

# WASTE

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## WASTE

Over the past 50 years, our ecological footprint—one measure of our consumption of natural resources—has increased by about 190%.<sup>63</sup> Much of this natural resource consumption is in the production of everyday consumer goods (such as furniture, clothing, and food). As Washington, DC’s population continues to grow, the demand for goods also grows. Unfortunately, the lifecycle of most of those goods follows a path that could be best described as “take, make, waste”—natural resources are taken to make goods and disposed of after usage. Further, while recycling is relatively convenient in the District, many residents find properly sorting waste unclear and confusing. In addition, the District’s location at the intersection of three state-level jurisdictions and two regional rivers means the District Government is faced with managing waste coming from outside of our city. To address growing challenges in managing waste, the District will have to not only reduce waste at the source but also develop systems and infrastructure to recover the value of unwanted goods. Creating a more sustainable system will require a new perspective: unwanted goods are not waste but simply wasted resources.

Sustainable DC was the first pronouncement of the District’s bold waste diversion goal: divert at least 80% of our waste away from landfill and waste-to-energy by 2032. In the five years since, there has been a dramatic shift in how we think about our discarded materials—not as trash but as potentially valuable resources. The District Government created an Office of Waste Diversion within the Department of Public Works (DPW) which now publishes an annual waste diversion report. District Council passed several significant new laws: banning the use of expanded polystyrene containers (commonly known as Styrofoam), banning electronics from our waste stream, and adding a fee to the distribution of disposable bags. The District Government has also established new programs to more

sustainably manage waste including a program for producers to take responsibility for old paint and used electronics and a city-wide food waste composting drop-off program. Through an interagency effort, the District Government launched Zero Waste DC, which developed a universal list of recyclable and compostable items. This universal list has helped reduce residents' confusion as to how to properly sort their waste. Moving forward, the District Government is also scoping out a comprehensive Zero Waste Plan that will examine the programs, initiatives, and plans that contribute to the diversion of waste in the District. The plan will tie together existing activities and inform the development and evaluation of further policies.



## **Sustainable DC 2.0's actions on waste have real benefits for Washington, DC at all levels:**

### **INDIVIDUAL**

Individuals have a role to play in reducing waste at its source by taking actions like eliminating single-use plastics and embracing reuse. Reducing waste at its source will mean less waste polluting the District neighborhoods, parks and waterways, enhancing the desire for communities to make use of their community assets.

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### **NEIGHBORHOOD**

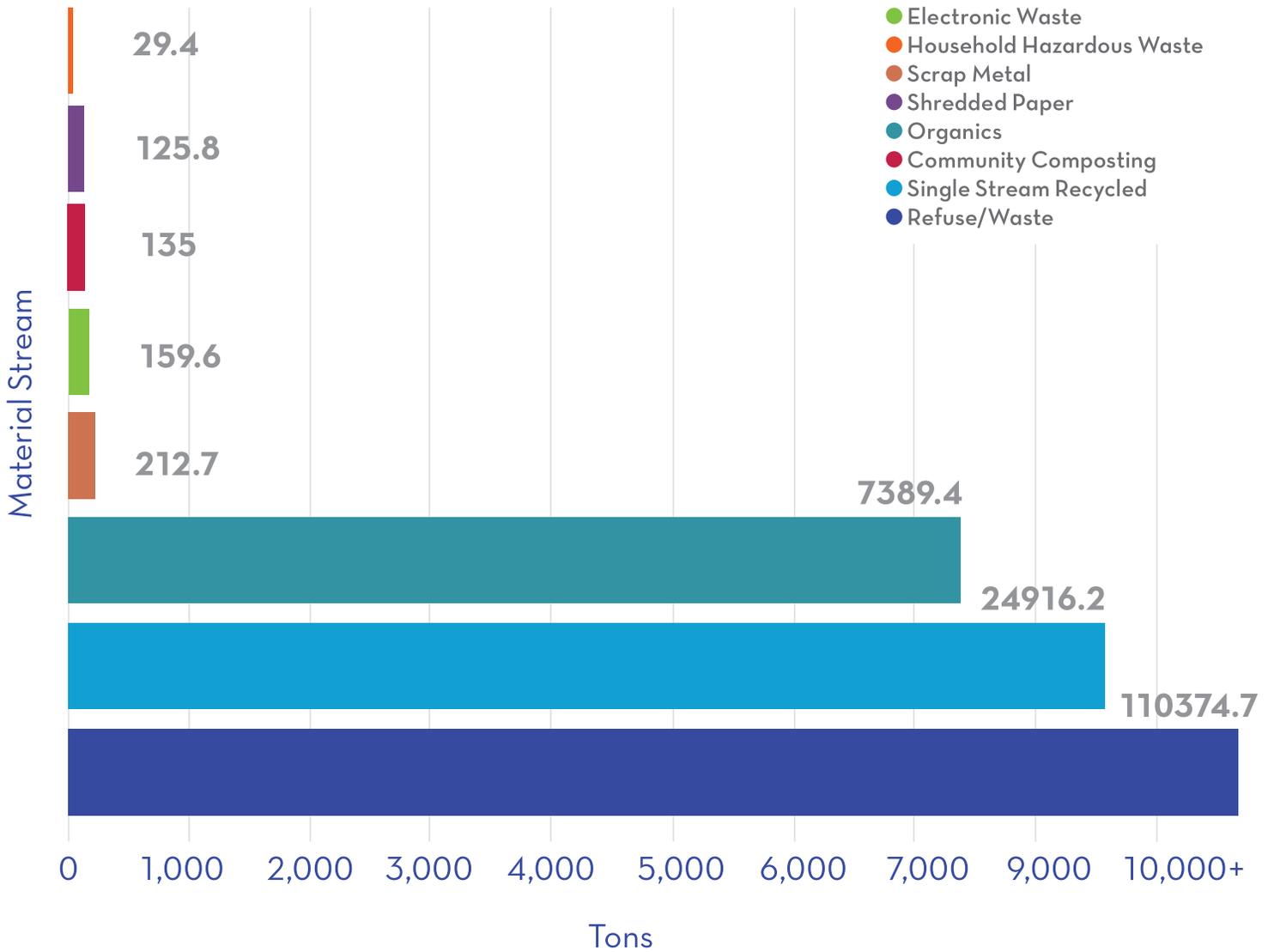
Communities will benefit from clean, litter-free streets and access to clean and attractive green spaces.

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### **DISTRICT**

Seeing our waste as a commodity can help grow the local economy by providing additional streams of income for local residents and providing materials for growing local enterprises. By separating the District's waste into identifiable clean waste streams that can be used in the manufacturing of new products, we conserve natural resources, reduce greenhouse gases, and can spur innovation in reuse to help create local businesses.

## 2016 City-wide Residential Waste Stream



2016 City-wide Residential Waste Diversion Rate:<sup>lxv</sup>

**22.98%**



**2018**

Food Waste Drop-Off Sites<sup>lxvii</sup>

**51,498**

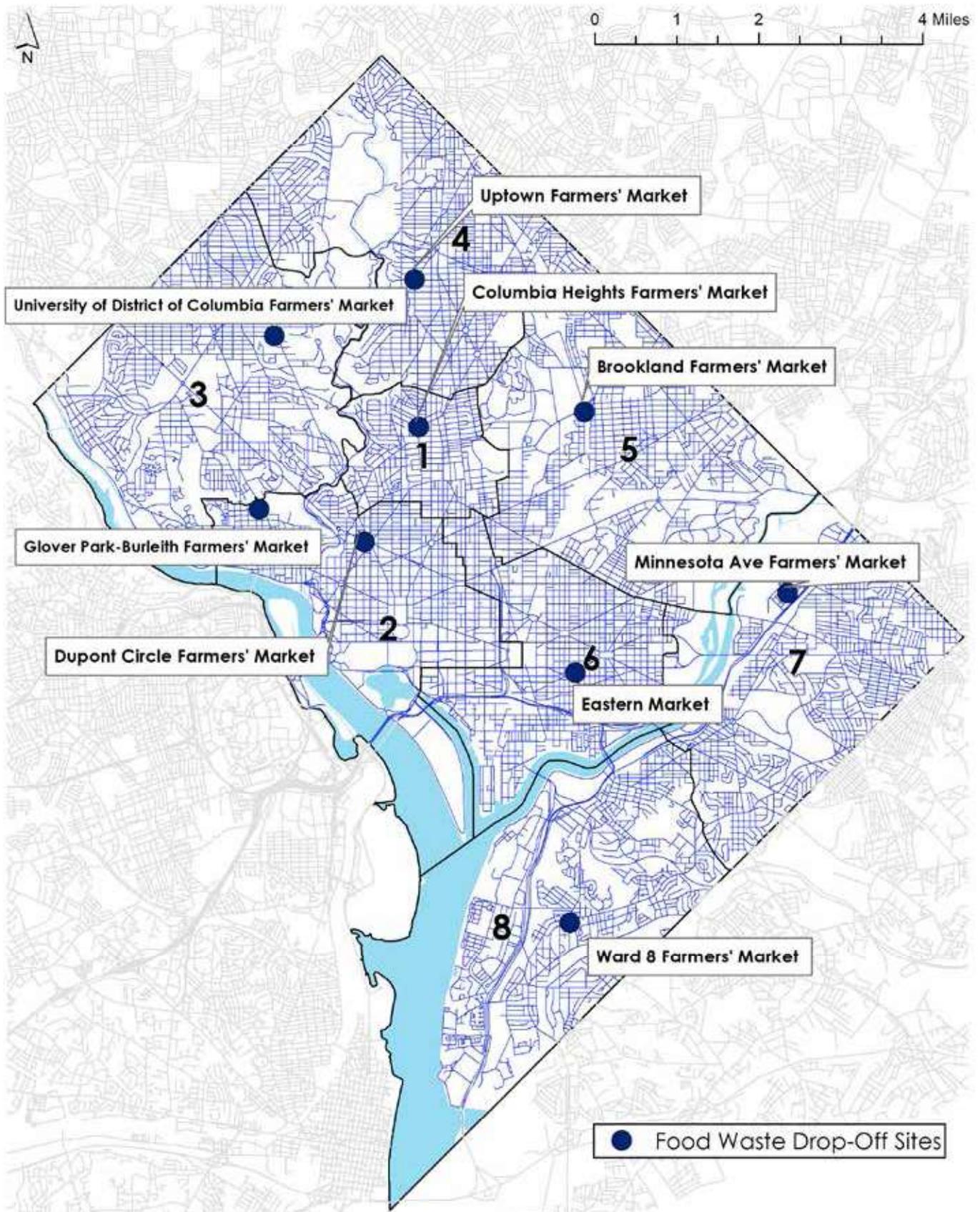
participants

**340,619**

lbs. collected



# FOOD WASTE DROP-OFF LOCATIONS





## GOAL 1

Reduce waste generated per capita in the District.



## TARGET 1

By 2032, reduce per capita waste generation by 15%.



## TARGET 1 BASELINE

7.61

lbs per capita per day

### WS1.1

Develop a comprehensive Zero Waste plan with the objective of decreasing all citywide waste streams and achieving source reduction goals.

The “Sustainable Solid Waste Management Amendment Act of 2014” requires the development of a Zero Waste Plan for Washington, DC. The development of such a Plan would tie together existing activities and inform the development and evaluation (including carbon impacts) of further policies so that the District can strategically achieve zero waste citywide, defined as 80% diversion of all solid waste from landfill and waste-to-energy.

#### TIMEFRAME

Short term

#### LEAD

DPW

#### PARTNERS

DOEE, DGS, DPR, OP

### WS1.2

Study the feasibility of an equitably priced collection billing structure (like Save-As-You-Throw).

The cost of residential waste management is equally shared amongst District households receiving DPW-provided collection service, regardless of the amount that each household generates. Establishing a Save-As-You-Throw system for DPW-serviced households in the District would provide an incentive for residents to reduce the volume of waste generated, and would more appropriately and fairly charge residents for collection services. The pricing structure should minimize disproportionate impact on low-income communities and avoid incentivizing illegal dumping.

#### TIMEFRAME

Short term

#### LEAD

DPW

#### PARTNER

DOEE

### WS1.3

## Expand current bans and fees on waste products like expanded polystyrene and disposable bags.

Banning the use of expanded polystyrene containers (commonly known as Styrofoam™) and adding fees to the distribution of plastic bags at the point of sale has been an effective means of decreasing the occurrence of these hard-to-recycle items in our waste stream. Broadening the polystyrene ban to include packing materials, adding additional points-of-sale (supermarkets, big box retailers, and suppliers), and increasing fees on plastic bags will bolster our efforts to keep these items out of the waste stream and serve as an incentive for the use or development of alternative products.

#### TIMEFRAME

Medium term

#### LEAD

DOEE

#### PARTNERS

DPW, EOM

### WS1.5

## Increase purchases of Environmentally Preferable Products and Services.

The District Government has an award-winning Sustainable Purchasing Program that provides resources to facilitate the purchase of Environmentally Preferable Products and Services (EPPS). The program, however, is sorely underutilized. Increasing the robustness of the program by including additional product categories, making the resources more accessible, training more District employees on the use of the product specifications and making EPPS the default through our purchasing systems would increase the percentage of District purchases that conform to the EPPS requirements and ultimately reduce waste resulting from conventional purchasing.

#### TIMEFRAME

Short term

#### LEAD

DOEE, OCP

### WS1.4

## Work with surrounding jurisdictions to develop and implement a regional approach to reducing plastic waste.

Washington, DC sits at the intersection of three jurisdictions and the confluence of two rivers. Goods (including items that eventually become plastic waste) flow freely into and out of the city carried not only by our waterways, but also by residents, commuters and visitors. Implementing District-specific initiatives will only go so far. Regional cooperation is required to insure that the policies and practices of the neighboring jurisdictions are aligned with the District's efforts.

#### TIMEFRAME

Long term

#### LEAD

DOEE, DPW

#### PARTNER

EOM





## GOAL 2

Facilitate local reuse and recovery of materials to capture their economic and social value.

### WS2.1

Reuse or recycle 50% of all commercial construction waste.

While the District has experienced rapid growth, including the redevelopment of entirely new neighborhoods, the construction sector has not been incentivized to account for their waste. Requiring the reuse or recycling of commercial construction waste creates a requirement that aligns with existing green building codes and standards.

#### TIMEFRAME

Medium term

#### LEAD

DOEE

#### PARTNERS

DCRA, DGS, DPW

### WS2.2

Reuse 5% of total non-hazardous residential building materials.

Over the last 5 years, residential construction and renovations have continued to increase. The Residential Technical Advisory Group (RESTAG) recommended a reuse standard for building materials that will begin to redirect building materials away from the waste stream. This action is consistent with the standard, and sets a minimum for diversion efforts including interior commercial remodeling. This effort will be supported by providing more resources to assist small-scale residential developers and homeowners to use recycled and salvaged building materials.

#### TIMEFRAME

Long term

#### LEAD

DOEE

#### PARTNERS

DCRA, DPW



## TARGET 2

By 2032, reuse 20% of all waste produced in the District.

### WS2.3

Develop a greenhouse gas impact calculator for specific waste streams to support the development of a circular economy and guide further policy development.

As waste diversion policy evolves, decision makers need a method for weighing the impact of potentially competing approaches to waste minimization and diversion. Focusing on circularity (an economy that is restorative and regenerative by design), a calculator will help quantify the greenhouse gas impact of various actions and help us minimize waste products and services through thoughtful design.

#### TIMEFRAME

Short term

#### LEAD

DOEE

#### PARTNER

DPW

### WS2.4

Support the development of a locally based, circular economy by facilitating the separation of waste into commodity streams.

Bringing circularity to local economies calls for the establishment of circular systems. Separating the District's waste at its source into identifiable and commodifiable, clean waste streams spurs innovation by allowing material to be used in the manufacture of new products and encourages exploration of economic opportunities for handling "hard to recycle" items.

#### TIMEFRAME

Short term

#### LEAD

DOEE

#### PARTNER

DPW





## GOAL 3

Achieve zero waste citywide.



## TARGET 3

By 2032, achieve 80% waste diversion citywide without the use of landfills, waste-to-energy or incineration.



## TARGET 3 BASELINE

20.96%

### WS3.1

Provide District Government-served households with three, right-sized bins for collecting compostable materials, recyclable items, and trash.

Discarded food and other organic, compostable material make up as much as 30 percent of the District's waste stream. On Earth Day 2017, the District launched the Food Waste Drop-Off program, which is now available in all eight wards. A residential, curbside, three-bin system will provide the most convenient point of disposal for food and yard waste and will increase the value of all materials collected at the curb. Right sizing curbside bins to reflect our waste diversion goals will enable increased recovery of valuable materials (recycling and compost) and support behavior change.

#### TIMEFRAME

Medium term

#### LEAD

DPW

#### PARTNER

DOEE

### WS3.2

Establish a new organics processing facility (composting, anaerobic digestion, or co-digestion pre-processing) in the District to capture food and other organic waste.

Washington, DC and surrounding Maryland and Virginia counties, lack sufficient capacity/infrastructure to process large volumes of organic materials. A 2017 compost feasibility study concluded that an in-District facility would be the most cost-effective and sustainable means of extracting the full value from organic materials. The facility would process organics via composting, anaerobic digestion, co-digestion pre-processing, or a combination of multiple options.

#### TIMEFRAME

Medium term

#### AGENCY

DPW

#### PARTNERS

DC Water, DGS, DOEE, OP

### WS3.3

## Increase the number of co-located (trash and recycling) receptacles that are publically accessible.

Ensuring opportunities to recycle, by increasing the number of disposal points in all areas of the city, will support waste diversion messaging and reinforce behavior change that is needed for achievement of the District-wide zero waste goal. The District Government will expand recycling in District parks, recreation centers, and libraries, as well as work with partners like Business Improvement Districts to increase the amount of public space recycling receptacles in commercial establishments, multifamily buildings, and public spaces (i.e., street cans).

**TIMEFRAME**  
Medium term

**AGENCY**  
DPW

**PARTNERS**  
DCPL, DGS,  
DOEE, DPR, OP

### WS3.4

## Aggressively enhance educational resources and outreach campaigns that educate residents, workers and visitors on waste minimization, recycling, and composting.

Creating new outreach and compliance assistance to reinforce both the waste diversion and anti-littering messaging and behavior change will create pathways for success. Washington, DC has a number of well thought out educational resource and initiatives. Developing additional creative methods for engaging residents, with a particular focus on residents and communities that do not consistently engage with the sustainability community, will broaden our reach and impact.

**TIMEFRAME**  
Short term

**AGENCY**  
DPW

**PARTNERS**  
DCPL, DOEE,  
DPR, OCC, OP

### WS3.5

## Expand Washington, DC's product stewardship program to include additional product streams.

Washington, DC is successfully implementing product stewardship programs for paint and electronics. The models from these programs are transferrable to other specific waste streams (e.g., pharmaceuticals, batteries, mattresses).

**TIMEFRAME**  
Medium term

**AGENCY**  
DOEE

**PARTNERS**  
DGS, DPW, OP

### WS3.6

## Bolster enforcement efforts to ensure that commercially-serviced businesses and multifamily buildings comply with the requirements to provide adequate and timely on-site recycling and trash collection.

Better enforcement of the requirement for all commercial and multifamily buildings to make recycling available to residents and visitors, along with improvements to the enforcement labor force, will increase commercial property diversion rates.

**TIMEFRAME**  
Medium term

**AGENCY**  
DPW

**PARTNERS**  
DCPL, DGS,  
DOEE, DPR, OP