpeck Creek and a few miles from the Palisades Cliffs and the Hudson River, makes the preservation of green space critical. Providing for parks, recreation and preserving open space is therefore not only essential to the Borough’s local quality of life, but also to regional environmental benefits. The experience with the COVID-19 pandemic has highlighted the critical role that ample open space for passive recreation is critical for residents to be able to maintain both their physical and mental well-being.

Having parks, recreational facilities and open space is certainly beneficial to the community as a whole but knowing the types that exist is equally important.

Parks, Recreational and Open Spaces can be classified into four categories based on land use and how the space is used: active recreation, passive recreation, natural resource protection, or a utility resource. Understanding the kinds of parks and open spaces can help the Borough realize its recreational identity and recognize current inventory gaps.

Conditions Analysis

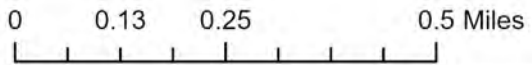
The **Open Space Map** shows the Borough's thirteen (13) established parks and other publicly accessible open space and recreational facilities (i.e. school fields). These parks and recreational facilities are owned and maintained by a variety of agencies such as the Borough, Bergen County, and the Board of Education. Collectively, these resources provide a wide array of amenities from bicycling and horseback riding to court and field games. The quality and quantity of Leonia's parks were often mentioned in survey responses to questions regarding Leonia in general and its best features. A majority (51%) of survey respondents believed that the condition of parks and recreational facilities are very important and another 40% believed that it was important. While residents are satisfied with the parks, they are also viewed as one of the Borough's major assets and is often seen as part of the community's identity. Residents often use parks in the Borough with 63% of respondents saying they go at least once per week with 43% saying that they use parks in the Borough multiple times per week. Ensuring the Borough works with its partners to ensure that both County and Borough parks maintain a high standard of excellence is a priority for Borough residents.





State of New Jersey, Esri, HERE, Esri Community Maps Contributors, NYC OpenData, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

- School Fields
- Public School Properties
- Properties listed on NJDEP's Recreation and Open Space Inventory (ROSI)
- Boro-Owned Parkland
- Boro-Owned Vacant Parcels
- Cemetery
- Leonia Pool



Borough of Leonia Parks and Open Space Map

H	2	architects +	engineers	119 Cherry Hill Road #110 Parsippany, NJ 07054 862-207-5900 www.h2m.com
M				

The latest national guidelines published by the National Recreation and Park Association (NRPA) encourages each community to create its own custom standards to determine whether it is providing adequate open space to its residents. Below is an initial list and subsequent analysis of common land-use related metrics to determine the open space needs for Leonia:

- 1. Acres per capita** – to determine if community has enough parkland
- 2. Facilities per capita** – To determine if a community has enough recreation facilities such as athletic fields, playgrounds, tennis courts, swimming pools, etc.
- 3. Building square footage per capita** – To determine if a community has enough indoor recreation space such as recreation centers, community centers, senior center, or gymnasiums
- 4. Access distance/time (bike, pedestrian, car, transit)** – To determine if parkland and facilities are easily accessible to residents via preferred modes of transportation including driving, transit, bicycling, or walking
- 5. Quality of facilities and experience** – To determine if park facilities and geographies are consistent¹

Several metrics regarding costs and revenues are not listed above but could be considered by the Leonia Parks & Recreation Department. They include operating expenditures per acre managed, operating expenditures per capita, revenue per capita, and revenue as percentage of operating costs.

A secondary analysis of metrics #1-3 can also determine if parkland is equitably distributed based on population and geography and can be a strong consideration on any future decision by the Borough to expand and improve upon its existing inventory. Open space opportunities and future potential acquisitions are discussed under **Future Open Space** on page 145.

Acres per Capita Metric

Based on the New Jersey “Balanced Land Use” Standards and the NRPA Standards discussed within the call-outs on the following page, both of which use an acres per capita metric, the Borough of Leonia has a surplus of parkland. Based on the ROSI data, the 2019 Bergen County Parks Master Plan determined that after adjusting for density that Leonia was very well served by open space making the Borough one of the only municipalities in southern Bergen County to be well served. Today, Leonia currently has 289.9 acres of open space (both ROSI and non-ROSI parcels). This number includes parcels owned by the County, but does not include school fields owned by the Leonia Board of Education, or other open space easement or conservation agreements with private property owners. Given that Overpeck Park is responsible for providing a significant amount of the Borough’s open space, it is not surprising that about 84% of the total amount of open space in Leonia is maintained by Bergen County while 16% is maintained by the Borough.

¹ American Planning Association, PAS Memo, “Alternatives to Determining Parks and Recreation Level of Service” May/June 2016

While there is no universal standard, there are two accepted sets of guidelines used to determine whether the Borough is providing adequate open space to its residents:

New Jersey Balanced Land Use Concept

According to New Jersey's 2013-2017 Statewide Comprehensive Outdoor Recreation Plan (SCORP), the state embraces the "Balanced Land Use Concept", which recommends at least 3% of a municipality's developed and developable area be the minimum amount of land that should be permanently dedicated as public open space and available for appropriate, direct public recreation uses. According to the concept, land that is protected for environmental purposes and do not permit direct public access do not count toward the public recreation land supply figure.¹

Leonia's developable land area that does not include water bodies or roads is 877.4 acres. To meet the 3% minimum standard for dedicated open space, the Borough would need to have at least 26.3 acres where there is a total of 289.9 acres of dedicated open space lands (County- and Borough-owned ROSI parcels only) – nearly 11 times more than the recommended standard.

National Recreation and Park Association (NRPA) Standards

According to the NRPA, "the typical park and recreation agency offers one park for every 2,266 residents served, with 9.6 acres of parkland per 1,000 residents."² With a 2020 population of 9,304 residents, Leonia should have around 89 acres of parkland. In comparison to the 3% standard used in the New Jersey Balanced Land Use Concept, in the context of the Borough, the NRPA standard would equate to about a 10% minimum of dedicated open space. Again, Leonia has 289.9 acres of County- and Borough-owned open space and ROSI lands, nearly 33% of the Borough's land area (not including roadway or waterbodies). Or more conservatively, the Borough has dedicated 46.5 acres of open space lands (Borough-owned ROSI parcels only), which is approximately 5.3 % of the Borough's land area.

Leonia meets both standards set by the state and nationally.

¹ New Jersey Statewide Comprehensive Outdoor Recreation Plan (SCORP) 2008-2012, Green Acres Program, NJDEP

² <http://www.nrpa.org/publications-research/ParkMetrics/>

Facilities per Capita Metric

The facilities per capita metric helps determine if a community has enough recreation facilities. First-tier facilities are those that are municipally owned. Second-tier facilities include publicly accessible school athletic fields and other intermittent publicly accessible fields. Generally, the Borough enjoys a mix of first and second tier recreational facilities. Again, the County and Borough collectively own over 289.9 acres of first tier facilities. Leonia residents are well served by park and open space facilities.

Building Square Footage per Capita Metric

The building square footage per capita metric helps determine whether there is sufficient indoor recreational space for Borough residents. Similar to the facilities per capita metric, facilities are categorized as first-tier and second-tier. The Borough of Leonia offers its residents indoor recreational spaces located in the Borough's Recreation Center, categorized as a first-tier facility. Second-tier facilities include school buildings that may be available for community use.

Access Distance/Time Metric

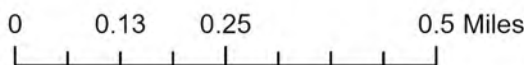
The access distance/time metric is expressed as distance or amount of time spent to travel to a park or facility. Generally, parks are accessed by those living within a half-mile distance from a park

Using the half-mile metric, a spatial analysis of Leonia's existing facilities was conducted, revealing that there are no park facility gaps. When conducting passive park analyses and active park analyses separately from one another, a similar result indicates that Leonia residents have quality access to both active and passive recreational opportunities. This is largely due to the parks in Leonia having a quality mix of active and passive recreational opportunities. Overpeck Park exemplifies this dynamic where the park gives users access to an extensive trail system that extends into neighboring municipalities as well as several basketball and tennis courts. Given the Borough's location in proximity to New York City, Borough residents are very fortunate to have the amount and diversity of recreational opportunities that are afforded them.



Esri Community Maps Contributors, NYC OpenData, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

- School Fields
- Public School Properties
- Properties listed on NJDEP's Recreation and Open Space Inventory (ROSI)
- Boro-Owned Parkland
- Boro-Owned Vacant Parcels
- Cemetery
- Leonia Pool
- Half-Mile Buffer



Borough of Leonia

Parks Accessibility Analysis

H	2	architects	119 Cherry Hill Road #110 Parsippany, NJ 07054 862-207-5900 www.h2m.com
M	+	engineers	

Quality of Facilities and Experience Metric

While the above four metrics measure the Borough's open space needs as a whole, the quality of facilities and experience metric determines whether individual parks and facilities are meeting the design and maintenance criteria established by the local community. Community-set design or maintenance criteria may include established park design guidelines including acceptable planting and material palettes. Other community-set criteria may include frequency of maintenance, safety inspections, or cleanliness. The Borough should conduct a community survey to help identify community-set criteria before analyzing how each park measures up.

A recommended design criterion for the quality of facilities and experience metric is diversified amenities that meet the needs of park users of all ages and all abilities. With slight population growth in Leonia since 2010 and an aging population, shifts towards passive recreation needs and a possible trend away from typical youth activities such as team sports and court games are anticipated. An aging population may also mean greater adherence to the Americans with Disabilities Act (ADA) and Universal Design standards. Identifying these gaps in park amenities can help to increase park usage and quality of life for Leonia residents.

Universal Design Standards –

Inclusive play is the promotion of interaction between individuals and families of all ages and abilities. Playgrounds that support inclusive play provide opportunities for emotional, social, physical, and development with materials, structures, and experiences that are accessible for everyone. This may include children with special needs, older adults with mobility challenges, or adults with physical challenges that impact their ability to interact with their children at play. The integration of these characteristics in a playground support a more inclusive society and allow all participants to grow and experience what parks have to offer a community.

Providing for park amenities with varying degrees of physical activity (sedentary, moderate or vigorous) ensures diversified park use by people of all ages and abilities. Walking loops, for instance, increase park use by 80% including twice as many seniors, according to a 2018 study from the National Study of Neighborhood Parks.² With increasing populations of senior citizens, this population will likely demand less physical activities and demand more wellness and fitness related recreation programs, educational programs and historic and environmental interpretive programming, according to the 2018-2022 New Jersey Statewide Comprehensive Outdoor Recreation Plan (SCORP).³

The National Study of Neighborhood Parks also found that for every play element added to a playground park use increases by 50%, which is of particular importance since a common reason for going to a park is taking children. Fitness Zones should also be considered. Equally important as what amenities are provided, the Borough should also consider why users may stay away, such as a lack of amenities such as restrooms.⁴

The 2018 study from the National Study of Neighborhood Parks also found that nothing increases park use as much as programming and on-site marketing (i.e. banners, posters, signs) and online outreach has proven effective at increasing park use.⁵ Leonia's Recreation Department should analyze its programming and marketing efforts to increase park use.

Additional Metrics

Leonia is a unique place and warrants additional metrics to those discussed above. To indicate park facility progress towards connectivity and walkability goals, the following metrics could be considered as well:

- Percentage of walkable commercial centers near to parks
- Percentage of multi-family complexes or

2 "Active Parks, Healthy Cities: Recommendations from the National Study of Neighborhood Parks". City Parks Alliance. 2018. https://www.cityparksalliance.org/storage/documents/active-parks-healthy-cities.pdf?mc_cid=61d75a1173&mc_eid=b8edc2e40f

3 2018-2022 New Jersey Statewide Comprehensive Outdoor Recreation Plan (SCORP), page 17

4 "Active Parks, Healthy Cities: Recommendations from the National Study of Neighborhood Parks". City Parks Alliance. 2018. https://www.cityparksalliance.org/storage/documents/active-parks-healthy-cities.pdf?mc_cid=61d75a1173&mc_eid=b8edc2e40f

5 "Active Parks, Healthy Cities: Recommendations from the National Study of Neighborhood Parks". City Parks Alliance. 2018. https://www.cityparksalliance.org/storage/documents/active-parks-healthy-cities.pdf?mc_cid=61d75a1173&mc_eid=b8edc2e40f

high-density housing near to parks

- Scenic view locations
- Miles of trails
- ADA accessibility
- Multimodal bike/pedestrian/transit access
- Satisfaction Surveys

Leonia should consider these additional metrics as the Borough plans for and implements improvements to its parks and open space.

Metric Maintenance

Level of service (LOS) metrics should be reviewed and calculated annually and updated every five years to ensure that they remain reflective of the Borough's needs, values, and goals. They should be reviewed by staff, user groups, key stakeholders, the general public and elected officials to build consensus.

Testing and updating these metrics regularly ensures that park and open space facilities are truly meeting residents' needs and generating the greatest benefits to its users.

Assessment

Based on the above existing conditions analysis, the greatest needs for Leonia's parks, recreational facilities and open space overall include:

- Additional and improved restrooms
- Improved walking/biking connections to existing Borough parks and open spaces
- Facilities that support a range of ages and abilities (i.e. ADA accessibility, Universal Design)
- Improved lighting

Borough Parks, Recreation & Open Space

The Borough has six (6) municipal parks and has many additional open spaces. Over the years, the Borough has made improvements to its other parks. However, residents during the public outreach portion of the Master Plan process brought up issues with the parks as they relate to maintenance. Most commonly, residents wanted to see better maintenance of the restroom facilities and to maintain the trails in Highwood Hills preserve.

Sylvan Park

7.8 acres, 140 Grand Avenue

Description

Located off Grand Avenue on the south end of Leonia, Sylvan Park acts as an active recreational area for Borough residents. The Park is equipped with playground equipment and has several ball fields including a softball, baseball and soccer fields. There is also a picnic area and a sheltered area.

Existing Facilities

Playground, Ball Fields, Picnic Area

Recent & Current Scheduled Improvements

None

Opportunities

Walking trails; Improved ball fields

Wood Park

5.7 acres, 370 Broad Avenue

Description

Located off Broad Avenue in the center of Leonia, Wood Park acts as an active recreational area for Borough residents. Based on survey results, Wood Park is the most utilized Borough-owned park. The park is equipped with playground equipment and has several courts including basketball courts, tennis courts and handball. There is also a sheltered picnic area and a playground.

Existing Facilities

Playground, Courts, Picnic Area

Recent & Current Scheduled Improvements

None

Opportunities

Additional picnic tables; bathroom and basketball court renovations; splash park

Station Park

2.9 acres, Station Parkway

Description

Located off Station Parkway in the western end of Leonia, Station Park acts as an active recreational area for Borough residents. The park is equipped with playground equipment and has a baseball field.

Existing Facilities

Playground, Ballfield

Recent & Current Scheduled Improvements

None

Opportunities

Walking path; tennis courts

Highwood Hills Park

13.5 acres, Highwood Avenue

Description

Located off Highwood Avenue in the southeastern end of Leonia, Highwood Hills Park acts as passive recreational area for Borough residents. The park is a preserved natural area with walking trails for residents to enjoy the park.

Existing Facilities

Walking Trails

Recent & Current Scheduled Improvements

None

Opportunities

Second access point



Dudley C Allen Park

7.5 acres, Broad and Lakeview Avenues

Description

Located off Broad Avenue in the northern end of Leonia, Dudley C Allen Park provides Borough residents with several amenities. The park has a dog park, picnic tables, benches and a swing set.

Existing Facilities

Dog park, picnic tables, swing set

Recent & Current Scheduled Improvements

None scheduled at this time

Opportunities

Stanley Gallone Park

0.5 acres, Christie Lane and Irving Street

Description

Located off Irving Street in the northern near the border with Fort Lee, Stanley Gallone Park acts as a pocket park and provides Borough residents with several amenities for active recreation. The park has a playground with a swing set, picnic area and a basketball court.

Existing Facilities

Playground, picnic area, basketball court

Recent & Current Scheduled Improvements

None

Opportunities

Additional trees; improved fencing

Future Open Space, Parks and Recreation

Leonia has minimal opportunities for future parks and open space whether through willing sellers, public or private partnerships, acquisition, blue acres or green acres programs, or conservation easements. One option that the Borough may want to consider is to preserve existing vacant parcels that are located in identified flood hazard zones. Additionally, the Borough should monitor damage from future flood events and consider a buy out program for properties that experience repetitive flood damage.

Implementation

The Borough of Leonia can fund these improvements through its general operating budget and may also wish to seek funding from outside sources as detailed below.

Open Space, Parks and Recreation Funding Sources

While open space, parks, and recreation activities are typically funded through the Borough's Operating Budget, other funding sources (i.e. grants, programs) are available to support activities related to the outdoors.

State Resources

NJDEP Recreational Trails Grant

Receiving assistance from the Federal Highway Administration's Trails Program (RTP), the state of New Jersey awards grants to counties, local governments, and non-profit agencies for motorized, non-motorized and diversified use trail projects. There is a maximum grant award of \$24,000 for non-motorized projects for the construction of new trails, maintenance or restoration of trails, development and rehabilitation of trailhead facilities and trail linkages for trails (i.e. parking, signage, shelters, sanitary facilities), and the purchase and lease of trail construction and maintenance equipment. Trail feasibility studies are not eligible for funding. This grant includes a local match up to twenty percent of the grant. The NJDEP's Green Acres Program administers the program in New Jersey. Applications become available in March with a mid-May deadline and a notification date of December.

NJDEP Green Acres

The Green Acres program funds the acquisition of open space for recreation and conservation purposes, and the development of outdoor recreational facilities. Applications are considered on an annual basis, typically with a deadline in the first quarter of the year. To qualify to participate in many of the funding programs, the Borough must have an open space trust fund and a Green Acres approved Open Space and Recreation Plan (OSRP).

County Resources

Bergen County Land Acquisition Grant Program

The Bergen County Land Acquisition Grant Program is a program through the Bergen County Office of Land Management. The program provides grants to municipalities and non-profits to acquire land for recreation and conservation purposes. Applications for this program become available in the Spring and are due in the Summer. There is a ten percent local match to be eligible to receive funding.

Bergen County Open Space Trust Fund

The Bergen County Open Space Trust Fund is funded through the Bergen County Open Space, Farmland, Floodplains Protection and Historic Preservation Trust Fund and funds the acquisition of land for recreation and conservation. Thirty percent of the Trust Fund goes to the Municipal Park Improvement Program which is used to expand municipal open space and improve recreational facilities maintained by the County's municipalities. The program requires a one-to-one dollar match from the municipality to receive funding.

Other Non-Profit and Organizational Resources

National Recreation and Park Association (NRPA)

The NRPA is a national non-profit professional organization that promote the funding and improvements of recreational facilities, parks, and open space for health and wellness, conservation and social equity. The organization advocates and educates on the importance of open space in the community while providing resources and partnerships to municipalities and stakeholders. The NRPA also provides grants and hosts information on funding opportunities for parks and open space.

The Land Conservancy of New Jersey

The Land Conservancy is a non-profit organization dedicated towards the preservation of land and water resources, conservation of open space, and the development of stewardship in New Jersey. The conservancy provides technical assistance to landowners on preservation options, and to municipalities in community planning for land acquisition, recreation and design for a variety of open space, trails, and park management plans. They also assist in land preservation for towns through transactions and funding and provide assistance in certification for Sustainable Jersey.

Parks & Open Space Element Recommendation Plan

Directions

“Check off” a completed recommendation and mark the year of completion as a way to measure progress.

Short Term: complete in 1-2 years; **Mid Term:** complete in 3-5 years; **Long Term:** complete in 10+ years.

Open Space, Parks & Recreation Plan

	<i>Recommendation</i>	<i>Implementing Party</i>	<i>Timeframe</i>	<i>Completed</i>	<i>Year Completed</i>
General					
1	Conduct a community survey to determine the needs of each of the Borough's Parks.	Recreation Department	Short to Medium		
2	Analyze programming and marketing efforts to increase park use.	Recreation Department	Short to Medium		
3	Implement facility and open space improvements as discussed on pages 143 to 144.	Borough Council	Medium to Long		
4	Monitor damage from future floods and consider a buy out program of properties that experience repetitive flood damage.	Borough Council, Environmental Commission	Long		
Trails					
5	Create a walking trail around Sylvan Park.	Borough Council, Recreation Department	Medium		
6	Formalize walking path along Station Park.	Borough Council, Recreation Department	Medium		
7	Add second access point at Highwood Hills.	Borough Council, Recreation Department	Medium to Long		
Parks					
8	Improve bicycle and pedestrian safety for residents crossing Grand Avenue to get to Overpeck Park.	Borough Council	Short to Medium		
9	Improve ball fields at Sylvan Park.	Borough Council, Recreation Department	Medium to Long		
10	Add additional picnic tables in Wood Park.	Borough Council, Recreation Department	Short		
11	Renovate bathrooms and basketball courts in Wood Park.	Borough Council, Recreation Department	Short		
12	Add a splash park in Wood Park.	Borough Council, Recreation Department	Medium		
13	Add tennis court in Station Park.	Borough Council, Recreation Department	Medium to Long		



COMMUNITY FACILITIES ELEMENT

Goals

1. Provide a new municipal building that is high quality and can meet the current and future needs of the community
2. Utilize the arts and creative placemaking to activate public spaces and enhance commercial areas
3. Continue to support the excellence in education of the Borough's school district as a focal point for the Borough's students and parents
4. Ensure high quality and responsive public works, safety, security and emergency response services

Introduction

The Community Facilities Element provides an inventory and evaluation of basic services in Leonia, including educational services, municipal and human services, water services, emergency services, and cultural services. These essential services benefit Leonia residents and can have a significant impact on residents' quality of life. This Element evaluates the quality of these services and makes recommendations to ensure they remain accessible to all residents.

Educational Facilities

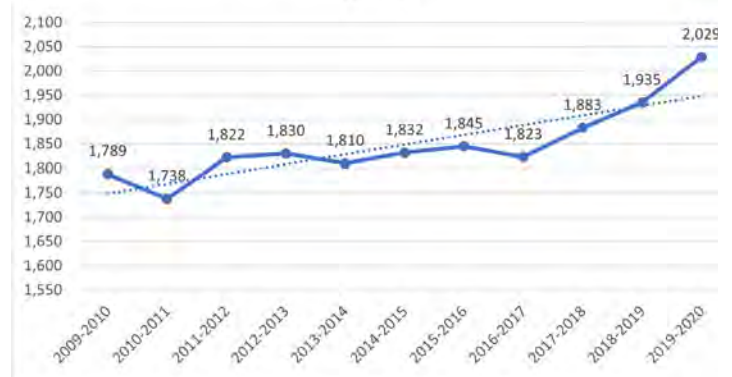
Leonia School District

Although Leonia public school buildings are maintained and budgeted under the authority of the Leonia Board of Education, separately from Borough Council, these schools and the impacts they have on their surrounding neighborhoods are important to identify in a Master Plan. Any significant proposed land use changes may have an impact on the Borough's population and the population of the school-aged children, for example and would further increase questions about school building capacity. The Leonia School District maintains one (1) administrative building and three (3) schools, an elementary school, middle school and high school.

The work of the Leonia School District has been altered significantly due to the Covid-19 pandemic. Beginning in March 2020 and running through the end of the school year in June 2020, the school district switched to virtual learning. Since then, the Leonia school district has made numerous changes to try to maintain students' ability to learn while adhering to the latest guidance regarding Covid-19. This has resulted in a mix of hybrid learning schedules to full in-person learning for the 2020-2021 school year.

Additional challenges to the school district came in September 2021 when the remnants of Hurricane Ida caused severe flooding to the region and had an outsized impact on school facilities in Leonia, primarily the Leonia High School building. Much of the first floor of the building was damaged due to flooding causing the first day of the school year to be postponed. The high school building has experienced an increase in flooding events as discussed in greater detail in the **Vulnerability Assessment** section of the **Land Use Element**. It should be noted that the middle school also experienced damage to the cafeteria and a classroom due to flooding associated with Hurricane Ida.

Enrollment Over Time for Borough of Leonia School District



Anna C Scott Elementary School

The Anna C Scott Elementary School is located at 100 High Street and serves kindergarten and first through fifth grades. Enrollment for the school during the 2019-2020 school year was 730 students. Due to school capacity issues, the Board of Education plans to relocate the fifth grade to the Leonia Middle School as a part of its Long-Range Facility Plan 2020-2025. The school building is approximately 82,300 square feet.

Leonia Middle School

The Leonia Middle School building is located at 500 Broad Avenue and serves sixth through eighth grade. Enrollment for the school during the 2019-2020 school year was 522 students. As mentioned above, the Board of Education plans to relocate the district's fifth grade students to the middle school starting in September 2021. The most recent addition to the Middle School was completed in 2005. The Middle School building is approximately 115,500 square feet.

Leonia High School

The Leonia High School building, built in 1912 and opened in 1913, is located at 100 Christie Heights Street and serves students in the ninth grade through twelfth grade. Enrollment for the school during the 2019-2020 school year was 777 students. The most recent addition to the High School building was completed in 2018. The High School building is approximately 135,000 square feet. The high school also includes an annex building that is approximately 2,600 square feet.

Administration Building

The Board Office is approximately 2,500 square feet and is located at 570 Grande Avenue. The building is currently in good structural condition.



School District Facility Needs Assessment

Leonia School District has seen a significant increase in its enrollment over the past decade with the student population increasing from 1,789 students in the 2009-2010 school year to 2,029 students in the 2019-2020 school year, a 13.5% increase. This growth has been particularly concentrated in the school district's elementary school and high school while the middle school population growth has been relatively flat. The relatively flat enrollment numbers for the middle school is the main reason why the District is planning on moving the fifth grade into the Middle School building.

A large factor in the increase in enrollment is the sending/receiving relationship that the Leonia School District has with neighboring Edgewater Borough where the District provides Middle and High School education to Edgewater residents. Edgewater has experienced a population boom over the past 20 years as the population has grown from 7,680 residents in 2000 to 14,336 in the 2020 Census, representing an 86.7% increase during that time. This growth has far outpaced NJTPA's previous population projections for the community where the organization projected the Borough's population to be only 13,740 by the year 2045. The Leonia Board of Education projects that the enrollment of students from Edgewater will increase from 481 students in 2020 to 708 students in 2026 while the number of students from Leonia will increase from 1,548 students in 2020 to 1,602 students in 2026. These population increases puts elevated pressure on the School District's capacity to provide middle and high school services, even as Leonia's own population grows, albeit at a much slower pace.

The increasing number of Edgewater students in Leonia's Middle and High school requires greater cooperation between the Leonia Board and

Education and the Edgewater Board of Education. This is particularly important given the EWBOE's declaration of a fiscal deficit. As a result, the EWBOE and the LBOE have submitted a joint appeal to the State against the restitution of the spending growth limitation adjustment. This is critical for the Leonia School District because tuition from Edgewater represented almost 21% of income for the School District.

Arts & Culture

The Borough of Leonia has always had a deep tradition of having a rich arts and culture scene. Many directors, artists, and actors have lived in the Borough over the years, and many of the Borough's parks and events reflect this history. The Borough's tradition of being a community of artists and creative types continues to be a driving force for why new residents move to Leonia. The Borough and its community partners help to put on events throughout the year that help to foster this creative culture. Several organizations in the Borough also work to provide for this important aspect of the community.

The Players Guild of Leonia

The Players Guild of Leonia, the oldest continuing community theater group in New Jersey, continues to provide lively performances and events based out of the Civil War Drill Hall theater on Grand Avenue. The Guild celebrated its centennial anniversary during the 2019-2020 season and has received numerous awards and recognitions making it a source of pride for the community. Despite the cancellation of the previous season due to the Covid-19 pandemic, the Guild has returned for the 2021-2022 season. The Guild recently completed the renovation of the outdoor deck at the Drill Hall theater.

Sculpture for Leonia

Sculpture for Leonia is an all-volunteer, nonprofit organization established in 2008 that helps to bring public art and events into the community. The organization hosts the annual Taste of Leonia event, which helps to highlight the diverse food and retail scene in Leonia. Sculpture for Leonia helps to support and maintain the Erika and David Boyd Sculpture Garden, which is located on the corner of Broad Avenue and Beachwood Place. The organization also plans for other community beautification efforts through public art in Leonia. The Borough works with this organization through the Mayor's Advisory Committee on Sculpture and the Arts. The Committee meets throughout the year

to organize events, discuss art and plan sculpture installations.



Creative Placemaking

Creative Placemaking refers to the utilization of art, performances, and cultural amenities to establish a sense of place within a community. There are many great examples of municipalities across the northern New Jersey region from nearby Montclair to the City of Newark that have utilized creative placemaking to help breathe new life into their downtowns and commercial corridors. A consistent theme of these efforts is the ability of creative minded stakeholders partnering with businesses and municipal governments to coordinated their focus on small efforts like public art projects and larger efforts such as community events that draw visitors and residents alike.

For a municipality like Leonia that has a rich history of attractive artists to call it home, there is significant opportunity to leverage assets such as the Players Guild and Sculpture for Leonia to distinguish Leonia from surrounding communities. Leonia can tap into the creative energy of its residents to generate

unique public places utilizing public art as a way of furthering community. Creative Placemaking can also result in greater tourism, promote economic activity, develop a sense of civic pride, and further enhance the arts within a community. In many cases, there are grants available to support creative placemaking, such as through the National Endowment for the Arts to help cities develop Creative Placemaking in their communities. Recently, New Jersey Institute of Technology in Newark launched the NJIT Hub for Creative Placemaking which will be a collaborative program to help partner faculty and students with arts organizations, civic leaders, philanthropists and others to work on creative placemaking projects in the greater Newark area. The Borough should work with the organizations mentioned above and others dedicated to promoting the arts in Leonia to develop strategies to use public art as a way to revitalize the Borough's commercial corridors, bring in grant funding and spur economic development.

Northern New Jersey Community Foundation is a leader in creative placemaking in the region. Recently offering a scholarship to a Leonia High School graduate, NNJCF seeks to identify and address critical issues within communities. In previous years the foundation has also awarded grants to locals in the community. ArtsBergen, a regional arts alliance, promotes collaborative activities between artists and arts organizations to enhance community life in Northern New Jersey. A study commissioned by the Foundation found that both parties wanted a unified way to collaborate and connect with Bergen County residents and businesses. The flagship initiative explores ways to integrate arts and culture into its action fields: education, public health, civic engagement, the arts, and environment.

The Bergen County Arts Grant Program is sponsored by the Division of Cultural & Historic Affair. The program is open to all County non-profit arts organizations and other non-profits that present Bergen County-based arts programs. The division puts an emphasis on serving ethnic or culturally diverse communities.

Municipal & Other Services

Borough Hall

Borough Hall, located at 312 Broad Avenue, is a 2-story building constructed in 1911. The building was last renovated in the 1990s. Borough hall is a registered historic landmark. There are numerous issues with the current building including a lack of security features and meeting space, insufficient storage space, and various deteriorating conditions as the building shows its age and lack of functionality for a twenty-first century municipal building. It is estimated that a baseline repair to bring the building up to code would cost upwards of \$500,000. As of writing this document, the Borough is looking to build a new 2-story building that will house the Borough Police Headquarters on the first floor and the municipal court and council chambers on the second floor. All other municipal functions and departments will remain at the existing Borough Hall building.

Borough Annex

Leonia's Borough Annex, located at 305 Beechwood Place, is a 2-story building constructed in the 1930s as a Girl Scout Meeting Hall. The last renovation of the building took place in the 1990s to install wheelchair ramps to make the building ADA-accessible. Similar to Borough Hall, the Annex is very poorly suited to the functions it houses including the Municipal Court and the Senior Center. There are long lines due to a lack of space for required security screening and the basement is flood prone. As of 2019, the Municipal Court is performing its functions at the Fort Lee Courthouse as the Borough begins construction of the new municipal building.

Police Department Building

The Police Department is located at 1 Wood Park, in the same building as the Fire Department. Currently the Police Department maintains a staff of 18 sworn police officers and 5 civilians. The current building has several deficiencies that prevent the Police Department from being able to perform their duties in the most efficient manner. These deficiencies were noted in previous reexamination reports to the Borough. As a result, the Borough's governing body is in the planning process to construct a new municipal building that will house the Police Department and allow for a more modern and up-to-date facility to help ensure the public safety of Borough residents.

The Department makes significant efforts to have

a police force that reflects the diversity of the community. There are officers of various ethnic and cultural backgrounds, which allows the Department to provide services in English, Spanish and Korean. The Leonia Police Department is one of a growing number of police departments that deploy Body Worn Cameras (BWCs) to help ensure public accountability, improve public safety and strengthen the relationship between officers and residents.

Community Gathering Places

Leonia Public Library

The Leonia Public Library is located at 227 Fort Lee Road. The building is one-story and shares a parking lot with the Fire and Police Departments. Given its central location in the Borough, it is within reasonable walking distance for most of the Borough's residents. The Leonia Public Library is part of the Bergen County Cooperative Library System, BCCLS, which allows the library to share resources with other libraries in Bergen, Essex and Union Counties. The library is home to the Leonia Makerspace, which grants students and residents access to tools and hands-on classes in basic 3D printing, circuitry and robotics. The library has two meeting rooms: the smaller Harold Ficke Conference Room that has a capacity of 13 people and the larger John W. Slazig Meeting Room that has a capacity for 85 people.



These rooms are available to Leonia non-profit community groups and organizations and tax-supported government bodies for public meetings.

Leonia Senior Center

The Leonia Senior Center is normally housed in the basement of the Borough Annex building. However, given the proposed changes to the Borough Annex building, senior center activities have been moved to the Borough's recreation center at 370 Broad Avenue. The Borough also provides seniors with a free bus service that transports older residents to the Shop Rite for groceries and to medical appointments if scheduled in advance.



Leonia Recreation Center

The Leonia recreation center is located at 370 Broad Avenue. The gym at the recreation center is free for students attending Leonia and Edgewater schools. The recreation department offers numerous classes, clinics and leagues throughout the year that Leonia and Edgewater residents can pay for.

Leonia Swim Club

The Leonia Swim Club is located at 140 Grand Avenue, on the corner of Grand and Moore Avenues. The complex is open from Memorial Day to Labor Day and includes features such as a kiddie pool area, adult lap lanes, concession stand among many other features. The Swim Club is open to both Leonia and Edgewater residents. Membership fees for the Swim Club are based on the size and age composition of the household with fees ranging from \$100 for an individual high school student to \$600 for a family of 6 people. A majority of survey respondents felt that the pool had good convenience with some residents feeling that facilities at the pool should be upgraded. The Borough should continuously plan for regular

facility upgrades at the pool.

Post Office

The United States Postal Services (USPS) has a facility located at 398 Broad Avenue that serves the Borough. The facility is a one-story building located in the center of town along Broad Avenue with very limited parking to the rear of the building. There is on-street parking located in the front of the building. During the public survey, many respondents expressed concerns regarding the condition of the building and its impact on both postal services and how that in turn contributes to the quality of downtown Leonia. While the Leonia does not control the post office facility, the Borough may consider working with the USPS about the significant facility upgrades that are needed based on residents' reviews of the facility.

Shared Services

The Borough of Leonia participates in Shared Service Agreements (SSAs) which consolidates municipal services in order to reduce local expenses and reduce property taxes. Shared services allow municipalities to contract for employees or equipment to meet a statutory requirement or need without having to bear the full cost of such a service. These shared services have worked and continue to work for Leonia's benefit.

Expenditures

- The Borough of Leonia established an SSA with the Mid-Bergen Regional Health Commission to provide public health services in Leonia.
- Leonia established an SSA with Bergen County to provide communications and dispatching services.
- The Borough has an SSA with Cliffside Park and Edgewater to leverage reduced tipping fees in their contract with Waste Management.

Revenues

- The Borough of Edgewater pays tuition to the Board of Education based on the New Jersey state certified tuition formula. Edgewater is charged on a per student basis.

Capital Improvements at Community Facilities

The Borough is in the midst of capital improvements at its various community facilities, which includes the relocation of the Court and Police Department. As of writing this document, Leonia's governing body has been exploring and evaluating potential options for a new municipal building on the site of the old Ambulance Corps in Wood Park for the Police Department and the Court. The Borough anticipates keeping the remaining municipal departments at the existing Borough Hall building. These changes to the Municipal Court are ongoing while the Municipal Court proceedings are temporarily located in Fort Lee.

The Borough should work to finalize plans to begin construction so that court proceedings and general administrative functions can continue with the least amount of disruption. The Borough should also support departmental needs by funding capital equipment needs, on an ongoing basis.

Funding Sources

While community facilities are typically funded through the Borough's Capital Improvement Program (CIP), other funding sources (i.e. grants, programs) are available.

Library Grants

1. The Library Services and Technology Acts (LSTA) is the only federal program exclusively for libraries. There is a requirement for a state match.
2. The Institute of Museum and Library Services (IMLS) administers competitive discretionary grant program of libraries.
3. The National Endowment for the Humanities has program grants available to libraries.
4. The Per Capita State Aid program is the largest public library grant program that is administered by the new Jersey State Library. The New Jersey State Library can administer additional grant programs when available and will be featured on the "Grants for Libraries" page of the state library website when available.
5. The New Jersey Historical Commission
6. The New Jersey Department of Labor and Workforce Development
7. The New Jersey Council on the Humanities
- 8.

Senior Center Grants

The Older Americans Act (OAA) authorizes funding for the operation, "acquisition, alteration, or renovation of existing facilities" of multipurpose senior centers. Contact New Jersey's Department of Human Services (DHS) Division of Aging Services (DoAS) or the Morris County Division on Aging, Disabilities and Veterans to find out about local funding.

NJCC's Creative Placemaking Fund (CPF)

Creative placemaking is a process where community member, artists, arts and culture organizations, community developers, and other stakeholders use arts and cultural strategies to implement community-led change. This approach aims to increase vibrancy, improve economic conditions, and build capacity among residents to take ownership of their communities.

NJCC's Creative Placemaking Fund (CPF) deploys capital to arts and culture based enterprises and neighborhood development efforts that celebrate the character, diversity, and livability of New Jersey communities.

Bergen County Arts Grant Program

The Bergen County Arts Grant Program is sponsored by the County's Division of Cultural and Historic Affairs. The program is available to all Bergen County non-profit arts organizations and other non-profits that present arts program. The grant cycle runs from January through December with Letters of Intent due in September and completed grant applications due in October.

Community Facilities Element Recommendation Plan

Directions

“Check off” a completed recommendation and mark the year of completion as a way to measure progress.

Short Term: complete in 1-2 years; **Mid Term:** complete in 3-5 years; **Long Term:** complete in 10+ years.

Community Facilities Plan

	<i>Recommendation</i>	<i>Implementing Party</i>	<i>Timeframe</i>	<i>Completed</i>	<i>Year Completed</i>
Educational Facilities					
1	Maintain a positive relationship with Leonia Board of Education and minimize impacts on surrounding neighbors.	Leonía Board of Education, Borough Council	Short		
2	Work with Leonia School District to minimize damage from future flood events.	Leonía Board of Education, Borough Council, Borough Engineer	Medium		
Community Facilities					
3	Finalize plans or options to create the new municipal building.	Borough Council	Short		
4	Support departmental needs by funding capital equipment needs on an ongoing basis.	Borough Council, Borough Administrator	Ongoing		
5	Ensure accessible community facilities which meet the standards of the Americans with Disabilities Act (ADA).	Borough Council	Short		
6	Look for opportunities with local groups to advance arts in the community initiatives.	Planning Board, Administrator	Short to Medium		
7	Continue to pursue opportunities for shared services.	Administrator, Borough Council, Planning Director	Short- to Long-term		
8	Continue to support the Borough Library.	Library staff, Borough Council	Short		
9	Routinely plan for facility improvements at the Swim Club.	Borough Council, Recreation Department	Short to Long		
10	Reach out to USPS about facility improvements to post office building.	Borough Council, USPS	Short		
Arts & Culture					
11	Work with Sculpture for Leonia and organizations dedicated to promoting the arts in Leonia to develop strategies to use public art as a way to revitalize the Borough’s commercial corridors and spur economic development.	Administrator, Planning Board	Short- to Long-term		
12	Work with arts organizations in the Borough to obtain grant funding for their operations from Bergen County Arts Grant program.	Administrator, Arts Organizations	Short		



Goals

1. Preserve the local historic bucolic landscape and older, historically rich buildings.
2. Encourage public access to cultural and historical sites.
3. Balance new development with historic preservation efforts of significant landscapes and buildings.
4. Promote education and engagement of the public to foster a culture of historic appreciation.

Historic Overview & Introduction

The Borough has a number of historically significant buildings, some of which are located on the national and state registers and indexed by the State and the New Jersey Department of Environmental Protection through the State Historic Preservation Office (SHPO). This plan identifies the historically significant properties in the Borough. It would be appropriate to have a full historic preservation element to the master plan. This element should be completed pursuant to the applicable provisions of the Municipal Land Use Law.

The Borough of Leonia's historic resources include both older character-rich buildings and sites of historical significance encapsulating the Borough's unique community character and rich history. This Master Plan Element focuses on both the preservation of historic buildings and sites. These historic resources play a valuable role in Leonia's evolution from its humble beginnings in a simpler time to the various historical events and trends that has led to its unique identity today, a mix of the past and the present.

Benefits of Historic Preservation

Historic Preservation preserves the historic, architectural, and aesthetic character and heritage of a community or area and helps to provide a sense of place and continuity. As suburban sprawl with cookie-cutter development makes more and more communities lose their individuality and look like each other, it becomes important for communities to keep their identities intact. Even one or two striking historic buildings can help to define a community and hint at its past. If whole neighborhoods can be preserved, the effect is that much greater. The sense of history can contribute to community pride, and to a better understanding of the community's past and define their future.

Legal Context

New Jersey Municipal Land Use Law (MLUL)

In January 1986, New Jersey adopted historic preservation enabling legislation with amendments to the Municipal Land Use Law (MLUL) which allowed for a "Historic Preservation Plan" element of the Master Plan, a local ordinance, and a historic preservation commission. This is Leonia's first Historic Preservation Element. The MLUL identifies the Historic Preservation Element as an optional element within the Master Plan but requires the indication of "the location and significance of historic sites and historic districts." The Borough's historic sites and districts are identified in **Table 7.1** of this document.

Jurisdictional Context

Localities generally focus on the preservation of historic neighborhoods or streets where counties generally focus on individual historic structures or historically or archaeologically significant sites.

Applicable State and Local Laws and Regulations

New Jersey Municipal Land Use Law (MLUL)

The municipal master planning process is governed by the provisions of the New Jersey Municipal Land Use Law (MLUL) at NJSA 40:55D. The purposes of the MLUL include, among other things, the promotion of the conservation of historic sites and districts. An Historic Preservation Element, while an optional component of a municipal master plan, is essentially a prerequisite for designation and regulation of historic sites or districts in a zoning ordinance. The MLUL defines a "historic site" as any real property, man-made structure, natural object or configuration

or any portion or group of such sites having historical, archaeological, cultural, scenic, or architectural significance; while it defines a "historic district" as one or more historic sites and intervening or surrounding property significantly affecting or affected by the quality and character of the historic sites or sites.

Local Context

The community is fortunate to have appointed officials, the Leonia Historic Preservation Commission, whose purpose is to "protect and preserve the unique character of Leonia with specific focus on its historic sites and buildings." The Commission has been integral in helping the Borough preserve historic buildings, present programs and exhibitions that celebrate the history of Leonia and acquire financial resources for the continuation of the organization.

The Borough's Historic Preservation Commission, established by ordinance, consists of up to seven Class A through C members that are available for consultation to the Planning Board and Council.

The Historic Preservation Commission is responsible for making a comprehensive survey of the Borough of Leonia for the purpose of identifying historic sites which are worthy of protection and preservation. Designating properties as historic sites or districts locally does not guarantee protection of the property as would State or National designation.

State and County Planning Documents Relating to Preservation

New Jersey State Plan Development and Redevelopment Plan Among the goals of the New Jersey State Plan, most recently adopted in 2001, are the protection, enhancement, preservation, and, where appropriate, rehabilitation of New Jersey's historic, cultural, and scenic resources by identifying, evaluating, and registering significant landscapes, districts, structures, buildings, objects, and sites, and ensuring that new growth and development are compatible with historic, cultural, and scenic values. The Plan has also adopted special policies for the sensitive treatment of what it calls "Historic and Cultural Sites," which are scattered throughout the state rather than located in any one specific "environmentally sensitive planning area." One of the strategies the Plan identifies to accomplish its goals is the revitalization of New Jersey's cities and towns, where new development and redevelopment would be encouraged. Urban centers with endorsed

Strategic Revitalization Plans are given priority with regard to the public investment projects supported by discretionary funds.

County Context

The Division of Cultural and Historic Affairs (DCHA) serves Bergen County as one of New Jersey’s 20 county cultural agencies by supporting the arts, history, and historic preservation. Playing a leading role in helping build a flourishing cultural environment that benefits and distinguishes Bergen County as a New Jersey cultural destination, the DCHA offers programs, services, and resources in all three areas.

National & State Historic Registers

Traditionally, the goal of historic planning is to add candidate buildings, sites, or districts to State or National Registers. There are two major benefits for adding historic resources to the National Register:

1. Section 106 of the National Historic Preservation Act requires federal agencies to consider effects of federally funded projects on historic properties; and
2. Commercial properties on the National Register are eligible for 20% federal tax credits.

The New Jersey Historic Register is closely modeled after the National Register program, using the same criteria for eligibility, nomination forms, and review process. Benefits for adding historic resources to the State Register include:

1. A degree of review and protection from public encroachment; and
2. The New Jersey Historic Trust offers matching grants and low-interest loans for rehabilitation and restoration.

Historic Resources Inventory

Table 1 below identify historic resources that are locally designated and/or have been listed on the State and/or National registers. These resources underwent careful analyzation for age, style, or other historic elements, by individuals with design or architectural expertise. Since 2012, no historic resources in the Borough have been designated locally or on the State or National Registers. There are three National Historic Resources located in Leonia. All the historic resources are listed in **Table 7.1**.

DOE: A Determination of Eligibility is issued by the Keeper of the National Register.

COE: A Certification of Eligibility is issued by the New Jersey State Historic Preservation Officer. For properties not already listed on the New Jersey Register of Historic Places, a COE satisfies a prerequisite to apply for funds from the New Jersey Historic Trust, as well as several county preservation funding programs.

SHPO Opinion: This is an opinion of eligibility issued by the State Historic Preservation Officer. It is in response to a federally funded activity that will have an effect on historic properties not listed on the National Register.

Table 7.1: Existing Historic Resources

<i>Historic Sites</i>	<i>Location</i>	<i>National Register (NR) Reference # & Listed Date</i>	<i>SHPO Inventory ID # & State Register (SR) Listed Date</i>	<i>DOE Date</i>	<i>SHPO Opinion Date</i>	<i>Previous SHPO Opinion Date</i>	<i>COE Date</i>	<i>Locally Designated</i>
1	Civil War Drill Hall & Armory	130 Grand Ave	78001737; 10-19-1978		544; 04-27-1978			
2	Cole-Allaire House	112 Prospect St	83001483; 1-10-1983		545; 10-03-1980			
3	Leonia Borough Hall	312 Broad Ave	N/A		546; 1-21-1982			
4	Moore House	215 Fort Lee Rd	N/A		547; 10-03-1980		1-10-1983	
5	Vreeland House	125 Lakeview Ave	78001738; 11-17-1978		548; 11-17-1978			

In addition to the previous historic resources that are either state or nationally designated as historic, the Leonia Historic Preservation Commission can compile a list of historic sites within the Borough. Leonia does have this type of list of historic sites (as shown in **Table 7.2**). However, this list of historic sites has not been updated since the 2002 Master Plan.

An update to this list would give the Borough guidance about which properties the Borough should look to locally designate as historic. This list would be a comprehensive list that illustrates the local perspective of sites with historic significance. The Borough may want to consider authorizing the Historic Preservation Commission to conduct an historic resource inventory that will further promote its mission and the goal of preserving Leonia’s unique history. The Historic Preservation Commission would require hiring a historic preservation expert to survey and complete an historic resources survey and adopt the survey by ordinance.

Table 7.2: Properties of Local Historic Significance

	<i>Site Name</i>	<i>Location</i>	<i>Block-Lot</i>
1	Urey House	335 Highwood Ave	1601-14
2	The Charles Chapman House	156 Sylvan Ave	1504-13
3	Aherns House	141 Prospect Street	1205-15

Conventional Preservation Tools

Historic Preservation Ordinance

A Historic Preservation Ordinance (HPO) is considered to be a conventional preservation tool with legal authority to identify, evaluate, and protect historically significant resources from inappropriate alterations or demolition. To be legally viable, the ordinance must:

- Clearly state the public purpose that goes beyond aesthetic regulation and include other community goals such as economic development or community revitalization:** The Historic Preservation District Zone section of the Borough Code acts as the Borough’s Historic Preservation Ordinance, for the purpose of designating sites that “conform with the standards set forth in this article and other state or national standards for the recognition and designation of historic sites.”
- Include criteria defined by the Commission, by which a historic landmark or district can be identified, evaluated and protected;** Borough of Leonia defines “historic site” (Subsection 290-70 – Definition) and outlines the standards by which the Borough Council should follow in designating such a landmark (Subsection 290-72 – Designation of historic sites and historic districts), but the ordinance does not identify how it can be protected. The Borough should instead utilize the most common set of standards and guidelines for criteria: Secretary of Interior’s Standards for the Treatment of Historic Properties.
- Explain what types of changes are subject to review (i.e. demolitions, building or landscape alterations, or new construction in historic districts).** Historic landmarks in historic districts cannot be altered, modified, relocated, or demolished without a Certificate of Appropriateness (COA). The COA declares that the proposed action is consistent with the style and general design of the historic district and is issued by the Planning Board after review and recommendation by the Commission. Borough of Leonia’s Historic District Commission can also review demolitions of a historical landmark and can suspend the granting of a demolition permit for up to 90 days, allowing

time for consideration by the Borough or other public or private entity to acquire the property for the purpose of preservation.

Historic and Conservation Easements

Incentivizing private preservation is key to maintain this community character. One way to do so is through tax benefits, such as the federal income tax deduction for an eligible property owner should they pursue a historic preservation easement. Through an easement, a property owner can voluntarily place restrictions on the development of or changes to their historic property, and then transfer these restrictions to a preservation or conservation organization. This legal agreement, typically in the form of a deed, permanently protects a historic property. The Historic District Commission may want to consider educating homeowners on the benefits of a historic preservation easement and work with interested owners to execute such agreements.

Design Standards and Guidelines

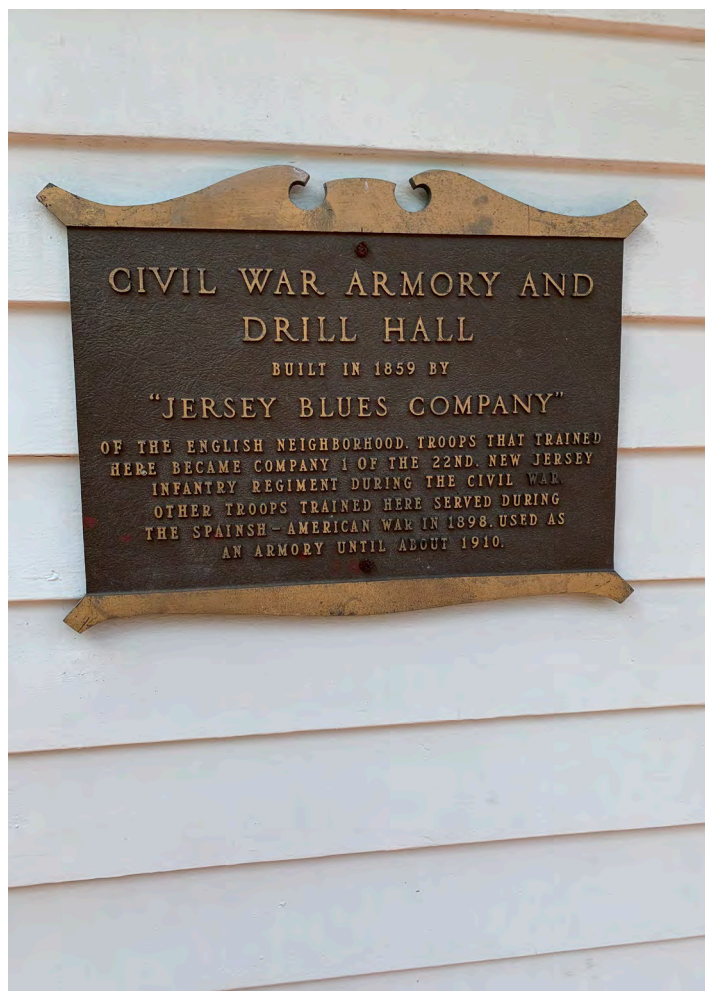
One way to strengthen the Borough's historic preservation ordinance is to implement Design Standards and Guidelines. Design Standards and Guidelines are used to protect historic districts, with the intention to preserve the existing historic character and prevent any exterior activities that would destroy or be inconsistent with that district's style. Design rules for exterior modifications should derive from an analysis of the existing historic styles in the district. Design guidelines, however, should list enhancements that have reasonable costs; as this may present a burden upon the homeowners where they may prefer disinvestment to expensive conversion costs.

Certified Local Government Status

The Borough of Leonia, like every other municipality in New Jersey, may participate in the State's Certified Local Government Program. The Certified Local Government Program is intended to promote historic preservation on the municipal level with an emphasis on local control and oversight. In order to achieve this, the Program provides qualified municipalities with financial and technical assistance for historic preservation efforts. Municipalities such as Leonia must meet certain requirements to be eligible for the State Certified Local Government Program. At a minimum, municipalities must adopt an historic preservation ordinance to identify and protect historic resources within the community. The ordinance must provide for the designation of historic sites and

districts as well as the review of exterior renovations to ensure that the historic integrity of designated sites and districts is preserved. All reviews are performed by the local Historic Preservation Commission in consultation with municipal officials and the Planning Board as well as Zoning Board of Adjustment.

Municipalities that have been designated a Certified Local Government are eligible to apply for 60/40 matching grants for a broad range of historic preservation initiatives. These include the preparation of Historic Preservation Plans, Historic Structures Reports, Historic Resource Surveys, Design Guidelines and Historic Preservation educational outreach. At present, more than \$60,000 in grant funding is available from the State Historic Preservation Office each year. Technical assistance, such as ordinance review and staff training, is also available from the State Historic Preservation Office. Consideration should be given to applying for Certified Local Government status in order to further historic preservation efforts in Leonia. Necessary initial steps would involve the preparation of an historic resources survey and adoption of an historic preservation ordinance.



Out-of-the-Box Preservation Tools

The Borough may want to employ out of the box preservation tools for local resources that have historic significance but may not be identified in the State and National Registry. These tools are described in detail below.

Historic Preservation Tax Credits

A 20% income tax credit is available for the rehabilitation of historic, income-producing buildings that are determined by the Secretary of the Interior, through the National Park Service, to be “certified historic structures.” The State Historic Preservation Offices and the National Park Service review the rehabilitation work to ensure that it complies with the Secretary’s Standards for Rehabilitation. The Internal Revenue Service defines qualified rehabilitation expenses on which the credit may be taken. Owner-occupied residential properties do not qualify for the federal rehabilitation tax credit.

The 10% tax credit is available for the rehabilitation of non-historic buildings placed in service before 1936. The building must be rehabilitated for non-residential use. In order to qualify for the tax credit, the rehabilitation must meet three criteria: at least 50% of the existing external walls must remain in place as external walls, at least 75% of the existing external walls must remain in place as either external or internal walls, and at least 75% of the internal structural framework must remain in place. There is no formal review process for rehabilitations of non-historic buildings.

Change of Use

To stabilize neighborhoods from possible disinvestment or teardowns, one out-of-the-box preservation tool is to consider allowing for a change of use. For instance, permit older, larger homes to be converted to two-, three-, or multi-family residences. If residential uses are close to or on major commercial corridors, consider allowing the existing residential use to be converted to a nonresidential use such as office or institutional. In these cases, additional parking may be necessary and should be located in the rear.

Neighborhood Conservation Districts (NCDs)

Residential neighborhoods that are worth preserving but may not meet historic district standards may benefit from designation as a Neighborhood Conservation District (NCD). Less restrictive than historic districts, NCDs focus more on preserving the overall community character rather than the historic fabric. They do not address traditional design-review items in historic districts such as windows, doors, trim and building materials. They can provide for the review of demolitions or other major changes such as large additions. NCDs can be written into the code as either overlay zones or special zoning districts.

Demolition Deterrents

One way to encourage rehabilitation of older buildings, rather than demolition, is to charge demolition and permitting fees that adequately reflect the true cost of demolition and disposal of demolition debris. Municipalities have also written into their ordinances, the delay of demolitions, in order to allow the Historic District Commission time to consider alternative options. Other New Jersey municipalities have employed a time frame of nine months.



Historic Resources Funding Sources

While historic resources are typically funded through a municipality's Open Space, Recreation, Farmland, and Historic Preservation Trust Fund, other funding sources (i.e. grants, programs) are available to support activities related to the preservation of the past.

State Resources

Historic Preservation Fund (HPF) Certified Local Government (CLG) Program

The Certified Local Government Program (CLG) allows designated municipalities to participate more directly in state and federal historic programs, including the eligibility to apply for Historic Preservation Fund (HPF) grants available annually from the National Park Service. In order to participate in these grant programs, the Borough of Leonia must first pursue CLG designation. Municipal designation requires the adoption of a historic preservation ordinance and a historic preservation commission that conforms to the guidelines of the MLUL and the New Jersey Certified Local Government Guidelines, approved by the National Park Service.

The State of New Jersey Historic Trust

The Historic Trust was created by state legislation in 1967, and since 2002, the agency has been affiliated with the Department of Community Affairs. It is a 501c3 non-profit organization. Since 1990, the New Jersey Historic Trust has awarded more than \$138 million in grants to 734 preservation projects. Ideally, funds available for historic preservation grants will increase to at least \$10 million annually, as identified in the Historic Trust's 2018-2020 Strategic Plan. Available funding programs include: the Garden State Historic Preservation Trust Fund, the Cultural Trust Capital Preservation Grant Program, the 1772 Foundation, the Discover NJ History License Plate Fund for Heritage Tourism, the Revolving Loan Fund, and the Emergency Grant and Loan Fund.

Preserve New Jersey Historic Preservation Fund

Established by legislation in 2016, this program provides a stable source of funding for historic preservation projects through matching grants from the state's corporate business tax. The Preserve New Jersey Historic Preservation Fund was established by legislation in 2016 to provide an annual source of

matching grants from the state's corporate business tax for historic preservation projects. The Preserve New Jersey Fund continues the work of the Garden State Historic Preservation Trust Fund (2000-2012) and the Historic Preservation Bond Program (1990-1997). Since 1990, more than \$145 million in matching grants has been awarded to worthy historic preservation construction and planning projects throughout the state.

Cultural Trust Capital Preservation Grant Program

The New Jersey Cultural Trust provides grants to support capital projects, endowments and institutional and financial stabilization of arts, history and humanities organizations in New Jersey.

1772 Foundation

Nonprofit organizations would be eligible for matching capital preservation grants up to \$15,000 for exterior preservation projects. Schools and religious congregations, however, are not eligible for this program.

Revolving Loan Fund

This program provides low-interest, long-term financing for the preservation, improvement, restoration, rehabilitation, and acquisition of historic properties. The minimum loan amount accepted under this program is \$25,000.

Emergency Grant and Loan Fund

This program provides small grants or loans for the stabilization of historic property. Although this program is still accepting applications, all grants have been suspended, as of 2009.

County Resources

Bergen County Historic Preservation Grant Program

The Historic Preservation Trust Fund Program provides grants for the acquisition, stabilization, rehabilitation, restoration, and preservation of historic sites as well as the preparation of plans and reports associated with the implementation of historic preservation capital projects by the county, municipalities, and qualified non-profit organizations.

Local Resources

Historic Preservation Commission

The mission of the Leonia Historic Preservation Commission is to protect and preserve the unique character of Leonia with specific focus on its historic sites and buildings.

Historic Preservation Element Recommendation Plan

Directions

“Check off” a completed recommendation and mark the year of completion as a way to measure progress.

Short Term: complete in 1-2 years; **Mid Term:** complete in 3-5 years; **Long Term:** complete in 10+ years.

Historic Preservation Plan

	<i>Recommendation</i>	<i>Implementing Party</i>	<i>Timeframe</i>	<i>Completed</i>	<i>Year Completed</i>
1	Conduct an historic resource inventory that comprehensively details a list of historic sites within the Borough.	Borough Council, Historic Preservation Commission	Short		
2	Make annual reports to the Planning Board and Borough Council of HPC activities.	Historic Preservation Commission	Short		
3	Hire a historic preservation expert to survey and complete a new inventory and adopt the survey by ordinance.	Historic Preservation Commission, Borough Council	Short to Medium		
4	Ensure consistency of Leonia’s Historic Preservation Ordinance with the Municipal Land Use Law (MLUL).	Historic Preservation Commission, Planning Board, Borough Council	Short		
5	Revise the Historic Preservation Ordinance to include the most common set of standards and guidelines for criteria by which a historic landmark can be identified, evaluated and protected: Secretary of Interior’s Standards for the Treatment of Historic Properties.	Historic Preservation Commission, Planning Board, Borough Council	Short		
6	Educate homeowners on the benefits of a historic preservation easement and work with interested owners to execute such agreements.	Historic Preservation Commission	Medium		
7	Identify funding for advisory, educational, and informational activities to promote historic preservation in Leonia.	Historic Preservation Commission, Borough staff	Short		
8	Recognize historic sites with plaques and historic districts with signage.	Historic Preservation Commission	Medium		

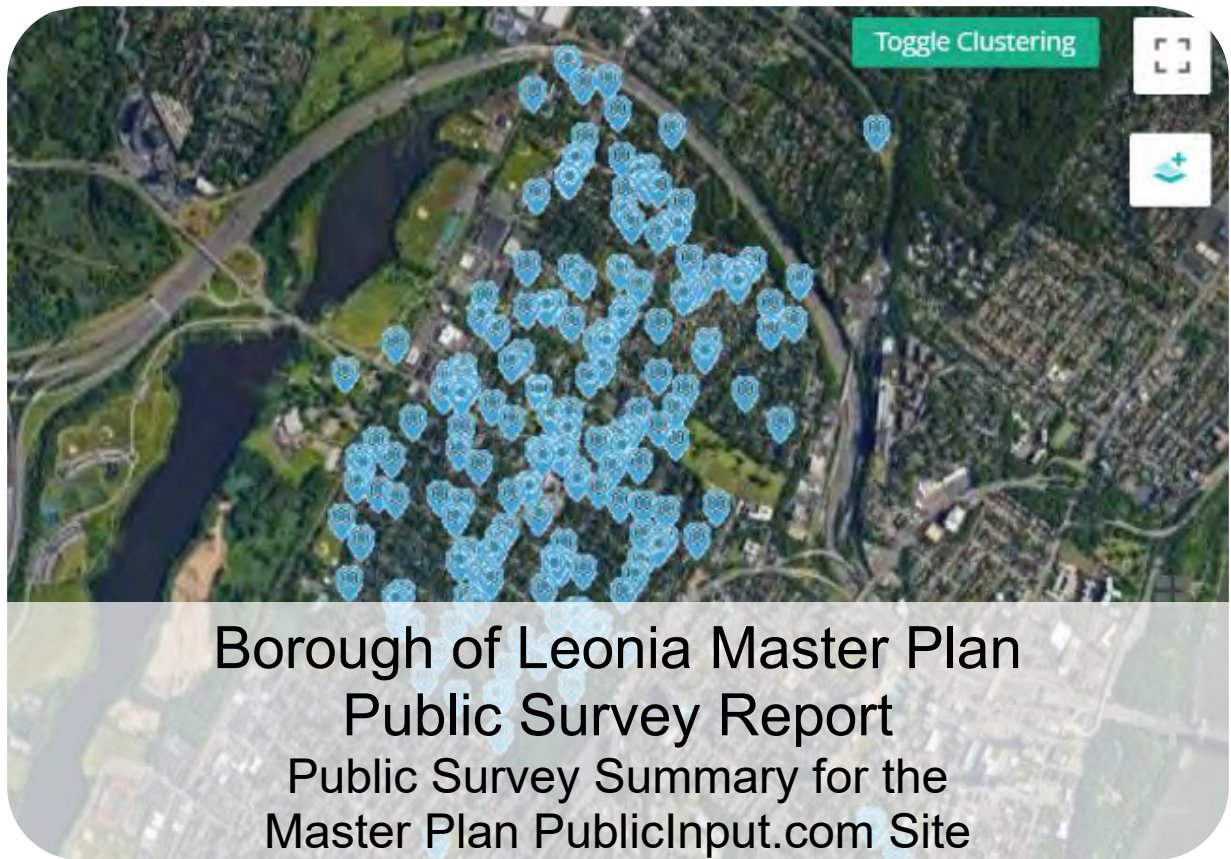
APPENDICES

- Appendix A:** Master Plan Survey Summary and Results
- Appendix B:** Community Engagement Materials
- Appendix C:** Draft Master Plan Presentation to Planning Board

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Appendix A

Master Plan Survey Summary and Results



Prepared By:



architects + engineers
practical approach. creative results.

Prepared Date:
August 12, 2021



Community & Public Participation

Purpose

This Master Plan Outreach Report cannot be written, nor recommendations made without input from the people who live, work, and visit Leonia. Without valuable public input, this document will not accurately represent the wants and needs of Leonia residents. The Master Plan Team is working hard to obtain ideas, opinions, feedback, and concerns from the public throughout the year long Master Plan process using “high touch” to “high tech” approaches, ranging from traditional workshops to online engagement. This collaborative approach provides community insight on the future of Leonia. The goal is to engage, preserve, and enhance community outreach communicated by individuals to foster inclusivity and diversity of community assets. The Master Plan aimed to evolve such public engagement to proactively develop strategies for future implementation and development.

Public Input

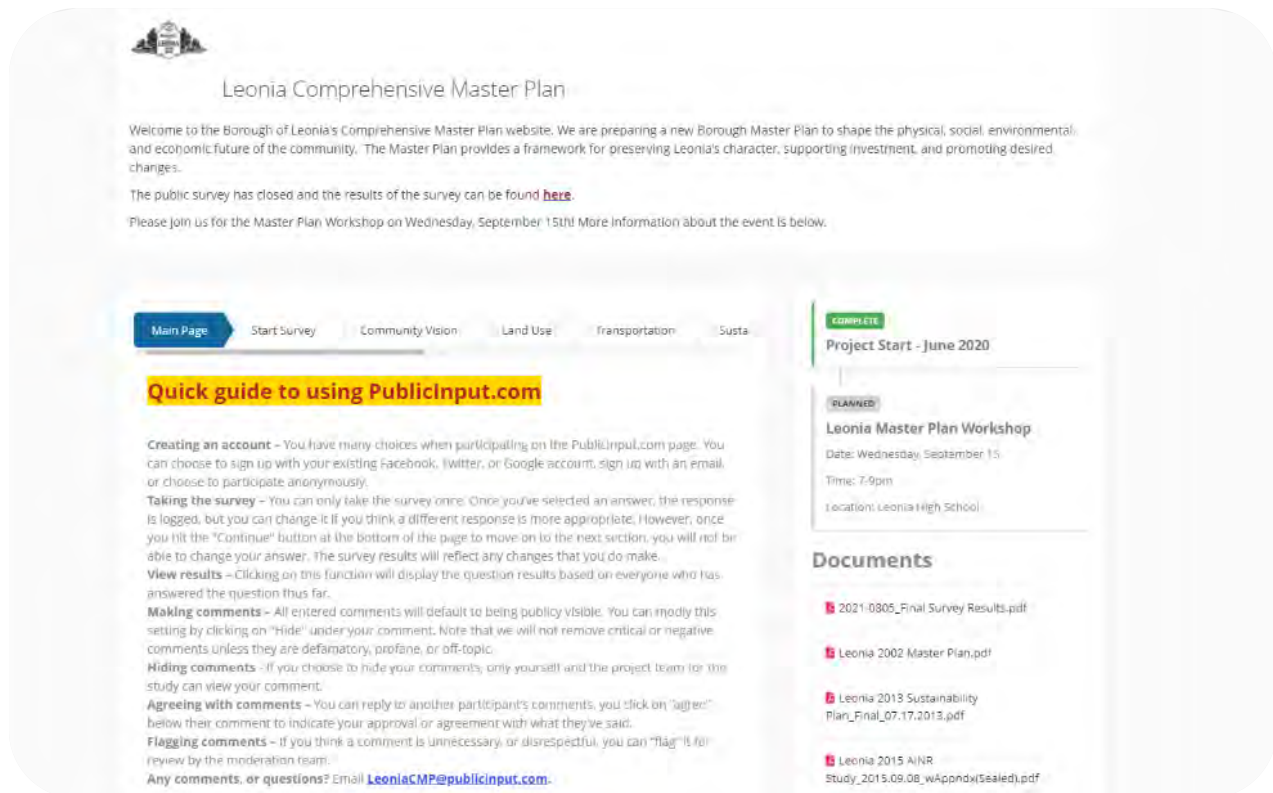
A Master Plan Subcommittee comprised of Leonia community leaders is helping to guide the Master Plan process. The Master Plan Subcommittee believed input from residents through an online public survey would benefit the outreach effort and help to supplement the feedback from the community workshop. The website for the survey was <https://publicinput.com/LeoniaCMP>.

H2M has previously used PublicInput.com to create a promote a public survey to great success. The questions used in the survey were developed by the consulting team with consultation from the Master Plan Sub-Committee and Leonia Borough Professionals. The Public Input site was published in April 2021 and promoted by the Borough to reach as many residents as possible. The survey closed in June 2021.



The Borough of Leonia Master Plan Public Survey Report

Public Survey Summary for the Master Plan PublicInput.com Site



The website was also used as a way to directly communicate with Township residents. The H2M team used the website to consistently update residents on future public workshops and gave results and provided general Master Plan information.

The Master Plan website generated significant traffic with 5,280 views through June 26, 2021. There were 831 participants for the survey who generated 50,086 responses and 6,244 comments. The results of the survey responses will be discussed further based on the section of the survey where it was asked.

Survey Breakdown

This survey was broken down into different topics generally corresponding to an element of the Master Plan. These topics included **(1) Community Vision, (2) Land Use, (3) Transportation, (4) Sustainability, (5) Open Space and Recreation, (6) Community Facilities, and (7) Economic Development**. These sections of the survey were created as tabs on the website. Each topic included about 3-7 questions depending on the section. These questions included open ended questions where residents were asked to comment, multiple choice questions where residents were asked to select one or multiple among many other types of questions.

A summary of the results is located in the following sections and a report of all of the questions can be found in the **Appendix** of this report.



The Borough of Leonia Master Plan Public Survey Report

Public Survey Summary for the Master Plan PublicInput.com Site

1. Community Vision

- Survey responses showed that respondents consider the following defining characteristics for their community: proximity to New York City (43% moved to Leonia for this), small-town feel, tree-lined streets, high-quality schools, quiet residential neighborhoods, artistic community, and family-friendly environment.
- While respondents expressed satisfaction with Leonia overall, they said priorities for improvements are to improve downtown (83%), upgrade park facilities (91%), taxes, traffic management (86%), and improve transit access to nearby cities (86%).

2. Land Use

- In relation to land use, survey respondents reported valuing single-family dwellings above other types of development (90% approved). There was also support for policies to accommodate senior residents through senior housing (44%), accessory dwelling units (54%), and pedestrian safety improvements (69%).
- While respondents reported visiting a restaurant in Leonia's downtown (42%), significantly more respondents said they had visited another community's downtown to go to a restaurant (75%). They said that the largest barriers to enjoying downtown were the lack of businesses/services (54%), and lack of restaurants and shops (74%). 84% of respondents said there was at least one barrier to enjoying Leonia's downtown.

3. Transportation

- While 20% of respondents reported either walking, cycling, or taking public transit to work, 93% said they either drive alone or with others to other places (school, shopping, entertainment, etc.)
- 72% of respondents said that they go to New York City for entertainment, and 42% said they go for work.
- Respondents said that out of town traffic and lack of speed limit enforcement were making pedestrian travel in Leonia dangerous.
- Other top issues for respondents were the Hudson-Bergen Light Rail expansion (63% support), streetscape amenities including benches, lighting, and bike racks (49% support), and to improve biking and walking conditions (44% support).
- Only 14% of respondents agreed that bicycling in Leonia is safe and easy and 79% thought bicycle and pedestrian safety was important. Lack of bike lanes were cited as a main reason for the safety concern.
- When respondents do bike around Leonia, they are typically riding to Overpeck park.



4. Sustainability

- Respondents said they were most likely to use electronics drop off (78%), hazardous materials drop off (78%), and curbside recycling (69%) when asked about sustainability programs and initiatives.
- The most popular potential borough-wide sustainability actions/programs were increased plantings by the Shade Tree Commission (65%), making energy efficiency upgrades to all of Leonia's municipal buildings (58%), and installing electric vehicle charging stations (51%).

5. Open Space and Recreation

- 63% of residents reported using a Park in Leonia at least once per week. The most popular reasons for visiting were walking/running (69%) and relaxation (37%).
- Park bathrooms were a main concern for survey respondents, particularly in wood park.



6. Community Facilities

- The most used public facilities for respondents in 2019 (prior to the pandemic) were the public library (76%) and the Borough Hall (71%).
- Respondents reported that the post office was the least convenient public facility and it needed upgrading. Many commented that they felt there is no need for a borough hall and that most services should be moved online. They also suggested that a new and improved police station is necessary.

7. Economic Development

- Survey respondents believe the Borough should prioritize redeveloping grand avenue/ft lee road and willow tree (56%), incentivizing downtown redevelopment (53%), diversifying the uses in the downtown (47%), and physically rehabilitating the buildings in the downtown (44%).
- Respondents are interested in easing tax burden on residents by drawing low-impact businesses, and 38% said recruiting and retaining employers and businesses in Leonia should be an economic development priority.
- A majority of survey respondents noted that the Borough should encourage attracting major employers to Leonia (64%).
- Respondents overwhelmingly support continuing COVID pandemic outdoor dining adaptations (allowing restaurants to use sidewalks/parking spaces to provide outdoor dining).



APPENDIX

Leonia Comprehensive Master Plan

Project Engagement

VIEWS
5,280

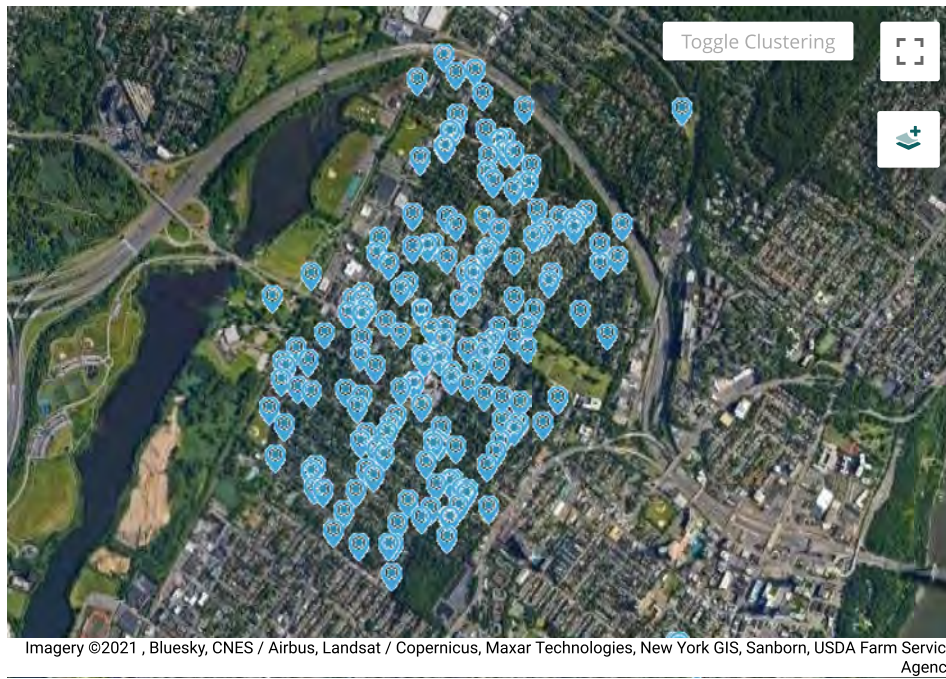
RESPONSES
50,086

SUBSCRIBERS
15

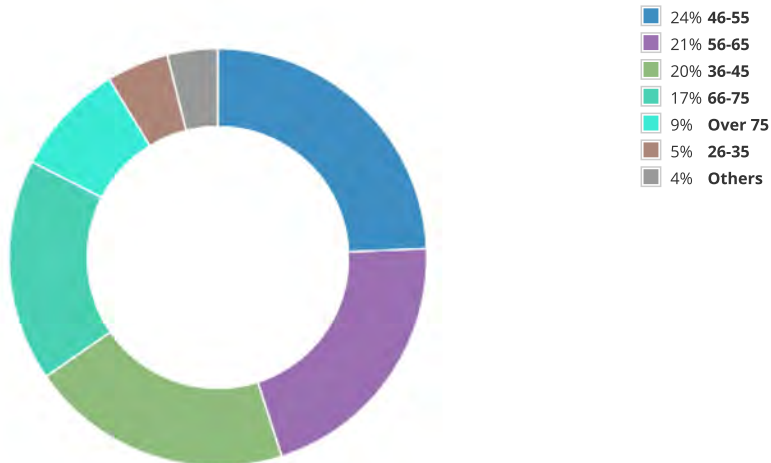
PARTICIPANTS
831

COMMENTS
6,244

1. Where do you live?

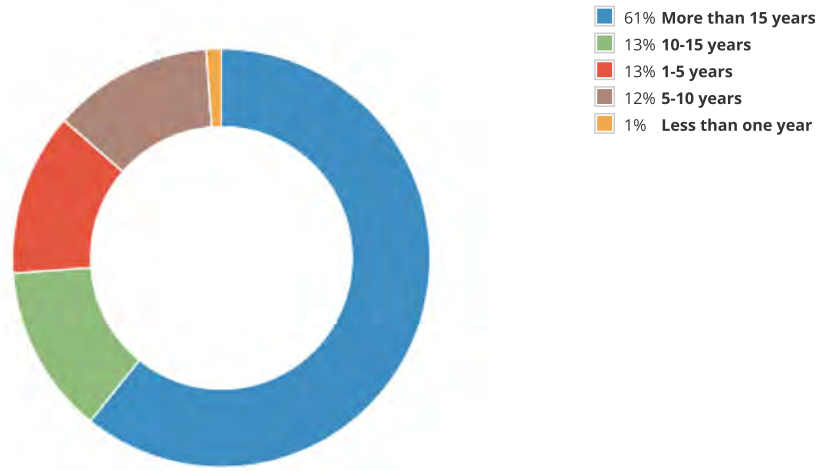


What is your age?



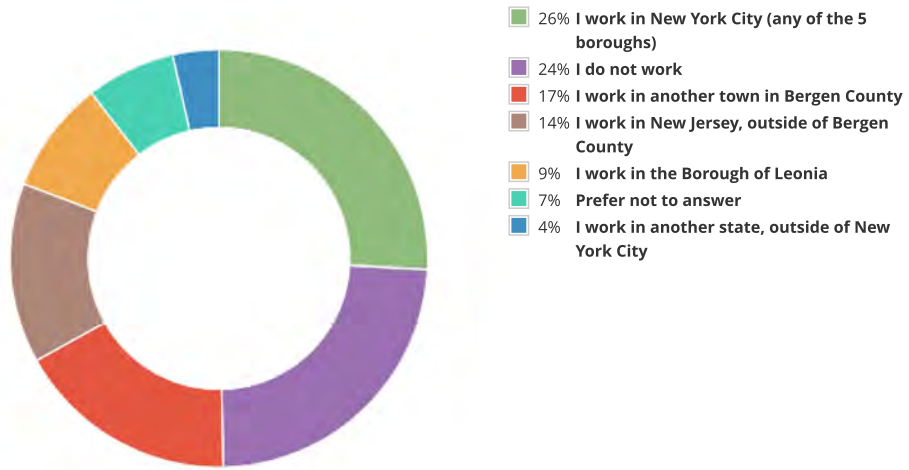
768 respondents

How long have you lived in this area?



765 respondents

3. Where do you work?



755 respondents

5. If you moved to Leonia within the last 20 years , what were the main reasons you moved here? (Select all that apply)

47%	Quality of school system	299 ✓
43%	Close to New York	276 ✓
38%	Quality of life	242 ✓
31%	I have lived in Leonia for over 20 years	198 ✓
27%	Found a home I liked	172 ✓
26%	Access to George Washington Bridge	166 ✓
25%	Availability of bus	163 ✓
25%	Close to where I work	158 ✓
23%	Close to family/friends	144 ✓
13%	Grew up in town or nearby	81 ✓
6%	Other	37 ✓

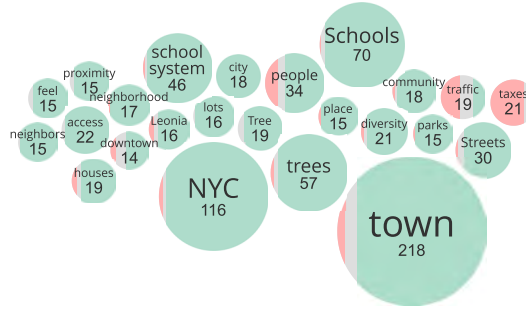
640 Respondents

What type of home do you live in?

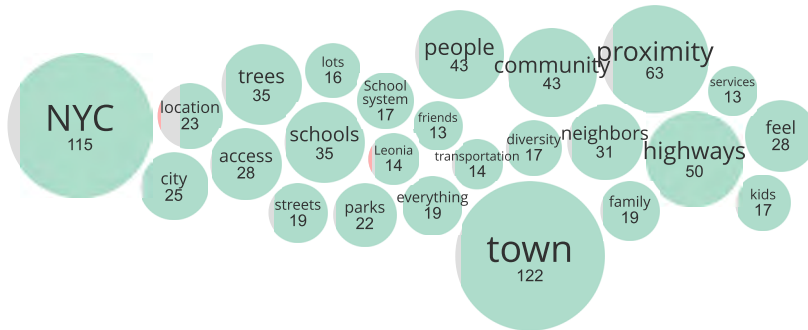
83%	Single-family home	618 ✓
8%	Multi-family building (Apartment, Condominium, etc.)	59 ✓
4%	Townhouse	30 ✓
3%	2-family or duplex	25 ✓
1%	Other	10 ✓
1%	Prefer not to answer	9 ✓

743 Respondents

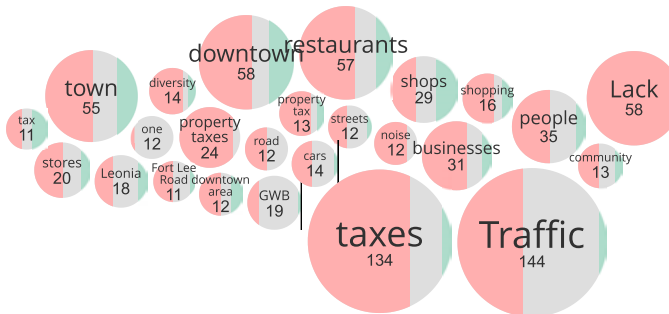
1. What is the first thing that comes to mind when you think of the Borough of Leonia?



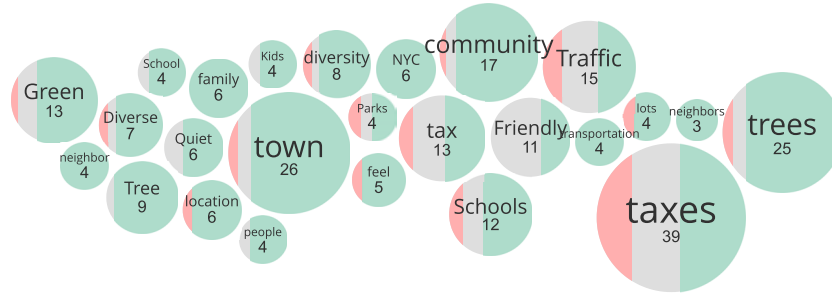
2. What do you most like about living in, working in, or visiting the Borough of Leonia?



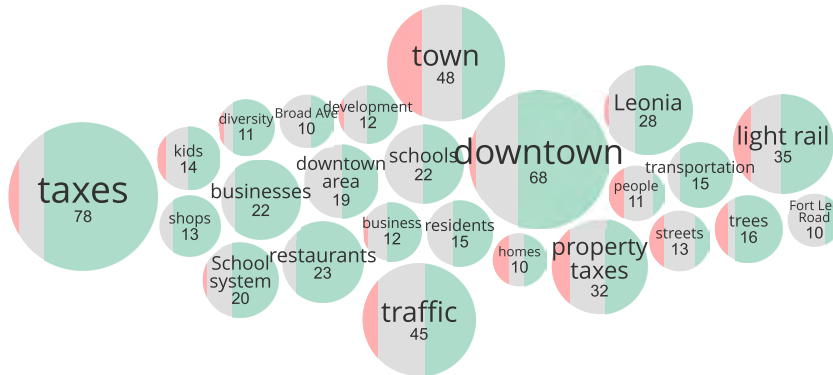
3. What do you least like about living in, working in, or visiting the Borough of Leonia?



4. What are 3 words you would use to describe the Borough of Leonia?



5. What are your priorities for making Leonia an even better place to live?



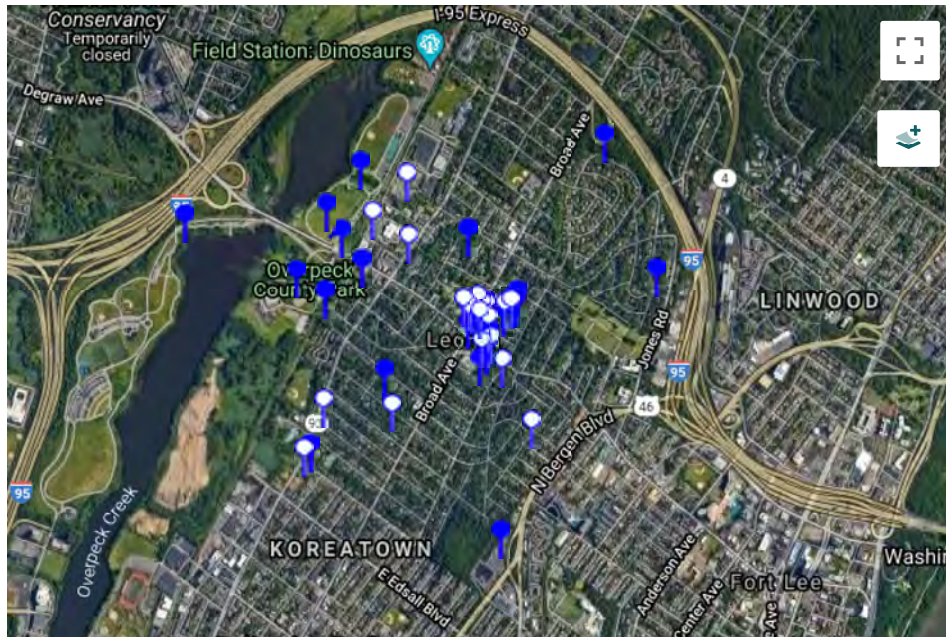
6. Rate the following issues/trends affecting The Borough of Leonia (**Choose one option per row**)

	Very important	Important	Somewhat important	Not at all important	Neutral/No opinion
Condition of Broad Avenue Commercial Corridor	47% Very important	36% Important	14% Somewhat important	2% Not at all important	2% Neutral/No opinion
Affordability of housing	30% Very important	30% Important	26% Somewhat important	10% Not at all important	4% Neutral/No opinion
Quality of public education	73% Very important	21% Important	3% Somewhat important	1% Not at all important	1% Neutral/No opinion
Traffic/ congestion	57% Very important	29% Important	13% Somewhat important	1% Not at all important	1% Neutral/No opinion
Diversity of housing stock (i.e., townhouses, apartments, single-family homes, etc.)	17% Very important	24% Important	32% Somewhat important	22% Not at all important	5% Neutral/No opinion
Residential teardowns/development of overly large new single-family homes	28% Very important	24% Important	23% Somewhat important	19% Not at all important	7% Neutral/No opinion
Access to reliable transit	50% Very important	36% Important	10% Somewhat important	3% Not at all important	2% Neutral/No opinion
Bicycle and pedestrian safety	48% Very important	31% Important	16% Somewhat important	4% Not at all important	2% Neutral/No opinion
Condition of parks and recreational facilities	51% Very important	40% Important	7% Somewhat important	1% Not at all important	1% Neutral/No opinion
Preservation of historic homes and neighborhoods	30% Very important	34% Important	25% Somewhat important	7% Not at all important	4% Neutral/No opinion
High-intensity development in surrounding municipalities	24% Very important	29% Important	29% Somewhat important	11% Not at all important	7% Neutral/No opinion
Redevelopment of underutilized parts of the Borough	32% Very important	37% Important	19% Somewhat important	8% Not at all important	4% Neutral/No opinion
Availability of goods and services downtown	43% Very important	36% Important	16% Somewhat important	3% Not at all important	2% Neutral/No opinion

	Very important	Important	Somewhat important	Not at all important	Neutral/No opinion
Access to jobs/employment	17% Very important	27% Important	29% Somewhat important	18% Not at all important	9% Neutral/No opinion
Environmental quality/protection	51% Very important	35% Important	10% Somewhat important	3% Not at all important	1% Neutral/No opinion
Northern expansion of Hudson-Bergen Light Rail	40% Very important	26% Important	16% Somewhat important	13% Not at all important	4% Neutral/No opinion

515 respondents

Please drop a pin and upload a photo of a place in the Borough that best highlights Leonia.



Map data ©2021 Google Imagery ©2021, Bluesky, CNES / Airbus, Landsat / Copernicus, Maxar Technologies, New York GIS, Sanborn, USDA Farm Service Agency

7. What development strategies should the Borough most focus on encouraging? (choose one option per row):

	Strongly encourage	Encourage	Neutral/No opinion	Discourage	Strongly discourage
Attract and retain major employers into the Borough	25% Strongly encourage	39% Encourage	24% Neutral/No opinion	8% Discourage	3% Strongly discourage
Redevelopment of existing buildings/areas in and around Grand Ft. Lee & Broad Avenues	41% Strongly encourage	39% Encourage	14% Neutral/No opinion	4% Discourage	2% Strongly discourage
Restoration/Rehab of existing residential homes	24% Strongly encourage	44% Encourage	28% Neutral/No opinion	3% Discourage	1% Strongly discourage
Promote new residential development within and near Grand & Broad Avenues redevelopment areas	18% Strongly encourage	31% Encourage	28% Neutral/No opinion	16% Discourage	7% Strongly discourage
Additional housing types (townhomes, senior housing)	11% Strongly encourage	25% Encourage	35% Neutral/No opinion	21% Discourage	8% Strongly discourage
Expanding and improving recreational opportunities	35% Strongly encourage	43% Encourage	21% Neutral/No opinion	1% Discourage	1% Strongly discourage
Expansion of public transit	42% Strongly encourage	35% Encourage	18% Neutral/No opinion	4% Discourage	2% Strongly discourage

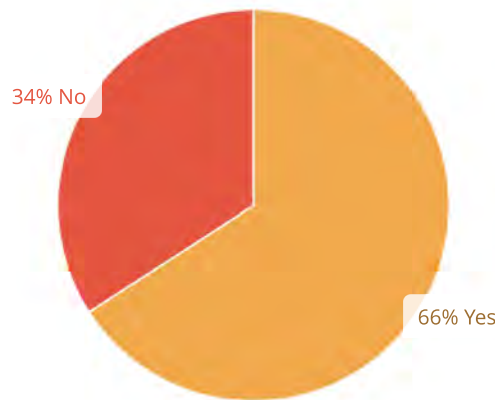
502 respondents

8. What is your opinion on the types of possible residential construction in Leonia?
(choose one option per row):

	Strongly approve	Approve	Neutral/No opinion	Disapprove	Strongly disapprove
Single-family	63% Strongly approve	27% Approve	7% Neutral/No opinion	2% Disapprove	1% Strongly disapprove
Duplex	9% Strongly approve	24% Approve	18% Neutral/No opinion	25% Disapprove	25% Strongly disapprove
Multifamily	7% Strongly approve	18% Approve	21% Neutral/No opinion	28% Disapprove	26% Strongly disapprove
Townhouse	11% Strongly approve	29% Approve	23% Neutral/No opinion	21% Disapprove	16% Strongly disapprove
Senior housing (of any kind)	18% Strongly approve	38% Approve	29% Neutral/No opinion	8% Disapprove	7% Strongly disapprove
Mixed-use	9% Strongly approve	22% Approve	36% Neutral/No opinion	17% Disapprove	16% Strongly disapprove
Affordable housing (of any kind)	14% Strongly approve	26% Approve	28% Neutral/No opinion	15% Disapprove	17% Strongly disapprove

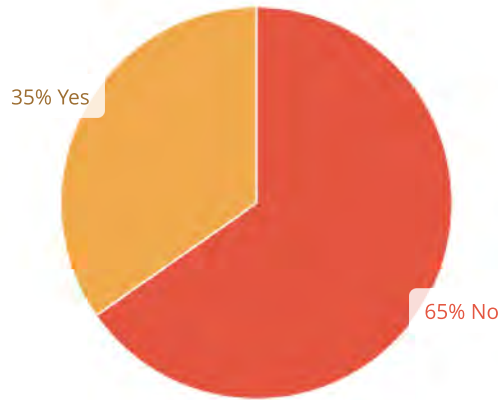
498 respondents

9. Would you be in favor of making it easier to incorporate an accessory dwelling unit into an existing single-family property?



536 respondents

10. If accessory dwelling units were permitted in Leonia, would you consider constructing one? Why or why not? Please explain in the box below.



530 respondents

11. What types of policies would you be in favor of to help senior residents remain in Leonia ? (Select all that apply)

69%	Improve pedestrian safety	352 ✓
62%	Increase public transit access and shuttle services	316 ✓
54%	Senior Programs	276 ✓
54%	Allow residents to construct accessory dwelling units (i.e. granny flats, in-law suites, etc.)	272 ✓
44%	Encourage construction of more senior housing	225 ✓
12%	I don't think this should be a priority for the Borough	60 ✓
3%	Other:(please explain)	17 ✓

507 Respondents

12. If the area around the Fort Lee Road and Grand Avenue intersection were entirely redeveloped, what would you like to see built there?

52%	Mixed-use (Residential/Commercial)	256 ✓
49%	Mixed Office and Commercial – a jobs center	237 ✓
12%	Remain the same	57 ✓
10%	Age-restricted residential	49 ✓
8%	All residential development	38 ✓

488 Respondents

13. In an average month, what do you typically do in downtown Leonia? (Select all that apply)

68%	I shop in downtown stores	345 ✓
52%	I conduct personal banking/financial business downtown	266 ✓
42%	I eat in downtown restaurants	215 ✓
42%	I visit personal care businesses (for example, salons) downtown	213 ✓
27%	I use community gathering/cultural space/religious spaces downtown	139 ✓
21%	I use government services downtown	109 ✓
9%	Other	44 ✓
2%	I work downtown	12 ✓

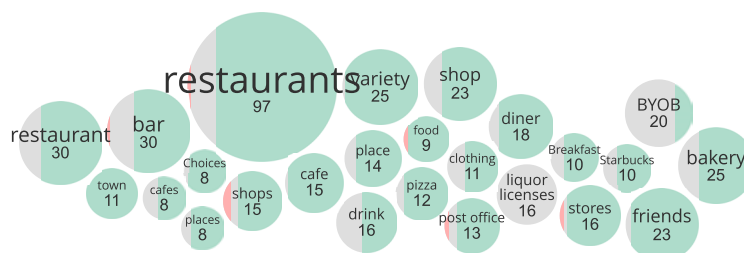
509 Respondents

14. In an average month, what do you typically do in downtowns of neighboring communities? (Select all that apply)

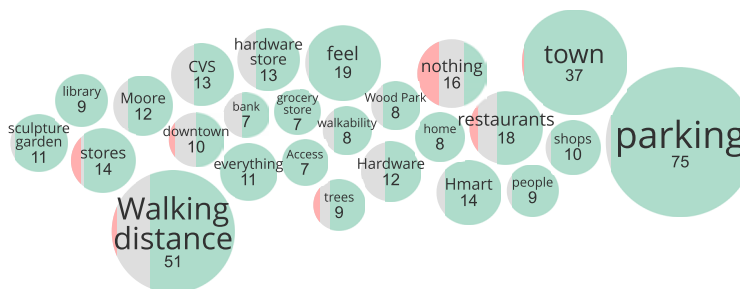
75%	I eat in downtown restaurants	345 ✓
63%	I shop in downtown stores	287 ✓
36%	I conduct personal banking/financial business downtown	167 ✓
33%	I visit personal care businesses (for example, salons) downtown	152 ✓
11%	I use community gathering/cultural space/religious spaces downtown	52 ✓
6%	Other	29 ✓
4%	I use government services downtown	18 ✓
4%	I work downtown	17 ✓

458 Respondents

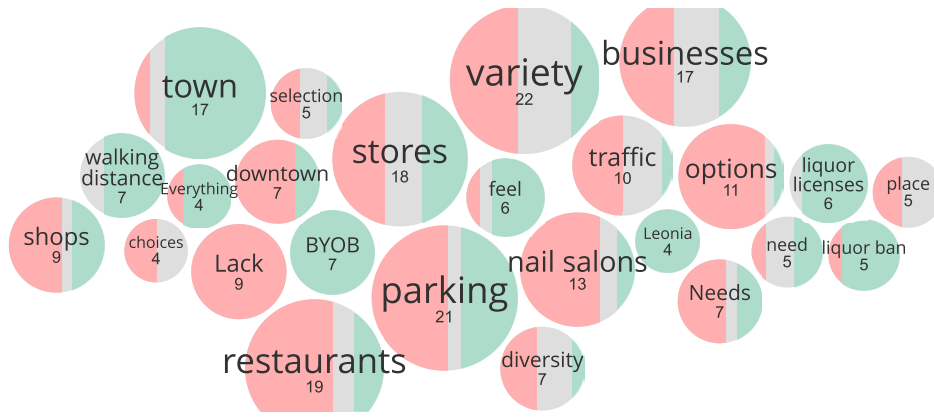
15. What would you like to do in downtown Leonia that you cannot now? Please give as much detail as you can.



16. What do you love about Leonia's downtown? Please give as much detail as you can.



16. When you think of Leonia's downtown, what are the first few words or phrase that come to mind to describe it?

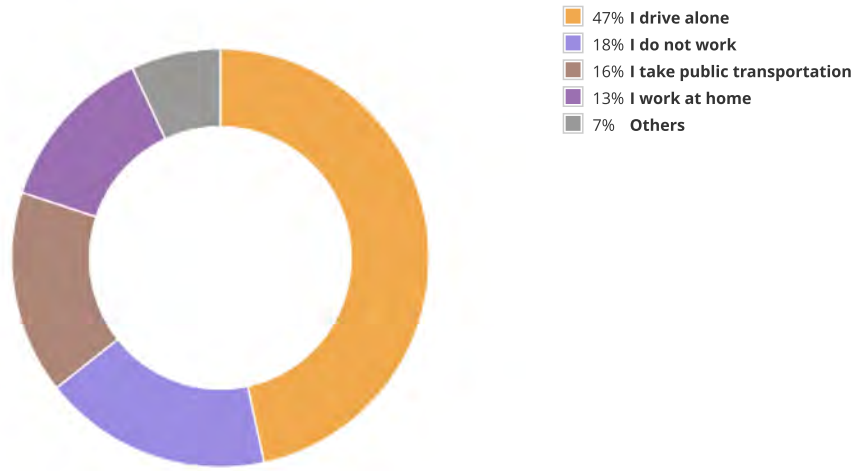


17. What are the biggest barriers that keep you from enjoying downtown now? (Select all that apply)

74%	Lack of restaurants or shops	362 ✓
54%	Lack of the businesses/services	267 ✓
18%	Lack of interest in visiting downtown	89 ✓
16%	There is no barrier that keeps me from enjoying downtown	79 ✓
15%	Lack of parking	76 ✓
13%	Lack of community gathering space	63 ✓
7%	Lack of open space	36 ✓
4%	Lack of affordability	21 ✓
2%	Lack of safety	9 ✓
2%	Lack of public transportation	8 ✓

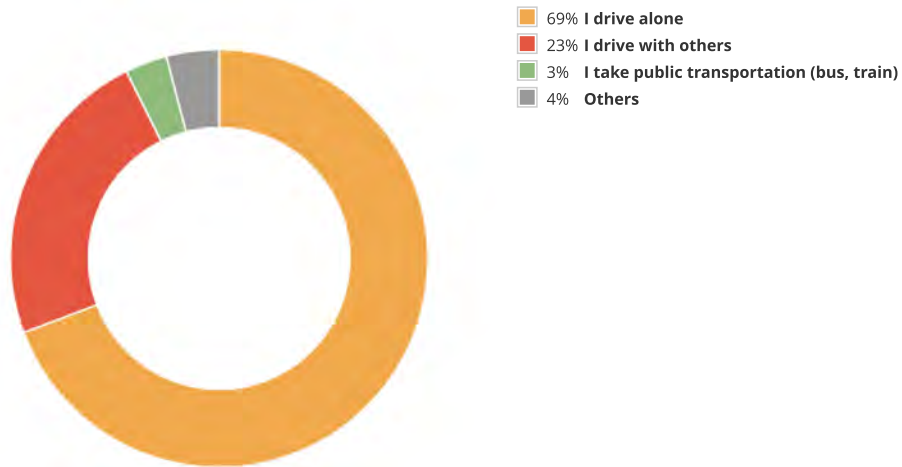
492 Respondents

1. How do you usually travel to work?



491 respondents

2. How do you usually travel to other places? (school, shopping, entertainment, etc.)



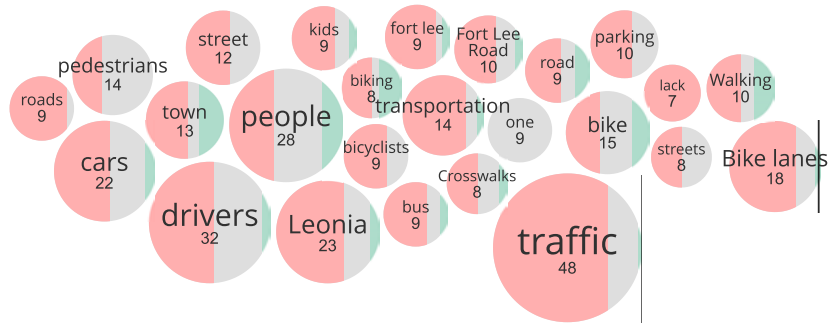
491 respondents

3. In your opinion, which of the following is true? (Select all that apply)

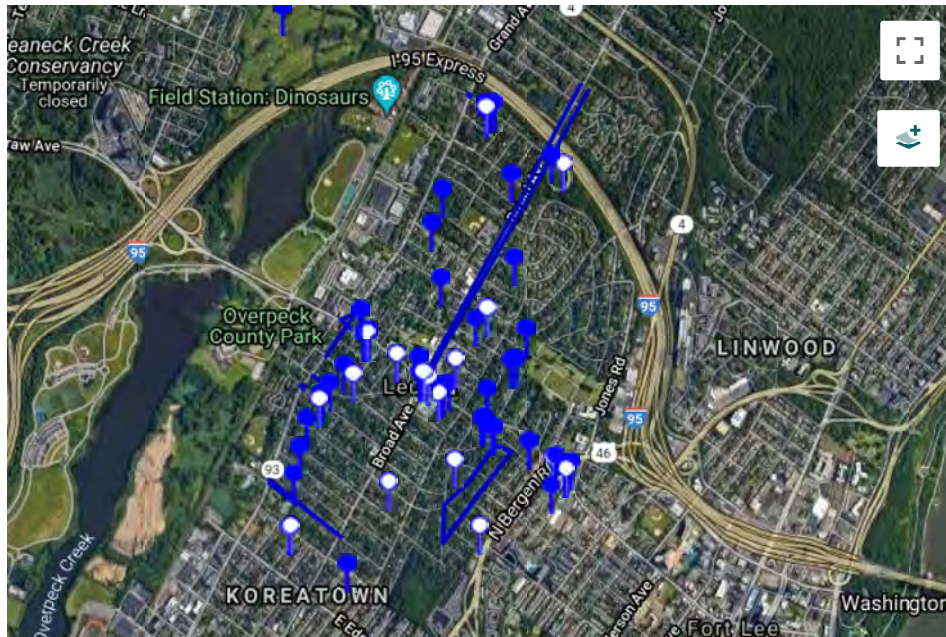
77%	Driving in Leonia is safe and easy	366 ✓
66%	Walking in Leonia in safe and easy	315 ✓
46%	Taking public transportation is safe and easy	219 ✓
14%	Bicycling in Leonia is safe and easy	65 ✓
9%	None of the above is true	44 ✓
6%	Traveling in Leonia as a person with limited mobility is safe and easy	28 ✓

475 Respondents

4. Are there reasons why you may feel that any of the transportation modes listed in Question #3 are not safe or easy?



5. Are there intersections or other locations where you feel unsafe, either as a driver, pedestrian, or bicyclist? Please provide the location and the reason why in the comments section below.



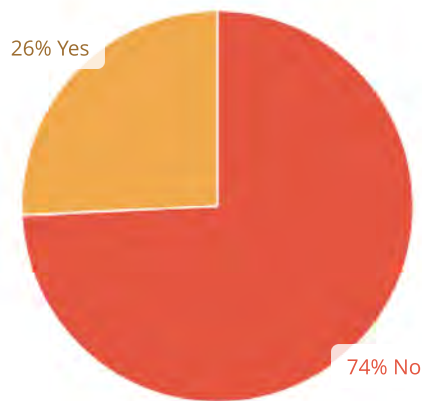
Map data ©2021 Google Imagery ©2021, Bluesky, CNES / Airbus, Landsat / Copernicus, Maxar Technologies, New York GIS, Sanborn, USDA Farm Service Agency

6. How should Leonia improve mobility throughout the town? (Select all that apply)

63%	Advocate for the northern expansion of the Hudson-Bergen Light Rail	283 ✓
49%	Add more streetscape amenities (benches, lighting, bike racks, etc.)	222 ✓
44%	Improve biking and walking conditions	197 ✓
35%	Improve transportation technology (traffic lights, dynamic message signs)	157 ✓
32%	Add more parking in the Downtown	145 ✓
31%	Restrict nonresidential traffic during peak traffic hours	138 ✓
24%	Increase accessibility/mobility for people with limited mobility	106 ✓
16%	Provide wayfinding signage to identify key destinations (parking, municipal buildings..etc.)	71 ✓
14%	Provide alternative transportation options such as bike shares/e-scooters	65 ✓
12%	Advocate for new bus routes (Comment below where you would like to see this)	56 ✓
11%	Partnerships with ride-sharing services (Lyft, Uber, etc.)	49 ✓
3%	Other	14 ✓

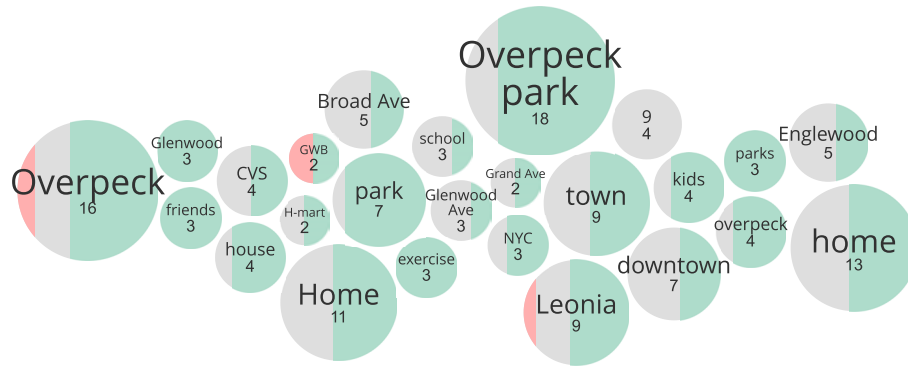
450 Respondents

8. Do you ride a bicycle around Leonia?

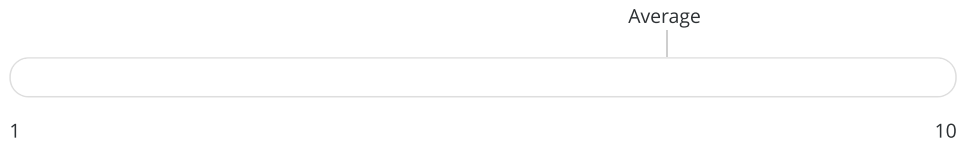


455 respondents

9. If you answered YES to Question #8, where do you ride to/from?



10. Rate the convenience of commuting/traveling to New York from Leonia



11. If you feel that travel to New York is inconvenient, what would make commuting to the City more convenient?

77%	New light rail service	237 ✓
43%	Improved traffic patterns	132 ✓
27%	Increased bus access to New York	83 ✓
4%	Other	13 ✓

306 Respondents

12. What are the reasons that you travel to New York City (Select all that apply)

72%	To go to an entertainment venue or event	318 ✓
42%	Work	188 ✓
40%	To visit a friend or family	179 ✓
33%	To go out at night	148 ✓
31%	Shopping	136 ✓
22%	To access healthcare services	97 ✓
7%	Other	31 ✓
2%	School	7 ✓

443 Respondents

13. What are other destinations that you travel to frequently?

82%	Destinations in Bergen County	352 ✓
41%	Other NJ destinations	177 ✓
15%	Hoboken	63 ✓
11%	Jersey City	46 ✓
9%	Other destinations. Please comment below	40 ✓
9%	Newark	39 ✓

430 Respondents

13. Would you utilize the following environmental/recycling programs and events (Select all that apply)

78%	Hazardous materials drop off	344 ✓
78%	Electronics Drop Off	341 ✓
69%	Curbside recycling	302 ✓
54%	Freecycle Program (exchange of free items between members)	236 ✓
45%	Request for a shade tree	199 ✓
42%	Renewable Energy Aggregation Program	185 ✓
27%	Use of the Jitney service	119 ✓
26%	Participating in a community garden	116 ✓
19%	Attendance at an Eco Fair	83 ✓
12%	Viewing at Green Film Series	53 ✓
1%	Other	6 ✓

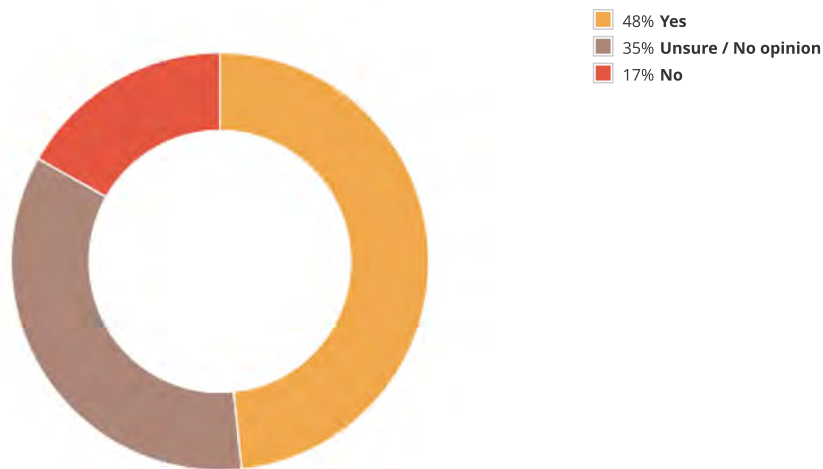
440 Respondents

14. Which sustainability programs/actions would you be in favor of the Borough supporting? (Select all that apply)

65%	Increased tree plantings by Shade Tree Commission	255 ✓
58%	Making energy efficiency upgrades to all of its municipal buildings	229 ✓
51%	Installing electric vehicle charging stations	200 ✓
49%	Purchasing electric and/or fuel-efficient vehicles	194 ✓
46%	Sustainable Jersey (www.sustainablejersey.com) recertification	182 ✓
33%	Community garden program	130 ✓
32%	Rain barrel sales/information workshops	126 ✓
27%	Rain garden education workshops	108 ✓
27%	Conducting a Greenhouse Gas (GHG) inventory for Borough operations	107 ✓
27%	Climate change resolution	105 ✓
4%	Other	14 ✓

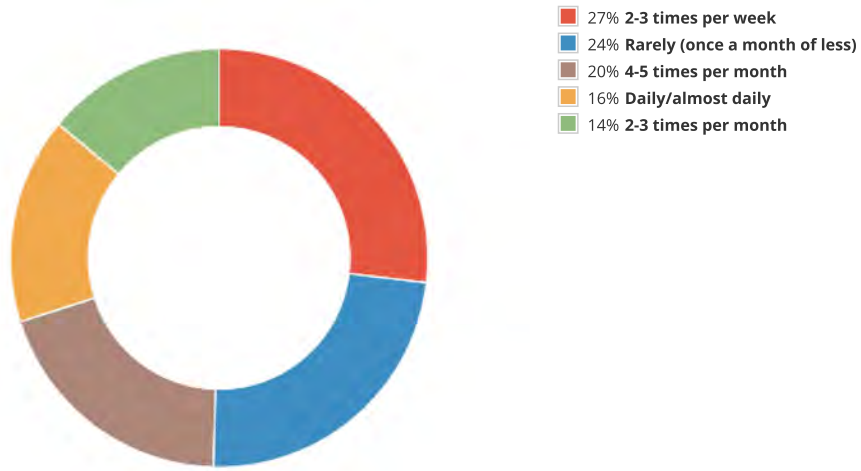
393 Respondents

15. Should local codes require green building construction techniques (i.e. Leadership in Energy and Environmental Design – LEED/ Wellness Building) such as high efficiency heating and cooling systems, green roofs, and other green infrastructure such as rainwater harvesting and on-site re-use? Currently, the Borough has no such requirements for new construction.



422 respondents

16. How often do you go to a park in Leonia?



458 respondents

17. What is the main reason you go to a park?

69%	Walking/running	302 ✓
37%	Relaxation	164 ✓
25%	Playground/swings	111 ✓
16%	Sports (basketball, tennis, baseball, softball, etc.)	71 ✓
10%	Other	42 ✓
5%	Swimming	23 ✓
5%	Hiking	21 ✓
5%	Picnicking	21 ✓

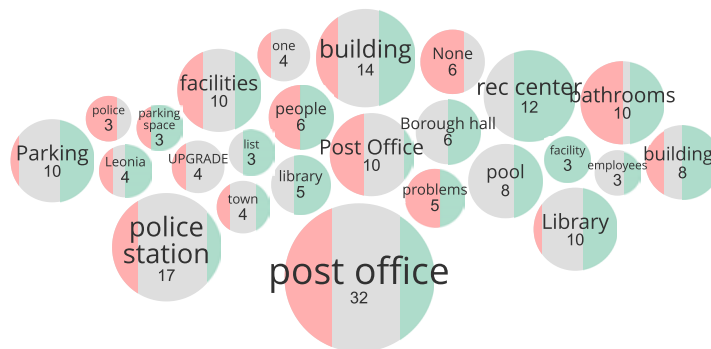
438 Respondents

1. Prior to the pandemic, had you been to the following public facilities at least once in 2019? (Select all that apply)

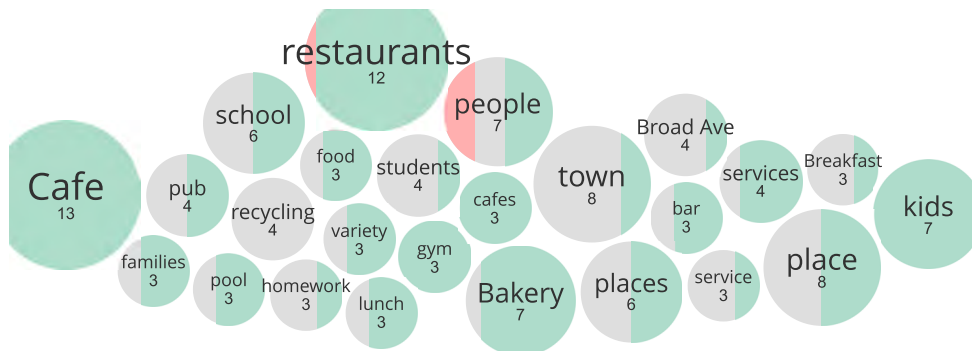
76%	Public Library	314 ✓
71%	Borough Hall	291 ✓
36%	Pool complex	149 ✓
24%	Police Station	98 ✓
18%	Leonia Drill Hall (Leonia Players Guild)	75 ✓
5%	Other	19 ✓

412 Respondents

3. What ideas do you have to improve the convenience or level of service you receive from these facilities?



4. Are there any services or facilities that are not in the Borough you would like to see added?

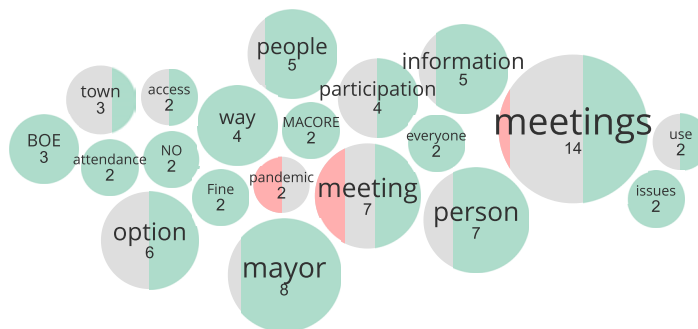


5. What additional technology services would you like to see the Borough of Leonia implement? (Select all that apply)

63%	Submit building and other permits and pay permit fees online	219 ✓
57%	Report issues and request services through online form	199 ✓
48%	Free wi-fi in the downtown	167 ✓
37%	Electric vehicle charging stations	128 ✓
31%	More transparent budgeting data	109 ✓
30%	Sign up for meeting agendas and meetings to be emailed to you	104 ✓
18%	Bike share/e-scooters	61 ✓
16%	Advanced technology for parking	57 ✓
10%	Information kiosks in key locations	35 ✓
3%	Ability to use blockchain currency (i.e. bitcoin) to pay municipal bills	9 ✓
2%	Other	6 ✓

347 Respondents

6. Have you attended any virtual public meeting since the transition to virtual meetings began? If so, what has been your perception of them?



7. What initiative(s) that the Borough undertook during the pandemic would you like to see continue into the future? (Select all that apply)

79%	Use of Nixle messenger to give daily/weekly updates	306 ✓
73%	Permitting outdoor dining	281 ✓
62%	Virtual public meetings	241 ✓
43%	Sign up for meeting agendas and meetings to be emailed to you	165 ✓

387 Respondents

8. What cultural activities do you attend/participate in ?

70%	Music/concerts	258 ✓
70%	Museums	257 ✓
68%	Festivals/events	250 ✓
60%	Theater performances	220 ✓
50%	Art galleries	184 ✓
42%	Children/youth activities	153 ✓
16%	Military appreciation activities	59 ✓

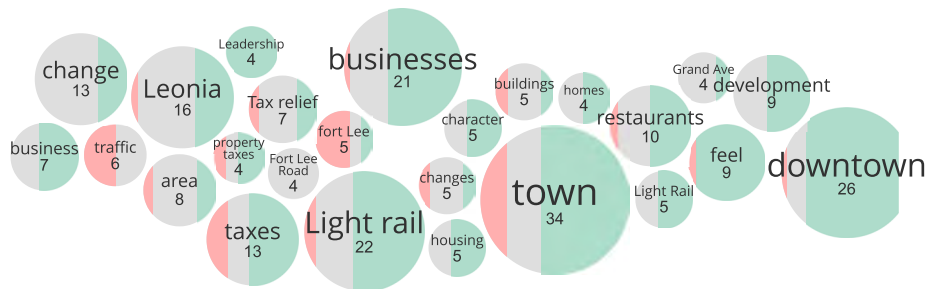
367 Respondents

1. What should be the top economic development priority? (Select all that apply)

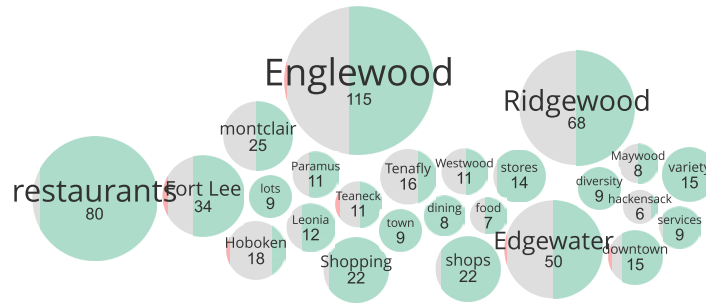
56%	Grand Avenue/Ft Lee Road and Willow Tree redevelopment	221 ✓
53%	Downtown revitalization through incentives (i.e. SID, rehabilitation, redevelopment designations)	210 ✓
47%	Diversification of uses in the downtown	188 ✓
44%	Physical rehabilitation of buildings in the downtown	176 ✓
38%	Recruit and retain employers and businesses in Leonia	150 ✓
25%	Small business support programs (technical assistance)	99 ✓
15%	Construction and development of Senior housing	60 ✓
10%	Access to capital for entrepreneurs and businesses	41 ✓
6%	Job training and workforce development programs	22 ✓
3%	Other	13 ✓

396 Respondents

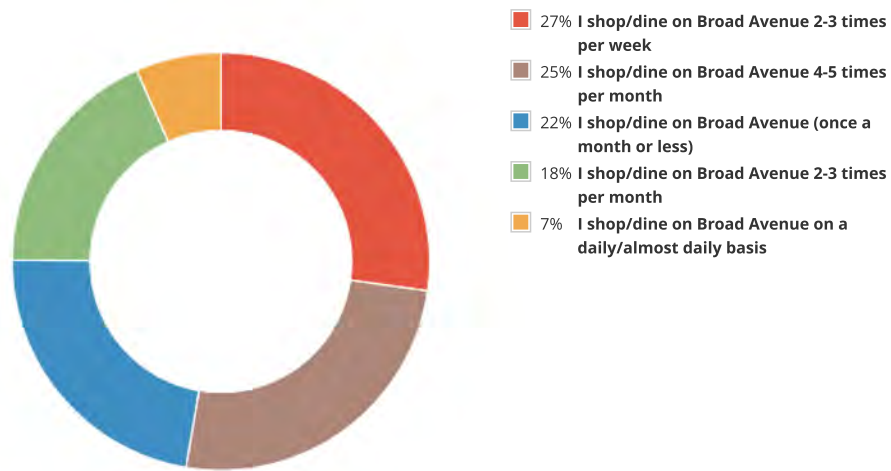
2. What are the greatest opportunities for change in Leonia ?



3. Outside of Leonia, what other downtowns in New Jersey that you enjoy visiting? What about those downtowns do you like most?



4. In a typical month prior to the pandemic, how often did you shop/dine along the Broad Avenue commercial corridor?



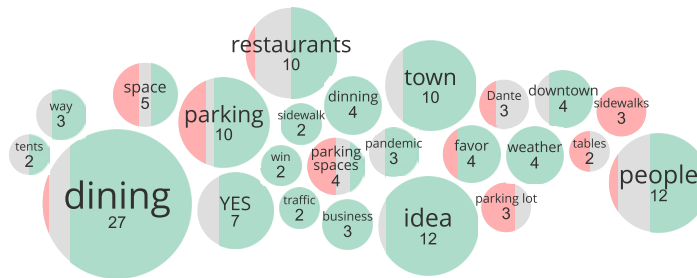
393 respondents

5. In your opinion, Leonia could use more: (Select all that apply)

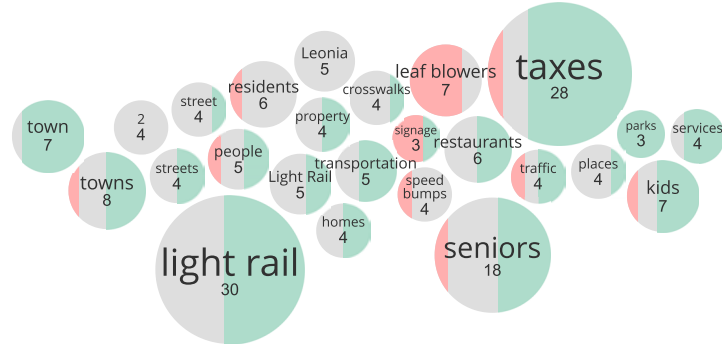
86%	Restaurants	344 ✓
76%	Retail stores	302 ✓
38%	Community gathering spaces	150 ✓
35%	Cultural facilities	140 ✓
34%	Public artwork	135 ✓
24%	Fitness services	94 ✓
19%	Professional services	76 ✓
4%	Health and beauty services	16 ✓
2%	Other	9 ✓

398 Respondents

6. What is your opinion of the Borough allowing restaurants to use sidewalks/parking spaces to provide outdoor dining? Should the Borough continue to allow this after the COVID-19 pandemic subsides?



7. What policies have other towns either in New Jersey or in the greater New York area implement that you think would also work in Leonia?



8. Which capital improvements should the city prioritize?

71%	Downtown redevelopment	275 ✓
46%	Road improvements	177 ✓
38%	Sidewalks	146 ✓
32%	Parks	124 ✓
28%	Water and sewer	106 ✓
23%	Parking	88 ✓
4%	Other	14 ✓

385 Respondents

Appendix B

Community Engagement Materials



The Borough of Leonia Master Plan Outreach Report
Community & Public Participation Summary for the October 20th Leonia Community Workshop



The Borough of Leonia Master Plan Report
Public Participation Summary for the
October 20th Community Workshop

Prepared By:



architects + engineers
practical approach. creative results.

Workshop Date:
October 20, 2021

Prepared Date:
October 29, 2021



Community & Public Participation

Purpose

This Master Plan Report cannot be written, nor recommendations made without input from the people who live, work, and visit Leonia. Without valuable public input, this document will not accurately represent the wants and needs of Leonia residents. The Master Plan Team is working hard to obtain ideas, opinions, feedback, and concerns from the public throughout the year long Master Plan process using “high touch” to “high tech” approaches, ranging from traditional workshops to online engagement. This collaborative approach provides community insight on the future of Leonia. The goal for the October 20th workshop was to engage, preserve, and enhance community outreach communicated by individuals to foster inclusivity and diversity of community assets. The Master Plan aimed to evolve such public engagement to proactively develop strategies for future implementation and development.

Community Workshop

A Master Plan Subcommittee comprised of Leonia community leaders is helping to guide the Master Plan process. The Borough of Leonia and the Master Plan Team worked with Community Stakeholders and the Planning Board planned one community workshop to both provide information to residents and solicit their input. The workshop was held in the cafeteria room of the Leonia High School on Wednesday, October 20th from 7 to 9:30pm. About forty (40) Borough residents attended the workshop that began with a short presentation by Mayor Zeigler, Planning Board Chairman DeGidio and Sanyogita Chavan. The workshop featured several interactive tables that provided residents in attendance the opportunity to voice their opinions on the various elements of the Master Plan.



The Borough of Leonia Master Plan Outreach Report

Community & Public Participation Summary for the October 20th Leonia Community Workshop



The workshop was spearheaded by Sanyogita Chavan of H2M Associates, the Planning Manager/Advisor preparing the Master Plan Report and head organizer of the event. Various other members of the H2M team, the Planning Board, and the Borough’s economic development consultant, Karp Strategies, were also in attendance helping to lead the event.

Upon sign in, participants were given a number that corresponded with a topic table to start at. After going to their first assigned table, attendees were able to go to any of the other tables that they desired to discuss the issues that were most important to them.



Above: Room layout; Right: Master Plan Flyer

Borough of Leonia presents:
Leonia Master Plan

The Borough of Leonia is launching its Master Plan to shape the physical, social, environmental, and economic future of the Borough. This planned Master Plan will provide a framework for preserving Leonia's character, supporting investment, and promoting needed changes, and we need your help.

Join Us at the Upcoming Community Workshop
Wednesday, October 20, 7-9:30pm
at Leonia High School Cafeteria

What is a Master Plan?
A Master Plan provides a guide for the future development of a community. It serves as a long-term strategic approach to planning issues and considers many factors impacting a community's economic development and goals.

Get Involved!
As part of the planning process, we are holding a public meeting in our community, and spreading the word on the new project website. We are talking to residents, businesses, and other stakeholders about the issues you face. We want you to share your ideas!

The Plan covers the following Elements of a Master Plan:

- Land Use
- Circulation
- Economic Development
- Community Facilities
- Open Space & Parks
- Sustainability
- Historic Preservation

Visit the project website & view the survey results!
PublicInput.com/LeoniaCMP
www.leonia.nj.gov



The Borough of Leonia Master Plan Outreach Report

Community & Public Participation Summary for the October 20th Leonia Community Workshop



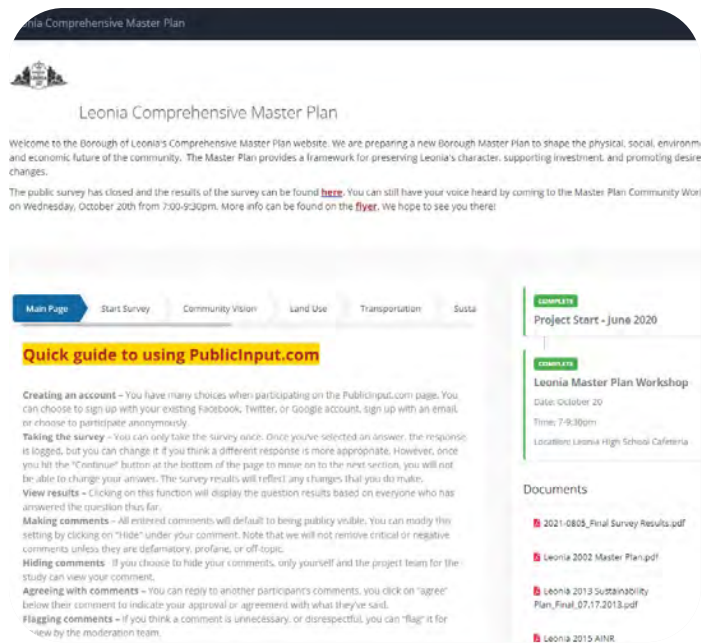
The Master Plan Report and the purposes of the night’s workshop were the following:

1. To gain an understanding of Leonia community issues through the eyes of residents.
2. To promote the Master Plan Report public participation process by encouraging participants to be ambassadors to the Plan.

Attendees were notified upon signing in about the workshop of the public survey website, <https://publicinput.com/LeoniaCMP> and were encouraged to visit the site to see the results of the public survey and to keep up to date on future events in the Master Plan process. It was also pointed out that the workshop was intended to build upon the questions that were asked during the online survey.

Interactive Portion

This interactive part of the workshop required workshop participants to join in conversation with the “topic table” facilitators broken out into (1) **Land Use**, (2) **Circulation**, (3) **Community Vision**, (4) **Open Space, Parks & Community Facilities**, (5) **Economic Development**, and (6) **Sustainability and Historic Preservation** to express their opinions, ideas, ask questions, and state their concerns. Each Topic Table was equipped with a handout for participants containing a 3-4 bulleted list of topics that could be discussed and a handful of guidance questions to help kickstart the brainstorming/interactive participation process. Each “topic table” was facilitated by a Master Plan Team member. A summary of issues resulting from the October 20th workshop is listed on the following pages.





Bolded items indicate popular or repeated sentiments.

1. Land Use

Climate change & sustainability
Have direction that can sustain vitality
TRAFFIC

TOO MANY GAS STATIONS
Mixed use - Resi + Commercial

LAND USE & DEVELOPMENT

Access to Highways

What do you like about Leonia? What do you not like? What can make it better?

Small town, good schools, green
Mainain the atmosphere
Live the diversity (esp. foreign)
Peaceful, good schools

Want the light rail
Traffic on local
Streets esp. weekend
& evenings.
Increase in
flooding

Development v/s flooding
More green space
organize traffic patterns

Are there any existing, new, or proposed developments which concern you?

→ Willow tree & flooding.
→ Grand Avenue → concern
tearing down of 401
→ Flooding west of ~~Grand~~ Grand Avenue

High density, setbacks, lot coverage.
Tear down 2 out of size houses.
→ commercial development.
Too many gas stations.
No eminent domain

What's missing to make Leonia an even greater place to live?

→ Downtown should be revitalized.
→ Variety of businesses in downtown. ~~esp~~ Diversify businesses.
→ Better walkability.
→ middle of downtown - remove gas stations & five house - walkable community

What stores/restaurants/etc. would you like to see in Leonia that isn't offered now?

→ Outdoor Cafes / Antique shops / Walkable downtowns
→ Quality restaurants - sit down / Beautify
restaurants. Diversity of retail stores
→ Pubs
→ Stores → Bookstores. Places to hang out.

What are the Borough's housing needs?

→ Afford to age in place More senior housing
→ Reasonable living space
for elderly
→ Multiple affordable housing options
→ Affordability in housing

Are there places in other communities you like? What do you like about them?

Myack
Piermont

LAND USE & DEVELOPMENT

What do you like about Leonia? What do you not like? What can make it better?

Are there any existing, new, or proposed developments which concern you?

What's missing to make Leonia an even greater place to live?

Schor to Chaveta Heights and back to Grand Avenue residential
→ Mixed Use development, Redevelop rd.
Extend hills to do

What stores/restaurants/etc. would you like to see in Leonia that isn't offered now?

What are the Borough's housing needs?

Are there places in other communities you like? What do you like about them?

Christine Hill
Hill
Schor.

Land Use concerns include:

Residential Concerns:

- High density developments
- Setbacks and lot coverage
- Affordable housing options and housing affordability
- Senior housing

Downtown Concerns:

- Variety and diversity of businesses
- Walkability
- Gas stations in downtown

- Retail and food establishments

Flooding Concerns:


- Flooding associated with development
- Flooding west of Grand Ave
- Increase in flooding generally

Commercial Space Concerns:

- Bookstores & other stores to gather
- Antique shops
- Sit down restaurants & outdoor cafes



3. Community Vision


COMMUNITY VISION

What do you love the most about Leonia?
*History, proximity, attracts educated individuals (including Nobel Prize winners)
Progressiveness, dry town; Safety*

What are the most important issues Leonia is facing? How should the Borough address these issues?
Traffic & sustainability (economic + ecological)

What are your favorite things about living in Leonia? What are your least favorite?
*Wood Park, Sylvan Park, Leonia Pool, diversity 1/2 hr from Midtown Manhattan
David Brown (town historian)
Borough is responsive to people's needs. Small-town responsive police w/ all urban amenities*

What are ways that Leonia can be a better place to live?
Have a microbrewery at Fort Lee Rd & Station Parkway. Could attract people from Overlook Park.

Police training for dealing with trauma survivors ←
Indoor/outdoor performing space/café

What kind of Borough would you like Leonia to become over the next 10 years?
*Other commercial buildings to take up less space and limit size of homes
Like the town that I grew up with along with the advantages of living today.*



Community Vision concerns include:

Culture and Community concerns

- History
- Educated community
- Progressiveness
- Old town character

Amenities and Activities

- Indoor/outdoor performing space/café

- Microbrewery at Fort Lee Road and Station Parkway

Development concerns

- Traffic
- Sustainability
- Balance of commercial and residential space



4. Open Space, Parks & Community Facilities

OPEN SPACE, PARKS & COMMUNITY FACILITIES

Is there a park near you? Do you use it? *ask cafe's around wood Park. Integrate into new Main building. More library parking to new Main building + replace*

- WOOD PARK** ← *OUTDOOR LUNCH* + *cafes*
- Wood Park - playground, tennis, etc + *etc*
- Highwood Hills - use it often + *woodpark - playground*

What do you like to do most at parks in Leonia? What ideas do you have to make them better?

- Spending time w/ kids + neighbors
- Eat with friends
- Reminiscence (with people I don't know... granted it takes LONGER... "Grown Higher 1985")

What amenities or upgrades would you like to see at local parks?

- Cleaner Bathrooms + *etc*
- Keep court lights on later (basketball)
- Keep Highwood Hills pathways clearer. Prevent erosion of soil along main path + mulch, woodchips, etc.

Are there any type(s) of recreational opportunity that the Borough doesn't have that you would like to see in Leonia? If so, what is that?

- INDOOR POOL! + *Coordinate Community facilities with Downtown*
- Ditto
- YOGA + *TRAMPOLINE* + *FITNESS FACILITY*

What do you like about the Borough's schools? What ideas do you have to make them better?

IMPROVE FLOOD CONTROL

Are there areas you see that can be beautified with art? *LEONIA!*

- ALL SCHOOL GROUNDS
- Agreed. All school grounds + any open spaces encourage continuation of sculpture

Are there municipal services that you would like to see improved? If so, how?

Can the town partner to help improve the post office building

OPEN SPACE, PARKS & COMMUNITY FACILITIES

Is there a park near you? Do you use it?

What do you like to do most at parks in Leonia? What ideas do you have to make them better?

SWIMMING POOL - FLY IN TRADE

What amenities or upgrades would you like to see at local parks?

*GOOD PATHWAYS
WORKING WATER FOUNTAINS*

Are there any type(s) of recreational opportunity that the Borough doesn't have that you would like to see in Leonia? If so, what is that?

*INDOOR POOL
SKATE BOARD PARK
CLIMBING WALLS*

What do you like about the Borough's schools? What ideas do you have to make them better?

*MAINTAIN THEIR GROUNDS BETTER
GREAT FACULTY SUPPORT THEM*

Are there areas you see that can be beautified with art?

*ACS, THE SCHOOLS
MIDDLE SCHOOL*

Are there municipal services that you would like to see improved? If so, how?

*BETTER LIGHTING ON STREET
IMPROVED SIDE WALKS
SQUARES ON PROPERTIES UNDER CONSTRUCTION*

CREATE A CERTAIN BASE OF BOROUGH OWNED VACANT LOTS - USE THEM AS COMMUNITY GARDENS.



Open Space, Parks & Community Facilities concerns include:

Variety of activities

- Indoor pool
- Skateboard park
- Climbing walls
- Fitness facility
- Community gardens

Accessibility concerns

- Flood control at local schools
- Lighting at basketball court
- Pedestrian paths maintenance
- Coordinate commercial use and restaurants with parks and open space

Aesthetic concerns

- Art at school grounds
- Keep water fountains on

Community facility concerns

- Improve post office
- Keep park bathrooms clean
- Maintain school grounds



5. Economic Development

Economic Development

How often do you shop/dine/visit Leonia's downtown?
me no 3x wk

What do you like about Leonia's downtown? What do you not like about the downtown?
I would like more **AMERICAN/LATINO** grocery stores/supermarkets & shopping.

Diversified Business Types
I like the **Free parking** that is in main lot & streets

Do you own a business in town? Is Leonia a good place to start a business? Why or why not?
services - coach (la coach), guitar teacher, etc. tutors/paper teacher, writer/actor
No Chamber of Commerce / Merchant Assoc.

All short term focus should be on commercial tax roll increase on the willow tree corridor.
What uses should the Borough allow?
Later hours for restaurants

• **Hotel / mixed use west of Grand Ave.**

• **Work / Live zoning**

What economic development policies that other towns use should the Borough attempt to implement in Leonia?
Penalties for extended vacant storefronts
Support from the town in creating a **merchants association or business assoc.**

• **Develop DPW/Mulch site for residential/mixed use hotel**

Offer liquor license for pub/burger joint
MUSIC VENUES (CLEAN + SOBER)!

support for bring signage for town

Int'l food court cafeteria a la hambur with Nechi Hope, etc



- Liquor license for pub/burger joint

Business coordination and incentivizing

- Create a merchant association or business association
- Focus on commercial tax roll – increase on the Willow Tree corridor
- Penalties for vacant storefronts

Commercial land use and zoning

- Work/live zoning
- Diversified business types
- Develop DPW mulch site for mixed use
- Hotel/mixed use west of Grand Ave
- Music venues

Economic Development concerns include:

Restaurant/Food establishment concerns

- More grocery stores/supermarkets
- International food court or cafeteria
- Later hours for restaurants



6. Sustainability and Historic Preservation

SUSTAINABILITY & HISTORIC PRESERVATION

What are things that you or the Borough could do to be more environmentally-friendly/sustainable?
limit or prevent leaf blowers or coordinate areas of town for DCM!
encourage mulching/composting of leaves

What are your ideas to reduce the impact of flooding?
better planning neighboring towns which overbuild

How should the Borough prepare for future storms and extreme weather events that are likely to occur due to climate change?
encourage planting trees (roots take up water)
discourage cutting down trees
enforce laws on paving over ground, & jawbone neighboring towns to do same
put electric lines below ground

How can the Borough become more resilient?
stop building west of Grand Ave. It will be a few plain in 15 years

Are there historic buildings in Leonia that you would like to see preserved?
FERMI HOUSE, HIGHWOOD + GLENWOOD
EARLY HOUSES BUILT IN THE EARLY 1900s

Would you like to see new construction match historic architectural styles?
yes (colonial, victorian)
I personally like a mix of styles



Sustainability and Historic Preservation concerns include:

Environmental Planning concerns

- Encourage planting trees and discourage removing them
- Limit impervious surfaces
- Coordinate with neighboring towns
- Green stormwater management
- Encourage residents to reduce “carbon footprint”

Architecture and Historic Sites concerns

- Preserve Fermi House, Highwood, and Glenwood, and early 1900s houses
- Promote colonial and Victorian architecture
- Allow mix of architecture styles

Appendix C

Master Plan Presentation to Planning Board

Leonia Master Plan 2022

ADOPTION MEETING PRESENTATION

MARCH 23, 2022



What is a Master Plan?

The **Master Plan** is a guiding document for multi-disciplinary planning and investment in the Borough of Leonia for the next 10+ years.

Elements prepared include:

- Land Use
- Circulation
- Parks & Open Spaces
- Economic Development
- Community Facilities
- Historic Preservation
- Sustainability

- Recommendations will provide land use policy changes and ordinance changes.

Element Strategy Plan					
	Strategy	Implementing Party	Priority Level	Completed	Year Completed
Strategy Category					
1	Strategy	Borough and/or partner	Priority 1 Priority 2 Priority 3	✓	insert year

Leonia hired H2M to complete the Master Plan



architects + engineers
practical approach. creative results.



Project Review

We engaged the community:

- Sub-Committee Meetings
- Master Plan Website
- PublicInput.com Survey
- Public Workshop
- Planning Board and Council Interim Check-ins
- Draft Plan Review with Public Hearing and Public Review

Community Engagement & Public Participation

WHEN ASKED TO RATE ISSUES AFFECTING LEONIA:

- Project-specific webpage/survey: PublicInput.com/LeoniaCMP

Borough of Leonia presents: Leonia Master Plan

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Join Us at the Upcoming Community Workshop
 Wednesday, October 20, 7-9:30pm
 at Leonia High School Cafeteria

What is a Master Plan?
 A Master Plan provides a guide for the future development of a community. It serves as a comprehensive approach to planning issues and considers many factors impacting a community's economic development needs.

The Master Plan gives the municipality the legal basis for control over future development, as well as land use planning policy and zoning changes. Most changes are implemented in the form of zoning amendments and land development ordinances.

The last time the Borough of Leonia completed a full Master Plan was in 2002 and last reexamined its Master Plan in 2020 & 2030. The new Master Plan is expected to be complete by the end of 2023.

Get Involved!
 As part of the planning process, we are holding a public meeting in our community, and spreading the word on the new project website. We are talking to residents, businesses, and other stakeholders about the issues you face. We want you to share your ideas!

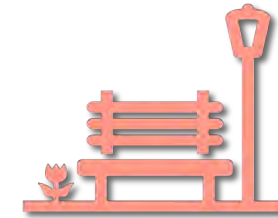
The Plan covers the following Elements of a Master Plan:

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- Historic Preservation

Visit the project website & view the survey results!
PublicInput.com/LeoniaCMP
www.Leonianj.gov



CONDITION OF BROAD AVE CORRIDOR
 84% IMPORTANT



CONDITION OF PARK FACILITIES
 87% IMPORTANT



QUALITY OF PUBLIC EDUCATION
 91% IMPORTANT



TRAFFIC CONGESTION
 87% IMPORTANT



ACCESS TO RELIABLE TRANSIT
 87% IMPORTANT

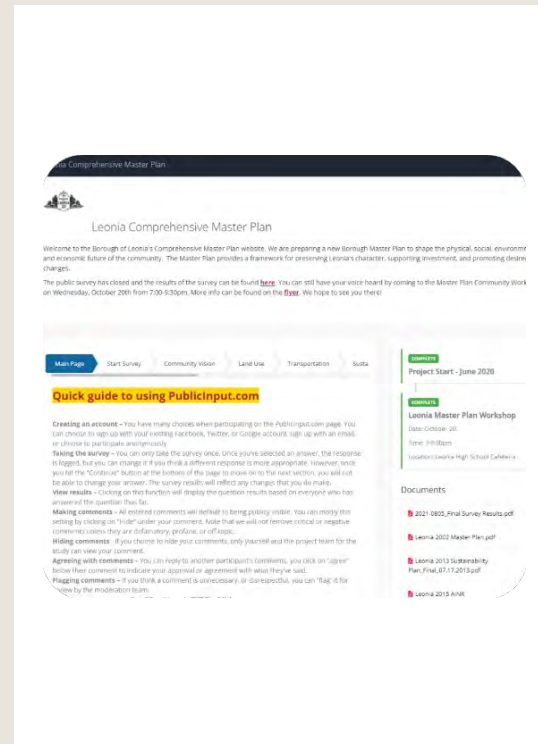


Survey Results By the numbers

838 Survey Participants

50,093 Responses

6,244 Comments



Why Leonia?

Main reasons people live in Leonia

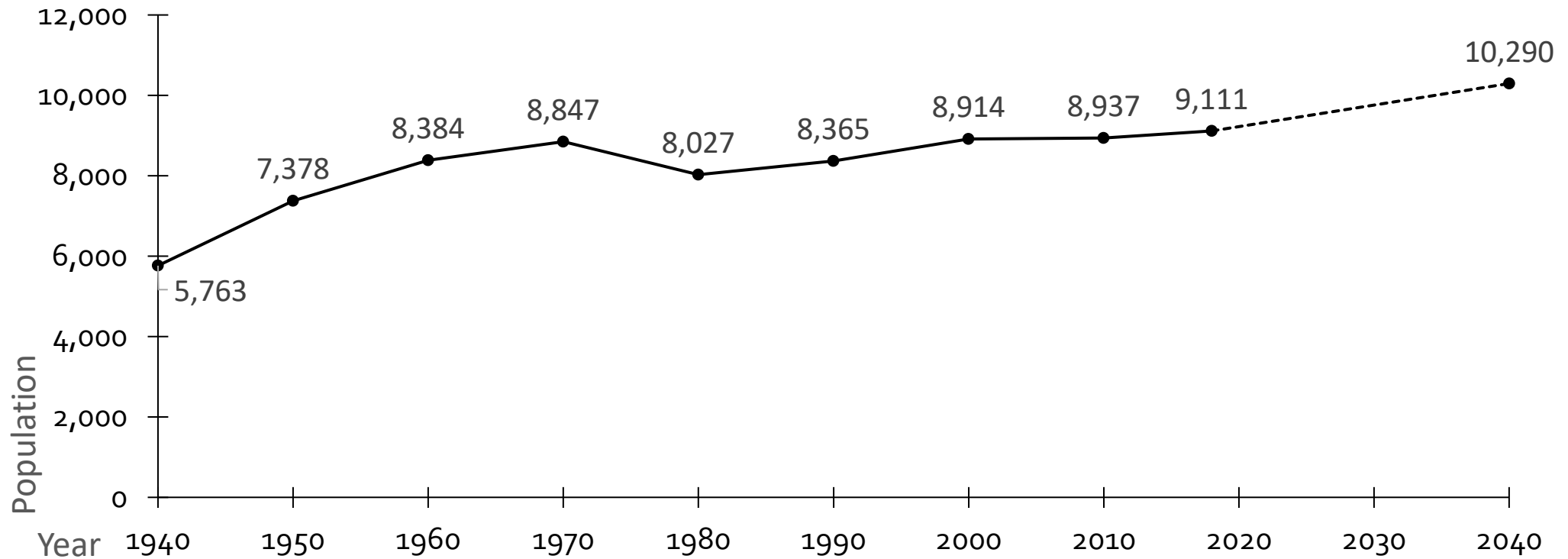
1. Quality of life (30%)
2. Close to New York (28%)
3. Quality of school system (27%)
4. Found a home I liked (20%)
5. Access to George Washington Bridge (19%)



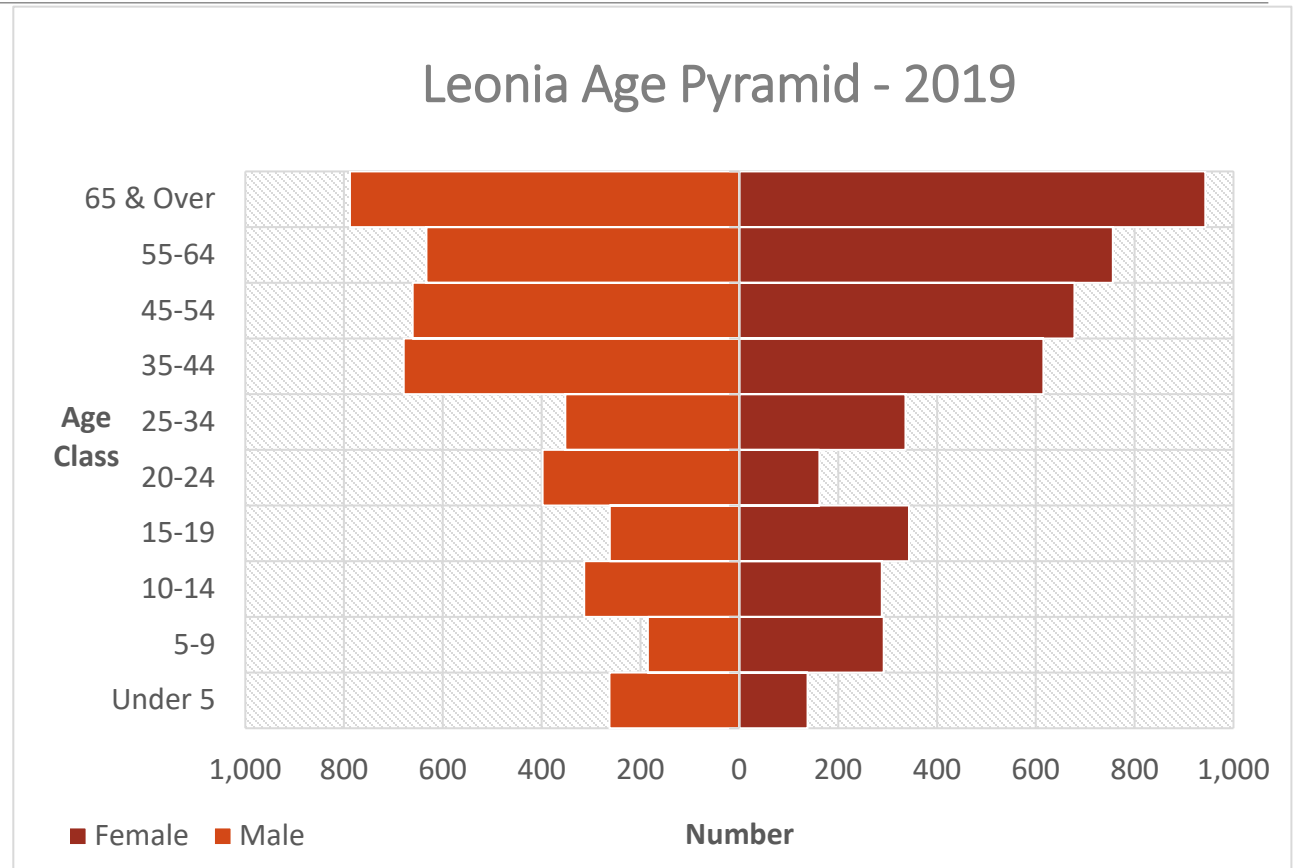
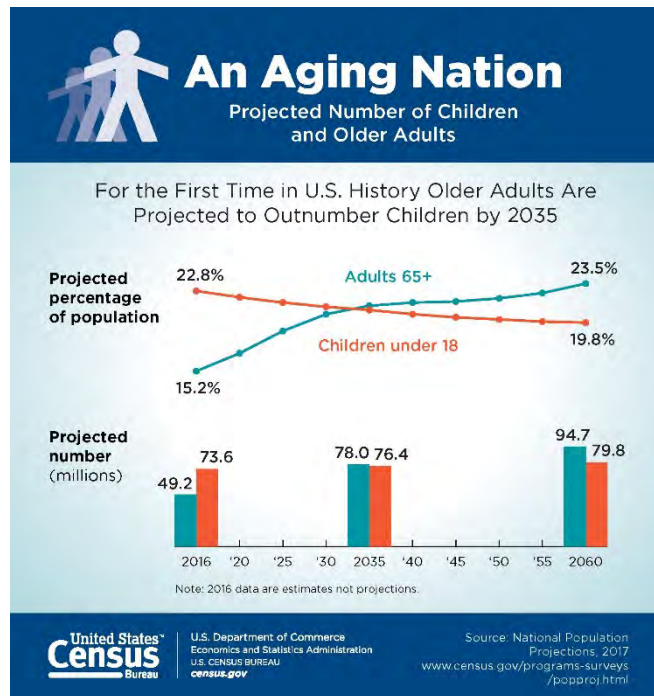
Significant Changes

- Changes in local, county, state and regional regulations
- Demographics

Leonia Population Growth 1940-2040

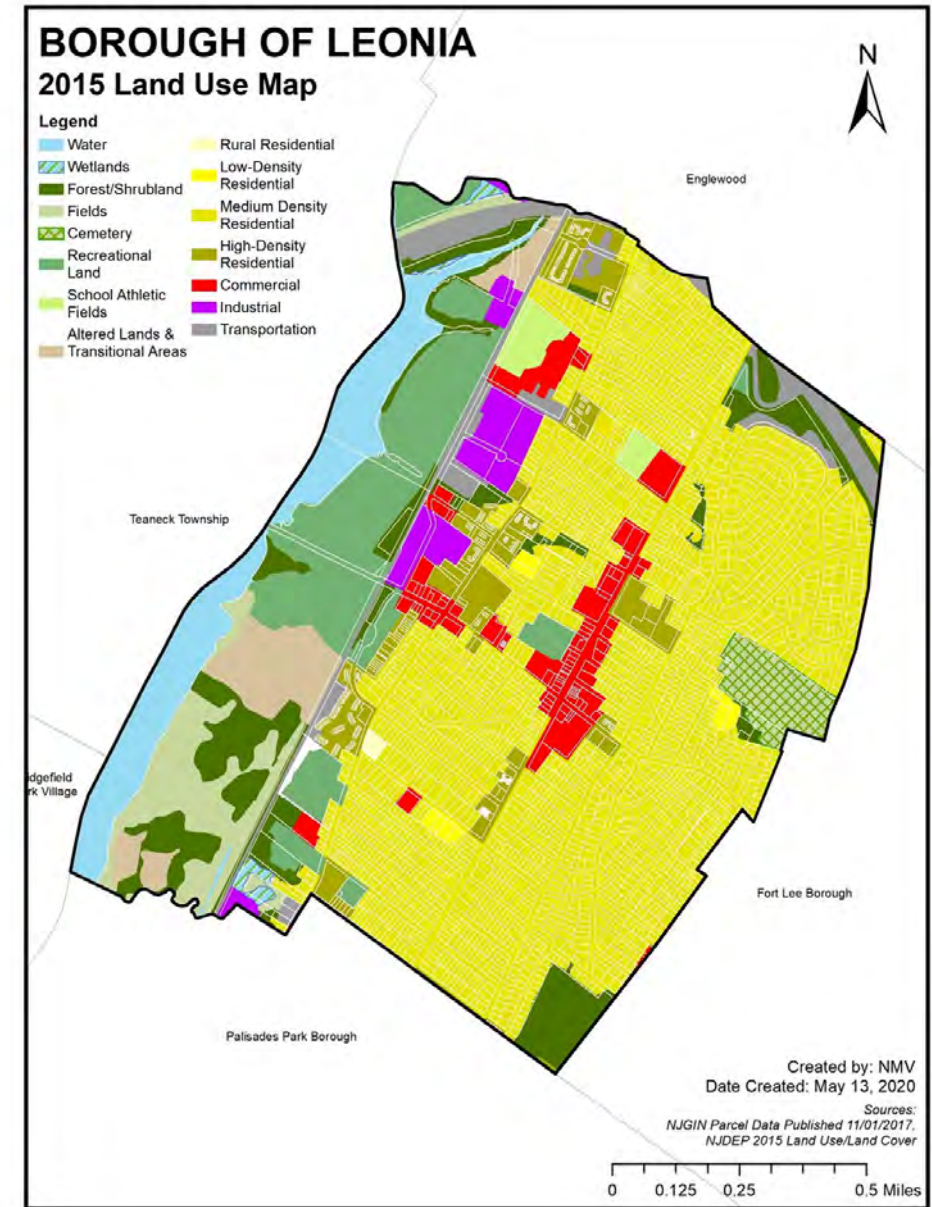


Aging in Leonia



Land Use Concerns

- ❖ Redevelopment of Fort Lee Road/Grand Ave area
- ❖ Downtown area – relatively limited types of commercial uses
- ❖ Streamline ordinances in Multifamily and Single-Family zones
- ❖ Flood hazard areas around Broad Ave, Willow Tree Road, and Meadowview Court
- ❖ High density development in neighboring municipalities and their impacts on Leonia





Residential

64.1% of developed acreage is residential

Residential districts are stable and the neighborhoods desirable and well maintained

No need to make substantial changes to existing sections of the zoning code that residential zoning districts

Consider allowing accessory dwelling units with proper regulations

Consider modifying Multifamily zone regulations to make it easier for property owners to redevelop and invest in existing structures

Review regulations of home occupations and professional offices

Future Housing Types

**When asked what is your opinion on the types of possible residential construction in Leonia?*

	Strongly Approve/ Approve	Neutral / No Opinion	Disapprove / Strongly Disapprove
Single-family	89%	8%	4%
Senior Housing	65%	22%	13%
Affordable Housing	44%	28%	27%
Townhouse	37%	26%	38%
Mixed-Use	31%	33%	36%
Duplex	27%	33%	49%
Multifamily	19%	23%	58%



Commercial and Business

6.0% of acreage is commercial

Broad Ave corridor improvements - possible Area in Need of Rehabilitation designation

Review and revise parking regulations to allow for greater investment in commercial corridors

Consider regulatory action in OB Zone to improve underutilized properties

Climate Change Vulnerability Assessment

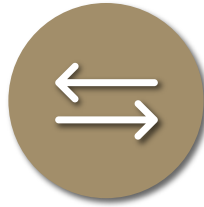


- Main vulnerability issues and recommendations include:
 - Mitigate flood hazards, particularly around Overpeck Creek (and high school building)
 - Acquire, elevate, or floodproof structures in flood-prone areas
 - Ensure that the Borough can handle winter storm snowfall by ensuring adequate green space and vacant area for snowfall deposition and maintaining adequate roadway and sidewalk widths to accommodate snowplows
 - Ensure that critical facilities have backup generators

Key Land Use Recommendations



Review existing land-use patterns and their compatibility with the zoning map, and make zone boundary changes as needed



Encourage redevelopment on underutilized lots via redevelopment plans and Payments in Lieu of Taxes



Encourage diversity of housing stock in appropriate locations



Maintain existing single-family neighborhoods



Promote greater investment in Leonia's commercial corridors with parking regulation revisions, redevelopment tools, and other regulatory incentives



Mitigate flood hazards and other natural hazards by implementing infrastructure projects and adequate regulations

Key Circulation Recommendations



Work to alleviate traffic congestion, particularly along Fort Lee Road



Implement safety enhancements in streetscape design when capital improvements for roadways are needed



Implement Complete Streets changes to Broad Avenue



Continue to support the northern expansion of the HBLR line and support efforts for the Bergen County Bus Rapid Transit route through Leonia



Develop a shared parking ordinance to reduce on site parking requirements



Create pathway connections to connect the Broad Avenue CBD to adjacent parks and recreation areas

Economic Development Issues



- **Major Economic Development Issues in Leonia include:**
 - Lack of commercial acreage compared to residential use
 - Underutilized properties in commercial corridors
 - Residents tend to do most of their shopping outside of the Borough

Key Economic Development Recommendations



Develop a creative placemaking strategy that highlights the unique character of Leonia



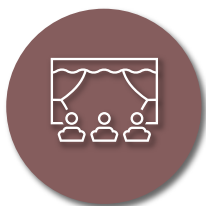
Review regulatory incentives to encourage new food retail and restaurant establishments in the Borough



Encourage public improvements in the redevelopment area



Create a Broad Avenue advisory committee of business and property owners in the corridor



Review zoning regulations to ensure that Broad Avenue corridor can create a Live, Work, Play environment



Consider allowing co-working spaces along commercial corridors

Sustainability Issues



- **Major Sustainability Issues in Leonia include:**

- Potential for reducing in greenhouse gas emissions by promoting energy efficiency and alternative energy use
- Lack of greenhouse gas emissions data for the Borough challenges effective planning
- Adoption of smart growth principles and electric vehicle infrastructure can reduce greenhouse gas emissions and vehicle miles traveled
- Increasing frequency and intensity of flooding and rainfall events prompts the need for greater stormwater management efforts

Key Sustainability Recommendations



Work with PSE&G to track the amount of carbon emissions that are being emitted by Borough residents and businesses



Consider opportunities to implement green infrastructure and green streets in capital improvement projects



Work with BOE and Bergen County to install electric vehicle charging stations at the high school and Overpeck Park



Plan for land use changes that will promote Transit-Oriented Development around proposed transit expansions



Ensure that electric vehicle charging stations will be included in new multifamily and commercial developments and on Willow Tree Road properties



Create a stormwater management plan

Key Parks and Open Space Recommendations



Conduct a community survey to determine the needs of each of the Borough's Parks



Implement park improvements including additional and improved restrooms, improved connections to existing Borough parks and open spaces, ADA and Universal Design facilities, and improved lighting



Improve trails around Sylvan Park, Station Park, and Highwood Hills



Improve bicycle and pedestrian safety for residents crossing Grand Avenue to get to Overpeck Park



Improve ball fields at Sylvan Park

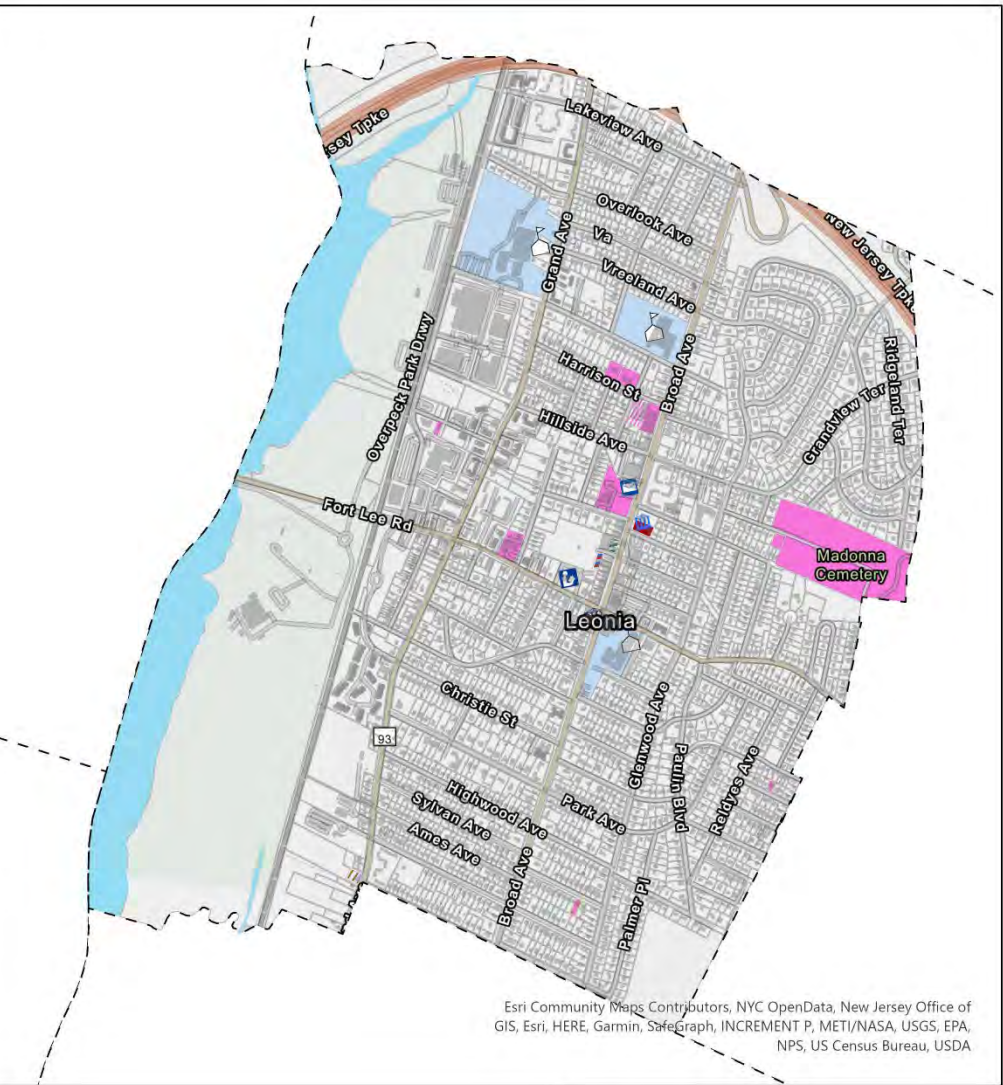


Improve Wood Park by adding additional picnic tables, renovating bathrooms and basketball courts, and adding a splash park

Community Facilities Issues

- **Major Community Facilities Issues in Leonia include:**

- Outdated municipal building needs to be upgraded to meet current and future needs of the community
- Community facilities including schools are vulnerable to flooding
- Leonia’s artistic community and character should be further leveraged to promote economic development and revitalization



Esri Community Maps Contributors, NYC OpenData, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Community Facilities Admin. Building Public Library Public Schools Public School Properties Historic Site Rec. Center Police & Fire		Borough of Leonia Community Facilities Map	
Borough Hall Borough Hall Borough Annex		Religious Lands Religious Lands Religious Private School	
		architects 119 Cherry Hill Road #110 Parsippany, NJ 07054 862-207-5900 www.h2m.com	

Key Community Facilities Recommendations



Maintain a positive relationship with Leonia Board of Education and minimize impacts on surrounding neighbors



Work with Leonia School District to minimize damage from future flood events



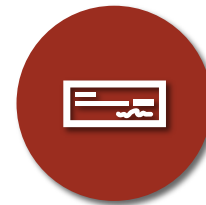
Finalize plans or options to create the new municipal building



Support departmental needs by funding capital equipment needs on an ongoing basis



Work with Sculpture for Leonia and organizations dedicated to promoting the arts in Leonia to develop strategies to use public art as a way to revitalize the Borough's commercial corridors and spur economic development.

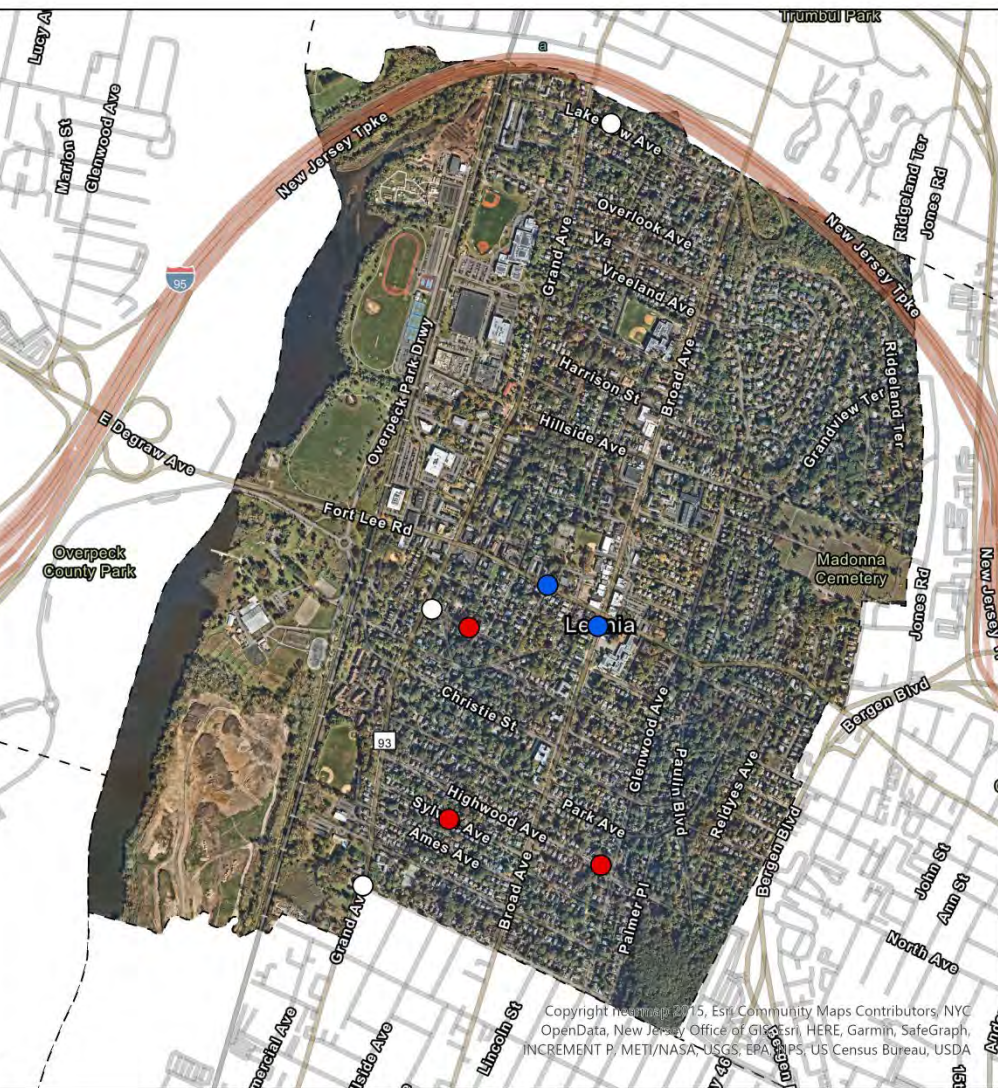


Work with arts organizations in the Borough to obtain grant funding for their operations from Bergen County Arts Grant program

Historic Preservation Issues

- Major Parks and Open Space Issues in Leonia include:

- Leonia's historic structures are crucial to its aesthetic character and should be maintained through local regulations and policies
- Redevelopment is expected in the future and should be balanced with historic preservation efforts
- Design guidelines can help to strengthen the Borough's existing historic preservation ordinance



Historic Properties

- Local Historic Significance
- National Register
- State Register

Borough of Leonia

Historic Properties Map

H 2 architects 119 Cherry Hill Road #110
Parsippany, NJ 07054
862-207-5900
www.h2m.com

M engineers

0 0.13 0.25 0.5 Miles

Key Historic Preservation Recommendations



Conduct an historic resource inventory that comprehensively details a list of historic sites within the Borough



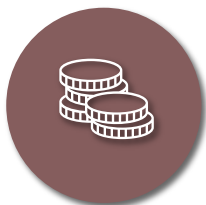
Make annual reports to the Planning Board and Borough Council of HPC activities



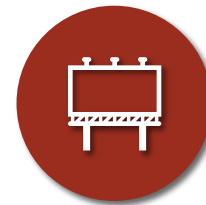
Hire a historic preservation expert to survey and complete a new inventory and adopt the survey by ordinance



Revise the Historic Preservation Ordinance to include the most common set of standards and guidelines for criteria by which a historic landmark can be identified, evaluated and protected: Secretary of Interior's Standards for the Treatment of Historic Properties



Identify funding for advisory, educational, and informational activities to promote historic preservation in Leonia



Recognize historic sites with plaques and historic districts with signage

Leonida Master Plan 2022



Thank you!

This document was prepared in collaboration with local officials, the community, and an extensive review of Borough-specific planning materials.