2018 ANNUAL REPORT



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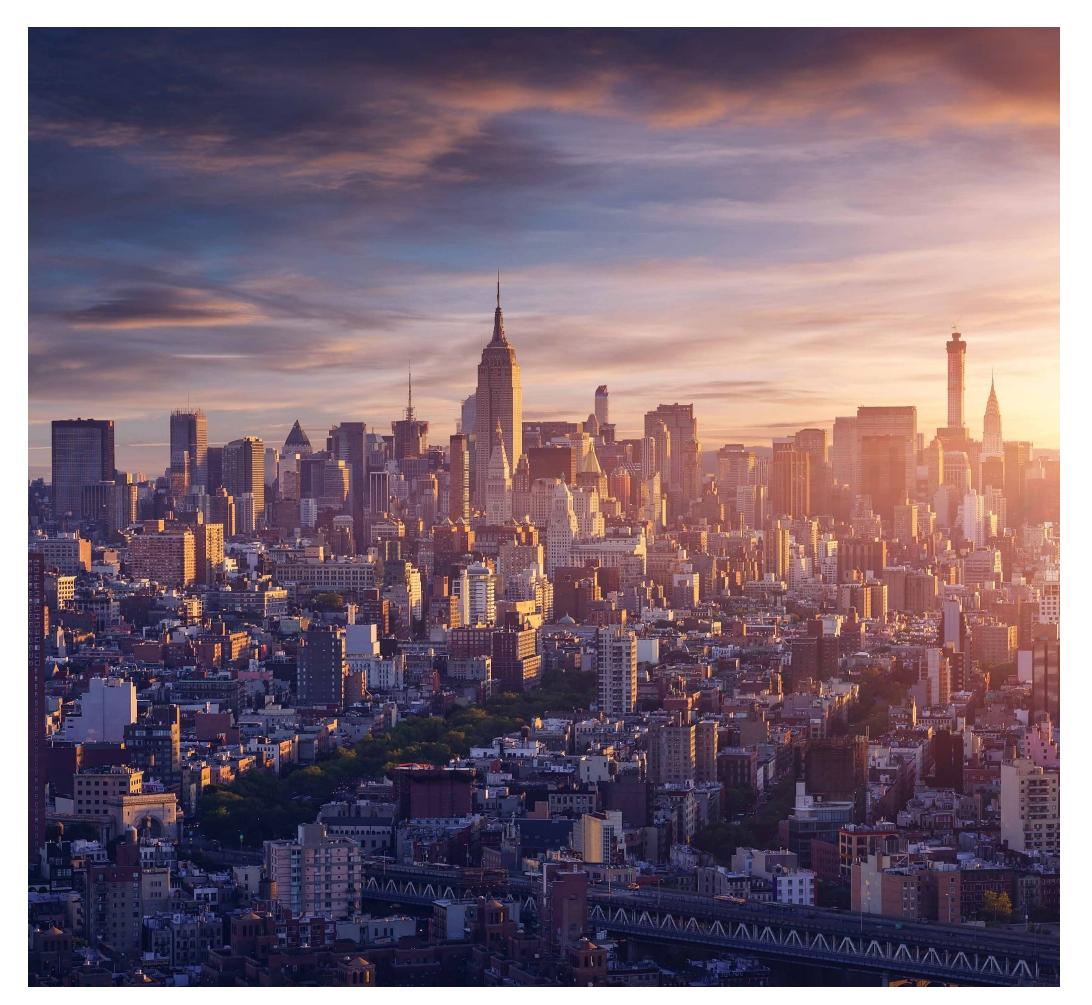
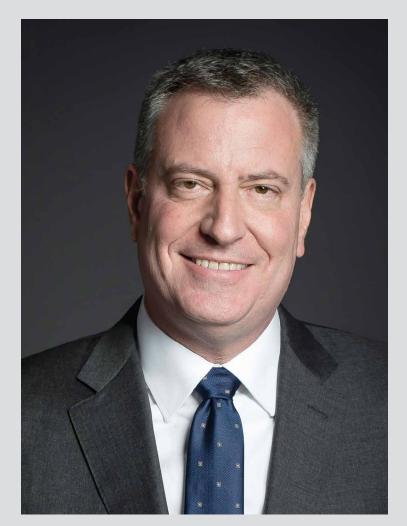


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November 2018

Fellow New Yorkers,

The NYC Department of Sanitation undertakes an impressive feat nearly every day, collecting more than 10,000 tons of refuse and 2000 tons of recyclables. The Department has an impressive commitment to keeping our streets clean and improving quality of life for New Yorkers in neighborhoods across the city. The women and men of this Department—10,000 of New York's Strongest—help our city thrive.

This last year, the employees of this Department went above and beyond the call of duty. When Hurricane Maria struck Puerto Rico in September 2017, nearly 1,000 employees volunteered to deploy to the island to help our fellow Americans suffering without services, food or water. New Yorkers know all too well the devastation that hurricanes can cause. Ultimately, 31 of our Strongest made the trek and helped lay the foundation to rebuild Puerto Rico's communities. They helped Puerto Ricans get back on their feet, and the experience for them was both inspiring and life-changing.

I salute our Strongest for all that they do for New York City, and beyond.

Bill de Blair

Mayor Bill de Blasio



November 2018

Dear Friends,

I'm pleased to share the NYC Department of Sanitation's 2018 Annual Report. This chronicles our wide range of successes this past year, from incorporating computer visualization and machinelearning technologies into snow response to launching new platforms that lead students to lifelong recycling habits.

Sustainability is a driving force in so many of our programs, and our progress relies upon reliably measuring results. Our 2017 Waste Characterization Study has done just that. For example, the study confirmed that residents are tossing less and recycling more than we did five years ago, but revealed that expanded polystyrene remains ubiquitous in our waste stream. This reiterated the importance of banning single-use foam packaging products to keep them from reaching our waterways — and beginning next year foam food service products and packing peanuts will be banned in New York City.

These accomplishments, and so many more, are thanks to my indefatigable colleagues who care deeply about our City and are committed to keeping it a great place to live, work and play.

Thank you.

Kathryp Jarcia

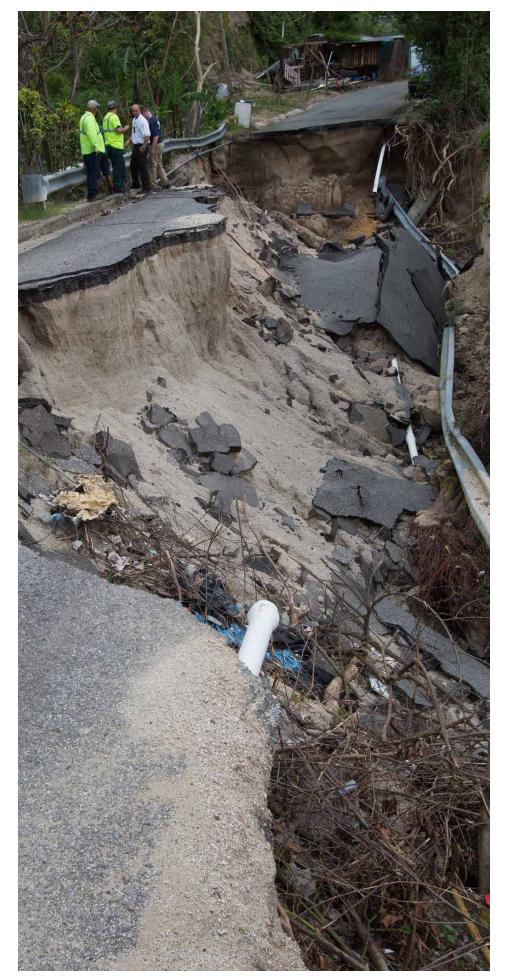
Commissioner Kathryn Garcia



HURRICANE MARIA

September 20, 2017, Hurricane Maria slammed into Puerto Rico. Regarded as the worst natural disaster Puerto Ricans have suffered, the storm bisected the island. For more than 30 hours, its 155 mph winds battered cities and suburbs and leveled forests and countryside. Then, the rain: A deluge triggered massive flooding. Some parts of the island suffered more than two feet of rain, and waist-high water swallowed homes and enveloped towns.





CHALLENGES

Maria resembled what relief experts classify as a "catastrophic event" - rarer than disasters – which wipes out vast expanses of infrastructure and buildings. Pre-positioning relief supplies in these crises is fruitless, as they're typically destroyed. Compounding the problem, Maria devastated Puerto **Rico's communications** systems. Nearly 95 percent of cell towers were felled. and the Federal Emergency Management Agency lacked working satellite phones to contact elected officials across the island. Without understanding the scope of the crisis, emergency responders were hobbled.

OUR SKILL

Dexterity is Sanitation's fundamental strength. It has to be: It takes prowess to clear more than 12,000 tons of garbage and recyclables from 300 square miles every day. Unexpected challenges continuously arise, from blocked streets to radioactive materials illegally buried in garbage. DSNY's paramilitary structure and the expertise honed over the last few decades were the right fit for this mission. Our tactical approach to response operations is well-suited to quickly assess complicated and often risky conditions, strategize our response, and take immediate action to mobilize personnel and divert



equipment. As Puerto Rico's devastation became clear, we knew our expertise would be crucial to Puerto Ricans.

OUR TEAM

More than 1,000 Sanitation employees volunteered for deployment to support the Puerto Rico Emergency Management Agency and the Federal Emergency Management Agency (PREMA and FEMA). Based upon strenuous criteria – including military training, expertise in operating heavy-duty machinery and large-scale debris management – Sanitation leadership deployed 31 Spanish-speaking members of New York's Strongest, including Sanitation Workers and Chiefs, to establish a clear chain of command.

OUR SERVICE

Initially intending to clear roads, the complexity of Puerto Rico's unfolding crisis became evident. Bridges were destroyed. Debris overwhelmed roadways. Telecommunication was crippled. There wasn't sufficient heavy machinery to clear a path to communities – and no way to determine what equipment was needed to reach them.

Instead of clearing debris, our 31 employees performed an even more critical role. Each day,

our team would fan out across the island, quickly assess evolving conditions, determine the necessary heavy- and light-duty equipment, and create real-time maps. As we canvassed all 78 municipalities on the island, Vieques and Culebra, we also provided technical assistance to local officials and delivered food and water to survivors. The decision to deploy bilingual specialists proved vital. Our experts seamlessly interacted with residents and municipal leaders and served as translators for other responders — facilitating their ability to distribute desperately needed supplies.

OUR CONTRIBUTION

- fs, With our team wearing safety-compliant fluorescent shirts throughout deployment, Puerto Ricans quickly noticed that supplies and services reached them soon after "The Yellow Shirts" arrived. Initially deployed for two weeks, our work was so critical to the recovery effort that local and federal authorities requested an additional week of support. Beyond
- the immediate assistance, our team laid the foundation for what is now Puerto Rico's longterm Debris Removal System, a plan to help deliver supplies, remove debris and rebuild.





We're in the process of training our largest class of new Sanitation Workers in 10 years, with more than 550 new recruits joining our ranks, becoming skilled in using our heavy-duty equipment and learning our Department protocols. Having a diverse agency that reflects the communities we serve is important to us. With our intensive diversity trainings, we continue to cultivate an inclusive workplace where our 10,000 employees have same opportunity to thrive.

this rank.

Public service is part of our identity, and that's why we raise awareness and support causes that are important to us, including a record-high of over \$100,000 in donations to Autism Speaks. In the field, our Sanitation Workers traveled to different communities providing New Yorkers with an immersive experience in our Touch-A-Truck events. We get to know the people we serve as they climb into our vehicles and learn how they operate. We also visited special education schools and helped children with sensory challenges become more comfortable with our large machinery.

INCREASING ACCESSIBILITY

Getting our information out to the public is vital to the success of our agency, and we introduced a new website to help New Yorkers more easily find information on our services. This was no small task; a team of experts including IT, graphic artists and communications professionals ensured the launch ran smoothly. The website also makes it easier for New Yorkers partner with us in sustainability programs.

WHO WE ARE

REFLECTING COMMUNITY

Reflective of New York City's diverse population, our agency's minority and female employees comprise approximately 50% of our agency. This year, Commissioner Garcia promoted Chief Shari Pardini to a four-star Chief – the first uniformed women to rise to

GIVING BACK



SHOWING OFF OUR FLEET

For the first-time ever, the New York International Auto Show featured New York's Strongest at its 2018 exhibit at the Jacob K. Javits Convention Center. Auto-enthusiasts checked out our electric hybrid mechanical broom, spoke to our mechanics and had a glimpse at some historic tools we used to keep New York City clean. Kids - and adults climbed into our broom and took pictures with our Sanitation Workers.

MWBE

Commissioner Garcia has appointed Kevin V.G. Wells, Esq. as the Department's first Chief Supplier Diversity Officer. He will be increasing opportunities for Minority- and Women-Owned Business Enterprises in agency contracts.



rating of 96.3%.



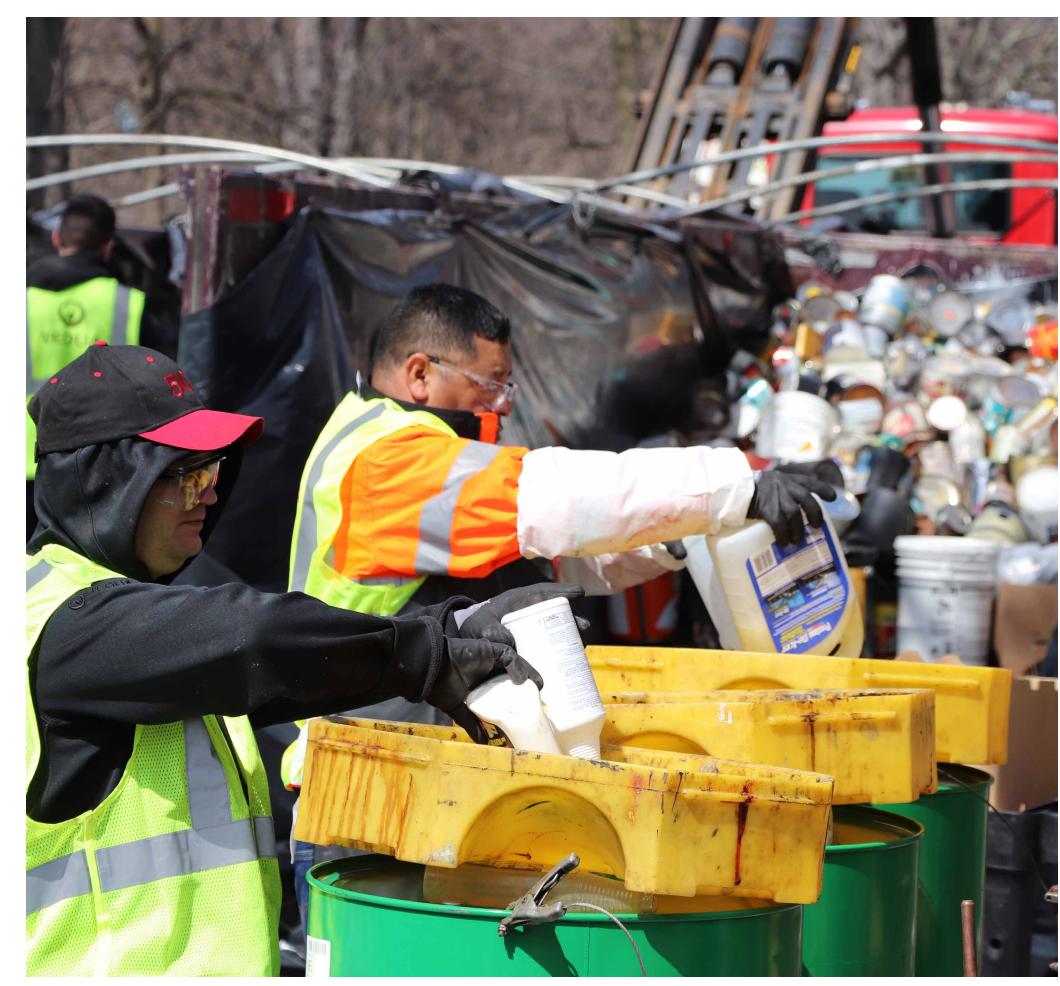
Refuse Disposed (in Millions of Tons)



BY THE NUMBERS

Our numbers tell a story. As we continue to evolve as an agency, we're better able to combat snow, clean our streets and manage our waste. We are leading New Yorkers to reduce how much they throw out while increasing their recycling rates by 2.5% since 2014. Continuing to provide clean streets, this year we achieved a 95.1% average cleanliness rating and a monthly high cleanliness





ZERO WASTE

We're changing the way New Yorkers view their waste correcting the idea that once you toss your trash, it no longer matters. Instead, the choices we make and how much we consume today will affect us tomorrow. For a healthy environment, we're guiding New Yorkers to send zero waste to landfills by 2030.

Food scraps and yard trimmings comprise about a third of what's in our garbage – even though they're valuable. In Fiscal Year 2018, we expanded our curbside organics program to roughly 1.88 million additional New Yorkers in districts in the Bronx, Queens, and Brooklyn; we added 95,000 New Yorkers in Manhattan and the Bronx through our high-rise enrollment program, which now serves over 1,100 buildings citywide. In total, curbside organics collection now serves over 3.5 million New Yorkers. Thanks to these programs, this year we kept 43,810 tons of food and yard waste from reaching landfills. Instead, we created rich compost

WHAT WE THROW OUT

We released our Waste Characterization Study outlining what New Yorkers throw out and how much of it. We sorted through over 800 samples of waste - discovering where recycling has improved and where it needs more work. The results showed residents are producing less waste at home than ever before, with curbside refuse collections down 70 lbs. per household from 2013. Of what we recycle, nearly 80% of all cardboard discarded is being properly set out for recycling collection. As our curbside organics program expanded, the amount of food and yard waste collected increased from over 25,000 tons to almost 44,000 tons. Throwing away electronics with garbage was banned in 2015 and thanks, in part, to our programs that allow New Yorkers to drop off their ewaste with us, there are far fewer electronics included with trash. Before the ban, on average New York City households threw out almost 17 lbs. per year of electronics; today, that figure is only 5.4 lbs. per year.

EXPANDING ORGANICS



to be used again, giving it back to New Yorkers We mo by distributing 4,304,400 pounds at compost Awards events all over the City. strides

TEACHING THE NEXT GENERATION

1.1 million children attend our City's public
schools and recycling habits they build now
matter. Our Zero Waste Schools initiative is
working toward an ambitious goal of diverting all
organic and recyclable waste from 100 schools.
Three years since its launch, we have built a new
social media platform that highlights student
successes – and over 20% of Department of
Education schools are using this new tool.

We motivate kids with our Zero Waste School Awards, celebrating schools that have made great strides in recycling. We also worked with Citizens Committee for NYC to introduce the Green Team Mini-Grants – making it easier for schools to secure resources for sustainability projects.

DONATING GOODS

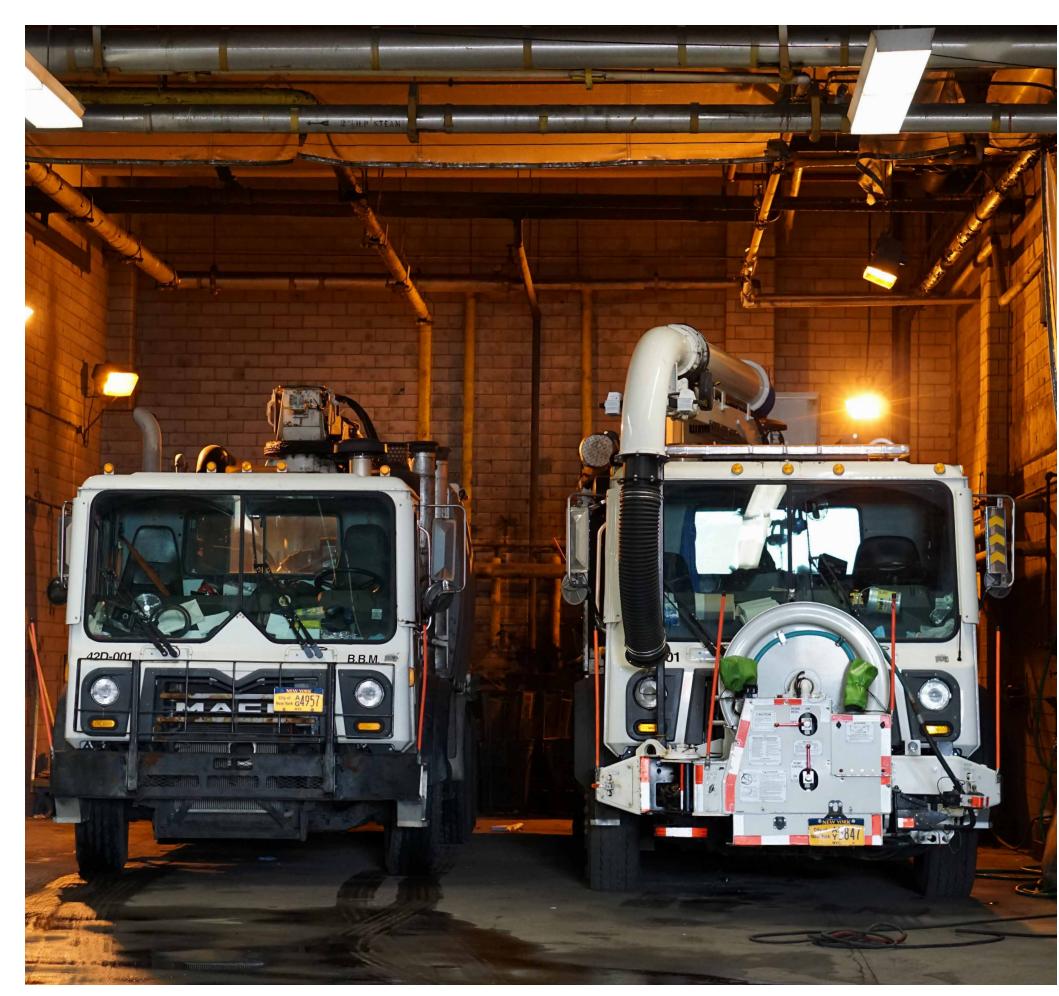
Useful products end up in landfills – even though people can put them to good use. Our donateNYC program enables New Yorkers to donate and find goods at no expense, and it successfully put 2,238 tons of things to beneficial use this year. At our annual donateNYC conference, we brought together partners and reuse experts to cultivate new relationships and brainstorm better ways to engage the public. Textiles are in the forefront of the conversation, since they make up 6% of our waste stream and 25% of donations to nonprofi reuse organizations. This year, our refashionNYC program collected 1,800 tons of clothing and accessories, diverting more than 7,000 tons from landfills since the program started in 2011. In addition, through our work with GrowNYC, we held our 250th Stop-N-Swap event – a major milestone for the program.

GUIDING INDUSTRY

As with residential waste, food scraps comprise one-third of call commercial waste. To combat



	this, we expanded of the Commercial Organic
	Waste Separation program to include larger
of	restaurants, chain restaurants and grocery stores.
r	This new requirement should keep 50,000 more tons
it	of food waste from reaching landfills each year. We
С	also strengthened our Commercial Recycling Rules
	by simplifying requirements for businesses.
m	



MANAGING OUR WASTE

We transfer over 10,600 tons of New Yorkers' waste each day to landfills or waste-to-energy facilities outside the City, so how we get it there matters. Our transfer stations free up traffic and eliminate CO2 emissions by transporting over 6,400 tons per day by rail. Outlined in our 20 year Solid Waste Management Plan, we have committed to opening five transfer stations throughout the five boroughs by the end of 2019. One in Southwest Brooklyn opened in October 2018 and one on the Upper East Side of Manhattan is scheduled to open shortly cutting over 46 million miles of annual truck travel and reducing toxins from our air.

With the majority of the landfill closure construction complete, our Post-Closure Care and environmental obligations are transitioning from active to passive systems. This will make it easier for New York City Department of Parks and Recreation

HEALTHY

We are "Sanitation" because a clean city is a healthy city. We manage our waste and focus on protecting the environment so we can keep New Yorkers healthy today and tomorrow.

HAZARDOUS MATERIALS

Electronics contain metals, and when improperly disposed they can harm our environment and health. This year, our e-waste Collection program kept close to 500 tons from landfills and served as a baseline to expand the program to the rest of Brooklyn and western Queens. So far, we added curbside collection service for residents in northern Brooklyn, giving over a million more residents access to the program. And our ecycleNYC program has enrolled over 13,000 apartment buildings, giving tenants access to dispose of e-waste in their buildings. We also accept electronics at our SAFE Disposal Events, where we collected nearly 1,000 tons of solvents, automotive materials and flammables in 2018.

FRESHKILLS PARK

to transform what was once one of the world's largest landfills into a thriving park. The muchanticipated Freshkills Park in Staten Island has begun construction of the first section of North Park. This 21-acre section of the Park will be the first area opened to the public in 2020—equipped with a seven-acre seed farm and composting area among other amenities with the rest of the 2,200-acre park opening in stages by 2036. Commissioner Garcia helped break ground on the site with NYC Parks Commissioner Mitchell J. Silver, FAICP, to celebrate this major step forward in changing a landfill into a public greenspace.

GREENER FACILITIES

Plans for a new Brooklyn District 3 facility are underway. Located in Bedford-Stuyvesant, this new garage will serve Bedford-Stuyvesant and parts of Bushwick. Certificated with a Silver-LEED rating, the building will be home to innovative green technologies, including a oneacre green roof to cool the building, a rainwater harvesting system to clean our trucks, and solar sunshades that will reduce sunlight, cutting down energy usage.

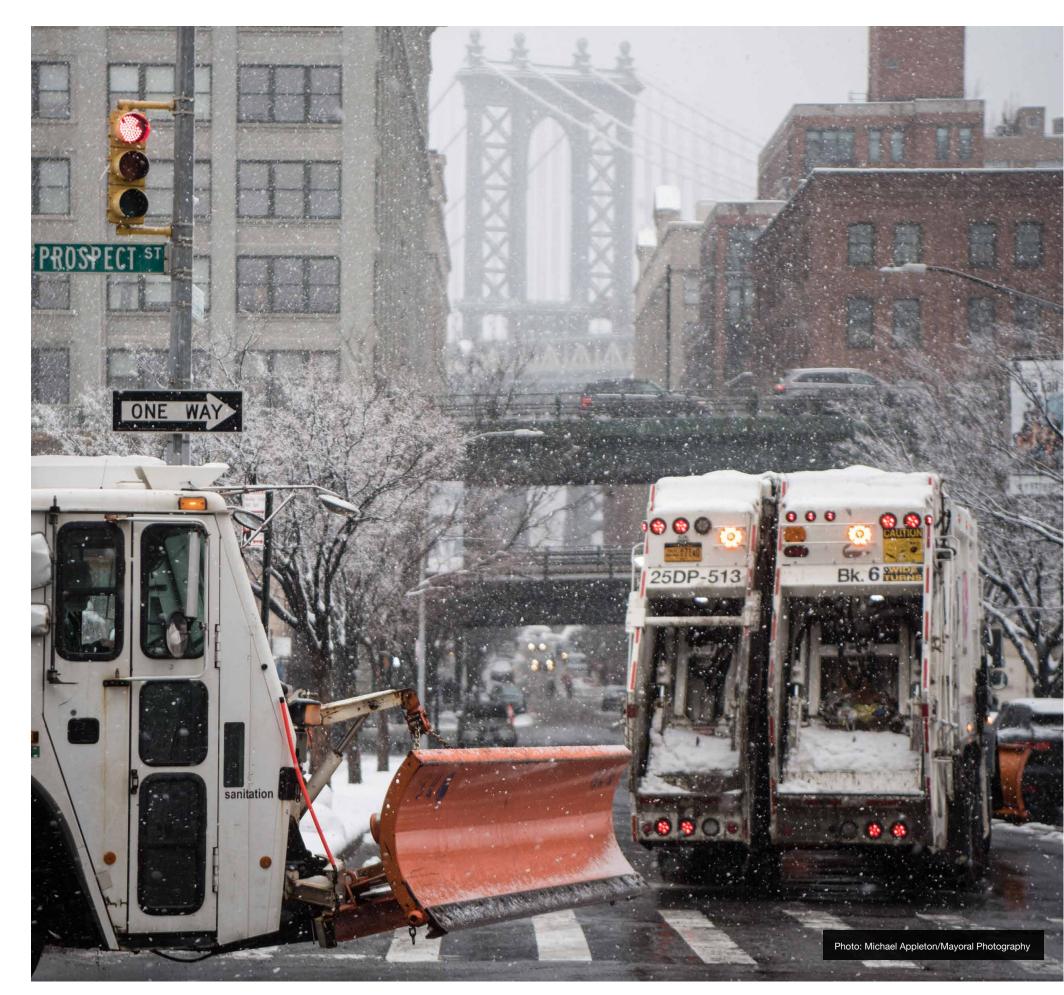
STRENGTHENING OUR FLEET

100% of our diesel fleet operates on B20 biodiesel made by soybeans—eliminating the use of 8 million gallons of petro-based diesel since 2005. We have cut our fleet's air pollutants such as particulate matter, by 90% and NOx by 81%. We've taken other key steps to offset our carbon footprint, too. Our hybrid-electric mechanical brooms mean we have the world's first fleet using this technology. Plus, we've cut fuel use and emissions in our light-duty fleet by shifting to hybrid-electric cars.









Clearing the streets for our City's first responders is our number one priority during storms. Even before the first snowflake hits the ground, we are planning our snow response. Behind the scenes, our team is working year-round to map out the most effective routes for our nearly 700 spreaders and over 1,600 plows.

With computer visualization technology and machine learning, we're responding to problem areas better than ever. Project White Out, used for the first time this snow season, is a computer program that quickly brings problem areas to our attention by sorting through hundreds of New York City Department of Transportation traffic cameras to find which streets need plowing the most. On the streets, we are piloting GPS units in nearly 70 of our mechanical brooms so our Sanitation Workers clean our streets faster and more effectively.

As severe winter weather approaches, our uniformed employees switch to 12 hour schedules and start preparing our fleet adding plows to our collection trucks, positioning our salt spreaders and adding chains to our tires for the icy roads ahead. Moving to longer shifts helps us clear 6,300 miles more efficiently. With the help of snow laborers, we cleared 14,000 bus stops across the city despite bone-chilling conditions.

SUPPORTING SPECIAL EVENTS

We protect residents through our day-to-day operations - and during City's special events. We strategically positioned our heavyduty vehicles during the 2017 United Nations General Assembly to block all high-priority roadways to control street traffic. When we aren't securing streets, we are clearing litter from high-profile events such as the Macy's Thanksgiving Day Parade or an election night. After the ball drops on New Year's Eve, our Sanitation Workers swoop in and cleaned up over 50 tons of debris.



LEADING INNOVATION

PREPARING FOR SNOW



This year we achieved a citywide average rating of 95% in street cleanliness. Our forces quickly navigate 6,300 miles stretching across all five boroughs to empty our 23,500 baskets and sweep our streets. Now, we are working more than ever with City Council members to bring add additional service in neighborhoods that need extra attention.

CLEAN

BETTER BINS

Virtually unchanged from its original 1930 design, our traditional wire-mesh litter baskets are getting a fresh look. On an average shift, a Sanitation Worker empties more than 250 baskets, each weighing more than 30 pounds each – with no trash inside. To conceptualize ways to improve the baskets, we've called upon the design industry to look toward the future. Our Better Bin Design Competition welcomed people to envision a litter basket that's easier for Sanitation Workers to lift, keeps our streets clean and has a sustainable structure. The submissions are in, and the competition's finalists will have their designs piloted around the city in 2019.

BETTER NEIGHBORHOODS

Implementing CleanNYC, Mayor De Blasio's initiative for cleaner neighborhoods, has allowed us to expand our litter basket service through Sundays and holidays citywide. Thanks to the Mayor's Neighborhood Rat Reduction program, we've also added baskets and collections trucks to areas needing extra attention. Continuing our work in vacant lots, we removed over 2400 tons of debris this year, leaving the neighborhood cleaner than before. New Yorkers are also partnering with us to keep neighborhoods clean. Providing local groups with the tools to look after their own corner basket with Adopt-a-Basket program, we have been able to decrease litter. Businesses can join over 75 participants in the Sponsor-a-Basket program, where over 2,000 high-end waste receptacles with sponsors names displayed have been placed around the city. We also equipped over 60 local cleanup events so the community can pick up litter and create a cleaner neighborhood.



TALK TRASH NEW YORK

We brought #TalkTrashNewYork to Brooklyn and the Bronx this year. By leading free, citywide basketball clinics, we reminded neighborhood kids to make the basket while throwing out their trash. Councilmember Andy King and Friends of Brownsville Parks hosted clinics in each of their boroughs, engaging over 500 children to make our 10-foot-tall basketball-themed litter basket and strengthen their game.



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