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## Testimony on the Department of Sanitation's Waste Characterization Study

*Submitted to the New York City Council Committee on Sanitation and Solid Waste Management*

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Thank you for the opportunity to testify today. My name is Ana Champeny, and I am the Director of City Studies at the Citizens Budget Commission (CBC). CBC is a nonpartisan, nonprofit civic organization whose mission is to achieve constructive change in the finances and services of New York State and New York City government.

Earlier this month, the New York City Department of Sanitation (DSNY) released the 2017 Waste Characterization Study; comparable studies were done in 2005 and 2013. CBC commends the City's commitment to completing these studies on a regular basis and releasing detailed results. These studies allow policymakers and advocates to better understand the waste stream and to assess the City's waste management strategies and programs.

CBC has written extensively about the economics of waste management in the City, and I want to comment on the fiscal and policy implications of changes in the waste stream on the City's waste management system. Specifically, while aggressively pursuing zero waste by 2030, the City should:

- Seek productivity gains in waste collection in order to realize savings, including meeting collection targets, increasing the volume of recyclables, and optimizing the Uniformed Sanitationmen's Association (USA) labor contract in the upcoming round of negotiations;
- Focus on increasing participation in the curbside organics program before extending it to other areas and pursuing the use of in-sink disposers;
- Continue policy initiatives to improve solid waste collection, including save-as-you-throw and single-stream recycling; and
- Revisit a plastic bag ban with a fee on alternatives.

## *The Waste Characterization Study*

The 2017 study shows the average New York household is throwing out 1,988 pounds, down from 2,001 pounds in 2013 and 2,280 pounds in 2005. This reduction in waste was not anticipated in the City's Solid Waste Management Plan and is a positive development.

Another positive development is that more than 75 percent of the waste New Yorkers are throwing out could be recycled or composted. Compared to 2013, the average household's waste stream contains less paper (ongoing decline in newspapers), but more plastic and organic waste.

But not all news is positive. While recyclable materials are increasing, New Yorkers are not dramatically better at sorting them out. The capture rate, which measures the share of a recyclable material that is separated, hovers around 50 percent for paper and metal, glass, and plastic (MGP). After decades of operating a curbside recycling program, the City is still landfilling as much as it is recycling. The 2013 expansion of MGP recycling to include rigid non-bottle plastics (bottles were already recyclable) has increased the amount of plastic recyclables, but just one-third of the newly recyclable materials are being separated.

## *Implications for the City's Solid Waste Management*

The City has set an ambitious goal of zero waste by 2030, but is far from reaching that, and progress has been slow.

## Curbside Refuse and Recycling Collection

While the City has set targets for diversion, which is the share of all waste that is recycled or composted, these rates have been stuck around 15 to 18 percent for many years, with the recent expansions of MGP recycling and organics composting associated with a 2 percentage point increase. However, the reality of recycling economics is that collecting a ton of recycling is much more costly than collecting a ton of refuse--\$629 compared to \$291. If all else stayed the same, having New Yorkers separate more recycling would increase the City's cost. For example, if households sorted 55 percent of recyclables, up from the current 50 percent, the City would spend about \$20 million more in collection and disposal, including savings from lower refuse collection and disposal.

Labor productivity at DSNY, measured in tons per truck shift, presents opportunities for the City to achieve savings. In 2017 the average recycling truck collected 5.6 tons per shift, while the average refuse truck collected 9.6 tons, making refuse collection 71 percent more productive. And because the cost to run a truck shift is basically the same regardless of the material being collected—the majority of the cost is for salaries and benefits of two sanitation workers—it costs substantially more per ton to collect recyclables.

This situation presents three opportunities for the City:

- 1) The USA labor contract sets a productivity target of 10.7 tons for refuse and 6.2 tons for recycling; actual collections are below that target. The City should implement recommendations from CBC's 2014 report, [Getting the Fiscal Waste Out of Solid Waste Collection in New York City](#), in order to meet the productivity targets. The targets are attainable, as DSNY collected at those rates in 2005. This would require lengthening routes, reducing collection frequency in areas with low waste volume, and altering shifts or allowing for four 10-hour shifts instead of five 8-hour shifts. Meeting targets could generate savings of \$120 million per year.
- 2) The City should continue efforts to increase recycling participation. More recyclables at the curb will allow recycling productivity to increase, however, it is important that refuse productivity not decline concurrently. If the City were able to increase capture rates to 55 percent, as previously discussed, and meet productivity targets, the net reduction in costs would be \$105 million.
- 3) The USA contract expires January 19, 2019, and the City should pursue collective bargaining changes to increase flexibility and productivity and end certain differentials and bonuses. In addition to the routing and collection changes discussed above, the City should expand the use of large containers and automated trucks. Bonuses for meeting productivity targets and dumping on shift should be ended, as they are more a function of the neighborhood and housing density than employee productivity.

### Organics Recycling

Organic material presents a major opportunity for New York to decrease the amount of waste being sent to landfills. Organics, which can be readily composted, are currently 34 percent of an average household's waste. The City began piloting curbside organics collection in 2013 and expanded to 3.3 million New Yorkers by the end of 2017. The City plans to make organics composting available to all New Yorkers by the end of 2018.

However, as CBC documented in the 2016 report, [Can We Have Our Cake and Compost It Too?](#), the current curbside organics program is costly and inefficient. The City reports in the waste study that just 13,000 tons of organics were separated and collected in 2017—just 1 percent of the citywide organic waste stream. Recent data released shows that DSNY collected an average of one ton per truck shift as part of the curbside organics program. Based on the average cost per truck shift, the estimated cost of collecting 13,000 tons of organics is about \$40 million.

While the program is well-intentioned and highlights the substantial potential that exists in organics, the City should prioritize fiscal considerations when deciding on next steps. CBC has argued for slower expansion, with a focus on districts likely to attain significant participation (based on recycling data). The City should halt expansion until participation can be increased in existing districts. CBC has also advocated the use of

in-sink disposers, which can crush food waste and send it to waste water treatment plants without incurring additional curbside collection. CBC estimated that a pilot in four districts with adequate wastewater treatment capacity would save the city \$4 million. Lastly, the organics program is currently voluntary; ultimately, the City will want to make it mandatory, as was done with recycling in 1989.

### Changes in Waste Management

The City is pursuing two policy avenues—single-stream recycling and save-as-you-throw—which have the potential to substantially improve waste management.

The City plans to implement single-stream recycling by 2020; this will present an opportunity to realize improvements and efficiencies in recycling collection. Under single-stream recycling, New Yorkers would no longer need to separate paper and metal, glass, and plastic; all recyclables would be put in one container. This is expected to increase participation, though the quality of the recyclables is likely to be lessened due to mixing paper with food containers. Single-stream recycling is likely to increase collection productivity as the City could send one truck instead of two, which would likely be fuller at the end of the shift. Alternatively, a dual-bin truck could collect recycling and organics or not be constrained by one of the two sides reaching capacity before the other.

The City has hired a consultant to recommend a volume-based garbage fee program, also called save-as-you-throw. CBC advocated for such a program in the report, [A Better Way to Pay for Solid Waste Management](#), and supports the City's efforts. An economic incentive is an effective way to get residents to reduce their waste production. In order to encourage more diversion, especially of organics, the program should charge a lower fee for recyclable and organic waste, as compared to refuse. The design of the program is of significant importance given the challenges in New York City, such as dense, high-rise apartment buildings and limits on where to store waste for collection, both within and outside buildings.

### Plastic Bags

While not a substantial part of the waste stream, plastic bags represent a missed opportunity for the City. In 2017 plastic bags were 1.9 percent of the waste stream, about 71,000 tons annually. Based on a disposal cost of \$171 per ton, the City is spending \$12.1 million to landfill these bags. As you know, the City Council passed and Mayor Bill de Blasio signed a carryout bag fee in 2016 that would have taken effect on February 15, 2017. However, the State Legislature and Governor Cuomo enacted a moratorium to halt the City's fee from taking effect. Since then, the State Task Force released a report on plastic bags that recognized the substantial environmental problem but failed to endorse a course of action for New York State. During the intervening months, a plastic bag fee took effect in Suffolk County and recent survey data shows a significant switch to reusable bags. In a [blog](#) released last week, the CBC advocated for the City to, once again, act on this issue and pass a plastic bag ban along with a fee on alternative bags.

The Waste Characterization Study provides significant data about the makeup of New York City trash and changing consumer behavior. It also provides a lens to evaluate current and proposed DSNY policies with regard to waste management, with an eye to increasing efficiency and cost-effectiveness. I am happy to answer any questions you may have.

### **Recent CBC Publications on Waste Management**

[\*The Time is Right for New York City to Act on Plastic Bags\*](#) (April 2018)

[\*Can We Have Our Cake and Compost It Too?\*](#) (February 2016)

[\*A Better Way to Pay for Solid Waste Management\*](#) (February 2015)

[\*Getting the Fiscal Waste Out of Solid Waste Collection in New York City\*](#) (September 2014)

[\*12 Things New Yorkers Should Know About Their Garbage\*](#) (May 2014)

[\*Taxes In, Garbage Out\*](#) (May 2012)