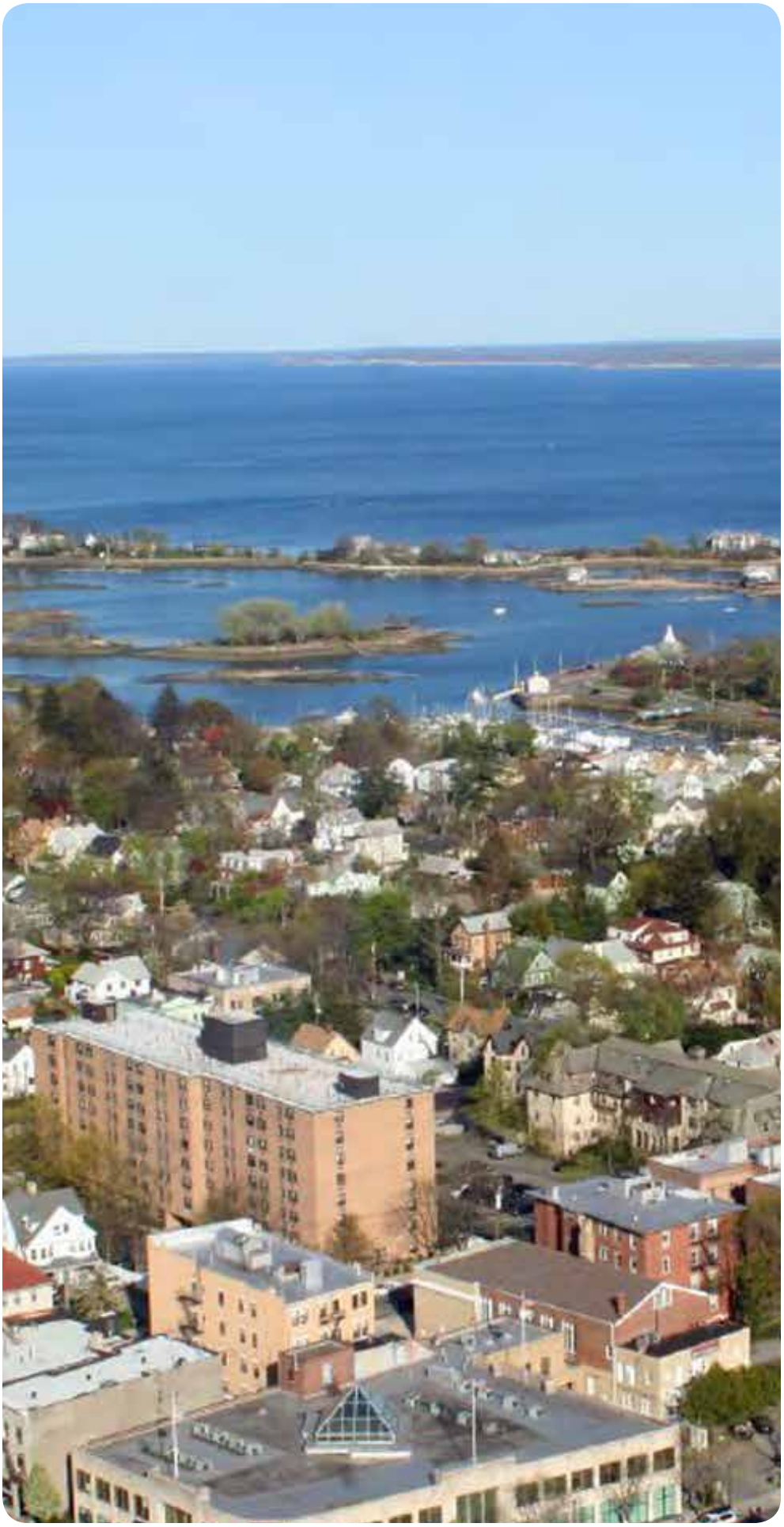


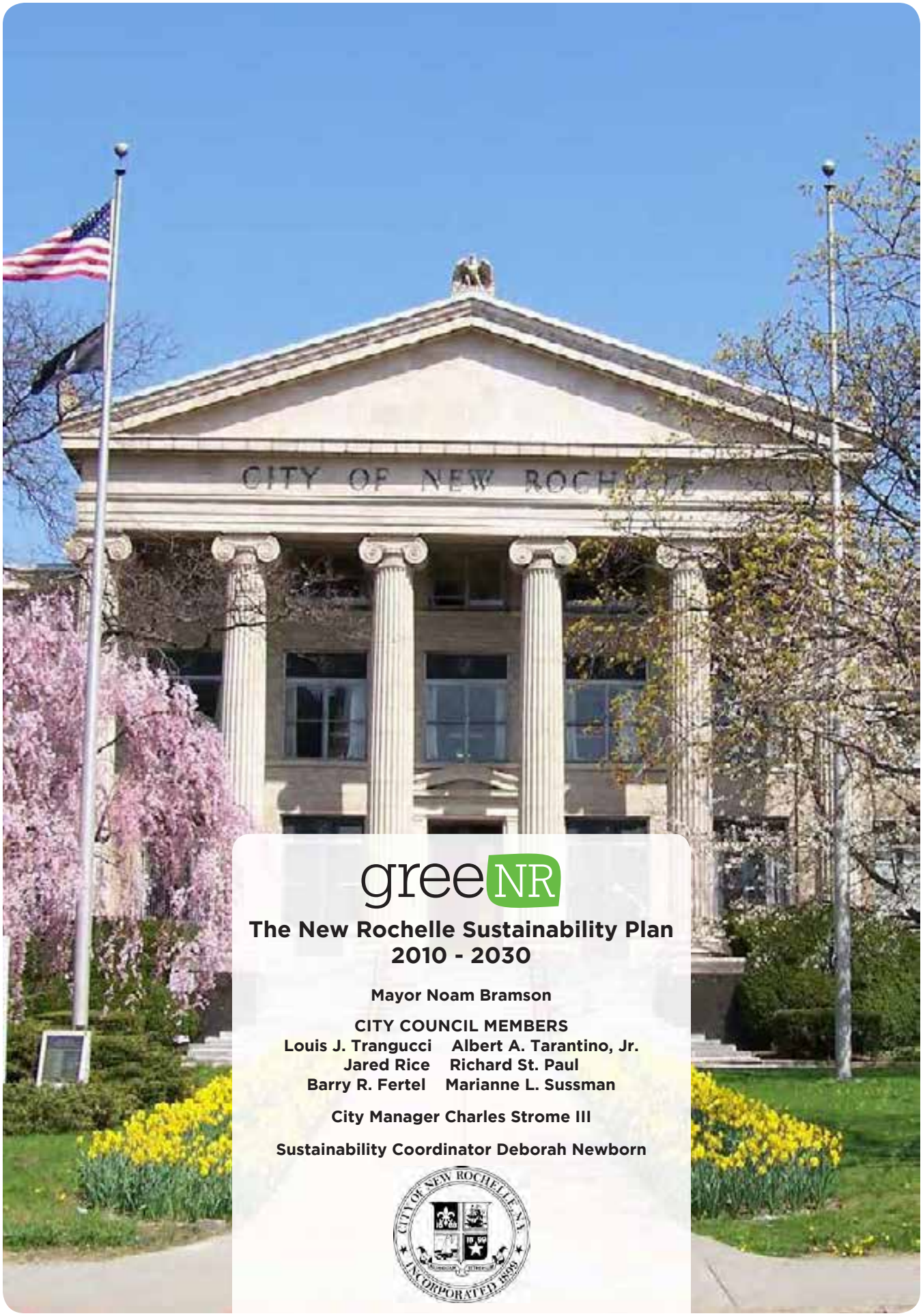
greeNR

The New Rochelle Sustainability Plan 2010 - 2030

Vision and Action for a Healthier Community

CITY OF NEW ROCHELLE, N.Y. INCORPORATED 1899


greeNR



greeNR

The New Rochelle Sustainability Plan 2010 - 2030

Mayor Noam Bramson

CITY COUNCIL MEMBERS

Louis J. Trangucci **Albert A. Tarantino, Jr.**
Jared Rice **Richard St. Paul**
Barry R. Fertel **Marianne L. Sussman**

City Manager Charles Strome III

Sustainability Coordinator Deborah Newborn

TABLE OF CONTENTS

April 22, 2011

Dear Friends & Neighbors,

On behalf of the City Council, I am pleased to present to our community GreeNR, New Rochelle's first sustainability plan. GreeNR reflects and articulates a vision of sustainable practices that can enhance the quality of life for citizens today, without compromising the interests of future generations.

GreeNR aligns New Rochelle with municipalities throughout the world that recognize a common obligation to address global challenges of resource depletion, climate change, and social progress – but GreeNR is far more than an abstract philosophical document. Contained within these pages are scores of specific, achievable recommendations, aimed at improving the environmental, economic, and social health of New Rochelle during the next twenty years and beyond. It is a practical guide to action that can be embraced regardless of one's views on global climate change.

Contained within these pages are scores of specific, achievable recommendations, aimed at improving the environmental, economic, and social health of New Rochelle during the next twenty years and beyond.

GreeNR arrives at a moment of acute economic distress for our nation, city, and many individuals. In recognition of present constraints on municipal finances, most GreeNR initiatives are phased to limit expenditures in the short-term and rely to the degree possible on grants, private initiatives and contributions, or existing staff resources. While some recommendations entail the expenditure of public funds, the great majority would achieve meaningful long-term savings for our taxpayers though reduced public and private costs.

Achieving GreeNR's goals will require an ongoing commitment to sustainability, demonstrated not only through public policy, but also through individual action. The hope and intent of GreeNR's authors is that the concept of sustainability will become more fully integrated into the culture of New Rochelle. Accordingly, many of its initiatives seek to empower citizens and community groups with the information and tools to make the best decisions for themselves.

Finally, we acknowledge the limits of our predictive ability. During the next twenty years, it is probable that changes in technology, law and lifestyle will render some recommendations obsolete, while also opening new paths to progress. GreeNR should not be viewed as a rigid document, but rather as a framework for ongoing discussion about how New Rochelle can best shape a bright future.

With gratitude for all who gave their time, energy, expertise and passion to this endeavor.

Sincerely yours,

Noam Bramson
Mayor

Every Single Day, the Average New Rochelle Resident...

Emits **49** Pounds of CO_2e

Uses
342,301
BTUs of Energy

Disposes of **4**
Pounds of Solid Waste

Generates **103**
Gallons of Sewage

Introduction
A Global & National Challenge

Sustainability encompasses environmental, economic, and social policies that satisfy short-term needs, without compromising long-term living standards.

Today, our capacity to achieve global sustainability is in question. Human beings are consuming resources more quickly than they can regenerate, in effect borrowing from the future. Dependence upon finite resources already induces conflict and undermines economic stability, conditions that will only intensify as resource depletion continues.

At the same time, human activity is responsible for serious and harmful changes in the global environment, including increases in atmospheric levels of carbon dioxide, methane and other greenhouse gases, with a consequent and accelerating rise in average global temperatures, now up 1.4 degrees since 1880. While predictions about a system as dynamic and complex as global climate are imprecise, the scientific consensus points to an additional increase in global temperatures of between 3.2 and 7.1 degrees Fahrenheit, with dire consequences.

This is a challenge for the developed world. The United States, with less than 5% of the world's population, currently accounts for 25% of global energy consumption and is the second largest emitter of global greenhouse emissions, just behind China. These facts obligate Americans to act as leaders.

And this is a challenge also for the developing world. As poorer nations strive to attain higher living standards, their resource needs and greenhouse gas emissions are expected to skyrocket. Some estimates put the world's population at 8 billion by 2030 – many more children and families to feed, clothe and shelter.

The bottom line for nations at every stage of development is that the direct relationship between economic growth, greenhouse gas emissions and resource consumption must be broken.

Sustainability debates are often dominated by understandable concerns about the individual and societal costs of change, and it is true that some possible solutions may entail monetary expense, challenges to traditional industries, and alterations in familiar personal habits. But any full accounting of costs and benefits must also tabulate the enormous price of inaction, including climate adaptation infrastructure, disaster relief and mitigation, scarcity-induced conflict, and inevitably bigger bills for fossil fuels. Furthermore, consideration must be given to the impressive opportunities of a greener economy, with the potential for creating and growing whole new categories of industry and commerce.

The good news is that human beings have the tools to address these challenges. We are technologically innovative, we are capable of collective action when sufficiently motivated, and we benefit from the example of countless individuals, companies, and communities that have embraced sustainable practices and serve as models for emulation.

Today, our capacity to achieve **global sustainability is in question**. Human beings are **consuming** resources **more quickly** than they can regenerate, in effect **borrowing from the future**.

A Local Opportunity

New Rochelle is a vibrant and diverse city of 77,000 residents, characterized by exceptional human, economic, and physical diversity. The City's land use patterns, housing stock and demographic composition have been shaped by successive waves of growth and immigration, each of which has left an imprint on New Rochelle's cultural and historic fabric. New Rochelle's natural environment includes a fourteen-mile shoreline on Long Island Sound, hundreds of acres of parkland and woods, and several lakes and streams. The City's density varies substantially from open space, to single and multi-family neighborhoods, to an urbanized downtown, where the majority of New Rochelle's commercial activity is centered. As a "first suburb" just half an hour from midtown Manhattan, New Rochelle is closely linked to the metropolitan New York economy and to the regional interests of Westchester County.

Because of its unusually diverse characteristics, New Rochelle serves as an ideal stage for exploring varied sustainability strategies, with potential demonstration value to many other communities. We have a chance to lead by example, and this is a chance we should seize.

New Rochelle has already taken a wide range of actions to achieve sustainability, including, but not limited to: transit-oriented development, reductions in public-sector energy consumption, construction of affordable housing, and preservation of open space. These initiatives, however, have proceeded on an ad hoc basis without an overarching long-term strategy for conceiving, prioritizing, and implementing sustainability objectives. The need for a coherent strategy is given urgency by the following expectations:

- **During the next twenty years, it is expected that New Rochelle's population will increase by approximately 5,000 new residents. How can our city ensure that additional population produces cultural and economic vitality without overburdening services, facilities, and neighborhoods?**
- **During the next twenty years, New Rochelle's infrastructure will continue to age, requiring the expenditure of scarce resources to maintain essential public services and safety. How can infrastructure priorities be addressed most efficiently and with the greatest benefit to our quality of life?**
- **During the next twenty years, present environmental challenges will intensify and new environmental challenges will arise. How can we help arrest and reverse negative trends, and take maximum advantage of the emerging opportunities and demands of a green economy?**

The communities that position themselves earliest and most fully as models of sustainable action are likely to benefit from national shifts towards greener commercial activity, consumer preference, and lifestyle. Communities that fail to anticipate and plan for such shifts are likely to receive comparatively fewer benefits and bear comparatively heavier burdens.

GreeNR is intended to be a blueprint for seizing this opportunity, while also preserving and strengthening the qualities New Rochelle already possesses and which our residents greatly value: historic and charming neighborhoods, ample recreational opportunities, convenient access to places of employment and an outstanding educational system. It is more than an environmental plan, it is an integrated framework for environmental, economic and social advancement.

The communities that position themselves **earliest** and **most fully** as models of sustainable action are **likely to benefit** from national shifts towards **greener commercial activity, consumer preference**, and **lifestyle**.

A Call to Individual Action

True community sustainability requires more than government action alone – it requires all of us to be aware and engaged. Simple arithmetic drives this assertion: the private residential and commercial

sectors in New Rochelle account for 97.5% of our local energy consumption, and for comparable percentages of waste generation, water use, and other measures of sustainability.

Therefore, while public policy is the central focus of GreeNR, many of its recommendations aim to empower the community as a whole with the information and tools to make sustainable choices. Initiatives that seek to sponsor educational forums, "brand" GreeNR, establish friendly social competition, or post web pages should be regarded as central to GreeNR's purpose.

Similarly, the City will look to community partners – service clubs, parent-teacher associations, neighborhood advocates, houses of worship, business leaders, local colleges, and others – to amplify GreeNR's message and to set their own positive examples of sustainable conduct.

A Practical Guide to Progress

GreeNR is practical, results-oriented and realistic. Its ten big goals and the dozens more contained within GreeNR's full Action Plan are achievable within twenty years and are consistent with New Rochelle's human and financial resources. Looking beyond the twenty-year time horizon, however, far more can and should be done, particularly in the context of technological advances and a national framework of sustainability policies and incentives. Our longer-term goals should encompass a more ambitious shift toward carbon-neutral activity, renewable energy use, and sustainable, broad-based economic growth. GreeNR is best seen as a good starting point and a solid foundation for future progress.

A Vision for New Rochelle

Together, sound public policy and informed individual action can achieve a vision of New Rochelle, shaped by these virtues:

AN ATTRACTIVE QUALITY OF LIFE characterized by safe, clean and appealing neighborhoods, ample access to recreational opportunities, efficient transportation, rich cultural and historic resources, and responsive services.

A GROWING ECONOMY that maintains or expands entrepreneurial opportunities, creates and attracts jobs, especially in emerging green businesses, provides convenient access to a broad range of quality goods and services, enhances our local tax base, and supports investments in public programming and infrastructure.

A THRIVING NATURAL ENVIRONMENT that allows current and future residents to enjoy the benefits of clean air and clean water, open space, biologically diverse habitats, abundant renewable energy, and a stable climate.

HEALTHY FAMILIES AND INDIVIDUALS who are better able to achieve workplace productivity, academic performance, reduced medical needs and costs, and general life satisfaction.

DIVERSITY OF CULTURE & EXPERIENCE supported by fair and equitable access to services and a broad spectrum of housing opportunities, and demonstrated through vital expressions of the arts and a spirit of mutual understanding and respect among different groups.

AN EFFICIENT GOVERNMENT that achieves savings, shares services, and demonstrates creativity in order to limit the tax burden borne by residents and free up resources for beneficial public investments.

AN ENGAGED & INFORMED CITIZENRY that actively shapes public policy through open dialogue, participates in volunteer service, and helps to meet community and global challenges through individual, institutional, and civic action.

A MODEL CITY that sets an example for municipal action and that forges regional, state, national and international partnerships aimed at achieving the broadest positive results.

New Rochelle by the Numbers

A Statistical Snap-Shot of Our Community

Population:	**77,000**
2030 Population Projection:	82,000
Households:	**29,500**
2030 Household Projection:	32,000
Energy Use* (MMbtu):	**9,196,946**
Per Capita:	125
Per Household:	339
CO_2e Emissions* (Metric Tons):	**662,601**
Per Capita:	9.0
Per Household:	24.5
Non-Recycled Solid Waste (Tons):	**29,932**
Per Capita (Pounds):	777
Per Household (Pounds):	2,029
Water Use (MGD):	**12.25**
Per Capita (Gallons/Day):	159
Per Household (Gallons/Day):	415
Wastewater Non-Storm Peak (MGD):	**20.5**
Non-Storm Base Peak:	12.5
Non-Storm I & I:	8.0
Land Area (Acres):	**6,639**
Public Open Space:	577
Tree Canopy:	1,201
Substantially Natural State:	1,248
Permeable Surface:	2,895
Shoreline (Linear Feet):	**72,500**
Public Access:	21,175
Taxable Sales:	**$920,000,000**
Local Jobs:	**26,804**

* Energy figures based on 2005 data and population figures.

10/30
Ten Big Goals for 2030

1

Reduce energy use and greenhouse gas emissions by at least 20%

2

Cut non-recycled solid waste generation by 15% and increase recycling rate to 50%

3

Preserve natural spaces and restore inland water bodies

4

Absorb or retain 25 million gallons of flood water per storm

5

Decrease sewage flow by at least 2 million gallons in peak hours

6

Build at least 95% of new housing near mass transit

7

Open at least one additional mile of the Sound shore to the public

8

Plant at least 10,000 new trees on public property

9

Create a comprehensive walking and bicycling system

10

Subscribe at least half of all households to the City website

Action Plan Summary:

Energy & Climate

Reduce local energy consumption and greenhouse gas emissions while transitioning to renewable sources of energy and adapting to probable climate changes.

GOALS BY 2030:

- **Reduce annual per capita energy consumption by at least 20%, from 125 MMbtus to 100 MMbtus**
- **Reduce annual per capita CO_2e emissions by at least 20%, from 9.0 metric tons to 7.2 metric tons.**
- Reduce municipal energy use, GHG emissions, and costs for lighting by at least 40% and for buildings by at least 15%.
- Increase the average gas mileage of the municipal fleet by 50% from 10 mpg to 15 mpg.
- Align with New York State objectives to obtain at least 30% of energy from renewable sources.

SUMMARY OF INITIATIVES

1.1 **Green Building Standards:** Adopt requirements and guidelines to promote energy efficiency and conservation in the construction, renovation, and operation of buildings, with distinct standards for structures of different size and use.

1.2 **Exterior Lighting Efficiency:** Replace or retrofit municipally owned exterior lights to fully utilize energy efficient and cost-saving lighting technology.

1.3 **Municipal Building Efficiency:** Enhance the energy efficiency of municipal buildings through physical and operational improvements.

1.4 **Green Fleet:** Replace or convert City vehicles to improve average gas mileage, utilize alternative fuel technology, and reduce the emission of air pollutants.

1.5 **Renewable Energy Generation:** Facilitate the generation of renewable energy by addressing impediments in the local building and zoning codes and by exploring opportunities for energy production on public lands.

1.6 **GreeNR Seal:** Establish a certification program to recognize the sustainable design or retrofit of properties and to acknowledge sustainable practices in the business sector.

1.7 **Mid & High Rise Building Campaign:** Conduct an informational campaign to reduce energy consumption and waste generation in existing commercial or multi-family mid-rise and high-rise structures.

1.8 **Efficiency & Conservation Loans:** Implement a local loan program to make energy efficiency improvements more affordable by enlisting lenders to provide favorable financing terms, secured by property tax obligations and paid back through energy savings.

Action Plan Summary:

Resource Conservation & Waste Reduction

Cut waste generation, improve recycling rates, encourage conservation and efficient use of water and other natural resources.

GOALS BY 2030:

- **Reduce annual per capita non-recycled solid waste by at least 15% from 777 pounds to 660.5 pounds and increase recycling rate to 50%.**
- **Reduce daily peak non-storm wastewater generation by at least 2 million gallons from 20.5MGD to 18.5 MGD.**
- Reduce daily per capita water use by at least 15% from 159 gallons to 135 gallons.
- Cut municipal waste generation by at least 20%, while increasing the municipal recycling rate from 50% to 75%.
- Achieve near universal household participation in recycling.
- Reduce annual municipal water consumption by at least 10%, from 8.57MG to 7.71MG.
- Encourage at least 500 families to compost their organic waste.

SUMMARY OF INITIATIVES

2.9 Municipal Building Waste Reduction: Establish a City Green Team and adopt best practices to increase municipal recycling rates, cut supply costs, and reduce overall municipal waste generation.

2.10 Residential Recycling Campaign: Promote greater participation in New Rochelle's recycling programs through targeted educational efforts and through enhanced enforcement activities.

2.11 Public Area Recycling: Introduce recycling bins at public locations already served by trash collection, such as parks, playgrounds, and commercial streets. employing sustainable practices.

2.13 Water Use & Wastewater Reduction: Reduce stress on wastewater treatment facilities by encouraging water conservation, controlling infiltration, and expanding options for cost-effective infrastructure repair and improvement.

2.14 Household Composting: Encourage backyard composting of organic materials through enhanced public education about composting methods, options, and benefits.

2.15 Regional Composting Study: Consider the creation of a regional composting site that could be utilized by New Rochelle and other nearby municipalities.

greeNR

Action Plan Summary:

Ecology, Biodversity & Public Health

Preserve New Rochelle's natural beauty, stabilize vulnerable habitats, improve air and water quality, limit or reverse the incidence of flooding and deforestation, and promote beneficial lifestyles and practices in order to achieve a healthy ecosystem, healthy neighborhoods, and healthy families.

GOALS BY 2030:

- **Preserve or expand the amount of land in a substantially natural state.**
- **Achieve a net increase of 10,000 trees on public property and rights-of-way.**
- **Reduce run-off from a one-inch rain event by 25 million gallons.**
- **Provide universal access to healthful nutrition options.**
- Increase community-wide permeable surface by 50 acres.
- Establish a regional storm water management district.
- Create at least 5 acres of rain gardens, including 50 on public property.
- Encourage at least 50% of single and two family homeowners to employ sustainable lawn and garden care practices.
- Site at least one designated walking route within or close to all neighborhoods.
- Increase the number of community gardening plots to 200.

SUMMARY OF INITIATIVES

3.16 Sound, Lake & Stream Water Quality: Undertake comprehensive capital improvements and encourage best practices to improve the Long Island Sound ecosystem and restore the health, beauty, retention capacity and recreational value of local inland water bodies.

3.17 Habitat & Open Space Preservation: Utilize diverse land use tools to protect and preserve New Rochelle's remaining natural habitats and to reclaim contaminated properties for public use and benefit.

3.18 Urban Forestry: Increase the number of trees within New Rochelle through preservation requirements and incentives, enhanced maintenance, and an expanded planting program.

3.19 Flood Control & Mitigation: Reduce the incidence and severity of local flooding by controlling storm water run-off, expanding permeable surface coverage, repairing existing infrastructure, and utilizing new green infrastructure models.

3.20 Rain Gardens: Establish at least 5 acres of rain gardens community-wide, including at least 50 locations on appropriate municipal property, including parks, traffic islands, and medians.

3.21 Green Lawn & Garden Care: Encourage sustainable garden and lawn care through enhanced education about low-water and no-chemical options, and through possible amendment of codes that impede sustainable landscaping.

3.22 Idling Prevention: Discourage motor vehicle idling through better public education, stricter enforcement, and promulgation of municipal work rules.

3.23 GreeNR Walking Guides: Create walking guides featuring maps, suggested routes, distances, challenge ratings, health benefits, and notes on natural, architectural, historic, and cultural points of interest.

3.24 Local Agriculture & Fresh Food: Improve access to fresh and nutritious produce through expansion of community gardening programs, expansion of the New Rochelle Farmer's Market, and possible introduction of rooftop farms.

greeNR

Action Plan Summary:

Smart Growth & Economic Prosperity

Attract beneficial investment to expand our local tax base, enhance the vitality of our commercial centers, and promote green job creation and training. Employ smart-growth principles that strategically encourage density and diverse housing opportunities in areas with ready access to local goods, services, infrastructure, and mass transit, while also realizing the economic and recreational potential of assets such as Long Island Sound.

GOALS BY 2030:

- **Open at least one additional mile of the Sound shore to the public.**
- **Quadruple the number of local green businesses and green jobs.**
- Complete streetscape improveme nts on North Avenue, Memorial Highway, and West Main Street.
- Rehabilitate all City-owned waterfront parks.
- Facilitate construction of 250 affordable workforce housing units.
- Triple the number of artists living and working in New Rochelle.
- Construct at least 500,000 square feet of new commercial space in the central business and transit districts.
- Increase inflation-adjusted taxable sales to at least $1 billion per year.

SUMMARY OF INITIATIVES

4.25 Transit-Oriented Smart Growth: Implement a comprehensive strategy to promote commercial and residential development in proximity to the New Rochelle Transit Center, while restricting undesirable growth in lower-density areas.

4.26 Waterfront Access & Enjoyment: Improve and expand access to Long Island Sound by reclaiming contaminated land for public use including at least one additional mile of shoreline, establishing better links among waterfront parks, and enhancing recreation and tourism opportunities.

4.27 Peripheral Node Planning Standards: Update New Rochelle's Comprehensive Plan to better define optimum scale, land use patterns, density and architectural design for peripheral commercial and mixed-use hubs and corridors, with an emphasis on contextual design.

4.28 Green Business & Job Creation: Foster green job growth and attract additional green businesses to New Rochelle, while also enhancing access to training, particularly for under-skilled or under-employed residents.

4.29 Workforce Housing: Promote appropriate workforce housing development, especially through the integration of workforce housing units into market-rate projects, while discouraging the excessive concentration of subsidized housing.

4.30 Creative Capital: Employ various land use, marketing, and incentive methods to attract a larger "creative class" to New Rochelle, stimulate demand for underutilized built space, and realize the economic benefits associated with arts and culture.

greeNR

Action Plan Summary:

Transportation & Mobility

Facilitate and encourage the use of sustainable transportation options, including walking, bicycling, carpooling and mass transit, while also reducing traffic congestion and enhancing the safety and efficiency of transportation routes.

GOALS BY 2030:

- **Create a comprehensive, safe, continuous and community-wide walking and bicycling system.**
- **Achieve at least a 50% increase in the number of commuters who walk or bike, from 3,300 to 5,000.**
- Increase the miles of local sidewalk in good repair from 136 to at least 195.
- Establish at least 350 bicycle parking spaces along at least 30 miles of designated bicycle routes.
- Cut by 25% the peak hour travel time from Eastchester Road to Huguenot Street, from 4 minutes to 3 minutes.
- Reduce the rate of single-vehicle occupancy commutes to City Hall by at least 15%, from 96% to 81%.

SUMMARY OF INITIATIVES

5.31 Pedestrian Mobility & Safety: Create and maintain a comprehensive system of safe and accessible walking routes for pedestrians, while also adopting general planning and engineering standards to promote pedestrian mobility.

5.32 Bicycle Mobility & Safety: Create public and private infrastructure supportive of bicycle use and storage, while also implementing a "Complete Streets" policy for future land use and road design.

5.33 Downtown Access: Facilitate efficient and attractive multi-modal access to New Rochelle's downtown through the improvement of major transit corridors and through the redesign of under-utilized alternative routes.

5.34 Jitney Service Study: Consider the creation of a free or low-cost jitney to serve commuting, commercial and recreational transportation demand.

5.35 Green Commuting: Create financial incentives to discourage single occupancy vehicle commuting by municipal employees, while also encouraging the adoption of similar policies by major local employers.

5.36 Scooter & Motorcycle Parking: Improve and expand scooter and motorcycle parking options in appropriate public parking facilities.

Action Plan Summary:

Public Participation & Awareness

Empower all residents to obtain information about local challenges and issues, make sensible choices about individual lifestyles and practices, and participate fully in community activities and decision-making.

GOALS BY 2030:

- **Subscribe at least half of all households to the official City website.**
- **Achieve near-universal English-language proficiency.**
- **Achieve near-universal awareness of the GreeNR logo and its meaning.**
- Restore distribution of a semi-annual City newsletter.
- Reduce by 7.2 million the number of non-biodegradable plastic shopping bags used annually in New Rochelle.

SUMMARY OF INITIATIVES

6.37 GreeNR Awareness Campaign: Conduct a broad-based and ongoing public awareness campaign to share information about sustainable action and enlist community participation in achieving GreeNR's objectives.

6.38 Informed Social Competition: Provide residents with comparative statistics on utility use to facilitate self-evaluation and foster friendly social competition toward reduced resource consumption.

6.39 Civic Communication: Better utilize electronic and traditional communication methods to improve the flow of information between municipal government and the larger community.

6.40 Sustainability Education Center Study: Consider adapting an under-utilized municipal building to serve as a Sustainability Education Center, providing ongoing outreach, instruction, programming and demonstration.

6.41 Outdoor Classrooms: Promote understanding and appreciation of regional ecology by facilitating school-sponsored instruction within wooded parks and by introducing maps and interpretive signage.

6.42 GreeNR Tote Bags: Create and distribute reusable GreeNR tote bags, while also adopting disincentives for the use of non-biodegradable plastic shopping bags.

6.43 English Language Proficiency: Ensure that English language instruction is available, accessible, and affordable to all non-English speakers in New Rochelle.

Action Plan

Action Plan:

Implementation

ADMINISTRATION & STAFF RESPONSIBILITIES:

The City Administration should prioritize implementation of GreeNR, coordinate staff activities as necessary to fully develop strategies for action, and present decisions and options to the City Council in a timely and thorough fashion. The Administration should also present to the City Council annual updates on overall progress towards GreeNR's goals, with additional updates on specific initiatives as warranted.

INTEGRATION WITH CITY ACTION:

As ongoing standard practice, relevant municipal actions, such as Comprehensive Plan updates, zoning amendments, development agreements, and environmental assessments, should be reviewed for consistency with GreeNR's objectives.

CITY COUNCIL OVERSIGHT & APPROVAL:

The City Council has voted to support GreeNR as a general statement of City policy and intent. The City Council reserves the right to reconsider, amend or rescind elements of GreeNR at its discretion.

FUTURE DECISIONS:

The support of this Sustainability Plan signals the City Council's approval of GreeNR's principal objectives and its desire to explore seriously options for achieving these objectives. The support of GreeNR as a general policy statement does not, however, prejudge approval of the many legislative and administrative actions necessary to realize its goals, nor does it imply automatic assignment of funding to GreeNR's implementation. Rather, these specific actions will be considered by the City Council and by other decision-makers on a rolling basis, as circumstances and organizational and financial capacity permit.

Action Plan:

Notes on Reading Initiatives

MONETARY & STAFF RESOURCES:

Many of GreeNR's initiatives are expected to save money. Others, however, may entail a net expenditure of public funds or staff time, or an initial expenditure with a longer-term payback. In the case of recommendations deemed particularly dependent upon resource availability, the phrase "if resources permit" or similar language is explicitly included. It is understood, however, that almost all recommendations are resource dependent, and that judgments about whether, how and when to proceed will be guided in part by organizational capacity and competing priorities, as judged by Council and staff.

TIMETABLES:

Recommendations have been sorted into short, medium and long term categories in order to achieve a logical progression of action and to limit new financial burdens at a time when New Rochelle's fiscal challenges are particularly acute. These timetables, however, should be regarded as approximations and general guides. With experience, it may be determined that some aspects of implementation require delay and that others can be accelerated.

CONDITIONAL RECOMMENDATIONS:

Most recommendations are phrased in a straightforward fashion. Others, however, employ more conditional language -- "consider," "evaluate," "if feasible," etc. Such phrasing signals the authors' view that a concept is appealing and worthy of study, but that additional cost-benefit analysis is required before it can be embraced.

ASSUMPTIONS, ESTIMATES & PROJECTIONS:

The data within GreeNR draws whenever possible on firm, objective sources. In many instances, however, hard data either could not be obtained or does not exist, and, therefore, educated assumptions were made instead, generally in consultation with relevant staff or community experts. When necessary, the specific logic and methodology for such assumptions is described. Such estimates may require adjustment with experience or new information. Future projections, in particular, should be seen as best guesses, reasonable expectations, and goals for which to aim, not as firm commitments or obligations.

REALISM & FLEXIBILITY:

In drafting GreeNR, the authors wrestled repeatedly with the tension between ambition and realism. In most cases, GreeNR errs on the side of realism, aligning goals and recommendations with the perceived capacity of the City organization and the community as a whole. Even so, some goals may prove unachievable in practice, while others may prove too timid and easily exceeded. Like any broad, long-term plan, GreeNR sets a course and suggests a destination (or destinations) -- but it cannot predict every aspect of the journey. As the City government evolves, and as new administrators, elected officials, and citizens assume leadership roles in our community, they will surely apply their own judgments and experiences to the challenge of sustainability and adjust GreeNR's scope and objectives accordingly. The intent for now is simply to begin the journey well.

Action Plan:

General Recommendations

GreeNR's 43 initiatives collectively include hundreds of specific recommendations tailored to particular goals and objectives. By contrast, the following general recommendations apply to the implementation of GreeNR as a whole:

CREATE TASK FORCES:

Many initiatives require additional research or analysis. In such cases, the City Administration should, as a first step, convene task forces composed of relevant staff, policy experts, and community stakeholders.

PARTNER WITH SCHOOL DISTRICT:

Many initiatives aimed at improving City government efficiency and sustainability could be applied also to the New Rochelle City School District. The City should actively pursue opportunities to partner with the School District, share best practices, achieve economies of scale in investment, and otherwise jointly pursue common objectives.

PARTNER WITH LOCAL COLLEGES:

New Rochelle's three local colleges serve as a valuable, and largely untapped, source of expertise and labor. The City should explore means of enlisting college faculty, staff, and students in pursuing GreeNR's goals, particularly those that bear a meaningful relationship to course content or which lend themselves to academic research, observation, or analysis.

AGGRESSIVELY PURSUE OUTSIDE FUNDING:

Each initiative suggests the most probable sources of outside assistance, but exploration of funding opportunities should not be limited to these suggestions only, and should also encompass private foundations, corporate grants, and mechanisms for voluntary donation to popular community goals.

SECURE CONSISTENT, STABLE LOCAL FUNDING:

When circumstances permit, the City should consider formalizing a stable, ongoing source of revenue for implementation of GreeNR's objectives. Any new revenue source should ideally advance sustainable practices in and of itself by creating incentives for resource conservation. In addition, a mechanism should be established for voluntary contributions to New Rochelle's sustainability budget. It is recognized, however, that the City's present financial condition is severely stressed by the weak national economy, and that any new category of allocation is not likely to be accomplished in the short term.

Action Plan – Part I:

Energy & Climate

Reduce local energy consumption and greenhouse gas emissions while transitioning to renewable sources of energy and adapting to probable climate changes.

GOALS BY 2030:

- **Reduce annual per capita energy consumption by at least 20%, from 125 MMbtus to 100 MMbtus**
- **Reduce annual per capita CO_2e emissions by at least 20%, from 9.0 metric tons to 7.2 metric tons.**
- Reduce municipal energy use, CO_2e emissions, and costs for lighting by at least 40% and for buildings by at least 15%.
- Increase the average gas mileage of the municipal fleet by 50% from 10 mpg to 15 mpg.
- Align with New York State objectives to obtain at least 30% of energy from renewable sources.

Per capita CO_2 emissions vary enormously based on living standards, land use patterns, housing stock, transportation options, sources of energy, regional climate and other factors. Consider the variations in metric tons of emissions per capita for: the United States (19.8), the United Kingdom (9.7), France (6.6), New York State (10.9), Westchester County (13.1), and New York City (6.4).*

*Statistics should not be compared to New Rochelle, because of variations in calculation methods especially related to transportation.

Westchester County's Climate Action Plan sets a goal of reducing greenhouse gas emissions by 80% by 2050 with an interim target of 20% by 2015. GreeNR seeks generally to align New Rochelle's goals with those of the County, but also includes variations based on timetables and differing emissions baselines.

Initiative 1.1:

Green Building Standards

DESCRIPTION:

Adopt requirements and guidelines to promote energy efficiency and energy conservation in the construction, renovation, and operation of buildings, with at least four categories of action: (a) for new construction or major renovation exceeding 10,000 square feet, mandate comprehensive energy efficient design more rigorous that current State requirements, based, but not explicitly reliant, upon LEED certification standards; (b) for the construction or major renovation of all buildings, establish minimum standards for energy efficient lighting; (c) for new construction or reroofing of multi-family and commercial buildings, consider standards for efficient roofing that is cool/reflective, white, or landscaped or roofs with solar panels or other renewable energy sources; and (d) for new municipal construction, abide by the applicable foregoing requirements, incorporate sustainable engineering and design elements, and strive to attain the highest LEED rating that is economically feasible.

GOAL:

Reduce the community's per capita energy consumption and greenhouse gas emissions, by cutting the energy use per square foot in new construction or major renovation by at least 25% relative to the current community average. Contribute significantly to overall energy and greenhouse gas emission goals. Enhance the marketability of new and renovated residential and commercial structures in New Rochelle, while reducing operating and maintenance costs. Stimulate green job growth by generating demand for services.

The new Wellness Center at the College of New Rochelle incorporates many green design features.

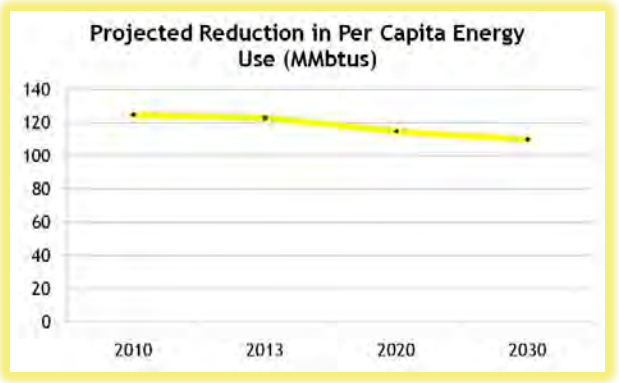
PAST ACTIONS & ACHIEVEMENTS:

New Rochelle enforces the New York State Energy Conservation Construction Code and has devised an innovative checklist/affidavit system for monitoring compliance. New Rochelle has also adopted a density bonus that awards additional FAR to new construction with LEED silver, gold and platinum certification.

CURRENT STATUS:

New Rochelle has not adopted enhanced local green building standards. State law permits municipalities to adopt local energy efficiency standards stricter than the State's, but does not allow similar local flexibility on other aspects of sustainable construction and design.

In the United States, buildings account for 38% of CO_2 emissions and 70% of electricity consumption.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Develop local energy efficiency, lighting, and roofing standards, modeled when applicable on the LEED framework. Evaluate these standards for possible legal challenges.

(2) For new municipal construction, establish and codify City intent to require a cost-benefit analysis of LEED attainment and to achieve the highest economically feasible LEED standard.

(3) Adopt a penalty provision or require a bond to ensure the enforceability of LEED density bonuses in the New Rochelle zoning code.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Adopt and implement new green building standards, with comprehensive energy efficiency requirements for construction or major renovations above 10,000 square feet in size, efficient lighting standards for new and major renovations of residential and commercial buildings, and roofing requirements for applicable structures of any size.

(2) Establish administrative procedures for overseeing and enforcing new standards, with the following general framework for issuance of approvals: a building permit for acceptable design, a temporary certificate of occupancy upon confirmation of compliance, and a final certificate of occupancy for demonstration of operations.

(3) Ensure that new requirements and standards are integrated into all relevant City reviews and approvals and, to the extent possible, create fast-track procedures for building applications featuring green design.

(4) Update local requirements, if necessary, to reflect evolving standards and technologies.

(5) Work with other municipalities to advocate for improved statewide energy efficiency and sustainability standards in new construction and major renovation.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue evaluating green building policy for possible challenges or amendments, and update local requirements, if necessary, to reflect evolving standards and technologies.

(2) If State law permits, expand green building standards to encompass features beyond energy use.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Local Large Green Building Law Adopted:	0	0	1	1
Local Roofing Requirement Adopted:	0	0	1	1
Local Lighting Requirement Adopted:	0	0	1	1
Municipal Building Policy Adopted:	0	1	1	1
New Construction/Renovation Compliant w. Standards:	0	0	100%	100%
Annual Energy Use Per Capita (MMBtu)*	125	123	115	100
Annual CO2e Emissions Per Capita (Metric Tons)*	9.0	8.8	8.3	7.2

* Includes effects of all initiatives related to energy use and greenhouse gas emissions.

Primary Departmental Responsibility: Sustainability, Buildings, Development, Law

Potential Partners: LEED-Accredited Professionals in the Community, Pace Land Use Law Center

Potential Municipal Costs: Possible Higher Construction Cost for Municipal Construction (Offset by Operating Savings)

Potential Outside Funding Sources: NA

Initiative 1.2:

Exterior Lighting Efficiency

DESCRIPTION:

Replace or retrofit municipal exterior lights, including streetlights and parking lot lights to fully utilize energy efficient and cost-saving lighting technology. An energy audit will be required to determine the best energy efficient lighting option for each location.

GOAL:

To the extent practical, achieve universal use of efficient technology in municipal exterior light fixtures. Reduce energy consumption and greenhouse gas emissions for municipal street lights and traffic lights by at least 40%, or 8,068MMbtu and 871 metric tons, respectively. Also reduce energy consumption and greenhouse gas emissions for exterior lighting in municipal parking garages and lots by 1,861 MMbtu and 201 metric tons.* Achieve annual energy cost savings of almost $550,000, plus additional savings through reduced lighting replacement and maintenance needs.

* Total garage and parking energy cost of $501,000, with 90% estimated to be electrical lighting costs, and 60% estimated to be suitable for replacement – excluding library south and ITC.

Efficient LED lights have been installed in the Library South parking lot.

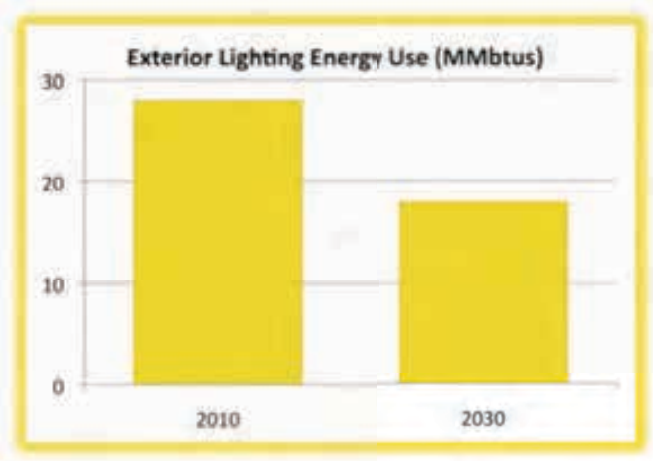
PAST ACTIONS & ACHIEVEMENTS:

The Library South parking area was recently refurbished and upgraded to LED lighting. The City has conducted pilot tests to evaluate energy efficient lighting around the City as well as at the New Roc and Intermodal parking garages.

CURRENT STATUS:

The City owns 6,979 streetlights, of which 1,211 are decorative. In 2005, streetlights and traffic lights used 20,171 MMbtu of electricity and were responsible for 2,178 metric tons of CO_2e emissions. An additional 7,755 MMbtu generating 837 metric tons of CO_2e were used for exterior lighting in municipal parking garages and lots. Most municipal parking facilities use metal halide or high-pressure sodium lighting fixtures. Only the recently renovated Library South lot has efficient LED lights.

The typical LED street light uses 50% less energy per lumen than a high-pressure sodium light and has an average lifespan 10 years longer than a traditional light.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Conduct a lighting energy audit, either in isolation or in the context of a broader municipal operations audit, to determine the most efficient and cost-effective replacement and/or retrofit options for each municipal facility and for streetlights.

(2) Implement the findings of the energy audit, through either direct City expenditure or performance contact.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Continue process of replacement and retrofit if not completed by year 3.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Evaluate evolving technology to determine if additional replacement or retrofit is indicated.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Number of Exterior Light Fixtures Replaced:	<1%	30%	100%	100%
Annual Energy Savings Achieved (MMbtu):	-	2,979	9,929	9,929
CO_2e Reduction (Metric Tons):	-	322	1,072	1,072
Reduced Energy Costs for Exterior Lighting (Thousands):	-	$164	$547	$547

Primary Departmental Responsibility: Public Works, Development

Potential Partners: Energy Auditors, NYPA, ESCOs

Potential Municipal Costs: Parts & Labor (Offset by Operating Savings)

Potential Outside Funding Sources: Federal, State, Formula, ESCOs, NYPA

Initiative 1.3:

Municipal Building Efficiency

DESCRIPTION:

Enhance the energy efficiency of municipal buildings through physical and operational improvements and retrofits such as insulation, tight air seals, upgraded HVAC systems, window replacement, efficient lighting, light sensors, and white roofs. Specific measures should be determined through a comprehensive energy audit, with improvements funded through either an overall performance contract, project-specific agreements with private providers, or direct City expenditures.

GOAL:

Reduce municipal building energy consumption and greenhouse gas emissions by at least 15% or 8,350 MMBtus and 757 metric tons, respectively, while cutting municipal energy bills by at least $75,000 annually. Improve the comfort and work experience of municipal employees. Set a positive example for the larger community.

City Hall is one of forty-four municipal buildings in New Rochelle.

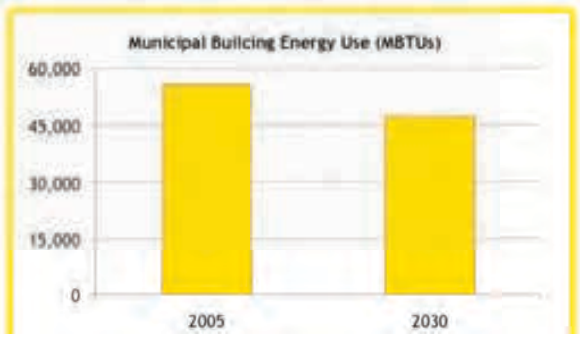
PAST ACTIONS & ACHIEVEMENTS:

The City recently replaced all light fixtures at 95 Lincoln Avenue, Fire Station Number 1 (Harrison Street) and the Hugh Doyle Senior Center with energy-saving fluorescent fixtures. The majority of New Rochelle's municipal building light fixtures have already been upgraded for energy efficiency, so much "low-hanging fruit" has been picked. The 1962 oil-fired boilers at City Hall have been replaced with an array of energy efficient gas-fired boilers. Energy conservation software was recently installed on the City's computers to launch screen saver mode after thirty minutes and shut-down after forty-five. Utilizing federal funds, the City has completed an audit of City Hall, the Police-Court facility and Fire Station One, and is currently beginning implementation of the audit's recommendations at City Hall and the Police-Court facility.

CURRENT STATUS:

There are forty-four municipal buildings in New Rochelle, almost all of which are aging, highly inefficient and poorly sealed, and which collectively used 55,664 MMBtus of energy and emitted 5,045 metric tons of CO_2e in 2005. The City has received funding through the Energy Efficiency and Conservation Block Grant, with $42,000 dedicated to an energy audit, and $643,000 dedicated to energy efficiency improvements. In addition, the City has received a $1,000,000 allocation for energy efficiency from the Department of Energy through the offices of Congresswoman Nita Lowey, with a 100% local match requirement.

Municipal buildings account for approximately half of the City's energy use and CO_2e emissions.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Implement audit recommendations.

(2) Consider applying white coating to the roofs of municipal buildings with a suitable structure. 7 of New Rochelle's 44 municipal buildings have suitable flat roofs for coating.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Conduct an energy audit of remaining City facilities.

(2) Begin implementation of efficiency measures identified through second audit.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Complete implementation of cost-effective energy savings measures identified through second audit.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Municipal Buildings Audited:	3	3	44	44
Suitable Municipal Roofs Painted White:	0%	10%	60%	100%
Projected Annual Energy Savings (MMbtu):	0	835	5,010	8,350
Projected Annual CO_2e Reduction (Metric Tons):	0	76	454	757
Projected Energy Cost Savings (Thousands):	0	7.5	45	75

Primary Departmental Responsibility: Public Works, Sustainability, Purchasing

Potential Partners: ESCOs, NYPA

Potential Municipal Costs: Parts & Labor (Offset by Operating Savings)

Potential Outside Funding Sources: Federal, State, Formula, ESCOs, NYPA

Initiative 1.4:

Green Fleet

DESCRIPTION:

Replace or convert City vehicles to improve average gas mileage, utilize alternative fuels and fuel technology, and reduce the emission of air pollutants. Improvements in the City fleet should be made on a rolling basis as vehicles end their useful life, with replacement options evaluated at the time of purchase.

GOAL:

Increase the average gas mileage of municipal gasoline-powered vehicles by 50%, from roughly 10 mpg to at least 15 mpg. Reduce the emission of air pollutants from diesel-powered vehicles. To the degree practical, shift the overall fleet composition to alternative and renewable design, with a goal of at least 25% of the City fleet utilizing renewable or alternative fuels.

New Rochelle recently converted one sanitation truck to hybrid electric operation.

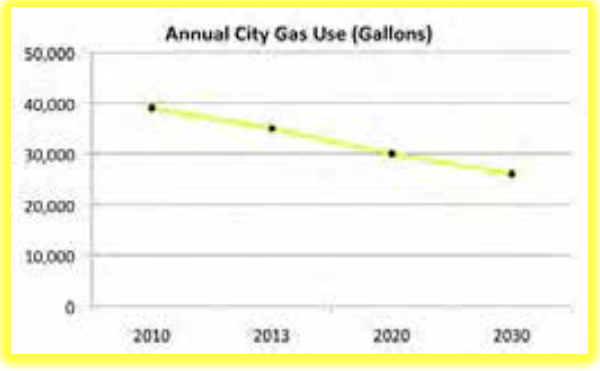
PAST ACTIONS & ACHIEVEMENTS:

The City owns and operates eight neighborhood electric vehicles and two hybrid SUVs. In addition, the Department of Public Works has converted one sanitation truck to hybrid electric operation.

CURRENT STATUS:

The City operates 221 cars and trucks, which consumed roughly 131,000 gallons of diesel fuel and 39,000 gallons of gasoline in 2009 at a cost of $232,000 for diesel and $71,000 for gasoline, with estimated greenhouse gas emissions in 2005 of 1,076 metric tons for gasoline and 1,549 metric tons for diesel. In addition, the City owns and operates 4 motorcycles, 4 Segways, and 12 bicycles, all principally used by the Police Department. The average car in the City fleet is 8 years old, and the average truck in the City fleet is 11 years old.

Municipal vehicles, such as Police cars, are required to have equipment and design features that limit their fuel efficiency. Improvements are possible, but achieving gas mileage comparable to that of standard vehicles is unrealistic



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Conduct a full-inventory of the entire City fleet, including data on fuel consumption and projected life of each vehicle.

.

(2) Explore the feasibility of reducing the overall public fleet size by eliminating unneeded vehicles or improving vehicle-sharing among departments

(3) To the maximum degree practical, enhance reliance on Segways, bicycles, and other low-emission vehicle options.

(4) As each vehicle reaches the end of its useful life, commence replacement of City vehicles with fuel-efficient alternatives and, when appropriate, smaller class models, including hybrids and alternative-fueled vehicles.

(5) Evaluate the use of fuel catalysts to improve vehicle efficiency, increase vehicle mileage, and reduce air pollution.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Continue replacement of City vehicles on a rolling basis.

(2) Consider introducing new fueling infrastructure to facilitate the use of biodiesel in appropriate diesel-powered vehicles.

(3) Begin implementation of efficiency measures identified through second audit.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue replacement of City vehicles on a rolling basis.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Average MPG of City Gas Vehicle:	10	11	13	15
Annual Gallons of City Gas Consumption (Thousands):	39	35	30	26
CO_2e Emissions From Gasoline Vehicles (Metric Tons):	1076	966	828	717
Alternative or Renewable Fuel Vehicles in Fleet:	5%	8%	15%	25%

Primary Departmental Responsibility: Public Works, Sustainability, Purchasing

Potential Partners: Municipal Vehicle Dealers, Alternative Fuel Vendors

Potential Municipal Costs: Vehicle Purchase or Lease (Offset by Operating Savings & Less Cost of Traditional Vehicle Replacement)

Potential Outside Funding Sources: Federal, State, Formula

Initiative 1.5:

Renewable Energy Generation

DESCRIPTION:

Facilitate within New Rochelle the generation of renewable energy, such as wind, solar, fuel cell technology, and geothermal, by addressing impediments in the local building and zoning codes and by exploring opportunities for renewable energy production on public land and in public buildings. Code amendments should seek to balance renewable energy opportunities with the constraints associated with suburban and urban land use patterns. In addition, advocate for utility and State purchase of renewable energy.

GOAL:

Reduce greenhouse gas emissions, limit depletion of finite resources, cut public and private energy costs, and create green jobs associated with renewable energy production and installation.

Solar panels have been installed at the Hugh Doyle Senior Center.

PAST ACTIONS & ACHIEVEMENTS:

The City has installed photovoltaic solar panels on a portion of the roof of the Hugh Doyle Senior Center. These panels generate 10.2 MMbtu annually.

CURRENT STATUS:

The New Rochelle Building Code permits the installation of solar collectors, but does not address other renewable energy options. To date, no thorough analysis has been conducted to consider possible amendments. Less than ten properties in New Rochelle are estimated to have renewable energy installations. Aside from the Doyle Center solar panels, there are no other renewable energy generators on public property within New Rochelle.

The New York State Public Service Commission has established a Renewable Portfolio Standard calling for New Yorkers to receive 30% of their energy from renewable sources by 2015.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Examine renewable energy technologies to determine which are appropriate for private installation and use in New Rochelle. Ensure input from experts and neighborhood association representatives. Also define dimensional screening restrictions necessary to limit visual or noise impacts.

(2) Amend the New Rochelle building and zoning codes to accommodate the forms of renewable energy production deemed appropriate.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Conduct an inventory of public buildings and public land to identify locations that may be suitable for renewable energy generation. Conduct feasibility and financial analyses to determine the costs and benefits of City-funded renewable energy projects. Also explore options for leasing or licensing public property to private energy producers, including solar power purchase agreements. Adopt and begin to implement a renewable energy generation plan based on these analyses. Reach out to the School District to gauge interest in a similar analysis of School buildings and properties.

(2) Consider the creation of an electric CHP (Combined Heat & Power), solar-powered or wind-powered charging station at the New Rochelle Transit Center to facilitate the use of electric vehicles by commuters and other drivers. If feasible, then implement as local resources and/or the availability of grants permit.

(3) Continue reviewing local Building and Zoning Codes to determine whether new amendments are required to address evolving renewable energy technology.

(4) Advocate for the purchase of renewable energy by utilities and State authorities.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue reviewing local Building and Zoning Codes to determine whether new amendments are required to address evolving renewable energy technology.

(2) Continue to implement plans for renewable energy production on public land and in public buildings.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Revised Renewable Energy Code Adopted	0	1	1	1
Public Land Renewable Energy Plan Adopted	0	0	1	1

Primary Departmental Responsibility: Buildings, Public Works, Sustainability, Law

Potential Partners: School District, NYPA, ESCOs, Renewable Energy Companies, Neighborhoods, Solar Power Purchase Agreement Vendors

Potential Municipal Costs: Purchase, Installation and Maintenance of Renewable Energy Equipment (Offset by Operating Savings)

Potential Outside Funding Sources: Federal, State, NYPA, ESCOs

Initiative 1.6:

GreeNR Seal

DESCRIPTION:

Establish a "GreeNR Seal" certification program to recognize the sustainable design or retrofit of residential properties and to also acknowledge sustainable practices in the business sector. The GreeNR Seal and specific green features should be noted on realtors' multi-listing sites and incorporated into the general marketing of properties, thereby increasing the resale value of sustainable properties and providing an additional payback for sustainable investments, beyond savings from reduced resource consumption.

Examples of sustainable features in the residential sector include Energy Star appliances, high efficiency HVAC systems, full insulation, skylights, sun tunnel skylights, energy efficient lighting, cool/reflective roofs, rain barrels, rain gardens, bamboo or cork flooring, water filters, Forest Certified Council wood products, non-VOC paint and carpets, etc. Businesses should be recognized for the investments referenced above, and also for ongoing practices such as the use of green cleaning products, the purchase of recycled paper, high recycling rates, donation of vegetable oil for vegi-vans, acceptance of used hangers, provision of recyclable take-out containers, reuse of packing materials, etc.

GOAL:

Enhance incentives for sustainable design and practice in the private sector. Allow property owners to better capture the monetary value of sustainable investments in re-sale. Reduce private sector energy consumption, greenhouse gas emissions, and waste generation. Promote green job growth by creating demand for green services.

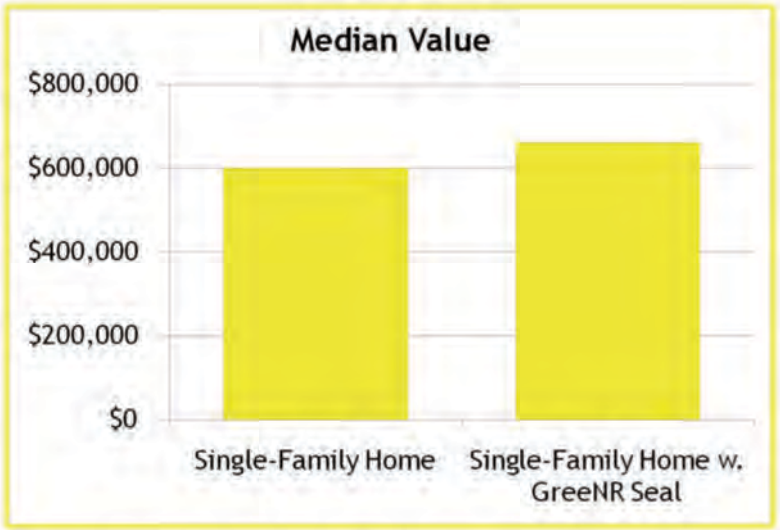
PAST ACTIONS & ACHIEVEMENTS:

None.

CURRENT STATUS:

There is presently no GreeNR Seal program in New Rochelle, nor is there any other standardized mechanism for recognizing sustainable design, retrofit, or practice.

Sustainable features can increase a home's market value by 10% to 15%.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Develop precise GreeNR Seal standards and a create mechanism for confirming the use of such standards in design, retrofit or practice. Such a mechanism should be structured to minimize City administrative oversight and rely to the degree practical on the submission of affidavits from contractors and/or property owners.

(2) Work with realtors, business representatives, Chamber of Commerce, Business Improvement District, and construction professionals to develop a strategy for conferring GreeNR Seals and marketing GreeNR seal properties.

(3) Work with realtors and appraisers to establish a method for quantifying property value increases associated with GreeNR Seals.

(4) Establish a communications strategy for raising public awareness of the GreeNR Seal program.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Implement GreeNR Seal program and begin conferring GreeNR Seals on eligible homes and businesses.

(2) Implement communications strategy to encourage public participation in the GreeNR Seal program.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Review GreeNR Seal program standards and operations to determine the need, if any, for modifications.

(2) Implement any necessary modifications.

PROGRESS TRACK

Year:	2011	2014	2020	2030
GreeNR Seal Standards Established:	0	1	1	1
Homes with GreeNR Seal:	0	0	700	2000
Businesses with GreeNR Seal:	0	0	70	200
Aggregate Increase in Property Value (Millions):	0	0	$42	$120

Primary Departmental Responsibility: Sustainability, Buildings, Marketing

Potential Partners: Local LEED Accredited Professionals, Realtors, Appraisers, Building & Construction Trades, Chamber, BID, Neighborhoods

Potential Municipal Costs: None

Potential Outside Funding Sources: NA

Initiative 1.7:

Mid & High-Rise Building Campaign

DESCRIPTION:

Conduct an aggressive informational campaign to reduce energy consumption and waste generation in existing commercial or multi-family mid-rise buildings (defined as 3 or more stories, up to 75 feet in height) and high-rise buildings (defined as greater than 75 feet in height.) Assemble and then disseminate a comprehensive and descriptive list of recommended operations, actions, and capital improvements. Strongly encourage building owners and managers to act on measures applicable to their own facilities, with projected cost-savings as an incentive. The following are illustrative examples of possible recommendations: (1) mechanical equipment upgrades to boilers, heat timers, and HVAC sensors, including adjustments in boiler cycling rates and introduction of wireless temperature triggers for boiler operation; (2) roofing that incorporates cool/reflective or green features; and (3) energy efficient and low-water-use appliances, coupled with guidelines for selecting equipment providers, such as laundry supply services.

More than a third of New Rochelle's households are in multiple dwelling units like this one on Pelham Road.

GOAL:

Achieve at least a 50% participation rate among targeted buildings and building complexes. Among participating mid & high-rise structures, reduce energy consumption by 15%, reduce greenhouse gas emissions by 15%, and reduce water consumption by 10%. Promote green job growth through expanded demand for green services and investments.

PAST ACTIONS & ACHIEVEMENTS:

The City has launched a "Green Supers" training program in conjunction with Local Union 32BJ, to provide training and certification to building superintendents in energy efficiency and waste reduction measures.

CURRENT STATUS:

The great majority of mid and high-rise structures in New Rochelle are more than thirty years old, sometimes considerably older, and are not likely to feature the most efficient physical and operational characteristics.

An efficient modern HVAC system typically consumes 40% less energy than a standard design from 1990.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Draft comprehensive recommendations for sustainable actions in mid and high-rise buildings. Include in this process City staff, relevant experts, and representatives of building owners and managers.

(2) Create a database of local mid and high-rise buildings, detailing square footage, number of housing units, the current status of operations and systems relevant to this initiative, contact information for owners, managers, and commercial/residential occupant representatives, and estimated energy use and greenhouse gas emissions – in total, per square foot, and per household.

(3) Distribute recommendations for action and information about resources to all owners and managers.

(4) Convene meetings with owners, managers, building workers, superintendents and commercial/residential occupant representatives for the ten buildings or complexes deemed to have the greatest potential for savings.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Generate positive publicity for first wave of buildings to undergo improvements, as a means of rewarding beneficial action and of stimulating further public interest.

(2) Convene meetings with additional building representatives to encourage expansion of efficiency efforts.

(3) Track progress through database of mid and high-rise buildings.

(4) Determine potential, if any, for access to Efficiency & Conservation Loans (see Initiative 1.8.)

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Review mid and high-rise building recommendations for possible updating and improvement.

(2) Continue to convene meetings with building representatives as deemed appropriate and necessary.

(3) Continue to track progress.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Mid & High Rise Guidelines Drafted:	0	1	1	1
Mid & High Rise Structures Tracked in Database:	0	25%	100%	100%
Meetings Convened with Building Representatives:	0	5	30	60
Buildings/Complexes Opting to Undertake Improvements:	0	3	50	100

Primary Departmental Responsibility: Buildings, Sustainability, Marketing

Potential Partners: Building Owners & Managers, Commercial & Residential Tenants, Co-op and Condominium Owners, Energy Auditors, ESCOs, NYSERDA, Local 32BJ

Potential Municipal Costs: None

Potential Outside Funding Sources: NA

Initiative 1.8:

Efficiency & Conservation Loans

DESCRIPTION:

Implement a local loan program to make energy efficiency improvements more affordable by enlisting lenders to provide favorable financing terms, secured by property tax obligations and paid back through energy savings. Focus on energy efficiency improvements for which expected monthly savings exceed payments on a medium-term loan, calculated using a standardized model of anticipated energy savings associated with specific improvements. This model should be the basis for pro forma financial plans that compare the potential energy savings (and greenhouse gas emissions reductions) with hypothetical capital mobilization and prospective returns for all parties, including local financing partners.

The residential sector accounts for 38.5% of New Rochelle's energy use.

GOAL:

Encourage at least 500 property owners to fund capital improvements with an average energy savings and greenhouse gas emissions reduction for each of at least 25%. Achieve a net reduction in monthly costs for participating homeowners and commercial property owners. Promote green job growth through expanded demand for green services and investments.

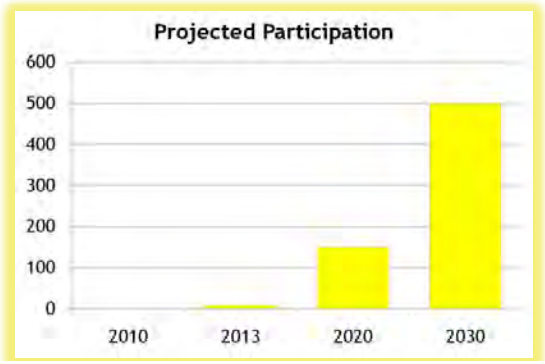
PAST ACTIONS & ACHIEVEMENTS:

None.

CURRENT STATUS:

There are no locally sponsored programs to facilitate access to capital for home and business energy efficiency improvements. Recent New York State legislation authorizes municipalities to create a Property Assessed Clean Energy ("PACE") program using federal grant assistance or federal credit support to issue bonds to finance energy efficiency improvements and renewable energy systems. Property owners can borrow the bond money to finance energy saving improvements and they repay the loan through a 15 - 20 year annual assessment on their property tax bills. The assessment is typically less than the energy savings generated, delivering immediate cost savings, and is attached to the property as a lien, staying with the property when it is sold, rather than the individual borrower. However, the PACE program has been challenged by the Federal Housing Finance Agency and, depending upon the legal outcome of this matter and subsequent changes in State law, it may be necessary to revise or delete this initiative.

The residential sector accounts for 38.5% of New Rochelle's energy consumption and for 36.6% of New Rochelle's greenhouse gas emissions. Meaningful community-wide energy savings and greenhouse gas emissions reductions cannot be achieved without significant action on the part of residential property owners.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Develop a pro forma financial model to compare potential energy savings and greenhouse gas emissions with hypothetical capital mobilization and prospective returns for all parties.

(2) With State authorization, enlist partner(s) among local lending institutions.

(3) Establish a mechanism for measuring and recording energy and greenhouse gas emissions reductions, as well as cost savings – both for individual participants and in the aggregate.

(4) Launch a two-year pilot program in select neighborhoods to test assumptions, gauge public interest, develop marketing tools, and resolve unanticipated challenges.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Complete the two-year pilot program.

(2) If the pilot program is successful, then expand program, so it is available in all neighborhoods, adjusting program details as indicated through the pilot experience.

(3) Continue to monitor benefits and savings, and refine analysis to determine building styles and ages with the greatest opportunities for improvement and the quickest payback.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Market program availability and benefits to encourage additional participation, targeting areas with housing stock most likely to achieve significant savings.

(2) Continue to monitor benefits and savings.

PROGRESS TRACK

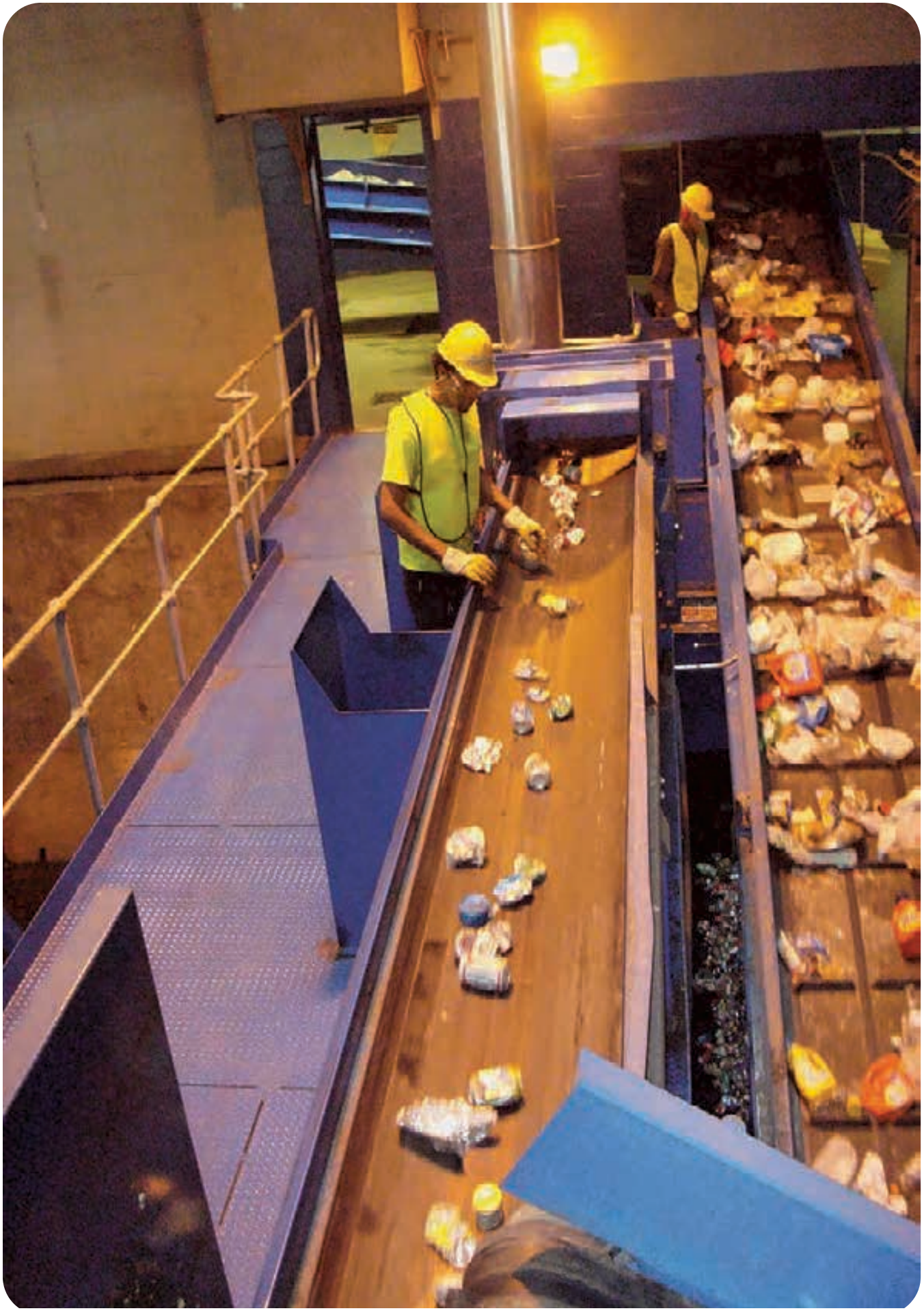
Year:	2011	2014	2020	2030
Pro Forma Model Developed:	0	1	1	1
Lenders Participating:	0	1	3	3
Properties Participating:	0	10	150	500
Estimated Annual Energy Savings (MMBtu):	0	1,600	24,000	80,000
Estimated Annual CO_2e Reduction (Metric Tons):	0	110	1,650	5,500

Primary Departmental Responsibility: Finance, Sustainability

Potential Partners: Local Lending Institutions, Neighborhoods, Chamber, BID, Con Edison, NYSERDA, Energy Auditors, ESCOs

Potential Municipal Costs: None

Potential Outside Funding Sources: NA



Action Plan – Part 2:

Resource Conservation & Waste Reduction

Cut waste generation, improve recycling rates, encourage conservation and promote the efficient use of water and other natural resources.

GOALS BY 2030:

- **Reduce annual per capita non-recycled solid waste by at least 15% from 777 pounds to 660.5 pounds and increase the community recycling rate to 50%.**
- **Reduce daily peak non-storm wastewater generation by at least 2 million gallons from 20.5MGD to 18.5 MGD.**
- Reduce daily per capita water use by at least 15% from 159 gallons to 135 gallons.
- Cut municipal waste generation by at least 20%, while increasing the municipal recycling rate from 50% to 75%.
- Achieve near universal household participation in recycling.
- Reduce annual municipal water consumption by at least 10%, from 8.57MG to 7.71MG.

Upgrading the New Rochelle sanitary sewage treatment is costing taxpayers more than $200 million, a vivid illustration of the need to reduce sewage generation.

In 2010, it cost New Rochelle taxpayers almost $1 million to dispose of 29,932 tons of non-recyclable waste and 9,875 tons of leaves and yard waste. There are no disposal costs for recycled items, aside from the cost of collection.

greeNR

Initiative 2.9:

Municipal Building Waste Reduction

DESCRIPTION:

Adopt best practices within municipal buildings to increase recycling rates, cut supply costs, and reduce the overall generation of waste. Establish a City Green Team, composed of representatives from each municipal department, to recommend improvements in work habits and work rules, and then to encourage compliance with new standards. Potential actions include placement of additional recycling bins, standardization of two-sided printing, increased use of paperless record-keeping, teleconferencing work rules and equipment, and custodial work rules for lighting.

GOAL:

Set an example of efficient use of resources, reduce non-recyclable waste generation from the public sector, cut wasteful energy use, and cut City office supply costs by 20%.

Shrink-wrap recycling at the Municipal Marina removes approximately 20,000 pounds of low-density polyethylene plastic from the waste stream.

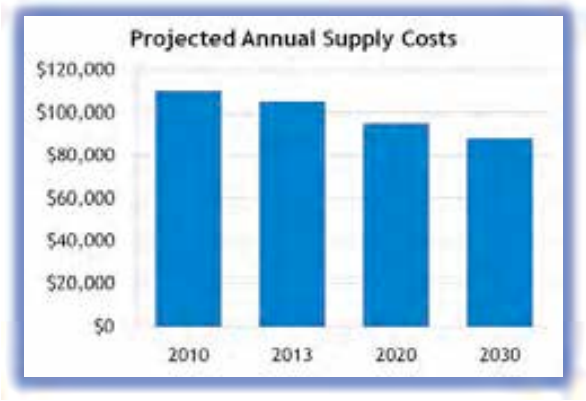
PAST ACTIONS & ACHIEVEMENTS:

New Rochelle recently provided recycling bins for paper disposal to all staff in City Hall and the Police Department and also placed commingled recycling bins at key locations within these buildings. The City is removing most personal printers in favor of network printers, and has eliminated a net of seven printers to date through this process. New Rochelle has established a cellular telephone recycling program to collect used cell phones at City Hall from employees and members of the public. The New Rochelle municipal marina has undertaken comprehensive green improvements, all of which are noted at the end of this initiative, as a positive example of municipal sustainability action.

CURRENT STATUS:

Work practices and habits have not been examined comprehensively, nor has any mechanism been established for encouraging sustainable action at the departmental or individual level. Public sector waste is combined with private sector waste before being weighed, so precise metrics will be difficult to track.

The City government purchased 9.5 tons of paper in 2009.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Create a permanent City "Green Team" with representatives from each department to evaluate municipal work habits within each department, solicit suggestions from employees, research best practices from other communities, and recommend sustainable practices. The "Green Team" should then monitor and encourage compliance within work rules with each member's respective department and suggest improvements or modifications on a rolling basis. Evaluate tools for empowering "Green Team" members and for rewarding sustainable action and for enhancing the visibility of "Green Teams" through morale-building identifiers.

(2) Conduct a comprehensive waste audit of all public buildings to determine the types of waste produced and identify opportunities for waste reduction. Possibilities include double-sided copying, paperless communication and record-keeping, teleconferencing, car pooling, deactivation of unnecessary lighting and greater use of natural light, reduced consumption of packaged foods and drinks, etc. Estimate the cost of equipment, building improvements, and personnel necessary to implement changes.

(3) Implement waste reduction practices and rules, as resources permit.

(4) Establish method for ongoing measurement of waste generation by municipal building and department.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Consider establishing friendly competition among departments for greatest level of waste reduction and recycling improvement, with recognition or reward for progress.

(2) Maintain best practices and evaluate for continued improvement.

(3) Undertake necessary investments in equipment, building configuration, or personnel, as resources permit.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Maintain best practices and evaluate for continued improvement.

(2) Undertake necessary investments in equipment, building configuration, or personnel, as resources permit.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Municipal Buildings Audited:	0	44	44	44
Green Team Established:	0	1	1	1
Annual Total Waste from City Buildings (Estimated Tons):	100	95	85	80
Recycling Rate in City Buildings (Estimated):	50%	55%	70%	75%
Annual Supply Costs (Thousands):	110	105	95	88

Primary Departmental Responsibility: Public Works, Sustainability, Marketing, MIS

Potential Partners: All City Departments

Potential Municipal Costs: Potential Equipment Purchases (Offset by Reduced Supply & Waste Disposal Costs)

Potential Outside Funding Sources: None

POSITIVE EXAMPLE: MUNICIPAL MARINA

The Municipal Marina has initiated a number of programs and best management practices to protect water quality, reduce energy use and recycle. These initiatives are:

1. All catch basins have hydrocarbon filters to prevent storm water runoff.

2. An oil water separator has been installed in the wash down area to prevent run off during bottom washing.

3. Filter and hay bales are used during bottom washing to prevent paint chips and other foreign debris from entering the harbor.

4. All boat bottom wash water is recycled and reused, saving approx 30,000 gallons of water per year. Filtration removes heavy metals (zinc, copper, lead) as well as paint chips and aquatic growth from reentering the Long Island Sound.

5. In 2008, the Marina created a shrink-wrap recycling program involving all marinas in the New Rochelle community, thereby removing approximately 20,000 pounds of low-density polyethylene plastic from the waste stream.

6. The Marina has adopted a green purchasing policy and uses only environmentally-sound products made of all natural, primarily citrus, non-toxic ingredients. These cleaning materials are automatically dispensed from a central unit thereby saving on wasteful packaging and excessive use of product. The approximate cost of usage equates to pennies on the gallon.

7. All light bulbs are being replaced when they burn out with longer lasting and more energy efficient Compact Florescent Light bulbs.

8. As upgrades to the facility take place, occupancy sensors are being installed in bathrooms and nonessential areas, which turn lights on and off to save electricity.

9. The Marina disposes of all collected waste oil, paints and used bottom-painting brushes in a proper manner.

10. By means of grants, the Marina has upgraded its sanitary waste pump out facility and will operate a pump out boat to service all the New Rochelle area marinas.

11. Fuel spill prevention rings are used during fueling on the Gas Dock.

12. A program of daily sweeping of the parking lot area during summer months prevents parking lot runoff into Long Island Sound.

13. Marina personnel use battery powered vehicles as much as possible to complete daily tasks.

14. When available, only power equipment using rechargeable batteries is purchased.

15. Recycling of paper and cans, and bottles is strictly enforced during the summer season, with sorting done by the Marina staff.


pitchi Tiki

Initiative 2.10:

Residential Recycling Campaign

DESCRIPTION:

Promote greater participation in New Rochelle's recycling programs through targeted educational efforts using door hangers, stickers, and printed leaflets, and through the issuance of warning and then violation notices for failure to comply with local law.

GOAL:

Increase the community-wide recycling rate (excluding leaves) to at least 50% and reduce the annual generation of non-recyclable waste by more than 100 pounds per capita. Achieve consistent recycling participation from at least 90% of New Rochelle's households.

Warning stickers like this can help to encourage recycling.

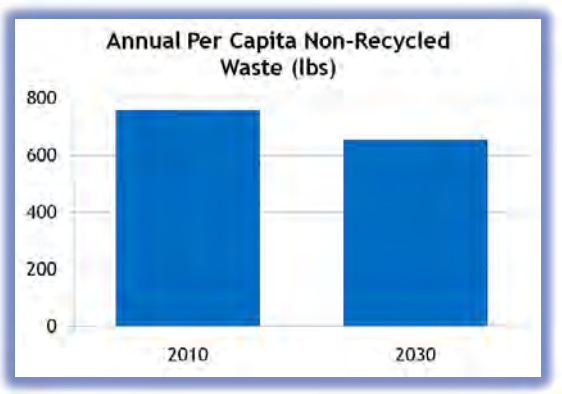
PAST ACTIONS & ACHIEVEMENTS:

New Rochelle participates in Westchester County's recycling program. The City includes recycling information in its annual public works handbook and calendar, mailed to all households, and on the City's website. New Rochelle has begun to issue "oops" stickers for observed failures to recycle household waste and may issue violations for failure to comply with recycling rules.

CURRENT STATUS:

In 2010, New Rochelle recycled 20,046 tons of waste and disposed of 29,932 tons of non-recyclable waste, for a recycling rate of 40%. Excluding leaves, which are considered recycled materials, New Rochelle's recycling rate is 30%. It is estimated that 50% percent of households achieve full compliance with recycling guidelines, 25% partial compliance, and 25% little or no compliance. In June 2011, Westchester County's recycling program was expanded to accept plastics with numbers one though seven.

Each ton of non-recyclable waste disposal costs New Rochelle taxpayers $25 in "tipping" fees, for a total of more than $748,000 in 2010.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Commence a general campaign of public outreach and recycling promotion, with appearances by appropriate DPW or City representatives at community and neighborhood gatherings.

(2) Increase the frequency and consistency with which warning notices are issued to homeowners who fail to recycle.

(3) Begin to issue violations to homeowners who have already received warning notices, but failed to modify behavior. Concentrate enforcement efforts on routes with low compliance levels.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Establish a process for better measuring recycling rates by sanitation route, in order to better target ongoing education and enforcement activity.

(2) With public input, consider possible adjustments in the sanitation and recycling pick-up schedule to encourage more rigorous household recycling practices.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Maintain education and enforcement efforts, with modifications and improvements, as needed.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Recycling Rate by Weight (Excluding Leaves):	30%	35%	40%	50%
Recycling Rate by Full Household Participation:	50%	55%	75%	90%
Per Capita Non-Recycled Waste (Pounds):	777	740	660	600.5
Annual Warning/Reminder Notices Issued:	100	1,500	1,000	250
Annual Violation Notices Issued:	2	150	75	25

Primary Departmental Responsibility: Public Works, Sustainability, Marketing

Potential Partners: Neighborhoods, Multi-Family Buildings Owners & Managers

Potential Municipal Costs: Minimal Labor and Printing Costs (Potentially Offset by Fine Revenue)

Potential Outside Funding Sources: County

Initiative 2.11:

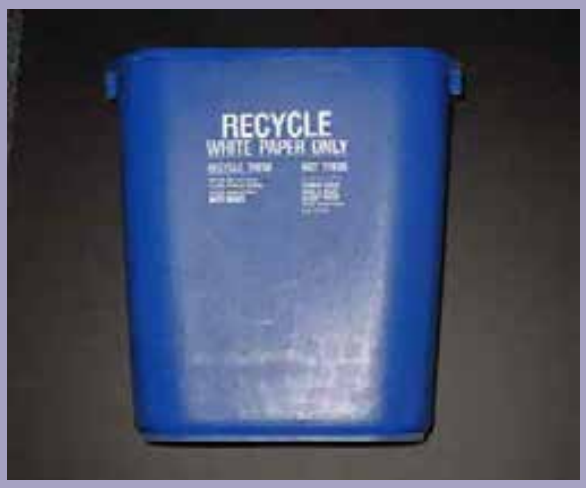
Public Area Recycling

DESCRIPTION:

Introduce recycling bins and commence recycling collection at public locations already served by trash collection, such as parks, playgrounds, parking facilities and commercial streets.

GOAL:

Increase community-wide recycling rates by facilitating the recycling of commingled items in public spaces. Enhance public awareness about recycling through enhanced visibility of recycling activities. Remove 4 tons of recyclable material from the solid waste stream.



Recycling bins in public spaces could reduce our annual non-recycled waste generation by 4 tons.

PAST ACTIONS & ACHIEVEMENTS:

Recycling bins and service are now available at the New Rochelle Municipal Marina.

CURRENT STATUS:

The City does not provide recycling bins in public locations, with the single exception noted above. Public spaces generate approximately 20 tons of waste each year, of which an estimated 4 tons or 20% are potentially recyclable. Recycling potential may be slightly higher at parks and slightly lower from on-street and parking area receptacles.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Implement a pilot recycling collection program at one or two public locations to establish bin design and better evaluate the costs and challenges of installation and operation.

(2) Create a comprehensive list of locations throughout New Rochelle at which it would be appropriate to install recycling collection bins.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Based upon the pilot program, determine the annual operations and maintenance cost for a full program of recycling at public locations.

(2) Expand pilot program to include additional areas, as resources permit.

(3) Aggressively explore grant opportunities for program implementation.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Expand program to encompass the entire community, as resources permit.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Public Recycling Bins Installed	0	10	250	500
Public Location Waste Stream Diverted:	0	0.5%	10%	20%
Non-Recycled Waste at Public Locations (Tons):	20.0	19.9	18.0	16.0

Primary Departmental Responsibility: Public Works, Parks & Recreation

Potential Partners: Athletic Leagues, BID, Chamber, School District

Potential Municipal Costs: One-Time Expense for New Recycling Bins Estimated at $250 per Unit, Ongoing Annual Operations Costs (Partially Offset by Reduced Tipping Fees for Non-Recycled Waste)

Potential Outside Funding Sources: Federal, State, County

Initiative 2.12:

Municipal Green Purchasing

DESCRIPTION:

Adopt administrative regulations to ensure the consideration and comparative pricing of goods and services employing sustainable materials and practices. Examples of sustainable goods and materials include Energy Star appliances, non-toxic cleaning products, and non-VOC paint, furnishings, and carpeting.

GOAL:

Reduce the energy consumption, greenhouse gas emissions, waste, natural resource depletion, and deleterious public health impacts associated with the City's supply purchase and use, while leveraging the City's purchasing power to promote green practices and production in the private sector. Set an example of sustainable conduct.

The City uses 100% post-consumer recycled copy paper.

PAST ACTIONS & ACHIEVEMENTS:

The City currently purchases 100% post-consumer recycled copying paper.

CURRENT STATUS:

There are no other municipal green purchasing policies.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Adopt green purchasing standards on a phased basis, beginning with products and services with easily-identified and implemented alternatives.

(2) Implement such standards and commence purchase of green products and services, provided that the cost differential, if any, for such products and services is deemed reasonable by the City Administration.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Continue implementation of green purchasing policy and periodically review, update and expand green purchasing alternatives.

(2) Develop and implement additional administrative regulations on an as-needed basis.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue implementation of green purchasing policy and periodically review, update and expand green purchasing alternatives.

(2) Develop and implement additional administrative regulations on an as-needed basis

PROGRESS TRACK

Year:	2011	2014	2020	2030
Green Product & Service Alternatives Considered:	0	5	10	20

Primary Departmental Responsibility: Purchasing, Sustainability

Potential Partners: All Departments, Green Design Professionals, Municipal Green Teams

Potential Municipal Costs: Possible Additional Cost for Green Service and Product Alternatives

Potential Outside Funding Sources: None

Initiative 2.13:

Water Use & Wastewater Reduction

DESCRIPTION:

Reduce stress on wastewater treatment facilities by encouraging water conservation, controlling storm water infiltration, and expanding options for cost-effective infrastructure repair and improvement. Work with neighboring municipalities within the New Rochelle Sewer District to adopt recommended practices District-wide. Modernize plumbing and improve practices to conserve water in municipal government and community-wide.

GOAL:

Reduce peak hour base sewage generation at the New Rochelle Sewage Treatment Plant by at least 500,000 gallons per day or at least 7 gallons per capita. Cut I & I rates by at least 1.5 MGD in non-storm conditions, 3.0 MGD in average storm conditions and 7.0 MGD in heavy storm conditions. Relieve stress on water quality in Long Island Sound. Reduce daily municipal water use by 2,347 gallons or 10% and reduce daily community-wide water consumption by 1.84 MGD or 24 gallons per capita. Control impediments to beneficial development by providing flexible and cost-effective builder-funded mitigation options.

The New Rochelle Sewage Treatment Plant is being upgraded to a treatment capacity of 20.6 million gallons per day.

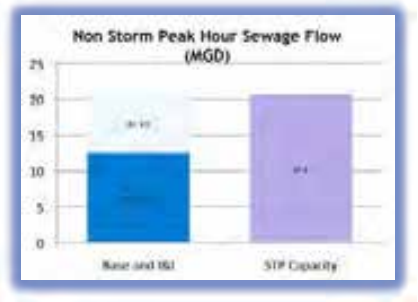
PAST ACTIONS & ACHIEVEMENTS:

The New Rochelle sewage treatment plant, owned and operated by the County government, is in the process of being upgraded in order to increase its treatment capacity from 13.6 MGD to 20.6 MGD. County and City officials have taken a variety of steps, including repair or lining of sanitary lines within New Rochelle, correction of 511 improper house connections to the sanitary system, and enforcement of developer I & I repair obligations at a 3 to 1 ratio of water removed to waste water generated. Together, these actions have reduced typical I & I levels by 3.5 MGD. With respect to efficient plumbing fixtures, State law requires low-flow toilets, while showerheads and faucets are now manufactured with water restrictors.

CURRENT STATUS:

The New Rochelle sanitary sewage treatment plant's new capacity is sufficient to accommodate New Rochelle's peak base flow of 12.5 MGD, plus typical non-storm infiltration of 8.0 MGD, but leaves little or no room for additional peak sewage loads. During storm events, due primarily to inflow, the rate of flow increases substantially, sometimes meeting or exceeding the trunk line hydraulic capacity of 55.0 MGD. Sewage discharge into the Sound contributes to ongoing water quality challenges, including hypoxia and water-borne pathogens. The community as a whole uses 12.25 million gallons of water per day, or 163 gallons per capita, with the municipal government consuming 23,474 gallons per day and 8.57 million gallons per year at a cost of $63,000. There are 323 miles of sanitary sewer lines in New Rochelle, of which 6 miles are under County ownership, 186 miles are under City ownership, and an estimated 131 miles are under private ownership.* Most of the public lines have been inspected, but most of the private lines have not. Many older residential and commercial properties still employ traditional plumbing fixtures that require high-water use. In municipal buildings, there are approximately 467 fixtures, of which one-quarter are estimated to require retrofit or replacement.

A modern low-flow toilet uses 1.6 gallons of water per flush, compared to a traditional standard toilet, which uses 3.5 to 7.0 gallons.



RECOMMENDED ACTIONS

(See Also Initiatives 3.16 Sound, Lake & Stream Water Quality, 3.19 Flood Control & Mitigation, 3.20 Sustainable Landscaping on Public Grounds, and 3.21 Green Garden & Lawn Care. Recommendations Not Repeated Here.)

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Replace plumbing fixtures in all public buildings with low flow fixtures as the useful life of existing fixtures expires.

(2) Evaluate changes in local law to require high water consumption businesses, such as laundromats, to convert to low-flow fixtures. If feasible and enforceable, adopt such a law, with a reasonable phase-in period. Otherwise, pursue on a voluntary basis through education and inclusion within relevant sustainability campaigns.

(3) Within sustainability awareness campaign, include options for residential water conservation, including fixture retrofits, and for shifting residential water discharge away from peak hours.

(4) Work with Westchester County to consider establishing a comprehensive program for examining lateral sewer lines on private property and for including the repair of such lines within the scope of publicly funded or developer-funded I & I repair.

(5) Clarify and improve developer-funded I & I repair obligations. Possible steps include: (a) calibrating repair obligations to peak, rather than average flow, while reducing repair ratios from 3.0 to 1.5; (b) providing credit and incentives for gray-water recirculation systems; (c) providing credit and incentives for on-site treatment of sewage; and (d) providing credit and incentives for sewage retention with non-peak-hour discharge.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Continue the installation of low-flow fixtures in public buildings, as resources permit or in conjunction with standard replacement.

(2) Implement revised guidelines and standards for developer-funded I & I repair and/or wastewater reduction obligations.

(3) Work with United Water to investigate the feasibility and merit of variable pricing for water, with rates increased during peak hours and cut during non-peak hours.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Complete the installation of low-flow fixtures in public buildings.

(2) Continue the inspection and repair of lateral sewer lines on private property through developer contributions and/or public funding.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Per Capita Daily Base Peak Hour Sewage (Gallons):	172	171	169	165
Non-Storm I & I (MGD):	8.0	7.9	7.2	6.5
Heavy Storm I & I (MGD):	42.5	42.0	40.0	35.5
Lateral Lines Repaired (Out of 131 Miles):	0%	1%	10%	35%
Low-Flow Fixtures in Public Buildings (Estimate):	350	360	385	425
Municipal Government Water Use (TGD):	23.5	23.3	22.5	21.15
Community Daily Per Capita Water Use (Gallons):	159	157	146	135*

*See also Initiative 3.21

Primary Departmental Responsibility: Public Works, Development, Buildings

Potential Partners: County, Developers, Property Owners, Plumbers, Building Contractors, Architects, United Water

Potential Municipal Costs: Infrastructure Inspection and Repair, Fixture Installation Estimated at Roughly $1,500 per Unit (Partially Offset by Reduced Water Costs and by Averted Need for Public Infrastructure Repair or Improvement)

Potential Outside Funding Sources: Developers, Property Owners, Federal, State, County

Initiative 2.14:

Household Composting

DESCRIPTION:

Encourage backyard composting of organic materials through enhanced public education about composting methods, options and benefits.

GOAL:

Encourage at least 500 households to compost, diverting 125 tons of kitchen waste and 125 tons of yard waste from the overall waste stream, and reducing annual waste disposal costs by more than $5,000. Facilitate sustainable gardening practices through ready access to and use of compost.

Household compost bins are readily available.

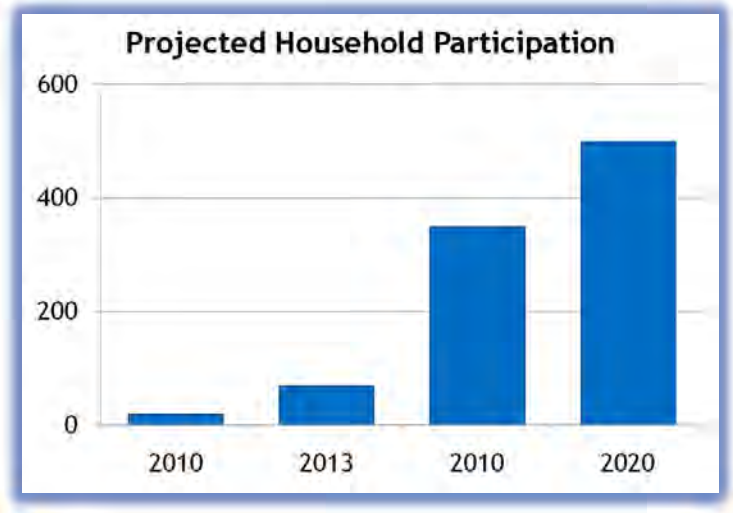
PAST ACTIONS & ACHIEVEMENTS:

None.

CURRENT STATUS:

The City has no organized program to promote composting. Rates of household composting are not measured, but are assumed to be low.

Composting for the typical household requires a roughly 240 liter composting bin or a compost heap between 9 and 25 cubic feet in volume, depending on household and property size.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Establish a community-staff committee to assemble information about household composting.

(2) Disseminate information through the City website, local access cable television, and community partners such as neighborhood associations.

(3) Establish and encourage the use of a web-based register of residents who choose to compost, as a means of better tracking participation.

(4) Consider the bulk purchase of compost bins with a GreeNR seal, for public distribution at-cost. As an alternative, partner with the County to better advertise existing County-sponsored compost bins to New Rochelle residents.

(5) Encourage local landscapers and gardeners to provide composting as an option to customers.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Maintain educational efforts and registration.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Maintain educational efforts and registration.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Households Registered in Composting Program:	0	50	350	500
Diversion from Waste Stream (Tons):	0	25	175	250

Primary Departmental Responsibility: Public Works, Sustainability, Marketing

Potential Partners: County, Neighborhoods, Volunteers, Sheldrake Environmental Center, Local Landscapers & Gardeners

Potential Municipal Costs: Minimal

Potential Outside Funding Sources: NA

Initiative 2.15:

Regional Composting Study

DESCRIPTION:

Consider the creation of a regional composting site that could be utilized by New Rochelle and other nearby municipalities.

GOAL:

Reduce the energy expenditures, greenhouse gas emissions, and public costs associated with municipal organic waste disposal. Encourage sustainable gardening practices by facilitating access to compost.

Transporting New Rochelle's organic waste requires an estimated 200,000 gallons of diesel fuel per year.

PAST ACTIONS & ACHIEVEMENTS:

None.

CURRENT STATUS:

There is no regional composting site. New Rochelle participates in a County leaf and yard waste disposal program, involving the collection of local organic waste by City crews, followed by the transfer of waste to County-operated 100-yard tractor-trailers that transport the waste to a variety of disposal sites, primarily in upstate New York. In 2009, New Rochelle disposed of 10,483 tons of leaves and 5,433 tons of yard waste, at a cost of $40 per ton or $636,640, with $25 per ton or $397,900 subsidized by the County Refuse District, leaving a net City cost of $15 per ton or $238,740. The transport of New Rochelle leaves and yard waste to disposal sites is estimated to consume approximately 200,000 gallons of diesel fuel annually.* In addition, the City currently lacks a permanent yard waste transfer station.

* 50 trips per day, at 200 miles round-trip, for 40 days per year, at 2 miles per gallon.

A composting site for New Rochelle's leaves and yard waste would require approximately 12 acres. A regional site would require more land, depending upon the scope of participation. Compost can be sold for approximately $40 per cubic yard.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Examine the practical challenges associated with creating a regional composting site, including the scale and availability of land, and the costs of both initial establishment and ongoing maintenance and operations. Invite participation from neighboring communities in exploring options. Determine whether the benefits of proceeding outweigh the costs and, if so, identify specific preferred and alternative sites. Include the potential cost of a permanent yard waste transfer site in such an analysis.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) If deemed practical and desirable, establish a regional composting center and reconfigure organic waste disposal procedures accordingly.

(2) Establish a process for the sale of compost to the public.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Maintain operation of regional composting center.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Diesel Fuel for Transport (Thousands of Gallons):	200	200	10	10
CO_2e Emissions from Transport (Metric Tons):	2,018	2,018	101	101

Primary Departmental Responsibility: Public Works

Potential Partners: Neighboring Municipalities

Potential Municipal Costs: Land Acquisition and/or Value of Parkland Utilized, Initial Construction, Ongoing Operation

Potential Outside Funding Sources: Contributions from Other Municipalities, Sale of Compost to the Public, Public-Private Partnership for Ownership and/or Operation

Action Plan – Part 3:

Ecology, Biodiversity and Public Health

Preserve New Rochelle's natural beauty, stabilize vulnerable habitats, improve air and water quality, limit or reverse the incidence of flooding and deforestation, and promote beneficial lifestyles and practices in order to achieve a healthy ecosystem, healthy neighborhoods, and healthy families.

GOALS BY 2030:

- **Preserve or expand the amount of land in a substantially natural state.**
- **Achieve a net increase of 10,000 trees on public property and rights-of-way.**
- **Reduce run-off from a one-inch rain event by 25 million gallons.**
- **Provide universal access to healthful nutrition options.**
- Restore the water quality and retention capacity of all City-owned lakes and streams.
- Reduce by 75% the number of annual beach closures at Hudson Park.
- Restore 104 acres of brown fields to environmental health.
- Increase community-wide permeable surface by 50 acres.
- Establish a regional storm water management district.
- Create at least 5 acres of rain gardens, including 50 on public property.
- Encourage at least 50% of single and two family homeowners to employ sustainable lawn and garden care practices.
- Site at least one designated walking route within or close to all neighborhoods.
- Increase the number of community gardening plots to 200.

An estimated 1,248 acres, less than 20% of New Rochelle's mainland area, are in a substantially natural state, with much of this area comprised of small patches of land at the perimeter of residential properties.

greeNR

Initiative 3.16:

Sound, Lake & Stream Water Quality

DESCRIPTION:

Undertake comprehensive capital improvements and encourage best practices to improve the Long Island Sound ecosystem and restore the health, beauty, retention capacity and recreational value of local inland water bodies.

GOAL:

Restore all of New Rochelle's estuaries, City-owned lakes and major streams to an aesthetically pleasing and ecologically healthy state, while also enhancing their natural flood control function and reducing the contribution of non-point source pollution to Long Island Sound. Reduce by 75% the number of water quality closures at Hudson Park Beach.

Beechmont Lake is one of several inland water bodies suffering from decades of silt deposition.

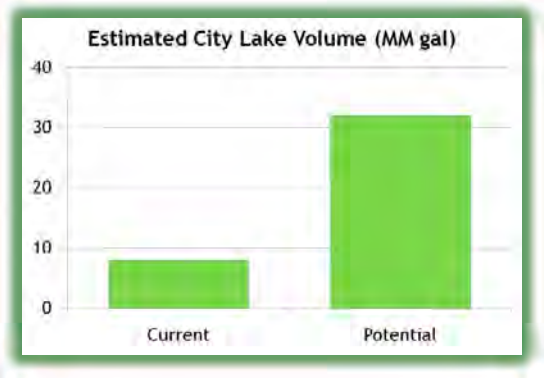
PAST ACTIONS & ACHIEVEMENTS:

New Rochelle has been an active partner in the Watershed Advisory Committee process for lower Long Island Sound watersheds and recently celebrated the completion of significant improvements, undertaken by the County, on the Sheldrake River, at Carpenter's Pond and at Dickerman's Pond. The City has installed aerators at Glenwood Lake, expanded Glenwood Lake Park, and prevented inappropriate development at Glenwood Lake's perimeter. Habitat improvements to sites along Stephenson Brook were implemented at New Rochelle High School, Paine Lake and Wykagyl Country Club. Along the estuarine shore of Long Island Sound, a portion of the salt marsh was restored at Five Islands Park. Storm water treatment units were installed to handle parking lot run-off at Glen Island Park.

CURRENT STATUS:

New Rochelle is located within four watersheds (from west to east: Hutchinson River, Burling Brook, Stephenson Brook, and Sheldrake River, as well as a fifth, Troublesome Brook, now entirely underground) which drain to Long Island Sound. The drainage from New Rochelle passes through five significant City-owned lakes or ponds and through several streams, all in varying states of distress. Challenges include scouring and erosion of stream banks, reduced depth, storage and carrying capacity resulting from accumulated silt, pollutants generated by point and non-point sources, proliferation of invasive species, seasonal algae blooms, and degraded or poorly maintained freshwater and marine shorelines. In addition to their watershed functions, New Rochelle's lakes also serve as important neighborhood amenities and focal points for recreational activity. Some past improvement efforts have failed. For example, measures to clear the fore-bay of Beechmont Lake in order to limit additional silt accumulation have achieved minimal results, lilies introduced as a water quality enhancement measure at Paine Lake have proliferated beyond intended boundaries because of diminished lake depth, and flood control efforts at the Hutchinson River has been impeded by private property, inter-municipal, and fiscal challenges. Hudson Park Beach was closed 39 times in 2009 because of water-borne bacteria.

City-owned lakes within New Rochelle have a natural aggregate water storage capacity estimated at 32 million gallons. Decades of silt deposition, however, have greatly reduced the depth of most lakes, and their current storage capacity may be as low as 8 million gallons.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Revisit the Watershed Advisory Committee Plans of 1997 and update the inventory of inland water bodies, including measurements of depth and carrying capacity, water quality, conditions of surrounding parkland, and usage patterns, if relevant. Utilize student and neighborhood volunteers to the maximum degree possible for field observations and testing.

(2) Identify sources of point and non-point source pollution that impact water quality within the watersheds of each water body.

(3) Create a multi-year plan for improvements, similar to the City's long-term capital budget, with recommendations for each water body. Recommended actions may include dredging, shoreline stabilization, riparian zone plantings, inlet and outlet modifications, etc.

(4) Institute an annual maintenance program for tributaries leading to lakes. Assign priorities based on objective criteria such as potential for flood mitigation, surrounding population density, and potential for access to outside funding.

(5) Determine the practical, financial, and ecological feasibility of installing draw-down valves at each lake to facilitate managed lake-level reduction in advance of storms.

(6) Identify potential funding sources for water body improvements.

Non-point source pollution is the principal threat to water quality in Long Island Sound. Even minor rain events of less than one inch can generate run-off with high concentrations of pollutants.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Begin phased implementation of water body improvements, as funding permits.

(2) Adopt requirements or incentives and/or mount educational campaigns to limit sources of point and non-point pollution.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Complete phased implementation of water body improvements.

(2) Establish and implement ongoing maintenance policy to stabilize water body conditions and health.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Lakes Restored:	1	1	3	5
Estimated City Lake Water Volume (MG):	8.0	8.0	20.0	32.0
Hudson Park Beach Closures (2009 Baseline):	39	30	20	10
Lake Storm Water Retention in One-Inch Storm*:	0.0	6.0	15.0	24.0

* Flood control capacity assumes75% draw-down prior to storm event.

Primary Departmental Responsibility: Public Works, Parks & Recreation

Potential Partners: Neighborhoods, Sheldrake Environmental Center, School District, County, Upstream & Downstream Municipalities

Potential Municipal Costs: Dredging and Disposal, Shoreline Stabilization, Parks Improvement and Maintenance, Aquatic Plantings

Potential Outside Funding Sources: Federal, State, County, Public Voluntary

Initiative 3.17:

Habitat & Open Space Preservation

DESCRIPTION:

Utilize diverse land use tools to protect and preserve New Rochelle's remaining natural habitats, including wooded areas, freshwater wetlands and coastal wetlands, and to reclaim contaminated properties for public use and benefit. Utilize protective zoning, open space and setback requirements, and other land use tools to prevent or limit the loss of natural habitats. To the extent practical, acquire sensitive ecological areas and/or apply conservation easements to ensure preservation. Do not foreclose entirely on the use of open space for development when such development is consistent with other sustainability goals, but ensure that open space conservation is given appropriate weight in all land use decisions.

GOAL:

Achieve no net loss of land in a substantially natural state on New Rochelle's mainland. Establish functional greenbelts to facilitate the movement of migratory wildlife. Preserve or enhance the natural beauty of our parks, neighborhoods, and shoreline. Support passive recreational opportunities for residents. Reduce incidence and severity of flooding by expanding permeable surface.

Ward Acres is New Rochelle's largest park and one of several wooded areas within our community.

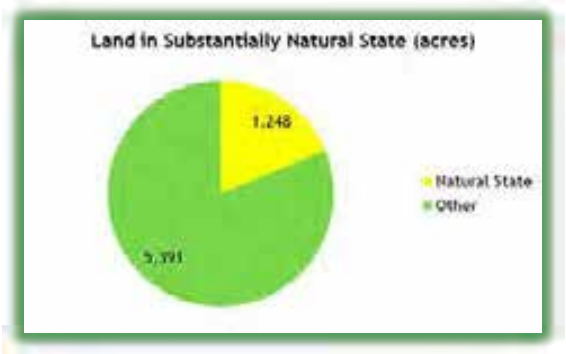
PAST ACTIONS & ACHIEVEMENTS:

New Rochelle has created a protective Recreation and Open Space zone and then applied it to 795 acres under both public and private ownership. Further, the City has increased minimum lot sizes in many single-family zones to prevent subdivision and thereby preserve a higher percentage of undeveloped space. New Rochelle has worked with the Westchester Land Trust for the perpetual conservation of four sensitive properties: the Wykagyl Wetlands, the "Bird Sanctuary" on Davenport Neck, the Pryor Manor Marsh Conservancy, and a large private property on Wilmot Road. New Rochelle and the County together restored coastal wetlands at Five Islands Park. In addition, the City has expended public funds to secure additional parkland and avert undesirable development at Glenwood Lake. Lastly, New Rochelle disallows construction on wetlands or within a 50 foot buffer of wetlands.

CURRENT STATUS:

1,073 acres or 16.2% of New Rochelle's mainland area features open space or recreation. A similar and overlapping amount of land, including both passive recreational areas and portions of residential areas, is estimated to be in a substantially natural state: 1,248 acres or 18.8% of New Rochelle mainland area. The City has not articulated a comprehensive habitat and open space preservation policy, and the community has lost a number of prominent open space assets in recent years, such as the former Cherry Lawn driving range.

Westchester County is home to more than 300 species of birds, including several that are rare or threatened.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Inventory and map New Rochelle's mainland open space assets, under both public and private ownership, with identification of areas in a substantially natural state or having sensitive ecological characteristics. To the extent practical, also identify and map continuous or semi-continuous greenbelts. Determine which sites are most at-risk of loss.

(2) Determine which sites are suitable for ROS zoning and apply.

(3) Determine which sites are suitable for conservation easements. Work with the Westchester Land Trust to encourage the use of such easements by private property owners.

(4) Review New Rochelle's zoning code for possible amendments to enhance the protection of greenbelts and sensitive habitats, possibly using the model already in place with respect to wetland preservation and setbacks.

(5) Consider enhancing local wetland setback requirements by applying protections to smaller wetland areas.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) If resources permit, consider the public acquisition of sensitive properties thought to have no other viable mechanism of preservation.

(2) Restore the Echo Bay waterfront from its currently underutilized and contaminated state and ensure that redevelopment plans at Echo Bay include a significant public open space component.

(3) Pursue the environmental remediation of Davids Island, in the context of sustainable development with a significant public open space component.

(4) Pursue partnerships and secure revenue from public and private sources aimed at conservation and biodiversity.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue to monitor open space, habitat, and ecological assets to assess and combat threats.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Land Zoned ROS (Acres):	795	795	810	830
Estimated Mainland in a Natural State (Acres):	1,248	1,248	1,248	1,248
Habitat/Greenbelt Protection Ordinance Adopted:	0	1	1	1
Brownfields Restored (Acres)*:	0	0	26	104

* Echo Bay & Davids Island

Primary Departmental Responsibility: Development

Potential Partners: County, Westchester Land Trust, Neighborhoods, Park Users and Advocates

Potential Municipal Costs: Possible Land Acquisition, Possible Environmental Remediation

Potential Outside Funding Sources: Public-Private Development Partnerships, Federal, State, County, Westchester Land Trust, Public Voluntary

Initiative 3.18:

Urban Forestry

DESCRIPTION:

Increase the number of trees within New Rochelle through preservation requirements, enhanced maintenance, and an expanded planting program.

GOAL:

Achieve a net increase of 10,000 trees on public property, while also encouraging tree planting and preservation on private property. Prevent flooding and erosion, enhance the aesthetics of both residential and commercial areas, and lower greenhouse gas levels through absorption of CO_2 and reduction of surface temperatures from shading.

There are almost 30,000 trees on public property in New Rochelle, like this one in Hudson Park.

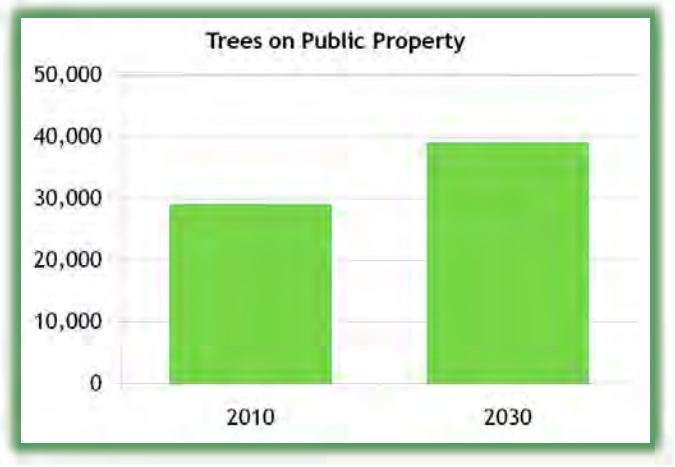
PAST ACTIONS & ACHIEVEMENTS:

The City has adopted a tree preservation and replacement law that governs tree removal on private property larger than one acre and on properties that are the subject of site plan or subdivision approval. Trees removed from such properties must either be replaced with saplings of equal aggregate diameter at breast height or through contributions to a City-administered tree fund. In addition, the City requires the planting of saplings in conjunction with the expansion of impermeable surface area.

CURRENT STATUS:

There are roughly 400,000 trees within the City of New Rochelle with an overall canopy covering approximately 18% of the City's land area. An estimated 29,000 trees are under City ownership. The City plants approximately 250 public trees annually, but also loses the same number, achieving no net increase. There are no comparable statistics for tree population growth or loss on private property.

A single tree can absorb as much as 11 metric tons of CO_2 during the course of its life, reduce the urban heat island effect by lowering peak summer temperatures from 2 to 9 degrees Fahrenheit, and assist with flood mitigation by intercepting and absorbing approximately 25 gallons of rain water.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Maintain current levels of public tree planting.

(2) Create a comprehensive inventory of sites awaiting and/or suitable for tree planting.

(3) Launch a campaign for soliciting private donations to City tree fund, modeled on New York City's drive for 1 million trees.

(4) Evaluate City planning and construction regulations to ensure that standards for new or renovated hard-scape, such as parking areas, require the maximum practical introduction of trees.

(5) As a means of reducing long-term maintenance costs, introduce and standardize the practice of situating new street trees to minimize future sidewalk damage, or of planting street trees on private property with property-owner consent.

(6) Consider reasonable reductions in the minimum size of properties covered by the local tree ordinance, including flexible standards to address individual circumstances.

(7) Evaluate tree selections to ensure suitability for intended locations and to maximize the use of native tree species, including New Rochelle native varieties such as the Lawton Blackberry and the Parsonage Pear.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Expand the City tree-planting program, ramping up to a peak annual rate of 1,500 new plantings per year, or a net increase of 1,250 trees per year.

(2) Develop a program for encouraging the planting of trees on private property.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Gradually scale-back the City tree-planting program to a maintenance level of 250 new trees per year, timed to achieve the 10,000 tree target by 2030.

(2) Continue promotion of private tree planting.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Public Trees Planted Annually:	250	250	1,500	250
Net Annual Public Tree Increase/Loss:	0	0	1,250	0
Net Increase in Public Trees:	0	0	3,000	10,000
Carbon Sink of New Trees (Thousands of Metric Tons):	0	0	33	111
Increase in Tree Canopy (Acres):	0	0	67	134
Storm Water Absorption in One-Inch Storm (TG)*:	0	0	75	250

* Based on 25 Gallons per Tree.

Primary Departmental Responsibility: Public Works, Development, Sustainability, Marketing

Potential Partners: Homeowners, Neighborhoods, Gardeners, Garden and Tree Supply Businesses

Potential Municipal Costs: Sapling Purchase and Planting at Approximately $250 per Tree, Ongoing Tree Maintenance and Related Sidewalk Maintenance

Potential Outside Funding Sources: Developer Mandate, Public Mandate, Public Voluntary

Initiative 3.19:

Flood Control & Mitigation

DESCRIPTION:

Reduce the incidence and severity of local flooding by controlling storm water run-off, expanding permeable surfaces, repairing existing infrastructure, and utilizing new green infrastructure models.

GOAL:

Reduce storm water run-off from a one-inch rain event by 25 million gallons.* Achieve no net run-off from new development and construction. Achieve a net increase in community-wide permeable surface of at least 50 acres.

* Includes storm water retention and absorption estimates from Initiatives 3.16 (24 million gallons), 3.18 (250,000 gallons), 3.19 (339,000 gallons), and 3.20 (27,000 gallons). Based on 27,514 gallon acre-inch volume, with absorption rates as follows: Impermeable Surface (0.0%), Permeable Paver (25.0%), Lawn (60.0%), Rain Garden (80.0%).

Flooding is already a chronic challenge in many neighborhoods, and severe weather is expected to become more frequent

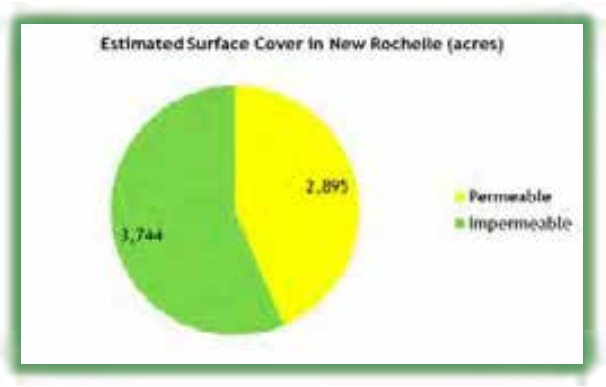
PAST ACTIONS & ACHIEVEMENTS:

The City of New Rochelle has taken a variety of actions either aimed at or having the ancillary benefit of controlling flooding. These include: applying a Recreation and Open Space Zone to 795 acres of land, adopting stringent storm water and pollution control standards for development to ensure no net increase in run-off, adopting a tree ordinance to preserve trees on private property and to require tree planting in conjunction with impermeable surface expansion, site-specific capital improvements to relieve flood conditions, and adoption of a catch basin cleaning program that addresses all basins on a 3-year rotation, with more frequent attention to catch basins in flood-prone areas. In addition, following extensive community flooding in the Spring of 2007, the City conducted an investigation of the most heavily impacted areas and produced preliminary designs for infrastructure enhancement in the Halcyon Park neighborhood and along the Hutchinson River. New Rochelle has taken a lead role in encouraging formation of a Sound Shore Stormwater Management District to fund capital and operation costs on a regional basis. Finally, New Rochelle has fully implemented the Phase II storm water management program as required by EPA. The six program requirements of this Phase II program are: public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site runoff control, post-construction runoff control, and reducing pollutant runoff from municipal operations.

CURRENT STATUS:

New Rochelle has approximately 87 miles of storm drains and 5,471 catch basins. Flooding is a serious threat to a significant portion of the New Rochelle community, as a result of topography, inadequate storm drainage, or diminished carrying capacity of natural waterways. At present, local funds are not sufficient to accomplish planned infrastructure improvements. Catch basin cleaning has been scaled back, although basins in flood-prone areas continue to receive attention. Approximately 3,474 acres, or 56.4% of New Rochelle's surface, are estimated to be impermeable. New Rochelle's inland water bodies have lost much of their storage and carrying capacity because of decades of silt deposition.

An acre of impervious surface generates 27,154 gallons of run-off during a one-inch rainstorm. The total run-off from all of New Rochelle's impermeable surfaces in a one-inch rainstorm is approximately 101 million gallons, with additional run-off generated by partially permeable surfaces.



RECOMMENDED ACTIONS

(See Also Initiatives 2.13 Water Use & Wastewater Reduction, 3.16 Sound, Lake & Stream Water Quality, 3.17 Habitat & Open Space Preservation, 3.20 Sustainable Landscaping on Public Grounds, and 3.21 Green Garden & Lawn Care. Recommendations Not Repeated Here.)

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Aggressively seek grants to fund repair and upgrade of identified deficient storm water infrastructure. Commence repairs as resources permit.

(2) Continue to explore the concept of an inter-municipal assessment district for improvement of the Hutchinson River and implement, if feasible.

(3) Work with the County and other municipalities to complete the formation of a regional storm water management district.

(4) Examine the local building and zoning codes with the goal of removing potential impediments to and creating incentives and/or requirements for the use of permeable surfaces, such as permeable pavers and pavements. Adopt any recommended changes.

(5) Consider expanding Storm Water Pollution Prevention Plan (SWPPP) requirements attached to new land development to encompass runoff reduction or elimination.

(6) In the context of the GreeNR Sustainability Awareness campaign, share information about permeable surface options and benefits, with the goal of encouraging a transition to permeable surfaces in conjunction with the renovation of private driveways, parking lots, and other hardscapes.

(7) Research the benefits and potential use of green infrastructure, such as bioswales, rain gardens, green roofs, and permeable pavements and pavers. If deemed cost-effective and beneficial, then incorporate green infrastructure into municipal road and construction projects.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Complete the upgrade of identified infrastructure deficiencies, if resources permit.

(2) Commence operation of a regional storm water management district.

(3) Implement approved green infrastructure standards and design features in the context of municipal road and construction projects.

(4) Continue evaluation of the local building and zoning code for possible amendment, based on evolving materials, practices, or technologies.

(5) Continue educational efforts aimed at conversion to permeable surfaces on private property.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue evaluation of the local building and zoning code for possible amendment, based on evolving materials, practices, or technologies.

(2) Continue educational efforts aimed at conversion to permeable surfaces on private property.

(3) Complete lake and water body restoration referenced in Initiative 3.16.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Storm Water Management District Formed:	0	1	1	1
Permeable Surface Area (Acres):	2,895	2,896	2,910	2,945
Additional Water Absorbed in One-Inch Storm (TG):	0	7	102	339

Primary Departmental Responsibility: Public Works, Development

Potential Partners: County, Sound Shore Municipalities, EPA Long Island Sound Study, LISWIC, Sustainable Landscaping & Design Experts, Permeable Surface Manufacturers and Sellers

Potential Municipal Costs: Infrastructure Improvement and Repair, Creation of Green Landscaping Features, Restoration of Inland Water Bodies

Potential Outside Funding Sources: Federal, State, County, Storm Water Management District, Public Mandate

Initiative 3.20:

Rain Gardens

DESCRIPTION:

Establish rain gardens at appropriate municipally-owned locations, including parks and playing fields, traffic islands and medians, and grounds of public buildings, while also encouraging the introduction of rain gardens on private property.

GOAL:

Create at least 5 acres of rain gardens throughout New Rochelle, including at least 50 rain gardens on municipal property. Absorb approximately 27,000 gallons of water that would otherwise produce flooding or sanitary system inflow and infiltration, and also filter pollutants that would otherwise contribute to non-point source contamination of water bodies. Enhance the beauty and aesthetics of New Rochelle. Reduce municipal maintenance costs.

The City, School District and PTA teamed up to establish a rain garden at Ward School.

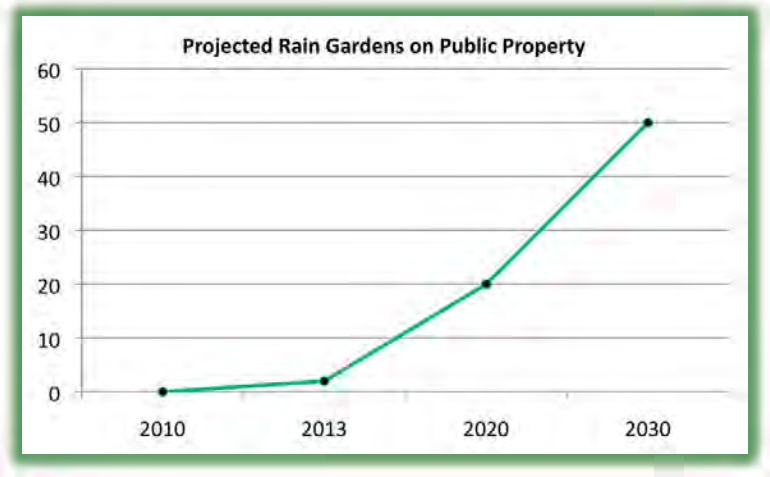
PAST ACTIONS & ACHIEVEMENTS:

The City has partnered with the School District to establish one demonstration rain garden at Ward School. The City's website provides instructions for building rain gardens.

CURRENT STATUS:

The City does not have a coordinated program or internal guidelines to promote sustainable landscaping practices on public or private property. There are significant public lands potentially suitable for rain gardens, including (a) approximately 124 City-owned traffic islands, containing a total of roughly 340,000 square feet of land, 45 of which have been "adopted" by individuals or associations, (b) various City parks, and (c) an additional 2.5 million square feet under City maintenance, such as the grounds of municipal buildings, median strips, etc. The annual cost of maintaining these grounds is roughly $60,000.

The typical rain garden can reduce run-off by half compared to a lawn of equivalent size and requires only limited weeding and pruning maintenance.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Develop internal guidelines for municipal rain gardens, identifying the methods and plantings suitable for different categories of location. Inventory public land to identify locations suitable for sustainable landscape features, then prioritize locations based on public visibility, existing conditions, and flood control potential.

(2) Determine whether municipal plantings can be accomplished with in-house resources or if outside contractors are required.

(3) Modify the "Adopt an Island" program to encourage or require rain gardens in suitable locations.

(4) Solicit in-kind contribution of expertise, labor, and/or materials from local gardeners and gardening centers, gardening clubs, and student organizations.

(5) Begin to establish municipal rain gardens, as resources permit, commencing with prioritized locations.

(6) Include information about rain garden design and benefits in all appropriate GreeNR promotional and educational materials. Work with neighborhood associations, gardening groups, and other community organizations to stimulate public awareness of and enthusiasm for rain garden creation on private property.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Continue to introduce rain gardens on public lands, as resources permit.

(2) Continue to encourage rain garden introduction on private property, and create a mechanism to register rain gardens and measure their aggregate size.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue to introduce rain gardens on public lands, as resources permit.

(2) Continue to encourage rain garden introduction on private property.

PROGRESS TRACK

Year:	2011	2014	2020	2030
New Rain Gardens on Public Property:	0	2	20	50
New Rain Garden Acreage City-Wide:	0.0	0.5	2.0	5.0
Additional Water Absorbed in One-Inch Storm (TG)*:	0.0	2.7	10.9	27.2

* Based on 60% Absorption for Lawn vs. 80% Absorption for Rain Garden.

Primary Departmental Responsibility: Public Works, Parks & Recreation, Sustainability

Potential Partners: Gardeners, Gardening Centers, Gardening Clubs, Neighborhoods, Local Businesses, Athletic Leagues, School District, Private Schools

Potential Municipal Costs: Labor and Materials for New Landscape Features, with Rain Gardens Estimated at $25 per Square Foot (Partially Offset by Reduced Maintenance Costs and Potentially Offset by Reduced Storm Water and Sanitary Sewer Infrastructure Needs)

Potential Outside Funding Sources: Donation of or Discount on Plantings from Local Gardening Centers, In-Kind Donation of Labor from Local Gardeners or Gardening Clubs, Adoption of Islands by Neighborhood Associations, Private Voluntary, Grants

Initiative 3.21:

Green Lawn & Garden Care

DESCRIPTION:

Encourage and facilitate sustainable garden and lawn care practices through enhanced education about low-water designs, alternatives to chemical fertilizers and herbicides, native species, and edible gardens. Consider amendments to property maintenance codes to remove impediments to sustainable landscaping. Set a positive example of sustainable grounds maintenance on municipal land.

GOAL:

Encourage at least 50% of New Rochelle's single and two-family homeowners to employ sustainable lawn and garden care practices. Improve water quality in lakes, streams, and Long Island Sound through reduction in non-source-point pollution. Preserve biodiversity and native ecosystems. Promote public health by discouraging the use of toxins. Contribute to a reduction in per capita water use of 24 gallons per day or 15%.

Native plants are attractive and require less water and maintenance.

PAST ACTIONS & ACHIEVEMENTS:

Westchester County recently enacted legislation to curb the misuse of lawn fertilizers containing phosphorous.

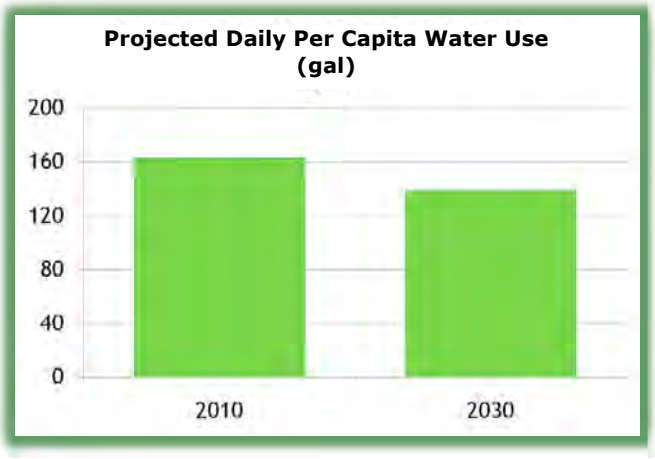
CURRENT STATUS:

There are no local programs aimed at promoting sustainable lawn care. Chemical pesticides and artificial irrigation remain in widespread use. Lawn fertilizers contribute to non-point source pollution in local streams and lakes and in Long Island Sound.

Lawn irrigation can account for as much as half of a household's annual water consumption.*.

.

* 660 gallons of water for one-inch application to 1,000 square feet. Estimate 5,000 square feet per irrigating household, at .25 inches of water per application, 100 days per year = 82,500 gallons, compared with per household average total consumption of 159,870 gallons.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Research sustainable lawn and garden care alternatives and develop guidelines appropriate for a northeastern suburban setting.

(2) Review the New Rochelle property maintenance code to identify impediments to sustainable lawn care practices and to recommend amendments.

(3) Post sustainable garden and lawn care guidelines on-line and distribute through neighborhood associations and gardening centers. Include information about organic gardening, native species, rain gardens, and "Victory Gardens."

(4) Determine whether local gardening centers are able to offer coordinated discounts on native plants species for either discrete promotional periods or on an ongoing basis.

(5) Consider creating a recognition program to promote public awareness and celebrate successful examples, with options including an annual award for best sustainable landscaping, or a tasteful, standardized "GreeNR Lawn" sign that could be posted on properties that opt to employ guidelines.

(6) Adopt recommended practices for maintenance and landscaping of municipal property.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Update lawn and garden care guidelines as needed.

(2) Continue to promote sustainable garden and lawn care through City publications and web presence, community partners, and sponsorship of public seminars.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Update garden and lawn care guidelines as needed.

(2) Continue to promote sustainable garden and lawn care through City publications and web presence, community partners, and sponsorship of public seminars.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Sustainable Lawn Care Guidelines Produced:	0	1	1	1
Households Using Sustainable Lawn Care Practices:	1,000	1,500	3,000	4,000
Community Daily Per Capita Water Use (Gallons)*	163	161	150	139

* See also Initiative 2.13

Primary Departmental Responsibility: Sustainability, Buildings, Marketing, Public Works, Parks & Recreation

Potential Partners: Neighborhoods, Gardening Clubs, Gardening Centers, Gardeners

Potential Municipal Costs: None

Potential Outside Funding Sources: NA

Initiative 3.22:

Idling Prevention

DESCRIPTION:

Discourage voluntary motor vehicle idling through enhanced public education, stricter enforcement, and promulgation of work rules, with a special focus on the parents of school-age children and on drivers in the public workforce.

GOAL:

Improve air quality and reduce wasteful fuel consumption by achieving better compliance with anti-idling restrictions

The School District has posted effective messages at drop-off and pick-up locations.

PAST ACTIONS & ACHIEVEMENTS:

Westchester County has adopted a three-minute limit on voluntary vehicle idling, exempting hybrid and electric vehicles. New Rochelle has its own five-minute limit on vehicle idling. Anti-idling messages are posted at pick-up and drop-off locations at New Rochelle public schools.

CURRENT STATUS:

Enforcement of anti-idling restrictions is nonexistent, with no violation notices issued within New Rochelle in 2009 or 2010.

Just ten seconds of idling uses more gasoline than shutting off and restarting a car.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Bring New Rochelle's anti-idling law into conformity with Westchester County's to establish a clear, uniform standard.

(2) Coordinate with the New Rochelle City School District's Sustainable Schools Coalition to develop and implement a program to better educate parents on the costs and negative environmental impacts of idling.

(3) Promulgate and supervise the enforcement of strict anti-idling work rules for the operators of municipal vehicles, accounting for varied operator responsibilities.

(4) Include anti-idling messages and information in appropriate public education components of GreeNR.

(5) Commence consistent police enforcement of anti-idling restrictions.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Continue to renew education campaigns for each successive cohort of school parents.

(2) Commence similar City-School partnership with local private and religious schools.

(3) Maintain anti-idling enforcement efforts.

(4) In conjunction with project-related traffic analyses or signal installation and timing, strive to minimize traffic stoppages that result in idling at intersections.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Maintain anti-idling enforcement efforts.

(2) Evaluate anti-idling restrictions and penalties for possible amendment.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Municipal Idling Work Rules Established	0	1	1	1
Annual Idling Violation Notices Issued:	0	100	25	10

Primary Departmental Responsibility: Police, Public Works, Sustainability

Potential Partners: Sustainable Schools Coalition

Potential Municipal Costs: Enforcement (Offset by Fines)

Potential Outside Funding Sources: None

Initiative 3.23:

GreenNR Walking Guides

DESCRIPTION:

Create GreeNR Walking Guides featuring maps, suggested routes, distances, challenge ratings, and notes on natural, architectural, historic, and cultural points of interest, as well as health benefits, such as calorie-burn counts. Make Guides available as downloadable and printable documents on the City's website and as hard copies available through the Department of Parks & Recreation.

GOAL:

Encourage at least 30 registered walking groups to collectively walk 9,000 person-miles per year, burning an annual total of 90,000 calories. Strive to site at least one walking route within or close to all neighborhoods in New Rochelle. Promote walking as a means of enhancing public health and reducing vehicle-miles traveled. Increase awareness and use of recreational and cultural resources. Assist businesses by encouraging pedestrian traffic in walkable commercial areas.

Walking with a group brings both health and social benefits.

PAST ACTIONS & ACHIEVEMENTS:

Materials for self-guided walking tours of the downtown area have been produced, but are not in regular use. Several local schools have supported "Walk to School" days and activities.

CURRENT STATUS:

There has been no comprehensive, community-wide effort to promote walking.

Walking one mile burns approximately 100 calories.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Establish committee to identify and plan walking routes, points of interest, distances, and health benefits. Participants in this process may include the Department of Parks and Recreation, the City Historian, the Traffic Advisory Board, the New Rochelle Council on the Arts, and the Historic & Landmarks Review Board.

(2) Identify internal or external capacity to graphically design Walking Guides.

(3) Post web-based Walking Guides.

(4) Encourage associations of neighbors, friends, congregants, coworkers, etc. to form walking groups for recreational, social, health, and mobility purposes, and establish a mechanism for registering walk group composition and activities.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Print hard copies of Walking Guides and develop distribution strategy utilizing neighborhood associations, community groups, athletic leagues, and public events.

(2) Develop and implement programming based on Walking Guides, such as family walk challenges, additional walk-to-school days, downtown pedestrian events, scavenger hunts, and site checklists. To the extent possible, link to national and regional walking initiatives and events.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Update Walking Guides and related programming as necessary.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Walking Routes Designated:	0	6	10	14
Walking Miles Designated:	0	9	15	21
Walking Groups Established & Registered:	0	6	10	30
Annual Person-Miles Walked*:	0	2,400	4,000	12,000
Annual Calories Burned (Thousands)*:	0	240	400	1,200

* Based on 30 walking groups, with 10 members each, with an average weekly participation rate of 50%, walking 2 miles per week, for 39 weeks per year, then rounded-up and multiplied by 100 calories per person-mile.

Primary Departmental Responsibility: Marketing, Parks & Recreation

Potential Partners: Neighborhoods, School District, Private Schools, County, Youth Bureau, Office of the Aging, Regional Walking Clubs & Associations, Sound Shore Medical Center, New Ro Runners

Potential Municipal Costs: Minimal

Potential Outside Funding Sources: Pro-Bono Design Services, Sponsorships

Initiative 3.24:

Local Agriculture & Fresh Food

DESCRIPTION:

Improve access to fresh and nutritious produce through expansion of community gardening programs, enhancement of the New Rochelle Farmer's Market, establishment of new food service options for commuters and other target populations, and potential introduction of new agricultural methods, such as rooftop, hydroponic or aquaponic farms.

GOAL:

Increase the number of community garden plots to 200. Increase participation in the New Rochelle Farmers Market to at least 12 vendors. Improve public health by promoting balanced diets rich in fresh fruits and vegetables. Raise awareness of and participation in sustainable agriculture. Reduce costs and energy expenditures associated with food transport.

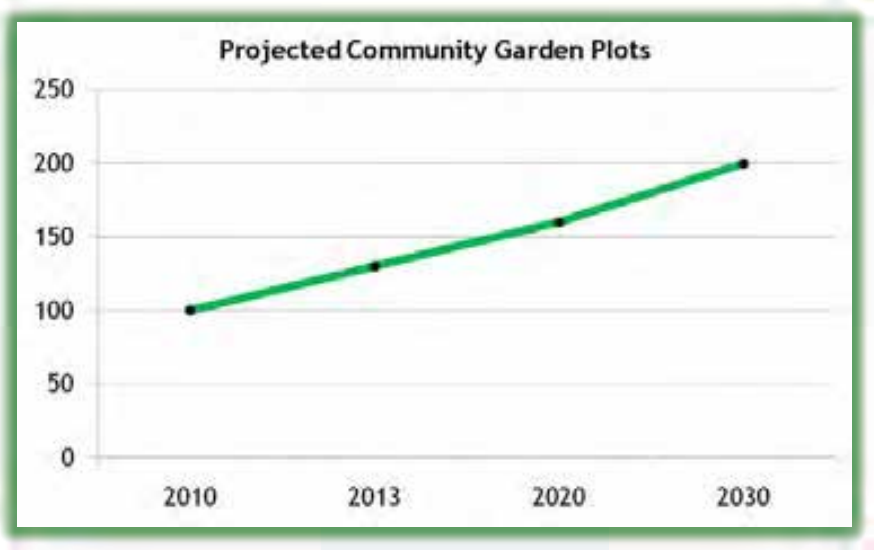
The Community Garden at Ward Acres has brought together dozens of enthusiastic volunteers.

PAST ACTIONS & ACHIEVEMENTS:

A successful volunteer-driven community garden has been established at Ward Acres, starting with 40 plots in 2009 and expanding to 88 plots in 2010. New Rochelle has the oldest continuously operating Farmers Market in Westchester County.

CURRENT STATUS:

The New Rochelle Farmers Market, recently reorganized under the auspices of Community Markets, now has a permanent and visible home at Library Green.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Work with Community Markets to significantly increase the number of vendors and range of products at the market. Link Market days to downtown promotional activities and cultural events. Explore opportunities for local gardeners to sell homegrown produce through the Farmers Market.

(2) Evaluate interest in and availability of land for additional community gardens. In land analysis, include public property, lands owned by not-for-profit institutions, if interest exists in donation, and private property.

(3) Review and modify the New Rochelle Building Code to evaluate and, to the extent appropriate, eliminate impediments to new agricultural methods, such as rooftop, hydroponic or aquaponic farms.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) If land and sufficient volunteer support exist, then establish additional community gardens, modeled on the existing fee-for-plot structure at Ward Acres. Pair seasoned gardeners with teams of beginners.

(2) Continue to publicize and improve the New Rochelle Farmers Market.

(3) Promote "Victory Gardens" on private property. (See Initiative 3.21)

(4) Evaluate interest in and feasibility of new food service options at the New Rochelle Transit Center, including possibilities such as a produce cart, a Farmers Market stand, or a produce-ordering service, enabling commuters to submit produce orders in the morning for pickup in the evening. If deemed practical, then implement.

(5) Market New Rochelle's openness to new agricultural models with the goal of attracting at least one operator to an appropriate location.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue to support and, as warranted, expand community garden opportunities.

(2) Continue to publicize and improve the New Rochelle Farmers Market.

(3) Review the New Rochelle Building Code for any necessary updates related to agriculture.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Community Garden Plots:	88	130	160	200
Community Garden Sites:	1	1	3	5
Farmers Market Vendors:	8	10	12	12
Local Farms Established:	0	0	1	2

Primary Departmental Responsibility: Parks & Recreation, Development, Buildings, Law

Potential Partners: Community Markets, School District, Private Schools, Neighborhoods, New-Method Commercial Farmers, BID, Ward Acres Community Gardeners

Potential Municipal Costs: Potential Acquisition of Land, Irrigation of Gardens

Potential Outside Funding Sources: Sale or Lease of Public Land for Commercial Farming, Property Taxes for Commercial Farms Sited on Private Property, Private Voluntary


CHASE

Action Plan – Part 4:

Smart Growth and Economic Prosperity

Attract beneficial investment to expand our local tax base, enhance the vitality of our commercial centers, and promote green job creation and training. Employ smart-growth principles that strategically encourage density and diverse housing opportunities in areas with ready access to local goods, services, infrastructure, and mass transit, while also realizing the economic and recreational potential of Long Island Sound.

GOALS BY 2030:

- **Site at least 95% of new housing units within walking distance of mass transit, including at least 65% of new housing units within 1/2 mile of the New Rochelle Transit Center.**
- **Open at least one additional mile of the Sound shore to the public.**
- **Quadruple the number of local green businesses and green jobs.**
- Complete streetscape improvements on North Avenue, Memorial Highway, and West Main Street.
- Rehabilitate all City-owned waterfront parks.
- Facilitate construction of 250 affordable workforce housing units.
- Triple the number of artists living and working in New Rochelle.
- Construct at least 500,000 square feet of new commercial space in the central business and transit districts.
- Increase inflation-adjusted taxable sales to at least $1 billion per year.

New Rochelle is expected to add 5,000 residents requiring about 2,500 housing units in the next 20 years.

Taxable sales in New Rochelle are estimated to be $920 million in 2010, with sales tax revenue accounting for more than 20% of the City's operating budget.

greeNR

Initiative 4.25:

Transit-Oriented Smart Growth

DESCRIPTION:

Implement a comprehensive strategy to promote commercial and residential development in proximity to the New Rochelle Transit Center, while restricting undesirable growth in lower-density areas, using tools such as zoning, parking requirements, and the marketing of sites with high potential for beneficial development.

GOAL:

Strive to situate at least 65% of new housing units within 1/2 mile of the New Rochelle Train Station. Strive to situate at least 95% of new housing units at locations with convenient, non-car dependent access to the New Rochelle Train Station, defined as directly on a bus or jitney route and within 750 feet of a bus or jitney stop. Achieve balanced use patterns in the central business district and transit zone by fostering additional office and retail development, including at least 500,000 square feet of new commercial construction. Stimulate local commerce and revenue generation by boosting demand for local goods and services, encouraging on-street pedestrian activity, and maximizing the use and income potential of public facilities, such as the Transit Center garage, with an overall goal of achieving at least $1 billion in inflation-adjusted annual taxable sales. Reduce New Rochelle's per capita energy consumption and greenhouse gas emissions by reducing reliance on car travel and shifting relative population to higher efficiency housing.

Almost 1,500 new housing units have been constructed near the New Rochelle train station since 1999.

PAST ACTIONS & ACHIEVEMENTS:

New Rochelle has successfully pursued transit-oriented development for almost twenty years, evidenced by the completion of the New Rochelle Transit Center with 902 parking spaces, the construction since 1999 of almost 1,500 housing units in proximity to the New Rochelle train station, and the adoption of zoning to facilitate smart growth, including the establishment of a Central Parking Overlay Zone with relaxed parking standards and the creation of a downtown density bonus. The City has also facilitated certain projects through investment in public parking, land acquisition, and/or tax incentives. New Rochelle has conducted a comprehensive analysis of public parking, which now serves as a basis for phased investment in parking facilities. The City has simultaneously acted to limit growth in low-density areas by increasing minimum lot sizes and adopting a variety of other zoning and planning restrictions. New Rochelle has taken a lead role in a regional Consortium to promote sustainable growth and has received funding through this Consortium to examine enhanced multi-modal connectivity to the downtown transit center.

CURRENT STATUS:

The development potential of many sites in proximity to the Transit Center remains unrealized. The overall quantity of development to date has not yet achieved the critical mass necessary to revitalize the central business district as a whole. Present national economic conditions pose a serious obstacle to new private investment. Several neighborhoods in New Rochelle have been burdened by overdevelopment that was approved and constructed prior to the adoption of recent zoning and planning restrictions.

Based on metropolitan growth projections, New Rochelle's population is expected to increase by approximately 5,000 residents, who will require approximately 2,500 housing units.

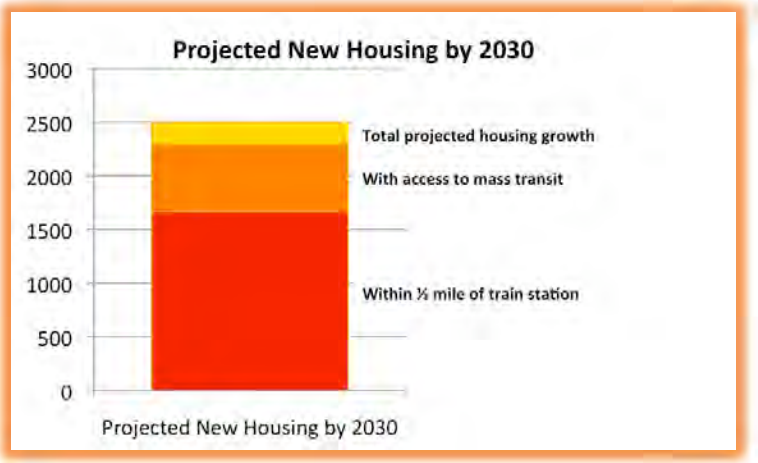
The New Rochelle train station is the New Haven line's busiest in Westchester County, with an average of 4,000 weekday passengers.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Update New Rochelle's Comprehensive Plan to reflect changes in the community and to better articulate a civic vision for future land use and resource allocation.

(2) Identify sites and potential aggregations of property most suitable to transit-oriented developments and then market these sites aggressively to potential builders. When appropriate, work in conjunction with private property owners through option agreements.



(3) Through observation and data collection, evaluate the adequacy of current parking requirements and, if necessary, modify such requirements to conform to parking demand and use patterns. As an alternative, explore mechanisms for reducing car ownership among residents in the transit district, through incentives, requirements, or physical design of new structures.

(4) Determine the legal and operational impediments, if any, to use of the Transit Center garage by non-commuters during evening and weekend hours. If feasible, establish an appropriate rate structure to facilitate such additional use of the Transit Center garage.

(5) Ensure that the New Rochelle Transit Center and Train Station are rigorously maintained and secured.

(6) Affirm and strengthen zoning and land use regulations aimed at promoting smart growth by directing development towards areas best served by mass transit, and by discouraging growth in lower-density neighborhoods. Set a goal of constructing at least 65% of new housing units within 1/2 mile of the New Rochelle Transit Center and at least 95% of housing units with convenient, non-car access to the New Rochelle Transit Center, with comparable ratios for commercial development.

(7) Thoroughly evaluate public infrastructure needs associated with projected growth, including parking, roadway geometry, and traffic management. Establish a multi-year capital budget for such improvements, based primarily on funding from the State Transportation Improvement program, developers, and the Parking Enterprise Fund, with sufficient flexibility to adjust to shifting circumstances.

(8) Continue to align New Rochelle's plans with regional transportation, housing and sustainability goals through active participation in regional planning organizations.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Complete the environmental analysis of new project(s), and, if economic conditions permit, commence construction.

(2) Consider the expansion of the Central Parking Overlay Zone to the area immediately north of the Transit Center. This would enhance the development value and potential of properties on lower North Avenue and Burling Lane by providing potential access to height and density bonuses and through modified parking requirements.

(3) Encourage the availability of transit-oriented goods and services within the Transit Center, train station, and immediate environs. Determine the availability and suitability of space under public control, including the potential retrofit of portions of the Transit Center garage, for conversion to commercial use.

(4) Explore opportunities to partner with Metro-North and the New York State Thruway Authority to utilize air rights over their property for development, or to facilitate vehicular, bicycle, and pedestrian mobility.

(5) Enhance the experience of pedestrian and bicycle transportation to and from the New Rochelle Transit Center (see Initiative 5.33).

(6) Advocate for improvements in the State Environmental Quality Review Act (SEQRA) to quantify and standardize energy and greenhouse gas emissions benefits associated with transit-oriented development.

(7) Advocate for the creation of State or federal Energy Conservation Zones, with tax or other incentives for energy efficient construction in compact urban areas, served by mass transit.

(8) Explore additional opportunities for transit-oriented development.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue to explore transit-oriented development opportunities.

(2) Re-evaluate and, if necessary, amend zoning and parking requirements to reflect experience and observation.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Projected Population Growth:	0	500	2,500	5,000
Projected Housing Unit Growth:	0	250	1,250	2,500
New Units Within ½ Mile of Transit Center:	0	163	813	1,625
New Units With Non-Car Access to Transit Center:	0	238	1,188	2,375
Retail/Office Space in CBD or Transit Area (M Sq Ft):	2.75	2.75	3.00	3.25
Annual Taxable Sales (Hundreds of Millions):	$920	$940	$970	$1,000
Overnight Utilization of Transit Center Garage:	100	150	250	450
Weekend Utilization of Transit Center Garage:	75	113	188	338
Average Weekday New Haven Line Rides:	4,000	4,100	4,500	5,000

Primary Departmental Responsibility: Development

Potential Partners: Property Owners in Proximity to Transit Center, Chamber, BID, Metro-North, NYSTA, Developers, Sound Shore Medical Center

Potential Municipal Costs: Consulting Services for Planning and Marketing, Infrastructure and Services to Accommodate Growth, Enhanced Maintenance and Security for Transit Center and Train Station

Potential Outside Funding Sources: Additional Parking Revenue, Developer Mandate, Federal, State

Initiative 4.26:

Waterfront Access & Enjoyment

DESCRIPTION:

Improve and expand public access to Long Island Sound by reclaiming contaminated and inaccessible waterfront sites for public use, establishing better physical, visual and programmatic linkages between Sound parks and other nodes of public activity, enhancing recreation and tourism opportunities associated with waterfront access, and clarifying opportunities for and restrictions on community use of public facilities.

GOAL:

Open at least one additional mile of the Long Island Sound shore to the public. Promote economic growth by seizing tourism and commercial opportunities associated with waterfront access and by increasing the value of properties proximate to Long Island Sound. Enhance the beauty of New Rochelle by better integrating Long Island Sound into the physical and visual fabric of community.

New Rochelle boasts a 14 miles shoreline, but the great majority is inaccessible.

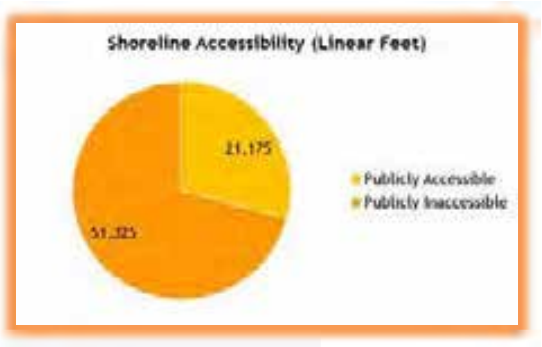
PAST ACTIONS & ACHIEVEMENTS:

New Rochelle owns and maintains several parks that front Long Island Sound, and the County-owned Glen Island Park is also located within New Rochelle's borders. Together, these parks contain 131 acres. The Army Corps of Engineers has completed the remediation of surface environmental conditions on Davids Island, a 78-acre property owned by the City of New Rochelle. The City has adopted a Water View Overlay Zone for the Sans Souci neighborhood.

CURRENT STATUS:

As the crow flies, New Rochelle's waterfront stretches slightly less than 3 miles from the Town of Pelham border to the Town of Mamaroneck border. Including contours and off-shore properties, the waterfront features nearly 14 miles of shoreline, of which a little more than half are on the mainland. Approximately 4 miles of shoreline are currently accessible to the public, with the County's Glen Island Park accounting for almost half of this figure. The majority of New Rochelle's shoreline is inaccessible and, in many instances, nearly invisible. There is no integrated plan linking waterfront parks, and several shoreline parks require significant capital improvement or enhanced maintenance. The City is pursuing plans to rehabilitate the Echo Bay waterfront, a 26-acre site, which is currently inaccessible and contaminated. The proposed project at this location, which would include 6 acres of parkland, has not yet undergone environmental review. The City is also in the very early stages of a planning analysis for the sustainable development of Davids Island.

Davids Island is the largest vacant and inaccessible property in the western Long Island Sound.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Conduct a complete inventory of waterfront parks, plus the municipal marina, to assess usage patterns, visitation rates, capital improvement needs, and maintenance requirements.

(2) Establish preferred routes and develop a way-finding system to link waterfront parks amongst themselves and to other nodes of public activity, particularly the central business district, with a focus on pedestrian and bicycle mobility.

(3) Draft and adopt zoning that provides incentives or requirements for provision of additional public access to Long Island Sound in the context of any waterfront development.

(4) Launch the environmental review for the Echo Bay waterfront development.

(5) Complete the design for new Public Works Operation Center at an appropriate inland location.

(6) Establish principles and standards for appropriate and sustainable development on Davids Island, including a significant public access component. Issue an RFQ or RFP based on these principles.

(7) Work with Westchester County to minimize negative shoreline and planning impacts associated with the upgrade of the New Rochelle Sanitary Treatment Plant.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Implement a way-finding system among waterfront parks and other nodes of public activity.

(2) Begin phased implementation of waterfront park improvements, as resources permit.

(3) Complete the environmental review and commence construction at Echo Bay. Complete public Bay Walk at Echo Bay. Complete the environmental remediation of Echo Bay development site.

(4) Complete the construction of a new Public Works Operating Center at an appropriate in-land location.

(5) Select a development partner(s) for Davids Island and begin implementation of a public access and redevelopment plan, including subsurface environmental remediation.

(6) Develop a recreation and tourism master plan for the entire Sound shore within New Rochelle. In the context of such a plan, explore the possibility of jitney service from central parking facilities to shoreline destinations. (See Initiative 5.34)

(7) Evaluate opportunities for "blue ways" that link waterfront destinations through water-borne transportation.

(8) Consider the formal linkage of revenue generated at Davids Island to mainland waterfront and water quality objectives.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Complete the Echo Bay and Davids Island plans.

(2) Complete the phased implementation of waterfront park improvements.

(3) Implement the recreation and tourism master plan for the Sound shore.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Estimated Feet of Public Access to Sound Shore:	21,175	21,175	24,175	26,425
Acres of Contaminated Waterfront Property:	104	104	0	0
City-Owned Waterfront Parks Rehabilitated:	0	1	3	6
Sound Shore Tourism Plan Adopted:	0	0	1	1

Primary Departmental Responsibility: Development, Parks & Recreation, Law

Potential Partners: Neighborhoods, Environmental & Planning Advocates, Neighboring Waterfront Communities, Developers, Waterfront Property Owners, Federal, State, County

Potential Municipal Costs: Possible Land Acquisition, Environmental Remediation, Capital Improvements, Consulting Services, Signage, Maintenance & Operation of Parks

Initiative 4.27:

Peripheral Node Planning Standards

DESCRIPTION:

Establish clearer objectives and standards for the development and design of peripheral commercial or mixed-use hubs and corridors, such as, but not limited to: Palmer Avenue, Pelham Road, Union Avenue, Weyman Avenue, and Wykagyl area. Update New Rochelle's Comprehensive Plan and adopt corresponding amendments to the New Rochelle zoning code to better define optimum scale, land use patterns, density, architectural design, transportation patterns, and infrastructure for these areas, with an emphasis on promoting contextual development to complement historical, existing, and/or desired character and function.

GOAL:

Encourage the orderly and well-planned evolution of New Rochelle's peripheral commercial and mixed-use hubs and corridors. Enhance the quality of architectural design within the community as a whole. Anticipate and address neighborhood concerns related to excessive or inappropriate development. Promote better integration of residential and commercial activity. Achieve complementary and mutually supportive development patterns within and beyond the central business district.

Wykagyl is the largest commercial node in the North End.

PAST ACTIONS & ACHIEVEMENTS:

New Rochelle recently adopted a process of Peer Architectural Review that empowers the Planning Board to address issues of design and appearance. The New Rochelle Zoning Code is frequently updated to better reflect land use patterns and was recently amended extensively to downzone areas deemed at risk of overdevelopment. In addition, the zoning code was recently amended to require more extensive landscaping and buffering of buildings and parking lots from adjacent non-commercial areas.

CURRENT STATUS:

New Rochelle's Comprehensive Plan is more than ten years old and does not address all of the geographic areas referenced above. In the absence of a clearly articulated vision for these areas, new development often generates conflict and controversy and does not always enhance its surroundings. The interplay between the central business district and peripheral commercial and mixed-use hubs is not considered with consistency in the review and approval of development plans.

The Wykagyl Business District contains almost 200,000 square feet of commercial space and is within walking distance of four major apartment complexes and hundreds of single-family homes.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Determine which peripheral commercial and mixed-use hubs and corridors require analysis and enhanced standards.

(2) Examine relevant portions of the New Rochelle Comprehensive Plan, Zoning Code, Zoning Map, and Building Code.

(3) Develop and implement a process for soliciting public input in the draft of amendments and standards.

(4) Prepare recommendations for requirements, incentives, and/or guidelines related to scale, density, design, historic preservation, use, and other qualities, tailored to the degree practical and legal to the contextual character and planning goals for each target area.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Adopt recommended amendments to the New Rochelle Comprehensive Plan, Zoning Code, Zoning Map, and Building Code.

(2) Consider and, if feasible, implement means of encouraging the retrofit of existing buildings and/or infrastructure to better reflect newly adopted standards.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Evaluate experience with new standards to determine need, if any, for amendment or update.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Comprehensive Plan Amendment Drafted:	0	1	1	1
Comprehensive Plan Amendment Adopted:	0	0	1	1

Primary Departmental Responsibility: Development

Potential Partners: Neighborhoods, Chamber, Major Commercial Property Owners, Developers, Local Architects & Planners

Potential Municipal Costs: Staff Time, Possible Consulting Services

Potential Outside Funding Sources: None

Initiative 4.28:

Green Business & Job Creation

DESCRIPTION:

Foster green job growth and attract additional green businesses to New Rochelle, while also enhancing access to training, particularly for under-skilled or under-employed residents. Green jobs are generally defined as those linked to clean energy or resource conservation and may include positions in renewable energy, alternative fuels, building construction and retrofits, building materials and furnishings, waste reduction, material reuse and recycling, habitat protection and enhancement, as well as associated legal or consulting services.

GOAL:

Position New Rochelle as a leader in the emerging green economy by attracting a critical mass of green businesses and by preparing our local workforce for the demands and opportunities associated with green jobs, with an overall goal of achieving a four-fold increase in the number of green businesses and jobs in New Rochelle, and of training at least 500 residents over twenty years with green job skills.

PAST ACTIONS & ACHIEVEMENTS:

The City has employed a successful job-training model, called the New Rochelle Economic Development Initiative (NREDI), that links training opportunities to local construction.

CURRENT STATUS:

There is no local program associated with green business recruitment and retention. There are local contractors, architects, and construction trades professionals with green design skills, but their numbers are not tracked in any reliable fashion, nor is there any precise count of local green businesses.

The Pew Charitable Trust estimates that 770,000 jobs nation-wide are linked to clean energy. Green jobs are expected to grow at a rate 2.5 times greater than general job growth.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Convene a Green Business Council composed of owners and/or representatives of local green businesses and not-for-profit organizations, local businesses interested in greening their companies, individual contractors with green job skills, local real estate companies and appraisers, academic experts and/or representatives, and relevant City officials.

(2) Utilize the Green Business Council to: (a) establish a local definition of green business and green job, drawing upon any available national or official guidelines; (b) conduct an inventory of green businesses and jobs already present in New Rochelle; (c) conduct a needs assessment of green job demand as a first step in developing a green job training program; and (d) establish a strategy for retaining and attracting additional green businesses to New Rochelle, potentially including both marketing and financial components.

(3) Consider modifying IDA benefit standards to better target and promote green business attraction.

(4) Explore partnerships with local colleges aimed at providing or enhancing green skills training, including Building Performance Institute (BPI) certification.

(5) Based on the successful NREDI model and experience, partner with workforce development entities to provide green job training in conjunction with suitable development projects.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Implement Green Business Retention & Attraction Strategy.

(2) Update Green Business & Job Inventory.

(3) Based on the successful NREDI model and experience, partner with workforce development entities to provide green job training in conjunction with suitable development projects.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Update and Implement Green Business Retention & Attraction Strategy.

(2) Update Green Business & Job Inventory.

(3) Update green job training programs to address the needs of local green businesses.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Green Business & Job Inventory Created/Updated:	0	1	1	1
Green Business Growth in New Rochelle:	Base	x1	x2	x4
Green Job Growth in New Rochelle:	Base	x1	x2	x4
Residents Provided with Green Job Training:	0	0	50	100

Primary Departmental Responsibility: Development

Potential Partners: Local Green Businesses and Contractors, Chamber, BID, Colleges, Workforce Development Entities, County, Labor Unions, Local Realtors and Appraisers

Potential Municipal Costs: Promotional Materials, Financial Incentives for Green Business Recruitment and Retention, Green Skills Training Courses

Potential Outside Funding Sources: Formula, Federal, State, IDA, Developer Voluntary, Developer Mandate

Initiative 4.29:

Workforce Housing

DESCRIPTION:

Promote appropriate workforce housing development, especially through the integration of workforce housing units into market-rate projects, while discouraging the excessive concentration of subsidized housing.

GOAL:

Ensure full compliance with County Legacy Grant obligations and strive to create at least 250 new workforce housing units by 2030. Reduce average commuting times for local workers by facilitating closer proximity between work and home, thereby reducing energy consumption and greenhouse gas emissions. Promote social equity by enabling individuals and families of diverse circumstances to find quality housing within New Rochelle. Facilitate "aging in place" by ensuring an adequate supply of appropriate and supportive senior housing.

13% of the housing units constructed in New Rochelle during the past decade have been affordable, like this town home in the West End.

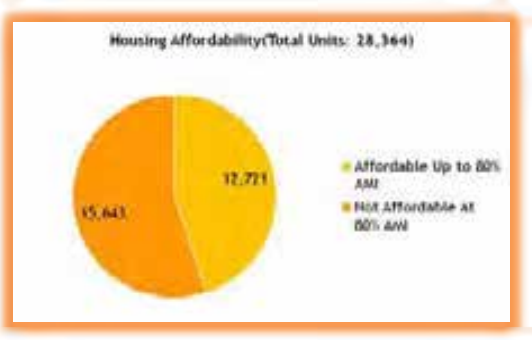
PAST ACTIONS & ACHIEVEMENTS:

New Rochelle has adopted an affordable housing policy that requires the builders of ten or more housing units to set aside 10% of a project's total square footage at an affordable level, defined as 100% of area median income or lower for owner-occupied housing and 80% of area median income or lower for rental housing. Builders may obtain a density bonus in exchange for inclusive housing and also have the option of achieving compliance by paying into an affordable housing fund. To date, two housing developments have proposed offering affordable units on an inclusive basis, while 23 units of housing have been developed in conjunction with opt-out payments totaling almost $300,000. The City has worked with partners to directly facilitate the construction of new affordable units, generally employing a $670,000 annual allocation of federal HOME funds, and has completed successful projects on Lincoln, Lawn Avenue, Union Avenue, and other locations. In all, 299 (13%) of the 1,807 housing units constructed in the past decade have been affordable up to 80% of AMI. The New Rochelle Municipal Housing Authority has articulated plans to reposition the Hartley House complex to serve a wider family income range in a lower-density configuration.

CURRENT STATUS:

New Rochelle has a significant supply of affordable housing, with 45% of housing units estimated to be affordable up to 80% of AMI. More than 1,700 units of housing, including over 1,000 senior apartments, are subsidized. There are no reliable statistics on the number of units affordable to individuals at 80% to 120% of AMI, but it is thought that this segment of the housing market faces the greatest gap between supply and demand. The City has accepted an obligation to construct 185 affordable housing units, affordable up to 80% of AMI, within five years, in conjunction with the acceptance of a County Legacy grant. More than a quarter of municipal employees do not live in New Rochelle.

The area median income (AMI) for a family of four in Westchester County is $105,300, which translates into an affordable housing purchase level of approximately $345,000 and an affordable monthly rent level of $2,633. The median value of a single-family home in New Rochelle is approximately $600,000.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Complete an accurate inventory of affordable and workforce housing units within New Rochelle and maintain this inventory on an ongoing basis.

(2) Identify specific short-term housing creation opportunities sufficient to meet County Legacy requirements, and address any obstacles impeding timely progress on such opportunities.

(3) Advocate for federal, state and county housing policies that permit the subsidy of workforce housing for residents at or close to area median income.

(4) To the degree permissible by law, establish preferences and marketing strategies to make new affordable units accessible to New Rochelle residents and to public employees.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Complete the new housing required by the County Legacy agreement.

(2) Continue to encourage the creation and maintenance of affordable housing through targeted use of federal HOME grants, and to encourage the creation of workforce housing through local policies and requirements.

(3) As the economy and housing market improve, re-evaluate the efficacy of New Rochelle's affordable housing policy to determine whether the balance of incentives and requirements is appropriate, and to consider additional means of promoting the development of units on an inclusive basis, rather than the payment of an opt-out fee.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue to encourage the creation and maintenance of affordable housing through targeted use of federal HOME grants, and to encourage the creation of workforce housing through local policies and requirements, with the goal of creating a total of at least 250 new workforce housing units.

PROGRESS TRACK

Year:	2011	2014	2020	2030
New Affordable Housing Units in New Rochelle:	0	185*	200	250

*Proposed Hammel, Hartley and Shiloh Developments

Primary Departmental Responsibility: Development

Potential Partners: New Rochelle Municipal Housing Authority, Private Not-for-Profit Housing Providers, Housing Developers, Religious Institutions, Neighborhoods

Potential Municipal Costs: Housing Construction Subsidies, Possible Barriers to Beneficial Development

Potential Outside Funding Sources: Formula, Federal, State, County, Not-for-Profit Housing Providers, Local Affordable Housing Fund

Initiative 4.30:

Creative Capital

DESCRIPTION:

Employ various land use, marketing, and incentive methods to attract a larger "creative class" to New Rochelle and realize the economic benefits associated with arts and culture. Consider the formation of an arts district(s) as a means of achieving a critical mass of cultural energy and investment. Work with the community's existing network of arts organizations and institutions to foster collaboration and attract a larger audience for cultural offerings in New Rochelle. Consider the formation of an arts & cultural center.

GOAL:

Strengthen the local economy by stimulating demand for under-utilized residential, commercial and live-work space and by attracting additional visitors to cultural centers and surrounding commercial districts. Triple the number of artists living and/or working in New Rochelle. Facilitate preservation of historic structures by creating a viable economic model for their adaptive reuse. Enhance opportunities for dialogue and mutual understanding among diverse groups of residents.

"Tapestry of New Rochelle" by Stomu Miyazaki enlivens the North Avenue façade of our Transit

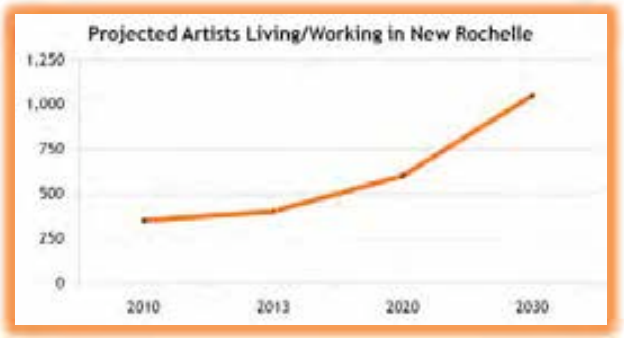
PAST ACTIONS & ACHIEVEMENTS:

New Rochelle has a robust network of artists associations, performance groups, and galleries (some housed within schools and colleges.) The New Rochelle Council on the Arts has emerged as a lead actor in promoting local cultural events and activities, sponsoring a range of programs, and displaying information on a well-designed and well-maintained website. The City has commissioned public art installations at the New Rochelle Transit Center and the Huguenot Street pedestrian bridge, commenced a program for installing murals in prominent downtown spaces, adopted new public art requirements in conjunction with major development, and strengthened the oversight and approval authority of the Municipal Arts Commission. The New Rochelle Public Library serves as a hub of cultural activity, with both a performance and a display space. The downtown Business Improvement District has worked to market vacant upper-floor space to artists, and has renovated 12,000 square feet of space to date. Medialoft is a successful local example of adaptive reuse of a historic structure for integrated live, work, and display space.

CURRENT STATUS:

While New Rochelle has many of the individual elements needed to spark arts-based economic growth, these elements are not sufficiently coordinated, marketed, or nurtured. The number of artists and cultural establishments in the downtown and other commercial or mixed-use districts remains too low to have a significant effect on the character of these areas. The City makes a modest annual contribution to support the New Rochelle Council on the Arts and also organizes annual performances in public venues, but does not provide any other incentives or supports for the attraction of artists or artist housing.

Attendees at Westchester arts events spend an average of $24.10 on related goods and services, such as meals, transportation, or lodging. In total, the arts contribute nearly $120 million to Westchester's economy.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Integrate art more fully into New Rochelle's streetscape and public spaces by introducing additional murals and installations in prominent locations, ideally with financial assistance from regional arts organizations and sponsors, and by exploring opportunities for functional, interactive, or volunteer-assisted public art displays, such as that currently underway at the Ward Acres Community Garden.

(2) Work with local and regional arts experts and commercial stakeholders to identify relevant and successful models of arts districts in other communities. Drawing from these models, develop a plan for a local arts district, including boundaries, marketing strategies, and incentives for adaptive reconstruction of buildings and attraction of new residential and commercial tenants. If a district proves infeasible, then identify specific buildings that may be suitable for adaptive reuse and work with owners to explore strategies for appropriate redevelopment.

(3) Evaluate options for the creation of an arts and cultural center, giving consideration to vacant or under-utilized structures under public ownership and to existing cultural facilities, such as the New Rochelle Public Library. Determine the practical and financial feasibility of such a center, including a thorough review of probable capital and operating costs, reliable revenue streams, and potential for competition within and beyond New Rochelle.

(4) Examine the New Rochelle Zoning and Building Codes to identify impediments to live-work space and then adopt any recommended changes.

(5) Encourage greater collaboration among arts institutions and organizations under the umbrella of the New Rochelle Council on the Arts and the Municipal Arts Commission, as well as promotional partnerships with related businesses, such as restaurants.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Implement the recommended strategy for the formation of a local arts district or for adaptive reuse of specific buildings. Establish a system for tracking the number of artists living and working within New Rochelle or within subsections of the community.

(2) If deemed feasible and cost-neutral for the City, implement plans for an arts & cultural center.

(3) Continue to introduce public art installations at appropriate locations, especially within the central business district.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue collaborating with property owners and other stakeholders to market artists live-work space and to foster arts related business development.

(2) Monitor incentive and marketing strategies for possible improvements.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Artists Living/Working Within New Rochelle:	350	400	600	1,050
Municipally-Supported Public Art Installations:	3	5	10	20
Arts Districts Established:	0	0	1	1

Primary Departmental Responsibility: Development

Potential Partners: Local & Regional Arts Organizations & Institutions, BID, Chamber, Property Owners, Housing Developers

Potential Municipal Costs: Public Art Installation, Possible Incentives for Arts District

Potential Outside Funding Sources: Developer Mandate, Developer Voluntary, Public Voluntary, Regional Arts Organizations, Federal, State, County


Hertz

Action Plan – Part 5:

Transportation and Mobility

Facilitate and encourage the use of sustainable transportation options, including walking, bicycling, carpooling and mass transit, while also reducing traffic congestion and enhancing the safety and efficiency of transportation routes.

GOALS BY 2030:

- **Create a comprehensive, safe, continuous and community-wide walking and bicycling system.**
- **Achieve at least a 50% increase in the number of commuters who walk or bike, from 3,300 to 5,000.**

  Increase the miles of local sidewalk in good repair from 136 to at least 195.
- Establish at least 350 bicycle parking spaces along at least 30 miles of designated bicycle routes.
- Cut by 25% the peak hour travel time from Eastchester Road to Huguenot Street, from 4 minutes to 3 minutes.
- Reduce the rate of single-vehicle occupancy commutes to City Hall by at least 15%, from 96% to 81%.

Transportation accounts for 37.1% of New Rochelle's energy use and 37.5% of New Rochelle's greenhouse gas emissions.

More than 60% of New Rochelle's commuters use cars, and a majority travel in a single-occupancy vehicle.

Initiative 5.31:

Pedestrian Safety & Mobility

DESCRIPTION:

Establish comprehensive planning, zoning, development, and engineering standards aimed at improving the quality and safety of the pedestrian experience within New Rochelle and in facilitating pedestrian mobility to the greatest practical extent. To the degree feasible, create and maintain a community-wide system of safe and accessible walking routes for pedestrians of all ages and abilities. Adopt a Complete Streets policy for future land use and road design and investment to facilitate balanced and appropriate allocation of space for motorists, bicycles, and pedestrians, with features such as sidewalks, better bus stop placement, optimized signal timing, and traffic-calming measures. Conduct a "Share the Road" education campaign to promote safe and respectful interaction of different transportation modes.

GOAL:

Facilitate safe and convenient pedestrian links among major institutions, commercial centers, schools, and parks. Strive to increase by 5% the number of streets served by sidewalks and to increase by 50 miles the quantity of sidewalk in good repair. Reduce vehicle miles traveled, with related reductions in energy consumption and CO_2e emissions. Promote public health by encouraging physical activity. Improve the quality of life in neighborhoods and the commercial vitality of business districts by enhancing their walkability.

An estimated 35% of New Rochelle's sidewalks need repair.

PAST ACTIONS & ACHIEVEMENTS:

New Rochelle played a lead-role in the creation of the Colonial Greenway, a fifteen-mile inter-municipal hiking and walking trail. The City has addressed the interests of pedestrians in the context of major streetscape upgrades on North Avenue, the downtown area, Lincoln Avenue, and Wilmot Road. New Rochelle has been recognized by Prevention magazine and the American Podiatric Medical Association (APMA) as one of the 100 Best Walking Cities in America, ranking second in New York State.

CURRENT STATUS:

New Rochelle has an extensive, but incomplete and aging, network of sidewalks, totaling 210 miles (3/5 of the City's street length.) 65% of these sidewalks are estimated to be in good condition, while 35% are in need of minor to major maintenance. The City has no general policies or clear objectives regarding pedestrian infrastructure. Under the City Charter, sidewalk maintenance and repair is generally the responsibility of the adjoining property owner. The City directs the private repair of roughly 3,000 square feet of sidewalk each year and budgets approximately $200,000 each year for public sidewalk maintenance, some of which is restricted to the Community Development target area. These resources are inadequate to address identified needs.

One square foot of sidewalk repair or installation costs approximately $8.50.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Address backlog of sidewalk repairs, as resources permit.

(2) Establish a list of desired improvements, including engineering, new construction, repair, enforcement, and education solutions, prioritized based on demonstrated safety challenges, estimated pedestrian traffic levels, importance to overall circulation patterns, links to schools and other essential institutions, and cost. Ensure robust public input in the assignment of priorities.

(3) Develop and adopt changes in planning and design standards, based on a Complete Streets model, to incorporate pedestrian safety and mobility features in future public and private developments.

(4) Consider revising tree-planting policies, so that new saplings are situated to minimize future root damage to sidewalks or are planted with an underlay that permits root expansion.

(5) Establish a mechanism for measuring and tracking pedestrian safety and for evaluating the efficacy of improvements.

(6) Secure vulnerable pedestrian zones, such as crosswalks, by upgrading walk signals to include a countdown feature, by improving public understanding of rights-of-way, and by commencing enforcement of violations.

(7) Develop and implement a Share the Road campaign to educate the public about safe and appropriate interaction between transportation modes. Possible methods of education include road signage and distribution of information through schools. Advocate on a regional basis for a common and universally recognized "Share the Road" sign.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Begin implementing pedestrian safety and mobility improvements, based on priority list, as resources permit.

(2) Ensure robust consideration of pedestrian interests in the context of all major street reconstruction projects.

(3) Review and, if necessary, amend priorities, based on changing circumstances and analysis of data.

(4) Aggressively seek public grants for implementation of pedestrian safety and mobility strategy.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Complete pedestrian safety and mobility improvements.

(2) Review and, if necessary, amend priorities, based on changing circumstances and analysis of data.

Primary Departmental Responsibility: Public Works, Development, Marketing

PROGRESS TRACK

Year:	2011	2014	2020	2030
Sidewalk in Good Repair (Miles):	136	139	158	195
Percentage of Street Length with Sidewalk:	60	60	62	65
Commuters Using Bike or Foot:	3,300	3,500	4,150	5,000
Commuter Miles Shifted to Bike or Foot:	0	150	638	1,275
Estimated Annual Gasoline Saved (Gallons):	0	7,500	31,900	63,750
Estimated Annual New Energy Savings (MMBtus):	0	863	3,669	7,331
Estimated Annual New CO_2e Reduction (Metric Tons):	0	66	281	562

* Miles and related metrics repeated for Initiative 5.32 (Bicycle Mobility & Safety). Estimates based on 50% increase in commuters biking or walking to work, at 3 miles per round trip, at 250 days per year, at 20mpg for car alternative

Potential Partners: Neighborhoods, Developers, BID, Traffic Advisory Committee

Potential Municipal Costs: Staff Time and/or Consulting Services for Initial Planning and Ongoing Data Analysis, Significant Capital Costs for Construction, Repair and Maintenance of Infrastructure

Potential Outside Funding Sources: Formula, Developer Mandate, Federal, State, Private Property Owners, Specific Programs as Follows: CMAQ, STP, TEP, HSIP, Safe Routes to Schools

Initiative 5.32:

Bicycle Safety & Mobility

DESCRIPTION:

Promote and facilitate bicycle mobility by establishing safe, attractive, and accessible travel routes and by creating public and private infrastructure supportive of bicycle use and storage. Adopt a Complete Streets policy for future land use and road design and investment, aimed at facilitating balanced and appropriate allocation of space for motorists, bicyclists, and pedestrians. Conduct a "Share the Road" education campaign to promote safe and respectful interaction of different transportation modes.

GOAL:

Achieve a comprehensive bicycle route system that fully links major institutions, commercial centers, schools, and parks. Reduce vehicle miles traveled within New Rochelle, thereby limiting energy consumption, greenhouse gas emissions, and pollutant discharge. Improve public health by expanding opportunities for exercise and outdoor recreation. Improve travel times by reducing vehicular congestion on local roads.

Inventive bicycle rack designs, like this one from New Rochelle resident Sarah Baehr, combine functionality and art.

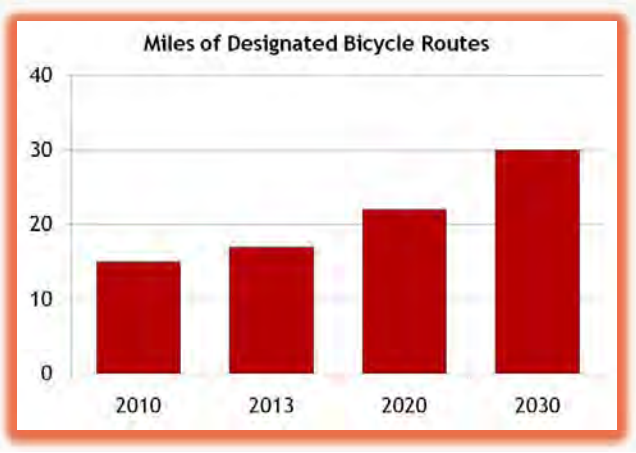
PAST ACTIONS & ACHIEVEMENTS:

The City has designated and placed signage on roughly 15 miles of bicycle routes. New Rochelle has commissioned and finalized two official and appealing bicycle rack designs. 9 bicycle racks containing 54 spaces have been installed on public property, with at least 13 others containing 39 spaces sited on private property that is accessible to the public, such as Iona College or ShopRite. In addition, the City has adopted zoning that requires bicycle parking in conjunction with private development of sufficient size.

CURRENT STATUS:

There are significant gaps on New Rochelle's bicycle routes that impede community-wide circulation, and only minimal capital improvements have been undertaken to enhance safety or ease of access. Just 0.1% of commuters use a bicycle to get to and from work.

A bicycle takes up just 15 square feet of roadway, compared to the typical car, which occupies 144 square feet.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Create a Bicycle Master Plan to serve as an actionable vision for bicycle mobility within New Rochelle and to adjacent municipalities. Such a Master Plan should identify proposed bicycles routes, lanes, and paths, describe the actions required to achieve levels of service at each location, and establish priorities for their creation based on the scope of capital investment needed and the relative importance of each location to overall circulation patterns. The Master Plan should aim to link residential areas to commercial and transit nodes, institutional facilities like schools, colleges, and Sound Shore Medical Center, and parks and recreational sites. The Master Plan should also identify optimum locations for bicycle parking and storage. Public input should be solicited and respected in the development of the Plan.

(2) Establish general design standards, based on a Complete Streets model, for local roadways that facilitate bicycle use to the greatest extent practical. Employ these standards in conjunction with significant road reconstruction and improvement projects and in conjunction with appropriate private developments.

(3) Encourage the installation of bicycle racks, usable by and accessible to the public, in conjunction with major private development.

(4) Review local and regional bicycle safety standards and regulations to assess the potential need for amendment.

(5) Develop and implement a Share the Road campaign to educate the public about safe and appropriate interaction between transportation modes. Possible methods of education include road signage and distribution of information through schools. Advocate on a regional basis for a common and universally recognized "Share the Road" sign.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Begin to implement the Bicycle Master Plan, as resources permit.

(2) Investigate the feasibility of and potential demand for a bicycle share program within New Rochelle and test on a trial basis, if deemed promising.

(3) Organize annual or periodic cycling events to better acquaint the community with designated bicycle routes.

(4) Strive to make bicycling accessible for individuals at every income stratum by formalizing a program to offer free bicycles obtained through the donation of new, "reasonably well-conditioned" used, and confiscated bicycles.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Complete implementation of the Bicycle Master Plan.

(2) If trial bicycle share efforts are successful, then implement a full bicycle share program.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Designated Bicycle Routes (Miles):	15	17	22	30
Bicycle Parking Spaces on Route (Public & Private):	93	120	200	350
Commuters Using Bike or Foot:	3,300	3,500	4,150	5,000
Commuter Miles Shifted to Bike or Foot:	0	150	638	1,275
Estimated Annual Gasoline Saved (Gallons):	0	7,500	31,900	63,750
Estimated Annual New Energy Savings (MMbtu):	0	863	3,669	7,331
Estimated Annual New CO_2e Reduction (Metric Tons):	0	66	281	562

* Miles and related metrics repeated for Initiative 5.31 (Pedestrian Mobility & Safety). Based on 50% increase in

Primary Departmental Responsibility: Public Works, Development, Parks & Recreation, Youth Bureau, Marketing, Law

Potential Partners: Local Bicycle Clubs & Advocates, Neighborhoods, School District, Private Schools, Colleges, Local Bicycle Sellers

Potential Municipal Costs: Consulting Services for Initial Planning, Capital Improvements on Designated Routes, Bicycle Rack Fabrication and Installation, Estimated at $200 per Space

Potential Outside Funding Sources: Formula, Developer Mandate, Federal, State, Private Property Owners, Specific

Initiative 5.33:

Downtown Access

DESCRIPTION:

Facilitate efficient and attractive multi-modal access to New Rochelle's downtown through the improvement of major transit corridors and through the redesign of under-utilized alternative routes.

GOAL:

Promote commerce in the central business district. Improve vehicular, bicycle, and pedestrian mobility within New Rochelle. Reduce traffic congestion and travel times.

New Rochelle's downtown has multiple access points, but many feature poor function or design.

PAST ACTIONS & ACHIEVEMENTS:

The City has rehabilitated the majority of the sidewalks in New Rochelle's central business district and has completed two of three planned phases of improvements to the North Avenue corridor. With federal support, New Rochelle constructed a 902-car inter-modal transportation center. Through a regional planning Consortium, the City has been awarded $100,000 to study means of improving connectivity to the New Rochelle Train Station.

CURRENT STATUS:

New Rochelle's downtown is currently perceived as inaccessible to large portions of the community, in part because of the appearance and efficiency of its primary entry and exit routes. Pedestrian and bicycle access to the central business district is particularly challenging. The west Main Street corridor has not received any significant capital improvement. New Rochelle is the only stop in Westchester County for Amtrak northeast corridor service.

During AM & PM peak hours, approximately 1,500 cars traverse the North Avenue corridor.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Complete the third and final phase of the North Avenue Streetscape Project.

(2) Commence a planning analysis of Memorial Highway and Memorial Circle, aimed at achieving better utilization of this road network as an alternative vehicular access route and a primary pedestrian and bicycle access route, while also achieving better integration between Sound Shore Medical Center, North Avenue, and the central business district.

(3) Complete the design of the West Main Street corridor streetscape.

(4) Examine the experience of pedestrian and bicycle travel from the New Rochelle Transit Center to primary destinations within the central business district to identify impediments and opportunities for improvement.

(5) Identify specific locations within the central business district at which new bicycle racks should be introduced (See Initiative 5.32).

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Complete the planning analysis of the Memorial Highway and Memorial Circle corridor, complete design for achieving recommended improvements, and commence improvement project, as resources permit and with maximum financial assistance from the federal and/or state governments.

(2) Commence the upgrade of the West Main Street Streetscape Project, as resources permit.

(3) Complete the installation of new bicycle racks, utilizing private contributions to the maximum extent possible.

(4) Introduce a managed traffic system in the downtown area with adjustable signal timing, pedestrian-count cross lights, and other features to improve traffic circulation and enhance pedestrian safety. The managed traffic system should be funded by the State Transportation Improvement Program and/or by developer contributions in the context of environmental impact mitigation.

(5) Implement recommended improvements in pedestrian and bicycle mobility between Transit Center and central business district, as resources permit.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Complete Memorial Highway and Memorial Circle improvements, as resources permit.

(2) Complete West Main Street Streetscape Project, as resources permit.

PROGRESS TRACK

Year:	2011	2014	2020	2030
North Avenue Improvements (Linear Feet):	4,170	4,170	5,530	5,530
West Main Improvements (Linear Feet):	0	0	1,800	3,600
Memorial Highway Improvements (Linear Feet):	0	0	1,250	2,500
Bicycle Spaces in Transit/Central Business District:	24	40	80	150

Primary Departmental Responsibility: Development, Public Works

Potential Partners: New York State Department of Transportation

Potential Municipal Costs: Significant Costs for Major Streetscape Design and Construction, Modest Costs for Bicycle Racks, Estimated at $200 per Bicycle Parking Space

Potential Outside Funding Sources: State, Formula, Federal, Developer Mandate

Initiative 5.34:

Jitney Service Study

DESCRIPTION:

Consider the creation of a free or low-cost jitney to serve commuting, commercial, and recreational transportation demand. Possible routes could link population centers in the Wykagyl area, the Pelham Road corridor or the West End to the New Rochelle Transit Center during commuting hours, operate on a continuous loop in the downtown area during business hours, and connect various parks on weekends.

GOAL:

Reduce energy consumption, greenhouse gas emissions, vehicle miles traveled and traffic congestion by providing a convenient alternative to single-occupancy vehicle transportation. Improve air quality. Promote commercial activity in downtown New Rochelle. Enhance social equity by expanding transportation alternatives for residents who do not own cars.

A low cost jitney service could reduce traffic congestion, such as this trolley did during ArtsFest.

PAST ACTIONS & ACHIEVEMENTS:

Local not-for-profit organizations have periodically rented trolleys in conjunction with multi-site events.

CURRENT STATUS:

The County Bee-Line Bus serves New Rochelle, at a cost per ride of $2.25. Local colleges have vans and buses that are used for student transport. Traffic congestion is an ongoing challenge on North Avenue and Pelham Road, particularly during commuting hours.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Research the demand for and viability of a low-cost jitney service. Examine relevant models in other communities, make preliminary judgments about jitney routes and hours of operation, survey major local institutions to determine their willingness and capacity to subsidize a service, consult with County Transportation officials, inventory the private operators with which the City might contract, and estimate probable municipal costs. This analysis should serve as the basis for a recommendation on whether and how to proceed.

(2) Research the legality and merit of requiring contributions from the owners of existing multi-family dwellings with fewer on-site parking spaces than current zoning would allow.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) If a positive recommendation is received, then implement, as resources permit.

(2) If a jitney service is established, monitor and record rider-ship rates.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Modify, expand, or discontinue jitney service, based on evaluation of rider-ship rates and ongoing costs.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Annual Jitney Rides – Commuter Routes:	0	0	60,000	90,000
Annual Jitney Rides – Downtown Loop:	0	0	16,000	24,200
Annual Jitney Rides – Waterfront Loop:	0	0	3,500	5,200

Commuter Routes: 3 routes, each with 3 morning and 3 evening runs, 20 passengers per run, for 250 days per year.
Downtown Loop: 1 route, at ten rides per hour, for 8 hours, 365 days per year.
Waterfront Loop: 1 route, at ten rides per hour, for 10 hours, for 52 days per year.

Primary Departmental Responsibility: Development, Law

Potential Partners: Major Multi-Family Property Owners, Developers, School District, Private Schools, Major Local Institutions, Commuters, County, BID, Chamber

Potential Municipal Costs: Probable Subsidy for Operation of Jitney Service, Potential Loss of Permit Parking Revenue at New Rochelle Transit Center

Potential Outside Funding Sources: Contributions from Multi-Family Property Owners, Developer Mandate, Developer Voluntary, Possible Rider Fees, Possible Increase in Sales Tax Revenue, Possible Avoidance of Public Parking Expansion Costs

Initiative 5.35:

Green Commuting

DESCRIPTION:

Create incentives to discourage single-occupancy vehicle use by public employees, while also promoting the adoption of similar policies by major local employers who offer on-site parking. Introduce a fee structure for employee parking, coupled with payments to employees who forgo parking permits by walking, biking, car pooling or taking mass transit to work.

GOAL:

Reduce single-occupancy vehicle trips to and from places of work, including a reduction of 15% in single-occupancy vehicle commutes to City Hall. Reduce energy consumption, greenhouse gas emissions, air pollution, and traffic congestion. Avert the need for future investment in employee parking expansion. Make additional parking spaces available for public use.

An estimated 96% of City Hall employees drive to work alone.

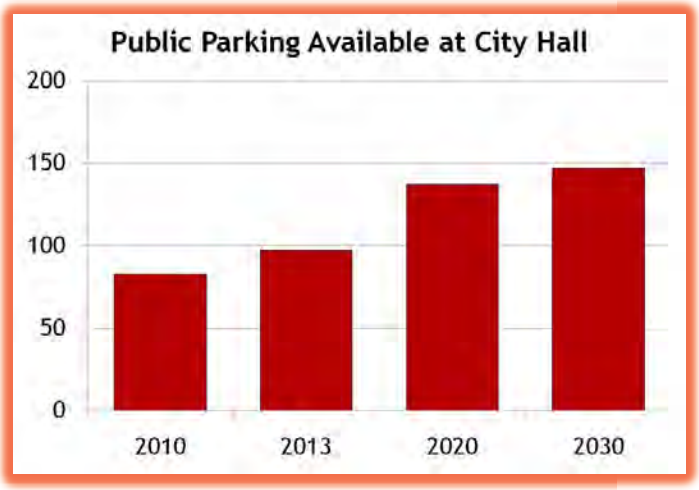
PAST ACTIONS & ACHIEVEMENTS:

None.

CURRENT STATUS:

The City government offers free parking to City and School employees and has no policies to discourage single-vehicle commutation. On a typical day, there are 344 employees in the municipal complex, including City, Court, Police, and School District workers. 96% of these employees have permits, for a total of 330 permits issued, with an additional 21 permits designated for official vehicles. There are 83 metered spaces available in the municipal complex for public use, with public demand often exceeding supply. The ten largest employers in New Rochelle have a collective workforce of almost 5,000.

In 2007, Marin County established a Green Commute Program to provide employees who walk, bicycle, carpool or take mass transit to work with a $4 per day stipend. By 2008, 19% of Marin County employees were registered in the program, and the percentage of employees driving to work alone decreased from 82% to 63%.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Establish fee and credit rates for receiving and forgoing employee parking permits. Fees should be set at a modest, affordable level. Credits should be many times larger, with the overall balance of both being budget-neutral.

(2) With advance notice of appropriate duration, implement this new fee and credit structure. Offer credits automatically to employees who already forgo permits and offer a limited number of additional credits to employees seeking them. In the case of oversubscription for credits, assign on either a first-come, first-served basis or through lottery. Gradually expand the availability of credits on an annual basis, with fee and credit rates rebalanced each year to achieve budget neutrality. Continue process until supply and demand equilibrium is achieved.

(3) Initiate dialogue with major local employers to gauge their interest in adopting similar rules for their employee parking. Simultaneously explore the legality and merit of requiring employers who offer free employee parking to provide an equivalent value credit for those who decline to use such parking.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Continue to implement parking fee and credit policy, adjusting rates as necessary. Monitor and track changing commuting patterns.

(2) Continue efforts to encourage similar action on the part of large private employers.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue to implement parking fee and credit policy, adjusting rates as necessary. Monitor and track changing commuting patterns.

(2) Continue efforts to encourage similar action on the part of large private employers.

PROGRESS TRACK

Year:	2011	2014	2020	2030
City Hall Employee Parking Permits Issued:	330	315	290	280
Estimated Rate of SOV Commutations to City Hall:	96%	92%	84%	81%
Public Parking Spaces at City Hall Complex:	83	98	123	133

Primary Departmental Responsibility: Manager

Potential Partners: Local Major Employers, School District

Potential Municipal Costs: None

Potential Outside Funding Sources: NA

Initiative 5.36:

Scooter & Motorcycle Parking

DESCRIPTION:

Improve and expand scooter and motorcycle parking options in the New Rochelle Transit Center and other appropriate public parking facilities. To the extent possible, scooter and motorcycle parking areas should be clearly delineated, covered, and situated close to points of ingress and egress. One automobile parking spot can accommodate up to three motorcycles and scooters.

GOAL:

Facilitate the use of transportation options that consume less energy and generate fewer greenhouse gas emissions than automobiles. Reduce traffic congestion. Optimize the use of public parking facilities.

Scooter gas mileage can be as high as 80 miles per gallon.

PAST ACTIONS & ACHIEVEMENTS:

The City has issued five permits for scooters and motorcycles at the Transit Center garage at a rate of $200, compared to the automobile rate of $925.

CURRENT STATUS:

Scooter and motorcycle parking areas are not clearly delineated and the availability of permits is not widely known. The City does not maintain dedicated scooter or motorcycle spaces in other public parking facilities.

Scooter gas mileage varies, but can be as high as 80 mpg, and the typical scooter or motorcycle takes up only a fraction of the road space of a car.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Delineate motorcycle and scooter parking areas in appropriate City parking lots and garages.

(2) Monitor and record the utilization rate of scooter and motorcycle parking spaces.

(3) Allow automobile permit holders to use their permits for scooters or motorcycles. Also allow the exchange of automobile permits for scooter and motorcycle permits, with a pro-rated refund offered mid-year.

(4) Publicize the availability of scooter and motorcycle parking spaces and permits through media release, web bulletin, and notices on parking permit documentation

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Adjust the quantity of scooter and motorcycle parking to reflect demand.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue to adjust the quantity of scooter and motorcycle parking to reflect demand.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Scooter/Motorcycle Permits Issued:	5	10	20	30
Scooter/Motorcycle Spaces:	5	25	50	60

Primary Departmental Responsibility: Development

Potential Partners: Motorcycle and Scooter Dealers

Potential Municipal Costs: Minimal Capital Costs for Re-Striping, Minimal Loss of Automobile Parking, with Net Budget Effect Dependent Upon Quantity of Scooter Permits Sold

Potential Outside Funding Sources: Motorcycle and Scooter Permit Fees


I DIDN'T
DO IT

Action Plan – Part 6 :

Public Participation and Awareness

Empower all residents to obtain information about local challenges and issues, make sensible choices about individual lifestyles and practices, and participate fully in community activities and decision-making.

GOALS BY 2030:

- **Subscribe at least half of all households to the official City website.**
- **Achieve near-universal English-language proficiency.**
- **Achieve near-universal awareness of the GreeNR logo and its meaning.**
- Restore distribution of a semi-annual City newsletter.
- Reduce by 7.2 million the number of non-biodegradable plastic shopping bags used annually in New Rochelle.

There are 28,000 households in New Rochelle, but fewer than 1,000 subscriptions to City email bulletins.

Initiative 6.37:

GreeNR Awareness Campaign

DESCRIPTION:

Conduct a broad-based and ongoing public awareness campaign to share information about sustainable action and enlist community participation in achieving GreeNR's objectives. Components of such a campaign should include: seminars for target constituencies facilitated by toolkits and presentation materials; production of a GreeNR Citizen's Guide to Sustainable Action for posting on the Internet and for limited hard-copy distribution; maintenance of a dynamic and interactive GreeNR page on the City website; dissemination of GreeNR Awareness Campaign information on local access cable, and assembly of comprehensive information and application procedures for funding sources, including tax credits, NYSERDA, and local efficiency loans.

GOAL:

Achieve near-universal awareness of GreeNR's objectives and goals. Facilitate best practices in the residential and commercial sectors of New Rochelle.

Community sustainability depends upon individual awareness and action.

PAST ACTIONS & ACHIEVEMENTS:

A Green Page has been established on the City website with weekly "Green Tips," environmental program information and resources. The City's Sustainability Coordinator has made presentations to neighborhood associations, colleges and the business community by invitation.

CURRENT STATUS:

There is no proactive strategy for public outreach. Content on energy action options is available from multiple sources, but information and materials are not coordinated in a targeted, user-friendly fashion or widely disseminated.

There are approximately seventy-five active neighborhood and tenant associations in New Rochelle.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) The Sustainability Coordinator, drawing upon local experts and professionals, should design a Citizen's Guide to Sustainability.

(2) Post the content of the guide on-line, while also printing a limited number for hard-copy distribution. Raise awareness about on-line content through appropriate City notices and publications.

(3) Enhance the City's web-based Green Page to allow for an interactive exchange of information, with customized recommendation based on user-provided data.

(4) Develop a strategy and schedule for seminars and presentations to target groups, including neighborhood associations, PTAs, service clubs, etc. Presentations should be made initially and primarily by the City's Sustainability Coordinator, but training may also be provided to college students or volunteers with interest and relevant skills.

(5) Create Sustainable Action Toolkits to facilitate seminars and presentations. Toolkits should contain visual aids and samples of products such as CFLs, smart power strips, and cool/reflective roof shingles. They should be customized for distinct target constituencies, including residential property owners and renters, commercial property owners and renters, schoolchildren, and those in the building trades.

(6) Work with the Sustainable Schools Coalition to develop information suitable for dissemination to students and parents.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Update the Sustainability Guide, Website and Toolkits, based on changes in technology or practice.

(2) Develop guidelines for green events to promote conservation and reduce waste generation at catering facilities and private event spaces. Meet with the owners of larger event spaces to encourage compliance with guidelines. Consider mandatory conservation and recycling standards for permitted events in public parks.

(3) Schedule additional community meetings, as deemed necessary.

(4) Consider expanding communication efforts to encompass current and emerging technologies and social networking services, such as Facebook and Twitter.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Update the Sustainability Guide, Website and Toolkits, based on changes in technology or practice.

(2) Schedule additional community meetings, as deemed necessary.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Sustainability Guide Drafted & Posted:	0	1	1	1
Interactive Green Page Established on Web:	0	1	1	1
Total Sustainability Seminars Held:	3	7	12	30
Households Aware of GreeNR	1%	50%	90%	95%

Primary Departmental Responsibility: Sustainability, Marketing, MIS

Potential Partners: School District, Colleges, Chamber, BID, Realtors, Neighborhood Associations, Sustainability Advisory Board, Volunteers, Applicable City Departments

Potential Municipal Costs: Small Printing Costs, Staff Time

Potential Outside Funding Sources: Business Sponsorships, Foundation

Initiative 6.38:

Informed Social Competition

DESCRIPTION:

Provide residents with comparative statistics on utility use to facilitate self-evaluation and foster friendly social competition toward reduced resource consumption. Work with utility providers to offer each ratepayer an analysis of their own resource use, with comparable statistics for the community as a whole and for property owners within a smaller geographic unit or for properties of a similar size. Incorporate tips on savings and conservation in all utility bills. Consider publicizing success stories, such as most efficient city-wide, most efficient by neighborhood, or most improved.

GOAL:

Achieve universal access to data on individual and community utility use. Empower individual residents and property owners to better evaluate their own habits and practices. Reduce private sector energy use, resource consumption, and waste generation by encouraging individual action in response to social competition incentives.

Comparative data on utility bills could help encourage conservation.

PAST ACTIONS & ACHIEVEMENTS:

None.

CURRENT STATUS:

Utility bills do not currently feature comparative statistics.

Most homeowners do not know how their own energy and resource use compares to that of their neighbors.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Meet with utility providers to determine the technical and operational opportunities for data collection and distribution.

(2) Establish format and content for distributing individual and comparative statistics through utility bills. Data should be displayed in an engaging and user-friendly fashion.

(3) Establish written conservation guidelines for distribution with utility bills.

(4) Consider publicizing examples of efficient resource use or significant improvements in efficiency through media releases, commendations, or postings on the City website.

(5) Launch pilot program in one or two neighborhoods.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Complete pilot program and evaluate changes in consumption patterns. If pilot is successful, then expand program to cover entire community.

(2) Evaluate the feasibility of establishing a comparable program for collecting and distributing recycling data. If feasible, implement.

(3) Review conservation guidelines and data distribution methods for possible updating in format or content.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Review conservation guidelines and data distribution methods for possible updating in format or content.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Con Ed Customers Receiving Comparative Data:	0	Pilot	All	All
United Water Customers Receiving Comparative Data:	0	Pilot	All	All

Primary Departmental Responsibility: Sustainability, Manager, Finance

Potential Partners: Utility Providers, Marketing, Public Works

Potential Municipal Costs: None

Potential Outside Funding Sources: NA

Initiative 6.39:

Civic Communication

DESCRIPTION:

Expand access to and improve awareness of general civic information, municipal decision-making, and community events, primarily through enhanced Internet and cable television communications, but also through traditional, non-electronic outreach, especially to underserved portions of the New Rochelle community.

GOAL:

Subscribe at least 50% of New Rochelle's households to the City email notification system. Restore direct-mail newsletters as resources permit. Facilitate receipt of municipal news by non-English speakers.

The City's new website is attractive and user-friendly.

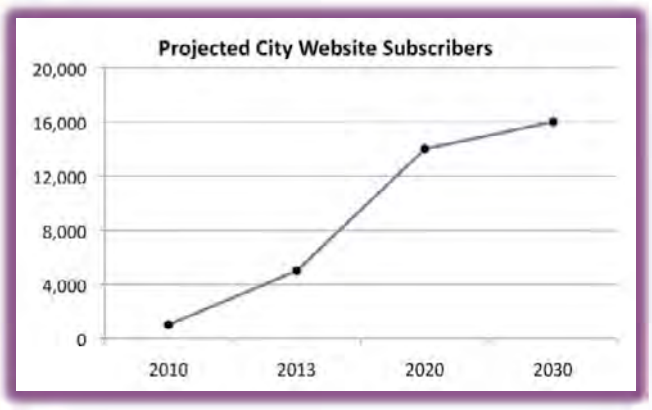
PAST ACTIONS & ACHIEVEMENTS:

The City recently completed a comprehensive redesign of its official website and now boasts a site that is attractive and user-friendly. City Council meetings are cable-cast live and subsequently rebroadcast for Cable and FiOS subscribers, but are not available to households with satellite service. City Council meetings can now be viewed over the Internet, either live or on-demand. For emergency or time-sensitive information, the City contracts for a citizen notification system capable of either community-wide or neighborhood-specific telephone, text and/or email bulletins.

CURRENT STATUS:

The City website receives approximately 30,000 visits per month. Less than one thousand individuals subscribe to municipal email bulletins. The City does not currently maintain funding for newsletter production and distribution. With rare exceptions related to legal requirements, the City does not typically offer bilingual documents.

New Rochelle's major daily newspaper, the Journal-News, reaches only 20% of the households in southern Westchester County.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Develop and implement a plan for encouraging New Rochelle residents to subscribe to the City's official website and public news notification system. Possible actions include: (a) re-designing all municipal forms and documents that are submitted by citizens, such as permit and license applications, property tax bills, etc. to include an opt-in subscription check-box; (b) utilizing the citizen notification system to encourage residents to subscribe; (c) encouraging subscriptions through cable-cast messages; and (d) sending an email solicitation community-wide using vendor-obtained email addresses.

(2) Analyze language-related barriers to public communication and awareness. Determine which, if any, City notices and documents should be translated. Recommend other means of facilitating information flow to and from non-English speakers. Consider providing bilingual citizen notification messages in areas with the highest concentration of Spanish-speakers.

(3) Consider expanding communication efforts to encompass current and emerging technologies and social networking services, such as Facebook and Twitter.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Continue efforts to attract email subscribers.

(2) Restore publication and distribution of semi-annual City newsletters, as resources permit.

(3) Explore opportunities to expand programming on the City's cable channel, drawing upon successful examples in other communities, such as LMC-TV in Larchmont and Mamaroneck.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue efforts to attract email subscribers.

(2) Continue evaluation of emerging communications technologies and services.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Households Subscribed to City Email Notification:	1,000	5,000	14,000	16,000
Annual Newsletters Produced & Distributed:	0	0	2	2

Primary Departmental Responsibility: Marketing, MIS, City Clerk

Potential Partners: All City Departments Receiving Documents or Forms Submitted from the Public, Local ESL Providers, Cable and Telecommunications Advisory Committee

Potential Municipal Costs: Newsletter Production and Distribution, Estimated at $15,000 per Issue

Potential Outside Funding Sources: Possible Newsletter Advertising

Initiative 6.40:

Sustainability Education Center Study

DESCRIPTION:

Consider adapting or leasing an under-utilized municipal building to serve as a Sustainability Education Center providing ongoing outreach, instruction, programming and demonstration, under private, not-for-profit operation.

GOAL:

Raise community awareness of and increase participation in sustainable practices, enhance New Rochelle's identity as a green community, cultivate native plant species for use, sale, or distribution, and restore and activate a currently underutilized public building.

The Greenhouse at Wildcliff is one of several locations suggested as a possible home for a Sustainability Education Center.

PAST ACTIONS & ACHIEVEMENTS:

Local not-for-profits and community leaders have organized in support of the concept of a Sustainability Education Center. The Sheldrake Environmental Center conducts environmental education and programming within the James Johnson Conservancy that straddles New Rochelle and the Town of Mamaroneck.

CURRENT STATUS:

The City owns several underutilized properties that could be renovated and maintained by a private not-for-profit organization for sustainability education. These include Wildcliff Villa and the Greenhouse at Hudson Park, the Barn and the Pinebrook home at Ward Acres, and the former Second Presbyterian Church adjacent to the Police/Court facility.

Programming at the Sheldrake Environmental Center reaches almost 5,000 children each year.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Assist private advocates in assessing the depth and scope of public interest in a Sustainability Education Center, evaluating the merits and probable costs associated with each potential site, considering alternative uses for each site, and identifying potential outside funding sources.

(2) If the general concept of a Sustainability Education Center receives requisite support and is deemed achievable, then select a site.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Provide data to assist not-for-profit sponsors in completing detailed budgeting, physical planning, and programmatic development.

(2) Support advocates in soliciting private and non-City public funds for development and implementation.

(3) Commence construction and implementation under private and not-for-profit supervision and direction.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Complete construction and implementation under private, not-for-profit supervision and direction.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Site Evaluation Completed:	0	1	1	1
Sustainability Education Center Established:	0	0	1	1
Annual Visits to Sustainability Education Center*:	0	0	3,694	5,654

* Estimates aggregate student visits, gardening classes, community service activities, green job training, general information visits, special events, seminars, and other use of grounds.

Primary Departmental Responsibility: Volunteers, Manager

Potential Partners: Friends of the Wildcliff Greenhouse, Sheldrake Environmental Center, Ward Acres Community Gardeners, School District, Private Schools, Colleges, County Soil & Water Conservation, Local Gardening Businesses, The Valhalla Native Plant Center

Potential Municipal Costs: Planning & Site Analysis

Potential Outside Funding Sources: Public Voluntary, Foundation, Fees for Classes, Sale of Plants or Other Items Produced and/or Cultivated

Initiative 6.41:

Outdoor Classrooms

DESCRIPTION:

Promote understanding and appreciation of regional ecology by facilitating school-sponsored instruction within wooded parks and by introducing maps and interpretive signage in appropriate locations such as Ward Acres, Nature Study Woods and the James Johnson Conservancy. Postings should enhance ease of park use, identify sites of historic or ecological interest, and provide information about the natural history of our region. Simultaneously establish a webpage with parallel content, accessible in the field by hikers and park users.

GOAL:

Raise awareness about regional natural history and ecology, build public support for open space preservation and improvement, encourage healthy and active lifestyles, enhance the sustainability curriculum in local schools through better integration with New Rochelle's parkland assets, and improve the educational experience of youngsters.

The Colonial Greenway features helpful directional signage and maps at key locations.

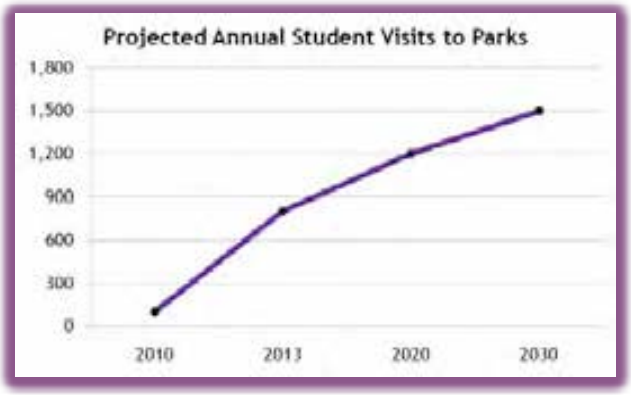
PAST ACTIONS & ACHIEVEMENTS:

The Colonial Greenway features maps sited at key locations. A map of Ward Acres was produced in the mid-1990s but has not been maintained. The Sheldrake Environmental Center maintains and posts maps of the James Johnson Conservancy.

CURRENT STATUS:

Information about the ecological and physical features of wooded areas within New Rochelle is not conveniently accessible. Many New Rochelle residents are not aware of the passive recreational assets within the community. New Rochelle High School is developing courses that could culminate in a concentration in Sustainability.

The Colonial Greenway includes approximately fifteen miles of trails, of which more than half are within the City of New Rochelle.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Establish a community-staff working group to determine sign locations and content. Include environmental and parks advocates, as well as environmental educators.

(2) Research availability of grants to fund design and fabrication of signs.

(3) Finalize plans for signage content, design, and placement.

(4) Design and host passive park and ecology webpage. If feasible, utilize students to update and improve the interactivity of such a page.

(5) Estimate probable cost of sign maintenance and determine responsibility for such maintenance.

(6) Work with local schools to develop lesson plans that utilize site visits to and study of local woodlands.

(7) Devise method for estimating and tracking park visits.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Implement signage plan, as resources permit and utilizing volunteer and student labor to the extent possible.

(2) Consider creating entry kiosks at the primary access points to parks, in which map brochures could be stationed, together with log books in which visitors could register and record comments.

(3) Maintain signage.

(4) Consider expansion of interpretive signage to encompass waterfront parks, such as Hudson Park, Davenport Park, and Five Islands Park.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue evaluating signage and webpage for possible changes or enhancements, and to perform necessary maintenance.

(2) If a Sustainability Education Center is established (Initiative 6.40), then integrate interpretive information maintenance and improvement into its ongoing responsibilities.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Parks with Signs & Maps Designed:	0	3	6	6
Parks with Signs & Maps Installed:	0	0	3	6
Annual Student Visits to Parks:	100	800*	1,200	1,500

* Enrollment in living environment, environmental, and earth sciences classes in the New Rochelle public schools.

Primary Departmental Responsibility: Parks & Recreation

Potential Partners: School District, County, Sheldrake Environmental Center, Private Schools, Boy Scouts, Ward Acres Community Gardeners, Ward Acres Dog Park Users

Potential Municipal Costs: Design, Fabrication, Installation and Maintenance of Signs

Potential Outside Funding Sources: State, County, Public Voluntary, Volunteers

Initiative 6.42:

GreeNR Tote Bags

DESCRIPTION:

Create reusable GreeNR canvas tote bags, while also adopting disincentives for the use of non-biodegradable plastic shopping bags.

GOAL:

Achieve general community use of GreeNR tote bags, with at least 90% of New Rochelle's households utilizing canvas bags on a regular basis. Promote public awareness of GreeNR and its goals, while reducing the waste generation associated with non-reusable plastic bags.

A successful tote bag campaign could save more than 7 million plastic shopping bags each year.

PAST ACTIONS & ACHIEVEMENTS:

None.

CURRENT STATUS:

Most large supermarkets sell canvas shopping bags with their corporate logo, but also continue to offer plastic bags as the default option for customers. There are no City regulations concerning bags, nor has a GreeNR tote bag been designed or fabricated.

The average useful lifespan of a plastic shopping bag is 20 minutes, but it requires an estimated 400 years to degrade.

RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Design a GreeNR tote bag.

(2) Contact major supermarket chains to determine willingness to substitute GreeNR tote bags for existing corporate bags or to add the GreeNR logo to existing corporate bags or to offer both options to customers. Identify other potential distribution and sale outlets.

(3) Determine total and per unit cost of production, together with per unit or bulk sale price. Evaluate options for profit-making, profit-sharing, cost-neutral sales, or subsidized distribution. Determine quantity for initial production and establish methodology for estimating future production.

(4) Produce and sell GreeNR tote bags.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Adopt a local law discouraging the use of plastic bags in stores above a minimum square footage, possibly by attaching a cost to each plastic bag, paid at point of purchase by the customer. The adoption of such regulations and the creation of GreeNR Tote bags are complementary actions, but not dependent upon each other and could be implemented independently.

(2) Advocate for adoption of consistent plastic bag policies throughout Westchester County.

(3) If biodegradable plastic bags achieve widespread use, then reconsider assumptions and goals of initiative.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue producing GreeNR tote bags with the goal of near-universal use.

PROGRESS TRACK

Year:	2011	2014	2020	2030
GreeNR Tote Bags Designed:	0	1	1	1
Plastic Bag Regulations Adopted:	0	0	1	1
Households Owning At Least One GreeNR Tote Bag:	0	25%	70%	90%
Estimated Plastic Bags Eliminated Annually (Millions)*:	0	2.0	5.6	7.2

* Five bags per week per participating household

Primary Departmental Responsibility: Marketing, Purchasing

Potential Partners: Supermarkets, Large Retailers, Chamber, BID

Potential Municipal Costs: Tote Bag Fabrication (Potentially Offset by Sales and/or Sponsorship Opportunities)

Potential Outside Funding Sources: Individual or Bulk Sale of GreeNR Tote Bags, Sponsorships

Initiative 6.43:

English Language Proficiency

DESCRIPTION:

Ensure that English language instruction is available, accessible, and affordable to non-English speakers in New Rochelle by working with public and not-for-profit providers to quantify current and potential demand, identify service gaps and other barriers to enrollment, and direct resources necessary to achieve universal access.

GOAL:

Achieve near-universal English language proficiency among New Rochelle residents, recognizing that proficiency with a common language can facilitate community dialogue, reduce barriers to public information, services and participation, and enable individuals to better seize opportunities for personal success.

The Adult Learning Center provides affordable ESL instruction to approximately 350 students each year.

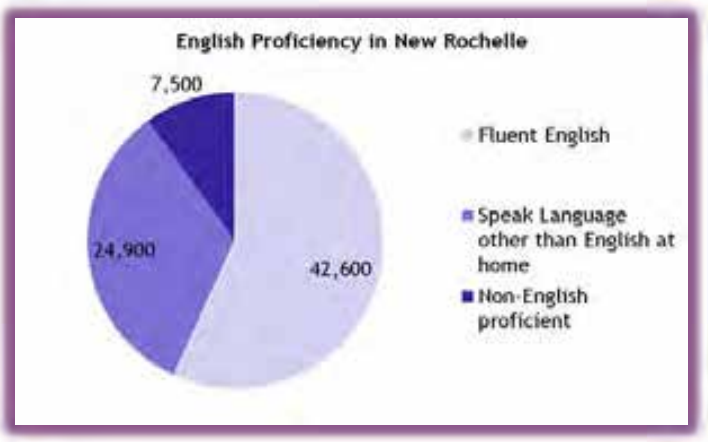
PAST ACTIONS & ACHIEVEMENTS:

ESL instruction for adults is provided by several public and not-for-profit entities within New Rochelle, including the Adult Learning Center, the English Language Institute of Westchester Community College and BOCES Southern Westchester. Together, these institutions are able to provide instruction to an estimated 1,616 adults* every year at generally affordable costs, including free instruction at the New Rochelle Public Library, organized by the English Language Institute.

* Adult Learning Center (350), English Language Institute (200 at Blessed Sacrament, 540 at Library), BOCES Southern Westchester (526). All figures are approximate and vary year to year. Classes are generally divided into semesters and some students may enroll for more than one semester.

CURRENT STATUS:

According to the 2000 census, 27% of New Rochelle residents are foreign-born and 33% speak a language other than English in the home, primarily Spanish. Hispanics are the fastest-growing demographic group within New Rochelle, comprising 20% of the population in 2000, with significant further growth anticipated with the release of the 2010 census. While many of these residents are bilingual, many others, particularly those who have immigrated as adults or as older teens, could benefit from English language instruction. In total, 10% of New Rochelle's population, or 7,500 residents, are estimated to be non-English proficient.



RECOMMENDED ACTIONS

SHORT-TERM RECOMMENDATIONS - COMPLETE BY YEAR 3

(1) Work with ESL providers to identify impediments to participation in English language instruction, including possible gaps between demand and supply, social or cultural barriers to enrollment, scheduling challenges, need for supplementary services such as child care, and/or adequacy of transportation to and from instruction. Determine the monetary and personnel resources and/or programmatic changes necessary to address such impediments.

(2) Draft a comprehensive community-wide plan for enhancing access to ESL instruction, and then seek public and private grants to implement such a strategy.

(3) Consider amending internal City guidelines for assignment of Community Development Block Grant funds to prioritize English language instruction.

MEDIUM-TERM RECOMMENDATIONS – COMPLETE BY YEAR 10

(1) Implement a comprehensive community-wide plan for enhancing access to ESL instruction, as resources permit, and then monitor participation rates to gauge success and/or the need for modification.

LONG-TERM RECOMMENDATIONS – COMPLETE BY YEAR 20

(1) Continue to monitor ESL participation and adjust programming as necessary based on changing demand patterns and community demographic characteristics.

PROGRESS TRACK

Year:	2011	2014	2020	2030
Projected Rate of English Language Proficiency:	90%	91%	93%	98%

Primary Departmental Responsibility: Manager

Potential Partners: Adult ESL Providers, Hispanic Advocates & Community Leaders, New Rochelle Public Library

Potential Municipal Costs: Support for Local Not-for-Profits

Potential Outside Funding Sources: Formula, Federal, State, County, Foundation, Public Voluntary

Appendices

Appendices:

Acknowledgements

The City of New Rochelle is indebted to the many individuals and organizations that contributed energy and expertise to the creation of GreeNR. This document results from a genuinely collaborative effort involving hundreds of person-hours during the course of an intense year of labor.

In particular, the City extends its thanks to the volunteer members of the Sustainability Advisory Board and its four Working Groups: Cheryl Archbald, Anne Beale, Dan Bena, Nanette Bourne, Ed Burroughs, Gina D'Agrosa, Michael Deane, Terri Eberle, Richard Ellenbogen, Linda Forman, Herb Fox, John Gallagher, Dakers Gowans, Amy Jackson, David Kooris, Faith Kostel-Hughes, Felipe Lecaros, Rita Mabli, Maggie MacNichol-Skau, Sadie McKeown, Chuck Mirabile, Jerry Mulligan, Steven Nakashima, John Nolon, Richard Organisciak, Daniel Pomerantz, Fredrica Rudell, Michael Rouse, Len Shendell, Joe Stabile, Bob Stanziale, Edna Sussman, Mitchell Tarnopal, and Adrienne Weiss-Harrison. Together, these individuals represent a collection of talent and knowledge of an order rarely before applied to civic challenges in New Rochelle. The development of GreeNR would have been simply impossible without their contributions.

We thank the members of the City staff who participated in and often led the discussion and development of GreeNR's initiatives. In addition to City Manager Charles Strome, these include: Michael Briska, Jeff Coleman, Kathy Gilwit, Kelly Johnson, Ed Lynch, Phillis Maucieri, Michelle Oliveros, Angela Taylor, Paul Vacca, and Bill Zimmermann. We note that all of these staff members have demanding full-time responsibilities outside the context of GreeNR, and that their involvement demonstrated impressive personal commitment to sustainability goals.

We make special note of the leadership of Deborah Newborn, New Rochelle's Sustainability Coordinator, whose initiative was instrumental in launching this process and who devoted herself with great success to managing the flow of information, drafting detailed recommendations, conducting painstaking research, and otherwise keeping participants focused on end goals.

Additional community leaders and members of the City staff provided valuable assistance with data collection and general assembly of information. These include: Lynn Brooks-Avni, Pete Campone, John Clemente, Michael Freimuth, Joyce Kent, Christine Magrin, Rash Mehta, Jagdish Mistry, George Rainone, Howard Rattner, Jeremy Schulman and Judith Weber.

We thank Frank Sarnicola for his exceptional graphic design work. The icons, color schemes and page lay-outs created by Mr. Sarnicola make GreeNR a remarkably accessible and readable document.

The City was proud to be selected by ICLEI and New York City's Office of Long-Term Planning and Sustainability as a pilot community to test ICLEI's sustainability plan toolkit, and we acknowledge ICLEI's advice and assistance in the initial stages of GreeNR's development, with special thanks to Jennifer Ewing Thiel.

Last, but certainly not least, we express appreciation to the dozens of citizens who offered suggestions and comments through participation in our sustainability workshop, submission of on-line proposals, or informal communication with City officials. Many of these suggestions are incorporated into GreeNR, and we hope that the community as a whole will remain engaged as we move toward implementation of this plan.

Appendices:

GreeNR Authors & Participants

SUSTAINABILITY ADVISORY BOARD (SAB) MEMBERS:

- Dr. Cheryl Archbald, MD, MPH, FAAP, Acting Commissioner – Westchester County Department of Health
- Dr. Anne C. Beal, MD, MPH, President – Aetna Foundation
- Dan Bena, Director Sustainability, Health, Safety & Environment – PepsiCo, Inc.
- Nanette H. Bourne, Senior Vice President – AKRF, President – League of Conservation Voters of Westchester
- Edward Burroughs, Acting Commissioner – Westchester County Department of Planning
- Michael Deane, Vice President & Chief Sustainability Officer – Turner Construction Company
- Terri L. Eberle, JD, Director of Government Relations – The College of New Rochelle
- Linda Forman, Vice President for Community Relations – United Hebrew
- Herbert Fox, Ph.D., Professor of Mechanical Engineering – NYIT, Past President – FCWC
- Amy Jackson, Parent, Volunteer, Community Organizer, Neighborhood Leader
- David Kooris, Hudson Valley Director – Regional Plan Association
- Felipe Lecaros, Esq.
- Rita C. Mabli, President and CEO – United Hebrew
- Sadie McKeown, Community Preservation Corporation
- Jerry Mulligan, Former Commissioner – Westchester County Department of Planning
- R. Steven Nakashima, MSPH, MPA, RS, Environmental Management Specialist
- Prof. John R. Nolon, Ph.D., Professor of Law and Counsel – Pace Land Use Law Center
- Richard E. Organisciak, Superintendent of Schools – New Rochelle City School District
- Prof. Fredrica Rudell, Ph.D., Chair, Marketing & International Business Dept. – Iona College
- Rev. Michael J. Rouse, Pastor – St. Catherine AME Church
- Leonard M. Shendell, President – Cornell Pace Inc., Board Member – Business Improvement District
- Edna Sussman, Esq., Arbitrator & Mediator – Sussman ADR LLC
- Dr. Adrienne Weiss-Harrison, M.D., F.A.A.P., Medical Director / School Physician – City School District

WORKING GROUP PARTICIPANTS:

- Gina D'Agrosa, Westchester County Department of Planning
- Richard Ellenbogen, President – Garb-O-Liner
- John Gallagher, Director of Buildings & Grounds – New Rochelle City School District
- Dakers Gowans, P.E., Proprietor – Left Fork Energy Inc.
- Prof. Faith Kostel-Hughes, Ph.D., Director of Environmental Studies – The College of New Rochelle
- Maggie MacNichol-Skau, Public Information Officer – New Rochelle City School District
- Saverio "Chuck" Mirabile, Dir. of Business Dev., Strategic Initiatives, Building Efficiency – Johnson Controls
- Dr. Daniel Pomerantz MD, FACP, Director, Ambulatory Care – Sound Shore Medical Center
- Prof. Joseph Stabile, Ph.D., Associate Professor and Chair of Biology Department – Iona College
- Robert Stanziale, Architect
- Mitchell Tarnopal, Chair – New Rochelle Traffic Advisory Committee

CITY OF NEW ROCHELLE PARTICIPANTS:

- Noam Bramson, Mayor
- Michael Briska, Traffic Engineer
- Jeffrey Coleman, Commissioner of Public Works
- Kathy Gilwit, Director of Marketing & Communications
- Kelly Johnson, Deputy Commissioner of Parks & Recreation
- Edward Lynch, Director of Planning
- Phillis Maucieri, Executive Director – Office of the Aging
- Deborah Newborn, Sustainability Coordinator
- Michelle Oliveros, Youth Worker
- Charles Strome, III, City Manager
- Angela Taylor, Assistant to the Mayor
- Paul Vacca, Deputy Commissioner of Development, Building Official

Appendices:

GreeNR History, Creation & Adoption

In December 2008 ICLEI – Local Governments for Sustainability and New York City's Office of Long-Term Planning and Sustainability invited municipalities throughout America to serve as pilots for a new sustainability plan toolkit, drawing primarily on New York City's experience in creating PlaNYC. More than twenty municipalities, including New Rochelle, applied for this opportunity.

On January 9, 2009, New Rochelle was selected as a pilot community, together with Miami-Dade County, Florida – small and large municipalities, respectively. The structure of New Rochelle's initial sustainability planning was shaped substantially by ICLEI's guidance and draft toolkit. This model includes five milestones: (1) Conduct a sustainability assessment; (2) Establish sustainability goals; (3) Develop a local sustainability plan; (4) Implement policies and measures; and (5) Evaluate progress and report results. As New Rochelle's efforts evolved, the City increasingly tailored the form and content of its planning to local needs, resources, and goals.

On April 29, 2009, City Manager Charles Strome appointed a Sustainability Advisory Board (SAB) composed of individuals with relevant knowledge and/or links to prominent community stakeholders and institutions. The SAB was chaired by Mayor Noam Bramson and met on a roughly six-week rotation from May 2009 through March 2010. The SAB commenced its work by agreeing on GreeNR's overall goals and vision and establishing a framework for the consideration of specific initiatives. The SAB continued to serve as the primary forum for debating and resolving broad questions of GreeNR format and content.

In addition, four working groups were established, focusing on the subjects of (1) energy and climate, (2) resource conservation, waste reduction, and ecology; (3) land use, development and transportation; and (4) public health, participation, and awareness. Each working group was chaired by a member or members of the City staff and composed of SAB members and additional volunteer experts. Like the SAB, working groups met on a roughly six-week rotation from July 2009 to February 2010. The working groups were charged principally with conceiving, researching, and drafting specific initiatives, and with suggesting metrics for measuring progress and setting targets.

On September 17, 2009 the City established a GreeNR website with a feature for submitting on-line proposals. On September 30, 2009 the City hosted a sustainability workshop, attended by approximately 150 citizens, featuring a keynote speech, followed by break-out sessions devoted to the four working group issue-clusters. Through both web submissions and the workshop, the public offered several dozen general and specific suggestions for sustainable action.

On April 20, 2010, a draft of GreeNR was presented to the City Council, and then on April 22 – Earth Day – the draft was posted on the City's website for public review and comment. The City Council conducted a public hearing in May 2010, and then discussed GreeNR's contents in detail during the subsequent ten months. In March 2011, the City Council approved amendments to the GreeNR draft, voted formally to support GreeNR as a statement of the community's sustainability objectives, and directed the City Manager to produce a strategy for implementing GreeNR's recommendations.

Appendices:

Glossary of Terms

ACRONYMS & ABBREVIATIONS

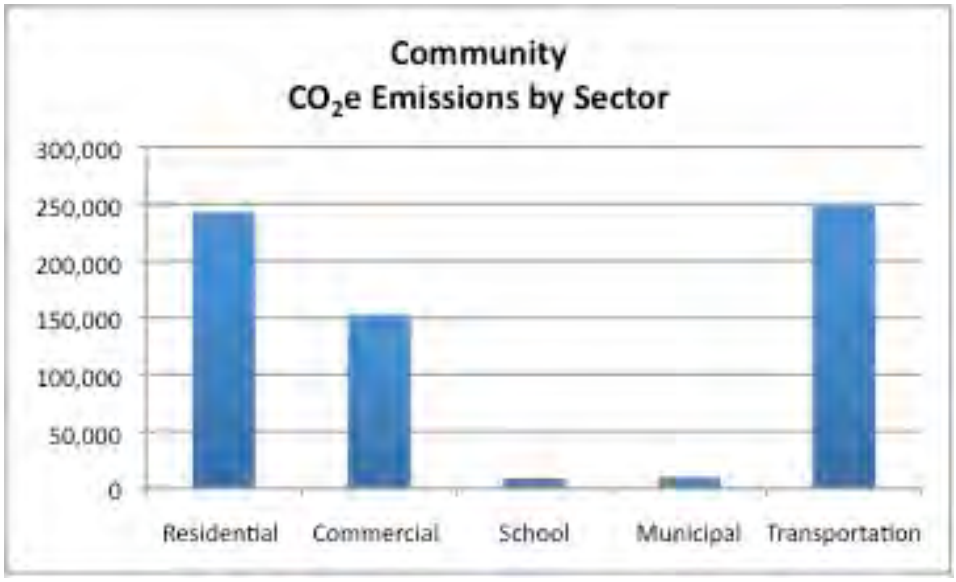
AMI: Area Median Income
BPI: Building Performance Institute
BTU: British Thermal Unit. (1 BTU is approximately the amount of energy needed to heat one pound of water one degree Fahrenheit.)
CDBG : Community Development Block Grant
CFL: Compact Fluorescent Light Bulb
CMAQ: Congestion Mitigation Air Quality Improvement Program
CO_2 e: Carbon Dioxide Equivalent - unit of measurement used to compare the relative climate impact of the different greenhouse gases
CPI: Consumer Price Index
D & B: Dun & Bradstreet
EEBCG: Energy Efficiency and Conservation Block Grant
ESCO: Energy Service Company
ESL: English as a Second Language
FAR: Floor to Area Ratio
GHG: Greenhouse Gas
HOME: Home Investment Partnerships Program
HSIP: Highway Safety Improvement Program
HVAC: Heating, Ventilation and Air Conditioning
ICLEI: International Organization for Local Governments for Sustainability
IDA: Industrial Development Agency
I & I: Inflow & Infiltration
LED Lighting: Light Emitting Diode Lighting
LEED: Leadership in Energy and Environmental Design, Building Standards developed by the US Green Building Council
LISWIC: Long Island Sound Watershed Inter-Municipal Council
METRIC TON: 1.1 American Tons
MG: Millions Gallons
MGD: Million Gallons per Day
MMBTU: One Million BTUs
MPG: Miles per Gallon
NAAQS: National Ambient Air Quality Standards
NREDI: New Rochelle Economic Development Initiative
NYSERDA: New York State Energy Research and Development Authority
PTA: Parent Teacher Association
ROS: Recreation and Open Space Zone
SEQRA: State Environmental Quality Review Act
STP: Surface Transportation Program
SOV: Single Occupancy Vehicle
TEP: Transportation Enhancement Program
TG: Thousand Gallons
TGD: Thousand Gallons per Day
TOD: Transit Oriented Development
VMT: Vehicular Miles Traveled
VOC: Volatile Organic Compounds
WAC: Watershed Advisory Committee

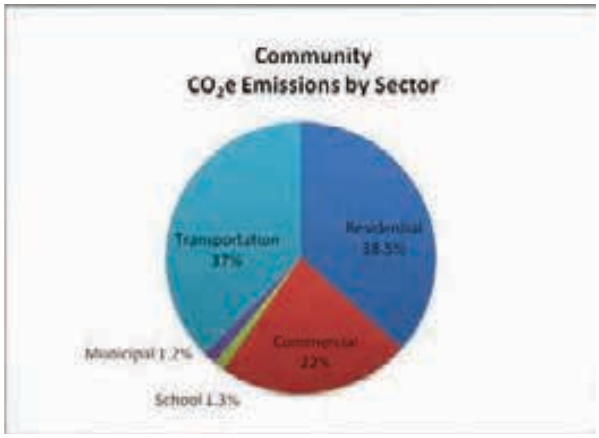
FUNDING SOURCES & PARTNERS

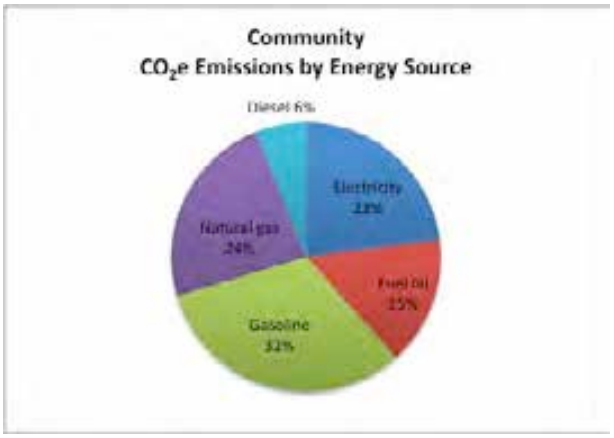
BID: Business Improvement District
Chamber: Chamber of Commerce
Colleges: Local Colleges
County: Westchester County Appropriations, Departments, and Programs
Developer Mandate: Required Developer Financial or In-Kind Contributions
Developer Voluntary: Requested Developer Financial or In-Kind Contributions
Federal: Federal Appropriations, Agencies, and Programs
Formula: Grants Administered But Not Funded by City, Such as CDBG, HOME, EEBCG
Foundation: Grants or In-Kind Services from Private Foundations or Corporations
Neighborhood: Neighborhood or Tennant Associations
Private Schools: Private or Parochial Schools
Public Mandate: Taxes, Fees, Fines or Other Forms of Mandatory Contribution
Public Voluntary: Voluntary Contributions of Funding, Land, or Other Assets
Schools District: City School District of New Rochelle
State: New York State Appropriations, Agencies, and Programs
Volunteer: Voluntary Donation of Labor or In-Kind Services

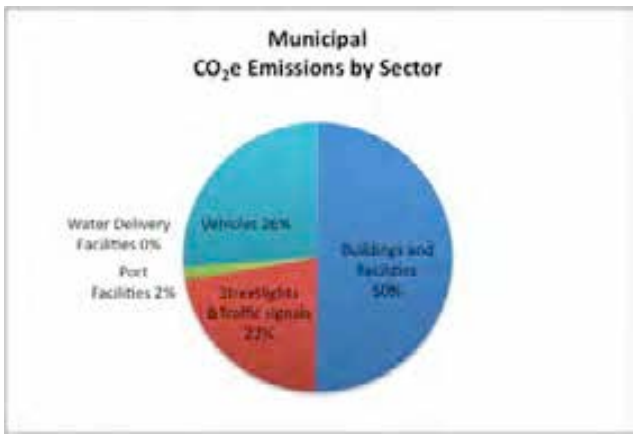
Appendices:

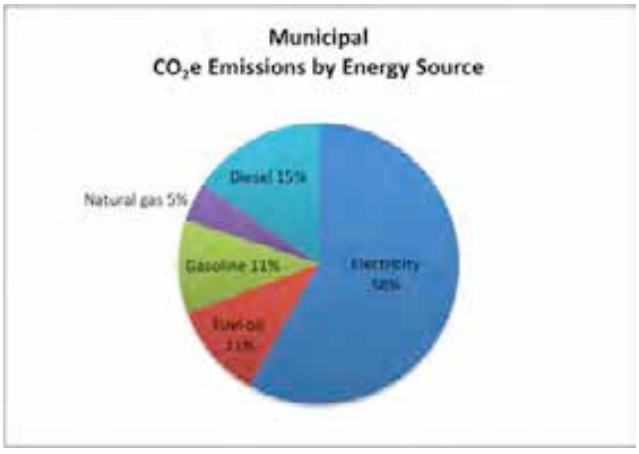
GHG & Energy Graphs











Appendices:

GHG Emissions & Energy Use Methodology

New Rochelle's 2005 baseline greenhouse gas inventory shows greenhouse gas emissions from the residential, commercial, school, transportation, and municipal sectors. The inventory accounts for energy consumed within the City of New Rochelle and does not include energy used to produce goods consumed in New Rochelle or wastes generated by New Rochelle. A separate inventory for municipal emissions is also presented so that the City government can better take action to reduce its own emissions and lead by example. For calculations per capita and per household, the 2005 census population estimate of 73,611 and an estimated household count of 27,000 were employed.

Greenhouse gas emissions were calculated by collecting information on energy use, including electricity, natural gas, fuel oil, gasoline, diesel fuel, and vehicle miles traveled within the City of New Rochelle. Information on energy use was then entered into the Clean Air and Climate Protection (CACP) Software developed by ICLEI-Local Governments for Sustainability. The software converts energy use into greenhouse gas emissions using specific factors according to the type of fuel used. Emissions are aggregated and reported in terms of carbon dioxide equivalents, or CO_2e. For example, methane traps heat twenty one times more effectively than CO_2. Therefore, a ton of methane emissions is quantified as 21 tons of CO_2e. The emissions coefficients and methodology employed by the CACP software are consistent with international inventory standards established by the Intergovernmental Panel on Climate Change and the US Voluntary Greenhouse Gas Reporting Guidelines.

Residential and Commercial emissions were calculated from electricity and natural gas usage obtained from Con Edison. Residential fuel usage was estimated based upon a template in the ICLEI software using population figures. Commercial fuel oil usage in New Rochelle was not available, so this figure was estimated by calculating the ratio of the population of New Rochelle to the population of New York State and applying that fraction to the total fuel oil usage for New York State as provided by the US Department of Energy.

School emissions were calculated using electricity, natural gas, fuel oil, gasoline and diesel fuel usage obtained from the New Rochelle School Districts records for the calendar year 2006-2007.

Transportation data was not available for New Rochelle so an emissions estimate was made based on the total vehicular miles traveled (VMT) in Westchester County in 2005 as provided by the New York Metropolitan Transportation Council. Two separate methodologies were employed. The New Rochelle highway VMT was estimated by taking the ratio of highway miles in New Rochelle to the total highway miles in Westchester County and applying that fraction to the total highway VMT in Westchester County. The New Rochelle arterial and local road VMT was calculated by taking the ratio of New Rochelle's population to the total population of Westchester County and applying that fraction to the total arterial and local roads VMT in Westchester County.

Municipal emissions were calculated from energy use data obtained from the 2005 Mayor's Energy Initiative Energy Audit and from Con Edison.

Appendices:

Chart of Initiatives

The following Chart of Initiatives summarizes the contents of Initiatives and should not be regarded as comprehensive. To review Initiatives in full, please refer to GreeNR's Action Plan. As noted previously, GreeNR's approval does not automatically assign funding to its implementation. As with all City appropriations, the Council will judge the merit of any expenditure on a case-by-case basis in the context of competing priorities, general economic conditions, public interest, and costs and benefits.

Energy & Climate

#	Name & Description	Recommendations & Goals
1.1	**Green Building Standards** Encourage efficient design and operation in conjunction with new construction and major renovation.	2014: Draft local building code for new construction, major renovation and municipal construction, including (a) comprehensive energy efficiency for 10,000 sq ft. or above; (b) efficient lighting for all sizes (c) consider efficient roofing in suitable structures; (d) LEED cost-benefit analysis for public buildings. 2020: Adopt & Implement Code. 2030: Modify Code as Needed.
1.2	**Exterior Lighting Efficiency** Replace/retrofit municipal exterior lights to reduce energy consumption and cut electricity costs.	2014: Conduct municipal exterior lighting audit to determine most favorable upgrade option. Begin replacement of exterior lights. 2020: Complete replacement (if not completed by 2014). 2030: Evaluate new technology to determine value of further upgrades.
1.3	**Municipal Building Efficiency** Retrofit municipal buildings to reduce energy consumption and cut energy costs.	2014: For the three municipal buildings that have been audited, determine which recommendations shall be implemented. Consider application of white coating to suitable municipal roofs. 2020: Complete efficiency measures of first audit. Audit remaining City buildings. 2030: Complete efficiency measures in all municipal buildings.
1.4	**Green Fleet** Increase the average gas mileage of the City fleet.	2014: Inventory City fleet and begin rolling replacement with more fuel-efficient alternatives as vehicles reach end of useful life. 2020: Continue rolling replacement. Investigate alternative fuel options. 2030: Continue rolling replacement.
1.5	**Renewable Energy Generation** Amend local laws to accommodate appropriate renewable energy options for private property owners and explore opportunities for renewable energy generation on public property.	2014: Consider amendments to zoning code to facilitate private renewable energy generation. 2020: Inventory public land to determine potential for renewable energy generation and begin implementation of identified opportunities. 2030: Continue implementation of above.
1.6	**GreeNR Seal** Establish voluntary program to recognize and incentivize green design, retrofit and operation in residential and business sectors.	2014: Create GreeNR Seal standards. 2020: Begin conferring GreeNR Seals on qualified homes and businesses. 2030: Update GreeNR Seal standards as needed.
1.7	**Mid & High Rise Building Campaign** Conduct education and outreach campaign to promote energy and resource efficiency in mid and high rise residential and commercial buildings.	2014: Develop recommendations for mid and high-rise structures. Commence educational campaign. Begin tracking progress. 2020: Expand educational efforts. 2030: Continue educational efforts. Update recommendations as needed.
1.8	**Efficiency & Conservation Loans** Consider the creation of a voluntary loan program to make home and business energy improvements more affordable.	2014: With State authorization, enlist local lenders to create a conservation loan program. Launch two-year pilot. 2020: Complete pilot and, if deemed successful, launch program city-wide. 2030: Market program to areas deemed to have greatest savings potential.

Resource Conservation & Waste Reduction

#	Name & Description	Recommendations & Goals
2.9	**Municipal Building Waste Reduction** Reduce wasteful resource consumption in municipal buildings.	2014: Create departmental "Green Teams" to evaluate internal practices and encourage BMPs. Conduct waste audit and implement opportunities for waste reduction. 2020: Maintain or expand efforts. 2030: Maintain or expand efforts.
2.10	**Residential Recycling Campaign** Increase community-wide recycling rates and cut waste disposal costs.	2014: Launch educational campaign. Increase frequency of warning and violation notice issuance. 2020: Establish procedures to better track recycling participation. Consider changes in sanitation schedule. 2030: Maintain educational efforts.
2.11	**Public Area Recycling** Recycle in public areas, such as parks.	2014: Launch pilot program at one or two public locations. Evaluate program operation and cost. 2020: Expand pilot program, if resources permit. Seek grant support. 2030: Continue program expansion, as resources permit.
2.12	**Municipal Green Purchasing** Consider materials, manufacturing method, health effects, etc. of items purchased by City .	2014: Identify purchasing alternatives on a phased basis and develop administrative regulations to implement. 2020: Review, update and expand green purchasing policies. 2030: Review, update and expand green purchasing policies.
2.13	**Water Use & Wastewater Reduction** Reduce community-wide water consumption and wastewater generation. Facilitate repair of sanitary sewer infrastructure.	2014: Continue replacement of municipal plumbing fixtures as useful life expires. Consider efficiency regulations for high-water businesses. Launch educational campaign to encourage BMPs. Evaluate new options for developer-funded infrastructure improvement. 2020: Continue replacement of municipal plumbing fixtures. Maintain educational campaign. Begin implementation of developer-obligation policies. 2030: Complete replacement of municipal plumbing fixtures. Maintain educational campaign. Continue implementation of recommended developer-obligation policies.
2.14	**Household Composting** Encourage household composting to reduce waste disposal and promote organic gardening.	2014: Launch educational campaign to encourage household composting. Consider sale of bins at cost. Establish registration system to track participants in program. 2020: Maintain educational campaign and registration process. 2030: Maintain educational campaign and registration process.
2.15	**Regional Composting Study** Evaluate creation of a regional composting site to reduce transportation-related costs and energy consumption.	2014: Study regional composting options, costs, operational challenges and potential benefits. 2020: If deemed practical, implement regional study recommendations. 2030: Maintain any new operations.

Ecology, Biodversity & Public Health

#	Name & Description	Recommendations & Goals
3.16	**Sound, Lake & Stream Water Quality** Improve the ecological health, cleanliness, appearance and retention capacity of water bodies, while reducing pollution levels in Long Island Sound.	2014: Evaluate inland water body conditions and sources of pollution. Devise multi-year plan for improvement. Institute annual maintenance program. Commence and maintain search for grants. 2020: Begin phased implementation of improvements, as resources permit. Utilize incentives and/or requirements to reduce point and non-point pollution. 2030: Complete phased implementation of improvements, if resources permit.
3.17	**Habitat & Open Space Preservation** Use various land use tools to achieve no net loss of land in a substantial natural state and to enhance ecological health and beauty of the community.	2014: Inventory open space assets. Consider ROS zone expansion. Consider land use standards to protect greenbelts. 2020: In context of private development, restore local brownfields for public use and/or benefit. Evaluate potential acquisition of at-risk open space. Pursue grant opportunities. 2030: Maintain efforts.
3.18	**Urban Forestry** Achieve a net increase of 10,000 trees on public property, while also encouraging private tree planting to improve aesthetics and air quality, moderate temperatures and mitigate flooding.	2014: Create long-term plan for expanded tree planting. Consider amendment of hardscape regulations to enhance tree cover. Evaluate tree-siting policies to minimize public maintenance costs. Consider expansion of tree ordinance. Launch fund-raising campaign. 2020: Increase rate of public tree planting. Launch promotional campaign to encourage private tree planting. 2030: Reduce tree planting frequency to maintenance levels.
3.19	**Flood Control & Mitigation** Reduce incidence and severity of local flooding. Identify and implement new strategies to control run-off.	2014: Continue support for regional stormwater and assessment districts. Consider amendments to local codes and educational measures to facilitate permeable pavement use and to reduce run-off. Evaluate benefits of public "green infrastructure." Aggressively seek funding for identified storm water infrastructure deficiencies. 2020: Repair and/or upgrade storm water infrastructure, as resources permit. Implement recommended code and "green infrastructure" policies. Maintain educational efforts. 2030: Maintain efforts.
3.20	**Rain Gardens** Promote the creation of rain gardens on public and private property as a means of reducing flooding, cutting grounds maintenance costs and enhancing the appearance of the community.	2014: Develop guidelines and long-term plan for municipal rain garden planting and begin phased implementation. Consider modification to the Adopt an Island program. Launch educational campaign. Solicit in-kind contributions. 2020: Continue phased implementation of planting program. Establish means to register and track sustainable landscaping features. 2030: Complete phased implementation of planting program. Maintain educational efforts.
3.21	**Green Lawn & Garden Care** Conduct educational campaign and expand options for sustainable lawn care and gardening practices, aimed at reducing water consumption and cutting pollution discharge.	2014: Develop lawn care guidelines and launch educational campaign. Consider amendments to local codes to remove impediments, if any, to recommended practices. Consider local recognition program. Employ recommended practices on public land. 2020: Maintain educational campaign. 2030: Maintain educational campaign.

Ecology, Biodversity & Public Health

#	Name & Description	Recommendations & Goals
3.22	**Idling Prevention** Reduce voluntary vehicle idling to improve air quality and save fuel.	2014: Expand anti-idling educational campaign in partnership with School District. Promulgate municipal work rules to discourage idling. Commence enforcement of anti-idling restrictions. 2020: Maintain educational efforts. Expand to include private and parochial schools. 2030: Maintain educational campaign.
3.23	**GreeNR Walking Guides** Encourage and facilitate walking as a means of achieving health and social benefits.	2014: Devise and map walking routes and encourage formation of walking groups, with web-based tracking of progress. 2020: Raise awareness about walking routes and link local programs to regional or national walk promotion. 2030: Update program as needed.
3.24	**Local Agriculture & Fresh Food** Expand access to fresh and nutritious produce and encourage participation in organic farming.	2014: Expand downtown farmers market. Evaluate feasibility of new garden sites. Modify building code to permit rooftop gardens. 2020: Implement community garden expansion recommendations. Evaluate food service options at Transit Center. Strive to attract one commercial rooftop farm. 2030: Maintain efforts.

Smart Growth & Economic Prosperity

#	Name & Description	Recommendations & Goals
4.25	**Transit-Oriented Smart Growth** Pursue comprehensive strategy to promote beneficial development with convenient access to mass transit. Plan for anticipated population growth to maximize economic benefits and minimize service and/or environmental costs.	2014: Create commercial/residential structural and spatial inventory around Transit Center. Identify appropriate sites for development. Evaluate and improve parking requirements. Evaluate expanded 24/7 use of Transit Center garage. Establish TOD land use goals and link to relevant City codes and planning documents. Identify infrastructure needs and create multi-year capital improvement plan. 2020: Continue pursuing appropriate development. Consider expansion of central parking overlay to lower North Avenue. Advocate for State and federal standards that promote and facilitate TOD. Seek partnership with Metro-North and NYSTA. 2030: Maintain efforts.
4.26	**Waterfront Access & Enjoyment** Integrate the Long Island Sound waterfront more fully into the economic and recreational life of New Rochelle, including a one-mile increase in publicly accessible shoreline and enhancement of existing waterfront parks.	2014: Evaluate condition and usage of waterfront parks. Create waterfront access and way-finding plan. Adopt code amendments to encourage waterfront access. Pursue appropriate development opportunities at Echo Bay and Davids Island. 2020: Implement way-finding system and evaluate tourism options. Begin phased improvements at waterfront parks, as resources permit. Continue development efforts at Echo Bay and Davids Island. Evaluate opportunities for enhanced water-borne transportation. 2030: Complete parks improvements, if resources permit. Complete Echo Bay and Davids Island plans.
4.27	**Peripheral Node Planning Standards** Encourage contextual design in the growth and redevelopment of secondary commercial and mixed-use corridors and hubs.	2014: Draft amendments to relevant codes and documents. 2020: Adopt recommended amendments. Consider incentives for retrofit of existing structures. 2030: Evaluate revisions for possible updating or improvement.
4.28	**Green Business & Job Creation** Foster green business creation and growth and expand access to green job skills for local residents.	2014: Convene a "Green Business Council" to establish strategy for business growth and attraction. Utilize grants and partnerships to create green job training opportunities. Consider linking public development incentives to green job growth. Utilize NREDI model to offer green job training in conjunction with development. 2020: Implement Green Job & Business Strategy. 2030: Maintain efforts.
4.29	**Workforce Housing** Facilitate workforce housing development in order to enhance access to quality housing, reduce commute times and comply with County Legacy requirements.	2014: Refine strategy to satisfy County Legacy requirements. Advocate for expansion of affordability definition. 2020: Complete Legacy requirements. Consider amendments to local housing policy. 2030: Maintain workforce housing development, with a goal of 250 new units.
4.30	**Creative Capital** Attract a larger "creative class" to New Rochelle and realize the economic benefits associated with arts and culture. Integrate the arts more fully into the physical fabric of the city.	2014: Encourage additional public art installations, utilizing grants and volunteer assistance. Evaluate merits of local arts district creation. Evaluate merits of local arts & cultural center. Resolve local code impediments to appropriate live-work space. Foster collaboration among art advocates. 2020: Implement recommendations for arts district formation. Implement recommendation for arts & cultural center creation. Continue public arts installations. 2030: Maintain efforts.

Transportation & Mobility

#	Name & Description	Recommendations & Goals
5.31	**Pedestrian Safety & Mobility** Create a comprehensive system of safe and accessible walkways linking major community nodes. Reduce energy consumption and traffic congestion, while promoting public health.	2014: Develop long-term plan for sidewalk repair and improvement. Adopt Complete Streets model for public and private road reconstruction where feasible. Enhance pedestrian safety through education, enforcement and technology. 2020: Begin implementing sidewalk and pedestrian improvements, as resources permit. Aggressively seek grants. 2030: Complete sidewalk and pedestrian improvements, if resources permit.
5.32	**Bicycle Safety & Mobility** Create a comprehensive system of safe and accessible bicycle routes linking major community nodes. Reduce energy consumption and traffic congestion, while promoting public health.	2014: Develop bicycle Master Plan to outline phased and prioritized improvements. Adopt Complete Streets model for public and private road reconstruction where feasible. 2020: Begin to implement Master Plan recommendations, as resources permit. Consider creating a "bicycle share" program. Evaluate program options for making bicycles affordable and accessible to all residents. 2030: Complete implementation of Master Plan, if resources permit.
5.33	**Downtown Access** Facilitate efficient and attractive multi-modal access to New Rochelle's downtown in order to promote commerce and reduce travel time.	2014: Complete North Avenue phase III. Design West Main improvements. Commence planning analysis of Memorial Highway/Circle corridor. Identify pedestrian and bicycle impediments surrounding Transit Center. 2020: Commence West Main streetscape, as resources permit. Complete Memorial Highway/Circle corridor design. Introduce downtown managed traffic system with State support. Implement recommended bicycle and pedestrian improvements. 2030: Complete Memorial Highway/Circle improvements, if resources permit.
5.34	**Jitney Service Study** Consider creation of low-cost jitney service to serve commuting, recreational and general commercial riders.	2014: Evaluate merit of local jitney service. 2020: If recommended, launch jitney service. 2030: Modify, expand or discontinue based on experience.
5.35	**Green Commuting** Discourage single-occupancy vehicle commutation to City Hall and other employment centers, as a means of reducing fuel consumption and traffic congestion, and of averting the need for costly physical parking expansion.	2014: Establish fee and credit structure for municipal parking. Encourage similar policy for major local employers. Consider merit of requiring such policies. 2020: Adjust fee and credit structure as necessary. Continue efforts to encourage similar practices among private employers. 2030: Maintain efforts.
5.36	**Scooter & Motorcycle Parking** Improve and expand scooter and motorcycle parking options in order to facilitate more fuel-efficient transportation options.	2014: Improve motorcycle and scooter parking areas at City parking lots and garages. Monitor use patterns. 2020: Adjust availability to meet demand. 2030: Continue adjusting availability of spaces to meet demand.

Public Participation & Awareness

#	Name & Description	Recommendations & Goals
6.37	**GreeNR Awareness Campaign** Conduct a broad-based public awareness campaign to share information about sustainable action and enlist community participation in achieving GreeNR's objectives.	2014: Create Citizen's Guide to Sustainability, primarily for on-line distribution. Conduct general educational campaign, utilizing customized toolkits. 2020: Continue educational efforts. Create guidelines for green events. Utilize social networking opportunities to expand outreach. 2030: Update recommendations and maintain educational efforts.
6.38	**Informed Social Competition** Promote voluntary conservation by empowering residents and property owners to better evaluate their own resources consumption through comparison to community averages.	2014: Work with utility providers to offer comparative consumption data and conservation guidelines on utility bills. Launch pilot program. Consider options for highlighting successful conservation measures. 2020: Expand pilot, if successful. 2030: Update and modify program, as needed.
6.39	**Civic Communication** Expand access to and improve awareness of general civic information, municipal decision-making, and community events.	2014: Create and launch comprehensive effort to sign-up for City email notification and bulletins. Evaluate options for surmounting language barriers to civic communication. 2020: Continue efforts to attract email subscribers and utilize social networking as an alternative outreach method. Restore publication of City newsletter, as resources permit. Expand City cable programming. 2030: Maintain efforts.
6.40	**Sustainability Education Center Study** Consider adapting a under-utilized municipal building to serve as center for sustainability education and demonstration.	2014: Assist private advocates in evaluating merits of and options for a Sustainability Education Center. 2020: If recommended, support private development efforts. 2030: Complete implementation efforts under private supervision and direction.
6.41	**Outdoor Classrooms** Raise awareness about regional natural history and ecology through integration into local educational curriculum, enhanced general access to information, and expanded public use of passive parkland.	2014: Create plan for interpretive signage and map system in wooded parks. Work with schools to develop lesson plans drawing on local ecology. Establish webpage on local woodland ecology. 2020: Implement signage and map installation, as resources permit. Consider expanding plans to encompass waterfront parks. 2030: Update and maintain signage and webpage, as needed.
6.42	**GreeNR Tote Bags** Create and encourage use of GreeNR tote bags to reduce waste generation and increase awareness about local sustainability goals.	2014: Fabricate and sell GreeNR tote bags. 2020: Adopt a local law to discourage plastic shopping bag use. Encourage use of GreeNR tote bags. 2030: Continue to encourage use of GreeNR tote bags.
6.43	**English Language Proficiency** Achieve near-universal access to affordable adult English-language instructions.	2014: Work with not-for-profit and public ESL providers to evaluate sufficiency of access to adult English-language instruction and create plan to address impediments to affordable, universal access. 2020: Implement recommended improvements, as resources permit. 2030: Update or maintain efforts, as needed.

Numbers

Numbers:

Human

GENERAL POPULATION CHARACTERISTICS (2010 CENSUS):

Official Population:	77,062	
Age		
Over 18	59,554	77.3%
Under 18	17,508	22.7%
Race		
Non-Hispanic White:	36,948	48.0%
Hispanic:	21,452	27.8%
Non-Hispanic Black:	13,956	18.1%
Asian:	3,212	4.2%
Multiracial:	1,138	1.5%
Other:	242	0.3%
American Indian:	94	0.1%
Native Pacific Islander:	20	0.3%
Total Households:	27,953	
With Children Under 18:	8,642	33.0%

POPULATION PROJECTIONS:

2010 Population (Rounded):	77,000
2030 Population (Projection):	82,000*
2010 Households (Rounded):	28,000
2030 Households (Projection):	30,500*

* Proportional share of projected New York Metropolitan Area projected population growth, with average household size reduced from 2.68 to 2.0, based on likely housing type. Assumptions are also generally consistent with zoning-based growth possibilities, based on the GEIS for the Downtown Density Bonus, which contemplates a full build-out of 1,842 units with 5,047 residents.

EDUCATIONAL ATTAINMENT & SCHOOLING:

Residents Age 25 & Older With . . .	
High School Degree or Higher	81.5%
Bachelor's Degree or Higher	39.3%
Total K-12 Students:	14,678
Public Schools:	11,022
Private Schools:	3,656

LANGUAGE & ORIGIN:

(Source: 2009 American Community Survey)

Foreign Born Persons:	20,790	27.0%	
Language Other Than English At Home:	25,872	33.6%	(Spanish: 18.1%, Other: 15.5%)
Estimated Non-English Proficiency*:	7,500	10.0%	

* Assumes current Hispanic population of 20,000 of which 14,000 are over 18, of which 50% are Enligh-proficient, plus an additional 500 whose native tongue is other than Spanish.

Numbers:

Behavioral

ENERGY USE (MMBTU) - 2005

Total Energy Use:		9,196,946	100.0%
Per Household		339	
Per Capita		125	
Private Sector		8,963,858	97.5%
	Residential	3,537,250	38.5%
	Commercial	2,012,348	22.4%
	Transportation	3,414,260	37.1%
Public Sector		233,088	2.5%
	Municipal	113,991	1.2%
	School	119,097	1.3%

GREENHOUSE GAS EMISSIONS (METRIC TONS OF CO_2e) - 2005:

Total CO_2e Emissions		662,601	100.0%
Per Household		24.5	
Per Capita		9.0	
Private Sector		643,643	97.1%
	Residential	242,798	36.6%
	Commercial	152,632	23.0%
	Transportation	248,213	37.5%
Public Sector		18,958	2.9%
	Municipal	10,066	1.5%
	School	8,892	1.3%

COMMUNITY ENERGY USE & CO_2e EMISSIONS BY SOURCE - 2005:

		CO_2e(Metric Tons)		Energy (MMbtu)	
Total		662,678	100.0%	9,198,026	100.0%
	Electricity	151,979	22.9%	1,398,137	15.2%
	Fuel Oil	102,764	15.5%	1,396,913	15.2%
	Gasoline	211,163	31.9%	2,908,725	31.6%
	Natural Gas	156,944	23.7%	2,950,317	32.1%
	Diesel Fuel	39,828	6.0%	543,934	5.9%

Numbers:

Behavioral

MUNICIPAL ENERGY USE & CO_2E EMISSIONS BY SOURCE & SECTOR - 2005

	CO_2e (Metric Tons)		Energy (MMBtu)	
Total	10,027	100.0%	113,990	100.0%
Source				
Electricity	5,838	58.2%	54,100	47.4%
Fuel Oil	1,108	11.1%	15,061	13.2%
Gasoline	1,076	10.7%	15,089	13.2%
Natural Gas	457	4.6%	8,591	7.5%
Diesel	1,549	15.4%	21,150	18.6%
Sector				
Buildings	5,045	50.3%	55,664	48.8%
Street/Traffic Lights	2,193	21.9%	20,171	17.7%
Port Facilities	163	1.6%	1,498	1.3%
Vehicles	2,626	26.2%	36,657	32.2%

CONVERSION
1 gallon of gas = 115,000 Btu = 19.4 pounds of CO_2e
1 gallon of diesel = 130,500 Btu = 22.2 pounds of CO_2e

SOLID WASTE GENERATION - 2010:

Total Solid Waste (Tons):	49,978	100.0%
Non-Recyclable:	29,932	59.9%
Total Recycled:	20,046	40.1%
Leaves:	7,291	14.6%
Yard Waste:	2,584	5.1%
Paper & Co-Mingled:	5,104	10.2%
Asphalt Millings, Concrete:	4,000	8.0%
Appliances/White Goods:	51	0.1%
Computers/TVs:	134	0.3%
Returned Deposit Containers	882	1.8%
Per Capita Solid Waste Total (Pounds):	1,298	
Per Capita Non-Recyclable (Pounds):	777	
Per Capita Recycled (Pounds):	521	
Per Household Solid Waste (Pounds):	3,570	
Per Household Non-Recyclable (Pounds):	2,138	
Per Household Recycled (Pounds):	1,431	

Numbers:

Behavioral

WATER QUALITY (LONG ISLAND SOUND)

(Source: Westchester County Department of Planning)

Nitrogen

Number of Wastewater Treatment Plants:	109
Annual Nitrogen Discharge 2007 (Pounds):	150,000 (Plant Discharge is 40% of Total Nitrogen)
Hypoxic Conditions in 2007 (Days):	58

(Hypoxia Defined at Dissolved Oxygen Below 3 mg/l. Deadly to Aquatic Life Below 2mg/l.)

Pathogens (Bacteria Principally from Waste – Untreated Sewage & Run-Off)

Hudson Park Beach Closures (2009):	39

TRANSPORTATION & COMMUTING:

Commuting Methods (Source: American Community Survey 2009)

Public Transportation:	20.8% (Bus: 4.7%, Rail: 16.2%)	
Walked:	14.0%	
Worked at Home:	6.8%	
Taxicab, Motorcycle or Other:	0.6%	
Bicycle:	0.2%	
Car, Truck or Van:	57.6%	(Vehicles Used: 18,725)
Drove Alone:	50.3%	
Carpooled:	7.4%	

Bee-Line Bus

Bus Stops in New Rochelle:	255 (12 for School Only)
Weekly Rides (2008):	26,934
Weekly Peak Hour Rides (2008):	7,822
Average Weekday Rides:	3,166

Metro-North Average Weekday Rides:	4,000

Work In . . .	New Rochelle:	38.1%
	Westchester:	26.8%
	NYC:	34.3%
	Other:	0.8%

Commute Time Over 30 Minutes:	40.9%

WATER CONSUMPTION - 2009

Total Water Consumption (MGD):	12.25 (Estimate from United Water)
Residential (Estimate):	9.75
Commercial (Estimate):	2.5
Per Capita (Gallons/Day):	159
Per Household (Gallons/Day):	437

Municipal (2009)

Annual (MG):	8.57
Daily Average: (Gallons):	23,474
Cost:	$63,000

Numbers:
Behavioral

SANITARY SEWAGE VOLUME & FLOW RATE - 2009

(Source: Westchester County Department of Environmental Facilities)

Sewage Treatment Plant & District

Plant Treatment Capacity Post-Upgrade (MGD):	20.6
Plant Treatment Capacity Pre-Upgrade (MGD):	13.6
Estimated Sewer District Population:	72,500
City of New Rochelle:	83%
Town of Mamaroneck:	12%
Town of Pelham:	5%
Estimated Sewer District Households:	27,000
Sewer District Size (Acres):	5,760
City of New Rochelle:	4,601
Mamaroneck & Pelham:	1,159

Non-Storm Conditions

Sewage Flow Rate – Base (MGD):	7.5	Peak: 12.5	Low: 1.0
Sewage Flow Rate – I & I (MGD):	8.0 (Principally Infiltration)		
Sewage Flow Rate – Total (MGD):	15.5	Peak: 20.5	Low: 9.0

Average Storm Conditions

Sewage Flow Rate Peak (MGD):	30.0
Base Peak:	12.5
I & I:	17.5 (219% Normal)
Infiltration:	8.0
Inflow:	9.5

Heavy Storm Conditions

Sewage Flow Rate Peak (MGD):	55.0 (Hydraulic Capacity of Trunk)
Base Peak:	12.5
I & I:	42.5 (531% Normal)
Infiltration:	8.0
Inflow:	34.5

Gallons Per . . . *	Acre	Capita	Household
Base:	1,302	103	278
Base at Peak Hour:	2,170	172	463
I & I Non-Storm:	1,389	110	296
I & I Average Storm:	3,308	241	648
I & I Heavy Storm:	7,378	586	1,574

* Based on Overall Sewer District Size & Population

Numbers:

Physical

GENERAL GEOGRAPHY

Total Land Area:	10.37 Square Miles 6,639 Acres
Population Density:	7,425 per Square Mile 11.6 per Acre

LAND USE & ZONING

Land Use Patterns & Zoning (Acres)	6,639	100.0%
Residential Single-Family	2,623	39.5%
Rights-of-Way:	1,242	18.7%
Open Space/Recreation:	1,073	16.2%
Institutional:	376	5.7%
Residential Two/Three-Family	330	5.0%
Residential Multi-Family	282	4.3%
Commercial, Office & Retail:	234	3.5%
Vacant:	226	3.4%
Transportation & Utilities:	87	1.3%
Industrial & Manufacturing:	77	1.2%
Interior Water Bodies:	68	1.0%
Mixed (Residential/Commercial):	30	0.5%

OPEN SPACE, PARK LAND & PUBLIC ACCESS

Open Space/Recreation Detail (Acres):	1,073	16.2%	100.0%
Public Access:	577	8.7%	53.8%
City Parks:	270	4.1%	25.2%
County Parks:	175	2.6%	16.3%
Nature Preserves:	109	1.6%	10.2%
Water Supply Lands:	23	0.3%	2.0%
No Access – Limited Access:	497	7.5%	46.3%
Private Recreation:	346	5.2%	32.2%
State Parkway Lands:	88	1.3%	8.2%
Cemeteries:	54	0.8%	5.0%
Homeowner Association:	9	0.1%	0.8%

Total Park/Public Access Space (Acres):	577	8.7%	100.0%
Mainly Natural:	345	5.2%	59.8%
Mainly Active:	107	1.6%	18.5%
Mixed Active/Natural:	125	1.9%	21.7%
Waterfront:	131	2.0%	22.7%
Inland:	446	6.7%	77.3%

Numbers:

Physical

GROUND COVER

Impermeable Surface* (Traditional Pavement & Structures)	3,744	56.4%
Permeable Surface:	2,895	43.6%
Developed/Maintained (Lawns, Playing Fields, Etc.)	1,647	24.8%
Substantially Natural State* (Woods, Greenbelts, Lakes, Etc.)	1,248	18.8%

* Impermeable Surface: Aggregate acreage of land use categories, adjusted as follows: Residential Single-Family (0.5), Rights-of-Way (.95), Open Space/Recreation (0.05), Institutional (0.6), Residential 2-3 Family (0.85), Residential Multi-Family (0.90), Commercial (0.95), Vacant (0.25), Transportation (0.95), Industrial (0.98), Interior Water Bodies (0.0), Mixed-Use (0.95)

*Substantially Natural State: Aggregate acreage of land use categories, adjusted as follows: Interior Water Bodies (1.0), Recreation & Open Space (.75), Vacant (0.5), Residential-Single Family (0.1)

WATERFRONT

(Estimates Based on Zoning Map Measurements)

Total Shoreline (Linear Feet):	72,500
Mainland:	40,000
Glen Island:	10,000
Davids Island:	9.000
Vacant/Private Islands:	13,500
Public Access:	21,175
Glen Island:	10,000
City Parks/Marina:	11,175
Private or Inaccessible:	51,325
Mainland:	28,825
Davids Island:	9,000
Vacant/Private Islands:	13,500
Total Shoreline (Crow-Flight):	15,000

FORESTRY

Estimated Number of Trees:	400,000	100.0%
Estimated City-Owned:	29,000	7.25%
Estimate Privately- Owned:	371,000	92.75%
Estimated Tree Canopy (Acres):	1,201	18.0% of City Land Area

Numbers:

Economic

EMPLOYMENT

Jobs Located in New Rochelle:	29,418 (Based on D&B - 2010) 24,189 (Based on ZapData - 2009)
New Rochelle Residents Employed: (Job May Be Sited Anywhere)	32,322 (Census)
Unemployment Rate:	9.8% (January 2010) 8.0% (2009 Average)

COMMERCE

Total Taxable Sales (2009):	$920,000,000
Businesses Within New Rochelle:	4,000 (Estimate, Based on ZapData 2009 & D&B 2010)

INCOME

(Source: 2009 American Community Survey)

Median Per Capita Income:	$40,747	
Median Household Income:	$64,304	(Less than 50K: 39.9%, 50K-100K: 27.3%, Over 100K 33.0%)
Median Family Income:	$88,560	
Poverty Rate:	18.4% (Up to 100%)	12.1% (100% to 150%)

COMMERCIAL & INDUSTRIAL PROPERTY

(Source: Bureau of Buildings & 2010 Commercial Real Estate Analysis)

	Structures	Sq. Feet	Vacancy	Avg. Rent
Flex/Warehouse/Manufacturing:	30	765,639	81,310	$13.37
Class A	0	0	0	
Class B	11	325,946	31,250	
Class C	19	439,693	50,060	
Retail	98	3,144,710	316,000	$25.91
Estimated Downtown/Transit			1,850,000	
Office	16	1,135,605	100,841	$23.62
Class A	3	432,235	31,245	
Class B	13	703,370	69,596	
Estimated Downtown/Transit	11	899,213	69,368	

PROPERTY VALUE

Total Estimated Market Value of Property: $11,680,327,869

Numbers:

Public Sector & Assets

PUBLIC SECTOR BUDGETS

Municipal Operating Budget:	$107,000,000
Public School Operating Budget:	$225,813,303

PUBLIC SECTOR EMPLOYMENT

Total Municipal Employees:	635	100.0%
Public Safety:	395	62.2%
Public Works:	127	20.0%
Other:	113	17.8%
New Rochelle Residents	471	74.2%
Total Public School Employees:	1,950	

PUBLIC BUILDINGS

City:	44	532,000 Square Feet
School District:	11	

PUBLIC INFRASTRUCTURE

Lighting	
Street Lights:	6,979
Traffic Signals:	170
Transportation (Miles)	
Paved Road:	176
Sidewalk:	210 (Counting Each Side of Street Separately)
	105 (Counting Street Length)
Sanitary Sewer (Miles):	323
County:	6
City:	186
Private Lateral (Estimate):	131
Storm Water	
Storm Drains (Miles):	87
Storm Water Catch Basins:	5,471

MUNICIPAL FLEET

Total Vehicles:	251
Diesel or Gasoline:	218
Electric:	10
Hybrid:	3
Bicycles:	12
Motorcycles:	4
Segways:	4

Numbers:

Housing

GENERAL HOUSING CHARACTERISTICS

(Source: City Assessor & 2008-2012 Consolidated Plan)

	Units	Structures
Total Housing:	28,364	13,137
Single-Family Homes:	9,790	9,790
Two-Family Homes:	3,308	1,654
Three-Family Homes:	1,605	535
Multi-Dwellings (4 or More Units):	12,931	985
Mixed-Use:	730	173
Owned:	13,833 (48.8%)	
Rented:	14,531 (51.2%)	
Recent Construction (2000-2010)	1,807	100.0%
Rental:	1,202	66.5%
Owner:	605	33.5%
Affordable (Up to 80% AMI):	229	12.7%
Market-Rate:	1,578	87.3%
Downtown or Transit District:	1,474	81.6%
Elsewhere:	333	18.4%

SUBSIDIZED HOUSING

(Source: New Rochelle Department of Development & 2008-2012 Consolidated Plan)

Project-Based Subsidized Housing	General	Senior	Total
Municipal Housing Authority:	340	203	543
Not-for-Profit:	371	820	1,191
Total:	711	1,023	1,734

Section 8 Rental:	1,164
City-Administered:	963
NRMHA-Administered:	201

SPECIAL CARE HOUSING

Serving Frail, Elderly or Disabled

Facilities:	18 (3 Age Restricted to 62 & Over)
Beds:	2,000 (Approximate)

Numbers:

Housing

GENERAL HOUSING AFFORDABILITY

(2008-2012 Consolidated Plan, 2000 Census, Planning Board Resolutions)

	Units	% of Total	Vacant
Total Units (Owner & Rental)	28,364	100.0%	480
Affordable (Up to 80% AMI)	12,721	44.8%	314
Below 30% AMI	2,334	8.2%	70
30% to 50% AMI	5,655	19.9%	115
50% to 80% AMI	4,732	16.7%	129
Above 80% AMI	15,643	55.2%	116
Owner Units Only	13,833	100.0% 84	
Affordable (Up to 80% AMI)	1,845	13.3%	19
Below 30% AMI	0	0.0%	NA
30% to 50% AMI	1,430	10.3%	15
50% to 80% AMI	415	3.0%	4
Above 80% AMI	11,988	86.7%	46
Rental Units Only	14,531	100.0% 396	
Affordable (Up to 80% AMI)	10,876	74.8%	295
Below 30% AMI	2,334	16.1%	70
30% to 50% AMI	4,225	29.1%	100
50% to 80% AMI	4,317	29.7%	125
Above 80% AMI	3,655	25.2%	70

HOUSING VALUES

Median Value of Single-Family Home: $697,000 (Equalization Rate & Assessed Value)

Median Sale Prices – 2009
(Source: Westchester County Board of Realtors)

Single-Family Home:	$580,000
Condominium:	$412,000
Cooperative:	$180,000

Numbers:

Public Health

DISABILITIES

(Source: Westchester County Department of Health)

Persons with Disabilities:	11,961	(17% of Total Population)
Physical:	21%	
Mental:	11%	
Sensory:	9%	
Prevent Leaving Home:	25%	
Affect Employment:	27%	
Over 65 Years Old:	6,602	(59% of Seniors)

LIFE EXPECTANCY & CAUSES OF DEATH

(Source: Westchester County Department of Health)

Average Age at Death (2005-2007):	All	Male	Female
All Races	77.4	73.4	80.7
White	78.7	75.0	81.7
Black	74.5	70.5	77.6
Other	66.7	60.6	74.5
Hispanic	60.6	53.9	67.1

Top Five Causes of Death		
Major Cardiovascular Disease	294	47.6%
Malignant Neoplasms	130	21.2%
Chronic Lower Respiratory	25	4.1%
Septicemia	22	3.5%
Pneumonia	13	2.1%

AIR QUALITY (WESTCHESTER COUNTY)

(Source: Westchester County Department of Planning)

Attainment Areas

- Carbon Monoxide
- Lead
- Nitrogen Dioxide
- PM-10 Particulates
- Sulfur Dioxide

Non-Attainment Areas

- Ozone
- PM-2.5 Particulates (Based on Impacts to Neighboring County)

Ozone Non-Attainment

8-Hour Ozone Avenue (ppm):	0.082	(NAAQS: 0.075)
Unhealthy-Sensitive Groups (days):	29	(2005-2007)
Unhealthy-General Public (days):	7	(2005-2007)

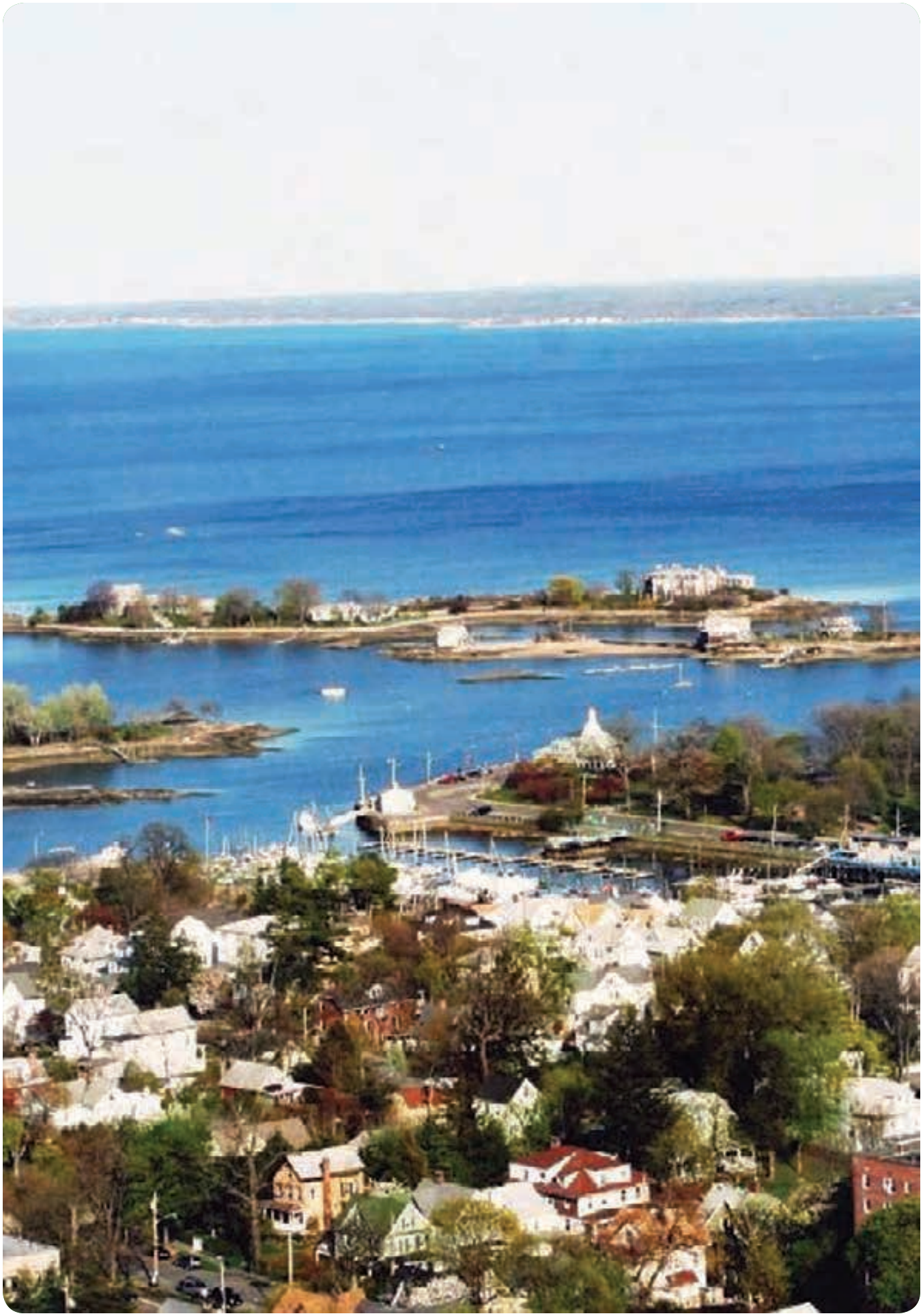
Numbers:

Public Health

MEDICAL CARE & ILLNESS

(Source: Westchester County Department of Health)

Top Five Communicable Diseases (2008)	
Chlamydia	221
Gonorrhea	32
Campylobacteriosis	12
Giardiasis	10
Group B Strep Invasive	9
Emergency Room Visits (2008)	25,397
Injuries	5,591
Acute Respiratory Infections	1,345
Mental Disorders	958
Infectious & Parasitic Diseases	943
Discomfort in Chest	822
Emergency Room Insurance Type	
Private	35.4%
Medicare	24.3%
Medicaid	25.3%
Other	0.8%
Self-Pay & Uncompensated	14.2%
Hospitalizations (2008)	9,584
Circulatory System Diseases	1,381
Digestive System Diseases	808
Mental Disorders	760
Injury & Poisoning	664
Respiratory System Diseases	629
Hospitalization Insurance Type	
Private	35.3%
Medicare	42.0%
Medicaid	20.3%
Other	0.5%
Self-Pay & Uncompensated	1.9%



greeNR

The New Rochelle Sustainability Plan
2010 - 2030

515 North Ave.
New Rochelle NY 10801