

City of New Rochelle
Department of Development

MEMORANDUM

TO: HONORABLE MAYOR AND CITY COUNCIL
THRU: CHARLES B. STROME, III, CITY MANAGER
FROM: LUIZ C. ARAGON, COMMISSIONER OF DEVELOPMENT
CC: KEVIN A. KAIN, DIRECTOR OF PLANNING AND SUSTAINABILITY
DATE: OCTOBER 4, 2019
SUBJECT: **GREENR 2018 ANNUAL PROGRESS MEMO**

Overview

The City has made tremendous strides toward the implementation of GreeNR, the City's 20-year sustainability plan. As shown within this document, 2018 provided a number of notable achievements, particularly regarding energy, mobility and smart growth. As noted in prior updates, the GreeNR plan recognizes that recommended actions are "resource dependent" and that "judgements about whether, how and when to proceed will be guided in part by organizational capacity and competing priorities." Accordingly, City has diligently been working on a select number of projects to be most effective.

This memo outlines 2018 progress of GreeNR broken out by initiative, followed by metrics where available.

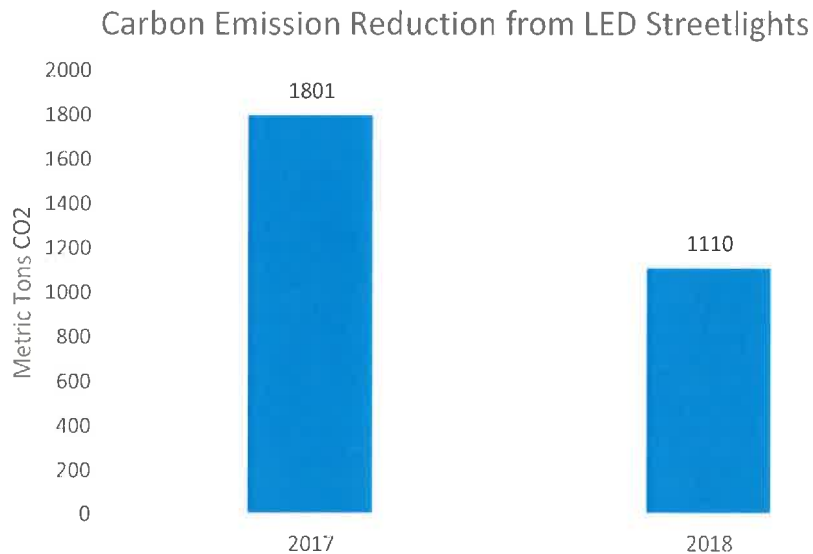
2018 Highlights

Solar

63 solar permits were issued in 2018, up from 37 in 2017, representing a 70% increase. Total kilowatts for permits issued in 2018 was 467.87. Once all of the solar projects permitted in 2018 are completed, they will abate the equivalent carbon emissions which are generated from charging 1,012,513 smartphones daily.

Lighting

LED street lighting is 100% complete. In 2018, the City's LED lights used only 1,569,883 kilowatt hours of electricity, down 38% from the total usage in 2017 of 2,547,146 kilowatt hours. The total electricity cost for City LED lights was \$418,877 down from \$573,951 in 2017 when the City completed LED lighting installations.



Grants

In 2018, the City of New Rochelle was awarded \$10,000,000 from New York State as part of Governor Cuomo's Downtown Revitalization Initiative (DRI). The DRI program is a grant initiative awarded annually to 10 Regional Economic Development Council (REDC) communities across New York State to encourage municipalities to transform their downtown neighborhoods. Among other projects, New Rochelle is proposing to connect the Lincoln Avenue Corridor to the downtown by leveraging green space, expanding pedestrian/bicyclist facilities and employing transit-oriented urban design techniques.

In 2017, the City of New Rochelle was awarded 3.5 million) from NYSDOT/FHWA TAP-CMAQ program. This grant will be used to improve mobility as well as accessibility along Quaker Ridge Road by providing for pedestrian facilities improvements, a re-designed right of way and smart signals. The transformation of Quaker Ridge Road to a “Complete Street” will be a dramatic improvement for residents, schoolchildren and visitors by increasing the standard of safety along this corridor.

Tracking

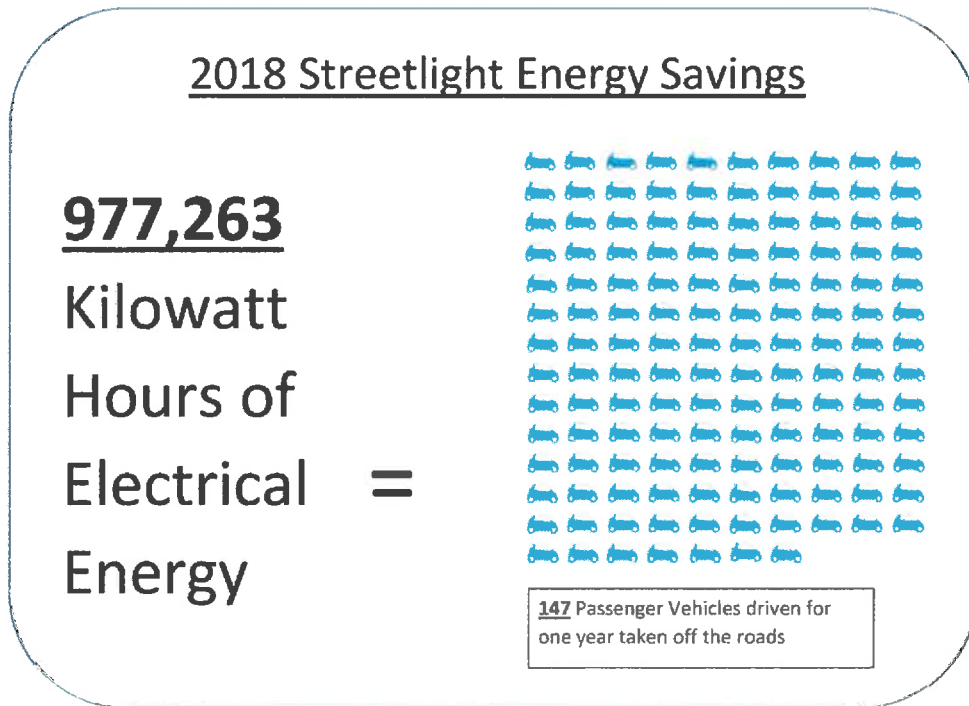
In 2018, the City began exploring methods to track greenhouse gas emissions at the municipal and community level. As of April 2019, the City issued a request for proposal (RFP) for a greenhouse gas tracking consultant. The consultant will create a narrative report identifying action items which can be used to address the findings of the data.

Progress

Part 1: Energy and Climate

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

1.2 Exterior Lighting Efficiency. In 2017, DPW completed replacing 100% of the City light fixtures with LED lights three years ahead of schedule. In 2018, the city's LED lights used 1,569,883 kWh of electricity, down 977,263 kWh from the 2017 total of 2,547,146, representing a 38% reduction in electricity usage. By more efficiently using electricity with our new LED streetlights, the City abated 691 metric tons of Carbon Dioxide. In 2018, LED streetlights cost the City \$418,877 to operate, down \$209,676 from 2016 costs representing a 33% costs savings.



1.4 Green Fleet. Seven leased Nissan Leaf electric cars are continually in use by the Department of Development. According to a study from the University of Michigan's Transportation Research Institute, electric vehicles costs less than half as much to operate as traditional gasoline powered vehicles.

Excluding police and fire, the City's fleet has improved fuel efficiency by approximately 9.25% since 2010. In 2018, the City has integrated 45 total vehicles into a fleet and fueling management system, which tracks fuel usage per vehicle thereby minimizing layover time for City vehicles.

1.5 Renewable Energy Generation.

Community Choice Aggregation. In April 2016, the City of New Rochelle joined the Community Choice Aggregation program through Westchester Power, an electricity purchasing program for Westchester municipalities. The City of New Rochelle automatically moved all residents to a “Green Supply” (100% Wind Power) as the default supply. Under a new agreement, Westchester Power can expand the source of their power beyond wind.

In 2018, the City of New Rochelle abated 36,166.7 metric tons of carbon dioxide by participating in Community Choice Aggregation, which is the equivalent of burning 4,069,619 gallons of gasoline from driving. The program also generated 118,520,293 kWh of electricity for New Rochelle residents. Residential households saved \$52.90 over the 2018 calendar year, in comparison with Westchester residents who do not participate in Community Choice Aggregation.

<p style="text-align: center;"><u>4,069,619</u> Gallons of gasoline equivalent saved in 2018 from participation in Community Choice Aggregation</p>
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In 2017, the City of New Rochelle abated 29,911.5 metric tons of carbon dioxide and generated 99,088,830 kWh of power by participating in the program.

Solar. 63 solar permits were issued in 2018, up from 37 in the 2017. Total kilowatts for permits issued in 2018 was 467.87. When all solar projects that received permits in 2018 are completed, the electricity all of the solar installations combined will have the potential to abate the carbon emissions generated from charging 1,012,513 smartphones once every 24 hours.

1.8 Efficiency and Conservation Loans. The City is partnering with other organizations/programs including Energize NY and Sustainable Westchester in support of New Rochelle Residents. A GreeNR goal is to “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%”.

To date, 139 New Rochelle homeowners have completed all of the steps of the home energy performance process by participating in the Energize program. Overall, 593 homeowners have been involved in the program. 330 homeowners have completed energy audit assessments but have not yet moved forward with implementing the suggested improvements.

Consolidated Edison Natural Gas Moratorium. In 2018, Consolidated Edison, the utility company providing electric and gas service in Westchester County, announced a moratorium on natural gas hookups due to a limited amount of natural gas supply. The City of New Rochelle encourages residents, businesses and developers to work with Energize NY, a non-profit corporation the City partners with, to provide for improved energy systems among residential and commercial buildings as well as NYSERDA, the New York State Energy Research and Development Authority. The City has assigned a standing committee of residents to collaborate with Energize NY to promote energy improvements among New Rochelle property owners.

Part 2. Resource Conservation & Waste Reduction

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

2.10 Residential Recycling Campaign.

Tennis Ball Recycling. In 2019, the Parks & Recreation Department will recycle approximately 3,000 tennis balls. 3,000 tennis balls equate to 386 pounds of material that is kept out of landfills as a result of this program.

Approximately 100 million tennis balls enter US landfills each year and tennis balls cannot be recycled with other recyclable materials, therefore the New Rochelle Department of Public Works is unable to collect tennis balls intended to be recycled. This program will prevent recyclable material from sitting in landfills and reduce carbon emissions associated with using virgin materials to create new tennis balls.

2.12 Municipal Green Purchasing. The goal of this initiative is to “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.”

The Department of Public Works began paving using the Hot-In-Place pilot program in 2018. During this time, the three roads that were paved included:

1. Webster Avenue, from Inverness Road to entrance of the Hutchinson River Parkway.
2. Weyman Avenue, from Main Street to Pelham Road.
3. Pelham Road, from the Pelham Manor border with City of New Rochelle to Centre Avenue.

The Hot-In-Place system rejuvenates existing asphalt on site and, according to an industry white paper, provides up to 40% in cost savings, reduces the carbon footprint by up to 28% versus standard paving methods. This program reuses existing pavement and burns less fuel compared to heating, hauling and working with new asphalt.

2.13 Water Use and Wastewater Reduction.

A Sewer System Evaluation Survey (SSES) was completed in 2017. This survey has already identified 30 locations needing repair. Inflow and Infiltration (I&I) calculations have been calculated and the consultant is preparing GIS data for the City. In 2018, the Department of Public Works completed a repairs contract and is currently in the process of completing two additional repair contracts based on the SSES study.

The City received a \$55,000 grant from the Fish and Wildlife Long Island Sound Futures Fund for a Green Infrastructure Plan. The City selected a consultant, and the consultant finished their plan in 2018. This plan will help the City in identifying Green Infrastructure initiatives that are feasible based on available funding opportunities.

The Department of Public Works began planning several locations in the Wykagyl community for tree pits with bioretention systems in 2018. When in use, these systems can reduce the impact of high stormwater events and remove pollutants from waste water, thereby preventing those pollutants from moving through the Long Island Sound Watershed. The Department of Public Works expects to implement these systems in the coming years.

2.14 Household Composting. The Department of Public Works is planning to open a new yard on Birch Street which will have food scrap recycling facilities. Food scrap recycling can reduce the need for chemical fertilizers, reduce methane emissions from landfills, and reduce the carbon footprint of households. According to the U.N. Food and Agriculture Organization, approximately 33 % of food is wasted globally, contributing to approximately 8% of the total global greenhouse gas emissions.¹

Part 3. Ecology, Biodiversity & Public Health.

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

3.16 Sound, Lake and Stream Water Quality. In 2018, the Department of Public Works began planning for the dredging of Beechmont Lake. As of April 2019, DPW has issued an RFP for a firm to oversee the project. By dredging Beechmont Lake, DPW will be able to maintain the lake’s original depth and condition, preserve wildlife through debris removal, and litter collection.

Fountains in Beechmont Lake, and the Twin Lakes at Huguenot Park are in full service and working well to reduce algae bloom. Bubblers are in place in Glenwood Lake where the pump was replaced in 2016. These initiatives help aerate and improve the water quality in compliance with EPA standards

As shown in the following graph, the City of New Rochelle closed the Hudson Park Beach due to contamination for four full days in 2018 compared to five in 2017 and 13 in 2016. The City has surpassed the initial goal of reducing closures of the beach to 20 days annually by 2020.



The Local Waterfront Revitalization Program (LWRP) draft is under review by the NYS Department of State.

3.23 GreenNR Walking Guides. In 2017, the City of New Rochelle joined 133 other cities and towns across the United States in the “10-Minute Walk” parks advocacy campaign started by The Trust for Public Land, the National Recreation and Park Association, and the Urban Land Institute. The goal of the campaign is to create sufficient space for parks so that all U.S. citizens can have a 10-minute walk to a park from their home. In 2017, the City received a grant to pursue efforts to ensure all New Rochelle residents can reach a park within 10 minutes on foot from their home.

According to The Trust for Public Land, 91% of New Rochelle residents live within a 10-minute walk of a park, whereas the national average is 54% of U.S. citizens. In addition, New Rochelle has 42 Parks with 418 acres, equal to the size of 317 football fields.

3.24 Local Agriculture and Fresh Food. Ward Acres Community Garden continues to be well subscribed. Lincoln Park Community Garden has expanded to double its plots and 700 linear feet of irrigation has been added. Both Ward Acres and Lincoln have allocated plots for growing food for the broader community. According to a study from researchers at the University of Carnegie Mellon and the University of Pittsburgh, 11% of the carbon emissions from food result from the transportation of food after production.² By participating in one of New Rochelle’s community gardens, residents can reduce the carbon footprint of their diet.

The City now has two successful Farmers’ Markets providing fresh food at Ruby Dee Park at Library Green and at City Hall. On June 1, 2018, the “Down to Earth” farmer’s market began its first date at City Hall along North Avenue. In 2019, the market will move to the Thomas Paine Cottage. The “Grand Market” farmer’s market was held at Ruby Dee Park at Library Green in 2018, and will remain at this location in 2019.

Part 4. Smart Growth and Economic Prosperity

Attract beneficial investment to expand our local tax base, enhance the viability 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.

4.25 Transit Oriented Development. The City has made tremendous progress in its effort to foster smart growth and transit-oriented development. These efforts provide benefit not just for New Rochelle, but for the entire region. By encouraging mixed-use, high-density development near transportation, the City has reduced pressure on undeveloped areas, and also reduced vehicle trips. In just a few short years, the city has approved 28 projects with nearly 5,000 residential units, and over 100,000 square feet of commercial development. Three projects are already complete, and eleven more are under construction. Nearly all of these projects are within a half mile radius of the train station.

² Weber, C. L., & Matthews, H. S. (2008). Food-Miles and the Relative Climate Impacts of Food Choices in the United States. *Environmental Science & Technology*, 42(10), 3508-3513

4.26 Waterfront Access and Enjoyment. This initiative is a large part of the LWRP update including a plan for Davids Island. A FEMA approved sun deck repair has been completed at Hudson Park. Phase Two of the FEMA funding included repairs and upgrades to runoff, bulkheads, and parking areas, which was completed in 2017. Final FEMA approved post Sandy restoration projects were largely completed in 2016, with the final phase two at Hudson Park scheduled for completion in 2018.

In 2018, several public meetings were held regarding Pratt Landing, a proposed waterfront development where the existing City Yard is located. The planning and design for this development is underway, which will provide public access to the waterfront.

Gateway Signage In 2017, the City began planning for Gateway Signage to help direct patrons to places of interest in New Rochelle such as Downtown, the Transit Center, Waterfront, etc. In 2018, all of the Gateway Signs were installed.

4.28 Green Business and Job Creation. The City Council adopted Resolution #264 in December 2016, to allow the city to enter into an agreement with Westhab to operate a First Source Referral Center, provide job training and prioritize job opportunities for local residents.

Since its inception, the Fire Source Referral Center (FSRC) has had serviced 500 New Rochelle residents where 365 residents have enrolled in the Jobseeker Recruitment program. Of those 365 individuals, 187 have obtained gainful employment.

4.29 Workforce Housing. Building of Affordable Housing is required under the Municipal Code 331 –152 and is included as an incentive in the downtown overlay zone.

In 2018, 336 affordable housing units were approved in projects that received site plan approval. Since the inception of the Downtown Overlay Zone in December 2015, 402 housing units have been approved within the zone through the 2018 calendar year.

4.30 Creative Capital. Planning for 24 wifi kiosks throughout the City of New Rochelle was completed in 2017. Six kiosks have been installed to date. The kiosks provide free access to the internet and other services for all patrons. Patrons can make phone calls, browse the internet and charge their electronic devices from these kiosks, which will be strategically placed throughout New Rochelle.

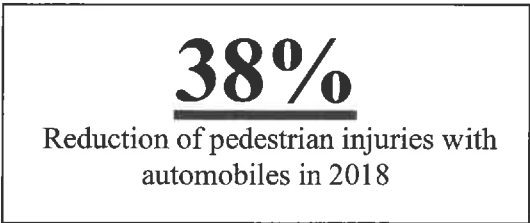
Part 5. Transportation and Mobility

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.

5.31 Pedestrian Safety & Mobility.

Pedestrian signals are being upgraded through routine maintenance, damage repair, and as part of new development or infrastructure projects. Sixty-three ADA compliant curb ramps were installed around the City in 2016 and three solar powered flashing LED warning signals were installed in 2017 at high pedestrian / vehicle

conflict intersections at Eastchester and White Oak; Webster and Glenmore; and Lincoln and Calhoun. DPW expects to order equipment for additional intersections in 2019 including Maple Avenue & Shea Place, Centre Avenue & Shea Place, and Webster Avenue & Bon Air Avenue.



There were two pedestrian fatalities and 47 pedestrian injuries from vehicle crashes in 2018, representing a 38% decrease in pedestrian injuries from 2017. There were two pedestrian fatalities in 2017, and 76 pedestrians injured.

5.32 Bicycle Safety and Mobility. The Complete Streets project is underway with studies taking place on in several areas.

In 2017, a Task Force of community members and Councilmember Jared Rice met regularly with City Staff to review potential visions for the Lincoln Avenue Corridor. In 2018, the City was awarded a 10 million dollar grant from the Governor’s Office of the State of New York to revitalize the Lincoln Avenue Corridor. Potential redevelopment plans include various mobility improvements including roadway re-designs, improved crosswalks as well as reclaiming an existing roadway for a new park. Approximately six million dollars of the grant will be dedicated to “The Linc”, a proposed park on Memorial Highway.

There are several ongoing “Complete Street” efforts throughout the City. “Complete Streets” are roadways designed to be inclusive to all users of a road by improving mobility and accessibility. Currently, the City is working on complete street design at Quaker Ridge Road, North Avenue, Lincoln Avenue and others to create a network of complete streets throughout the city.

The Bike to Work Day celebration took place along with the New Rochelle Bike Share launch on May 4, 2018. The program features 100 bicycles among 11 stations located throughout the city. Bicycles can be rented for individual trips at \$2 per trip, or for unlimited weekly or annual rides. Users can be access bicycles via a smartphone app where users scan a QR code on a bicycle. The program offers residents an alternative way to travel about the city aside from driving a personal vehicle.

5.33 Downtown Access. New development continues to be approved under the Form Based Code, which will create greatly enhanced streets for pedestrians. Further design is underway for the two-way street conversion of Main Street and Huguenot Street, which will also greatly improve access and mobility.

5.34 Jitney Service Study. A NYSEERDA grant was secured by BFJ Planning to study the viability of a free downtown circulator shuttle. The City is launching a pilot program with a shuttle vendor in 2019.

The City has partnered with Verizon to install wifi kiosks at multiple locations throughout New Rochelle. The City's goal is to make shuttle real-time information available at the newly installed wifi kiosks.

5.35 Green Commuting.

In 2018, residents and visitors rode 6,385 miles on New Rochelle Bike Share bicycles. According to the United States Environmental Protection Agency, the average passenger vehicle emits about 404 grams of Carbon Dioxide per mile driven. Assuming that Bike Share users would have driven alone had they not took a bicycle, bike share users abated about 2.5 metric tons of carbon dioxide in 2018.

According to a survey conducted by P3 Global Management, the City's bike share vendor, from March-September 2018 approximately 28% of Bike Share members used a bike for their trips which they previously made with a car.

Electric charging stations have been installed at New Roc garage, City Hall and the Intermodal Transit Center. There are two single charging stations available at the Intermodal Transit Center. There are two single stations, six EVgo stations, and eight Tesla single charging stations for a total of 16 stations at the New Roc Garage. There is one, double charging station at City Hall and another on Hamilton Avenue.

5.36 Scooter and Motorcycle Parking. There are currently three parking facilities with scooter and motorcycle parking – the Intermodal Transit Center, Prospect Street Parking Lot and the New Roc Garage. Motorcycle and scooter riders can apply for a permit to park on crosshatched 'dead' spaces on the corners of these designated lots. At ITC the number regularly utilizing this parking is between 20 – 30.

In 2018, the City began pursuing additional opportunities with electric scooters with the City's bike share vendor, P3 Global Management. The City expects to begin the rollout of a scooter-sharing program to complement the bike share program in 2019.

In Summary

Progress has been made in several areas over 2018, mainly where there is strong alignment with broader departmental priorities / programs. The Community Choice Aggregation program and LED lighting initiative are excellent examples of cost savings through improved technology and sourcing that also helps the City meet its sustainability goals.

Improving progress measurements is dependent on the city's ability to annually gather metrics.

The planned downtown development is expected to greatly enhance the downtown and improve pedestrian and cycling accessibility, safety, and the general experience of spending time in downtown New Rochelle.