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SOLID WASTE DIVERSION  
ANNUAL REPORT

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*Calendar Year 2018*

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ZERO  
WASTE



DC





## DC Department of Public Works Office of Waste Diversion

*This document was produced by the Department of Public Works and the Interagency Waste Reduction Working Group, in fulfillment of reporting requirements per the Sustainable Solid Waste Management Amendment Act of 2014.*



The Interagency Waste Reduction Working Group is a coalition of DC agency stakeholders charged with creating a path to zero waste for the District of Columbia. Working Group members shape the implementation of waste programs, provide feedback and support for waste diversion operations, design and develop cohesive waste diversion education and outreach materials, and support the continued evolution of the District's waste diversion policies.

 GOVERNMENT OF THE  
DISTRICT OF COLUMBIA  
**MURIEL BOWSER, MAYOR**

## **Introduction**

The Department of Public Works, on behalf of the Mayor, is proud to present the Calendar Year 2018 Solid Waste Diversion Progress Report in fulfillment of the annual reporting requirements of the Sustainable Solid Waste Management Amendment Act of 2014.

Zero Waste is defined as diverting 80% or more of the city's solid waste stream away from landfills and waste-to-energy facilities. This annual report includes data and information that describes solid waste activity during 2018 and is intended to track progress that the city is making in pursuit of this Zero Waste vision.

Notable changes have been made to this report's solid waste diversion metrics, something made possible in part by recently estimated citywide data. Specific changes are discussed in the following sections, as well as a brief summary of the 2018 results.

## **Discussion**

The Office of Waste Diversion is now capable of reporting a full calendar years' worth of solid waste data across all sectors of the city. This important milestone is made possible by the established Solid Waste Collector Registration & Reporting System<sup>[1]</sup> and the development of the city's first citywide Waste Characterization Study (2021).

Since 2015, the District of Columbia has been tracking solid waste diversion performance in line with the District of Columbia Government's fiscal year (FY) calendar (October 1 - September 30). Moving forward, solid waste data will be reported on a calendar year (CY) basis (January 1 - December 31). This seemingly small adjustment will greatly improve the consistency of this annual report and better align with neighboring jurisdictions' reporting timelines and those of established District programs and initiatives. Meaningful improvements have also been made to the city's solid waste diversion metrics. Previous reports have featured a Residential Waste Diversion Rate and a Citywide Residential Waste Diversion Rate. Going forward, the following two metrics will be reported upon and their full scope is described later in this document; Residential Waste Diversion Rate and Citywide Waste Diversion Rate.

In addition, the availability of citywide data allows for an estimation of the city's Per Capita Waste Generation Rate of solid waste. Combined, these three metrics will be utilized to determine how well the city is performing with respect to source reduction and waste diversion.

The data contained in this report will be used to establish baselines for solid waste generation and composition across the city. These baselines will also be used to quantify greenhouse gas emissions resulting from the District's solid waste sector, as well as track progress made towards achieving Sustainable DC<sup>[2]</sup> and Carbon Free DC goals.

## **Summary of Results**

The Residential Waste Diversion Rate equaled 25.24% for calendar year 2018. At 25.24%, the District falls within the median range for diversion performance among comparable large, U.S. cities. In time, this performance metric will be best improved through an expansion of existing residential programs (e.g. material drop-off programs) and increased education and outreach regarding how best to recycle and reduce waste generated in the home.

The Citywide Waste Diversion Rate is estimated to be 16.11% for calendar year 2018. Since almost all large U.S. cities struggle to quantify citywide waste diversion across all sectors, residential and commercial, comparisons are, therefore, difficult to come by. In time, this rate will be improved by focusing on a mix of supportive policies and programs specific to the commercial and multi-family residential sectors since, combined, they constitute the largest percentage of solid waste generated in the city.

The Per Capita Waste Generation Rate is estimated to be 1.62 tons per resident per year or 8.89 pounds per resident per day for calendar year 2018. These values are seemingly higher than comparable, large U.S. cities. This can be attributed to the large number of tourists and daily commuting employees, which inflate the District's daytime population well above the 702,455 residential population reported for calendar year 2018.

A deeper discussion of these results as well as a full disclosure of available calendar year 2018 solid waste tonnage data and information are presented in subsequent sections.

***\* These metrics should be considered estimates built upon a combination of existing data sources and for where data was not fully available, proxy data. These estimates are presented with a high degree of confidence.***



**25.24%**

*Residential Waste Diversion Rate*



**16.11%**

*\*Citywide Waste Diversion Rate*



**1.13M Tons**

*\*Citywide Solid Waste Stream*



**8.89 Pounds**

*\*Per Capita Waste Generation Rate (Daily)*

# RESIDENTIAL BREAKDOWN

## Residential Solid Waste Generation & Diversion

Residential Waste includes data for the entire DPW serviced, single-family residential sector plus drop-off programs that are open to all residents (including multi-family residents) across the District of Columbia.

Table 1A provides a breakdown of Residential Waste generated in 2018. Table 1B provides a breakdown of the refuse total shown in Table 1A.

In 2018, the Residential Waste Diversion Rate equaled 25.24%. This rate places the District of Columbia within the median range for diversion performance among other large, U.S. cities.

## Residential Waste Diversion Rate

# 25.24%



Material Stream	Tons
Electronic Waste <sup>[4]</sup>	400
Household Hazardous Waste <sup>[5]</sup>	79.12
Paint <sup>[6]</sup>	204.29
Textiles <sup>[7]</sup>	796
Scrap Metal	326.85
Shredded Paper	168.19
Community Composting	278
Leaves	5,633.62
Holiday Trees	450.1
Food Waste <sup>[8]</sup>	414
Other Green Waste <sup>[9]</sup>	449
Single Stream Recyclables	26,496.82
Bins Recycled	0.57
Refuse/Waste	105,290.89
<b>Total</b>	<b>140,987.45</b>
<b>Residential Waste Diversion Rate<sup>[10]</sup></b>	<b>25.24%</b>

Material Stream	Tons
Curbside Refuse Collection	98,462.08
Scheduled Bulk Waste Pick ups	2,618.58
Residential Bulk Drop-Off	4,210.23
<b>Refuse Total</b>	<b>105,290.89</b>

# CITYWIDE BREAKDOWN

## Citywide Solid Waste Generation & Diversion

For the first time, the District of Columbia can estimate Citywide Waste Diversion beginning with calendar year 2018. This important milestone will allow the city, as a whole, to track progress towards achieving the Zero Waste DC mission and related Sustainable DC goals. Table 2<sup>[11]</sup> provides a breakdown of the amount of solid waste generated across the entire city’s solid waste stream.

Citywide solid waste includes all solid waste which the District of Columbia generates including waste derived from residential and non-residential (commercial) sectors. This data and estimated metrics were made possible by the Waste Characterization Study (2021). Where calendar year 2018 data was not available, extrapolations were made using relevant years tonnages and population as proxies.

In 2018, the Citywide Waste Diversion Rate was estimated to be 16.11%. Since large U.S. cities do not regularly calculate a citywide waste diversion rate, comparisons are difficult to make. With the establishment of this performance metric, the District of Columbia aims to assert itself as a leader in tracking progress towards Zero Waste.

Per Capita Waste Generation Rate for the year is estimated to be 1.62 tons per resident per year or 8.89 pounds per resident per day. These values place the District of Columbia at the very high-end of the range of what other U.S. cities have typically reported. This can be attributed to the fact that the District of Columbia’s daytime population swells during the day with the influx of daily commuters and tourists.



Material Stream	Tons
Refuse	881,716.80
Mixed Recyclables	97,015.65
Paper	37,647.23
Shredded Paper	168.19
Plastic	163.56
Textiles	746
Scrap Metal	25,635.83
Bulky	39,253.09
Street Sweepings	20,146.22
Tires <sup>[13]</sup>	247.3
Leaves	5,625.49
Holiday Trees	481.03
Food Waste	4,736.34
Yard Trimmings	8,874.99
Other Green Waste	734.34
Electronics	1,433.53
Paint <sup>[14]</sup>	195.65 <sup>[15]</sup>
Other Household Hazardous Waste <sup>[16]</sup>	79.12
Other	14,945.75
<b>Total</b>	<b>1,139,846.12</b>
<b>Population</b>	<b>702,455</b>
<b>Annual Tons Per Capita</b>	<b>1.62</b>
<b>Daily Lbs. Per Capita<sup>[17]</sup></b>	<b>8.89</b>
<b>Citywide Waste Diversion Rate</b>	<b>16.11%</b>

### Citywide Waste Diversion Rate

# 16.11%

## Citywide Solid Waste Disposal by Destination

Table 3 contains all of the available solid waste disposal data across the city’s entire waste stream. It is important to note that there is a gap between the amount of the solid waste referenced in Table 2, and the amount of solid waste reported to be disposed of in Table 3. This gap is the result of citywide solid waste disposal data not yet being fully captured in the Solid Waste Collector Registration & Reporting System. Increased enforcement efforts on the part of the Department of Public Works’ Office of Waste Diversion and the Solid Waste Education & Enforcement Program (SWEEP) will increase reporting compliance and reduce the number of “hidden” tons. This effort, paired with building stronger partnerships with neighboring states in the mid-Atlantic region, will help the District better account for citywide waste generation and disposal.

Table 3: Citywide Solid Waste Disposal by Destination<sup>[18]</sup>

Facility Name	Facility Type	Facility Address	Tonnage
Lorco Petroleum Services	Biofuel	Unknown <sup>[19]</sup>	5.1
Revolution Bio Fuels	Biofuel	2162 Kerchner Lane, Seven Valleys, PA 17360	27.6
<b>Biofuel Subtotal</b>			<b>32.7</b>
ACME Biomass Reduction Inc.	Composting	21601 New Hampshire Avenue, Brookeville, Maryland 20833	10,753.93
Brookville Landfill Supply	Composting	8913 Brookville Road, Silver Spring, MD 20901	91.49
Community Composting (DPR)	Composting	Multiple Locations <sup>[20]</sup>	314
D & A Dunlevy Landscapers, Inc.	Composting	16101 Morrow Road, Poolesville, MD 20837	12
Evergro Landscaping	Composting	11411 Old Pond Dr, Glenn Dale, MD 20769	54.6
Fine Earth Landscape	Composting	16815 Budd Road, Poolesville, MD 20837	1,980.00
Great American Landscapes	Composting	14310 Comus Rd., Clarksburg MD 20871	202
Grounds Management	Composting	17930 Central Avenue, Mitchellville, MD 20716	8
Harvest RGI, LLC	Composting	7800 Kabik Ct, Woodbine, MD 21797	144
Level Green Upper Marlboro YARD	Composting	6408 Dower House Rd, Upper Marlboro MD 20772	1,810.00
Poole Landscaping	Composting	7802 Biggs Ford Rd, Frederick, MD 21701	18.5
Prince George’s County Yard Waste Composting Facility	Composting	6601 S.E. Crain Highway, Upper Marlboro, Maryland 20772	4,360.56
Remington Mulch	Composting	524 Lee Hwy, Fairfax, VA 22031	2.5
Soil Safe LLC	Composting	16001 Mattawoman Drive, Brandywine, MD 20613	1
Veteran Compost Facility	Composting	6300 Newman RD, Fairfax, VA 22030	624
<b>Composting Subtotal</b>			<b>20,376.58</b>



Facility Name	Facility Type	Facility Address	Tonnage
Charles County Landfill	Landfill	12305 Billingsley Rd, Waldorf, MD 20602	5,038.65
Davis Industries	Landfill	9920 Richmond Highway, Lorton, VA 22079	33.81
King and Queen LF BFI	Landfill	4443 Iris Road, Little Plymouth, VA 23091	71,958.04
King George Landfill	Landfill	10376 Bullock Drive, King George, Virginia 22485	54,820.32
Middle Peninsula Landfill	Landfill	3714 Waste Management Way, Glenss, VA 23149	57,749.81
Old Dominion	Landfill	2001 Charles City Rd, Henrico, VA 23231	3,432.93
PG's Brown Station Road Sanitary Landfill	Landfill	3500 Brown Station Road, Upper Marlboro, MD 20774	2,362.21
Republic Services- 623 Landfill	Landfill	1961 Ashland Road, Rockville, Virginia 23146	38,914.19
Ritchie Landfill	Landfill	2001 Ritchie Marlboro Road, Upper Marlboro, MD 20772	1,525.95
Bristol Virginia Solid Waste Management Facility	Landfill	2125 Shakesville Rd, Bristol, VA 24201	27.68 <sup>[21]</sup>
Annapolis Junction Transfer Station	Landfill	8077 Brock Bridge Rd, Jessup, Md 20794	411.46
ESI,Ameriwaste Transfer Station	Landfill	7140 Kit Kat Rd, Elkridge Md 21075	9
Northeast Transfer Station	Landfill	2100 Queens Chapel Road NE, Washington, District of Columbia 20018	31,068.28
Tristar Tires	Landfill	Unknown <sup>[22]</sup>	32.35
West Virginia Tire Disposal	Landfill	26 Bryant Branch Rd, Summersville, WV 26651	73.59
W Street Transfer Station	Landfill	1220 W. Street, NE, Washington, District of Columbia 20018	56,984.79
<b>Landfill Subtotal</b>			<b>324,443.06</b>
Prince Georges Scrap	Recycling	5700 Branchville Rd., College Park, MD 20740	240.51
East Coast Metals, LLC	Recycling	1015 Ritchie Road, Capitol Heights, MD 20743	5,660.00
Emanuel Tire LLC	Recycling	1326 Bentalou St., Baltimore, MD 21216	14.63
Encore Recycling	Recycling	13211 Virginia Manor Rd, Laurel, Maryland 20707	2,475.82
Shred-Ace	Recycling	DGS Material	
EnviroSolutions	Recycling	9304 D'Arcy Rd Upper Marlboro, MD 20774	90
Georgetown Paper Stock of Rockville, Inc.	Recycling	14820 Southlawn Lane, Rockville, MD 20850	4,918.82
Goode Companies	Recycling	6305 Ivy Ln Ste 720, Greenbelt, MD 20770	85.79
MXI Environmental Services	Recycling	26319 Old Trail Rd, Abingdon, VA 24210	79.00 <sup>[23]</sup>
Industrial Metal Recycling LLC	Recycling	9304 D'Arcy Rd, Upper Marlboro, MD 20774	52.48

Facility Name	Facility Type	Facility Address	Tonnage
JK Enterprise	Recycling	6200 farrington Ave, Alexandria, VA 22304	10
Joseph Smith & Sons, Inc.	Recycling	2001 Kenilworth Ave, Capitol Heights, Maryland 20743	3,097.04
Metalpro, Inc.	Recycling	7956 Twist Lane, Springfield, VA 22153	10.9
Montgomery County Recycling Center	Recycling	16101 Frederick Rd, Derwood, Maryland 20855	468.12
Montgomery Scrap Corp.	Recycling	15000 Southlawn Lane, Rockville, MD 20850	28.36
Olive Street Processing	Recycling	1701 Olive St, Capitol Heights, Maryland 20743	10,445.69
Planet Aid	Recycling	6730 Santa Barbara Ct, Elkridge, MD 21075	746
Recycle One	Recycling	4700 Lawrence Street, Hyattsville, MD 20781	20,093.42
Reliable Contracting	Recycling	2641 Brickhead Rd Gambrills Md 21054	10
Republic Northern Virginia Recycling Facility	Recycling	7911 Notes Drive, Manassas, Virginia 20109	29,219.93
Rodgers Brothers Material Recovery Facility	Recycling	2225 Lawrence Ave NE, Washington, District of Columbia 20018	95.84
Shredded Paper (DPW)	Recycling	Unknown	169.00 <sup>[24]</sup>
Tolson & Assoc.	Recycling	1451 Capitol Raceway Rd, Odenton, Md 21113	20
United States Penitentiary, Lewisburg (E-Waste Hauled by Unicor)	Recycling	2400 Robert F Miller Dr, Lewisburg, PA 17837	141.00 <sup>[25]</sup>
WM Recycle America, LLC	Recycling	7175 Kit Kat Road, Elkridge, Maryland 21075	60,329.92
MXI Environmental Services	Recycling	26319 Old Trail Rd, Abingdon, VA 24210	138.08 <sup>[26]</sup>
eCYCLE DC	Recycling	Multiple Locations	1,295.63
World Recycling Company	Recycling	5600 Columbia Park Road, Cheverly, Maryland 20785	24,442.53
<b>Recycling Subtotal</b>			<b>164,378.51</b>
Annapolis Junction Transfer Station	Waste to Energy	8077 Brock Bridge Rd, Jessup, Md 20794	411.46
Northeast Transfer Station	Waste to Energy	2100 Queens Chapel Road NE, Washington, District of Columbia 20018	31,068.28
W Street Transfer Station	Waste to Energy	1220 W. Street, NE, Washington, District of Columbia 20018	56,984.79
GeoCycle	Waste to Energy	2175 Gardner Blvd, Holly Hill, SC 29059	38.33 <sup>[27]</sup>
Covanta Energy Corporation	Waste to Energy	9898 Furnace Rd, Lorton, VA 22079	227,954.85
Covanta Energy Corporation - Alexandria	Waste to Energy	5301 Eisenhower Ave, Alexandria, Virginia 22304	8,852.48
Wheelabrator Baltimore	Waste to Energy	1801 Annapolis Rd, Baltimore, Maryland 21230	12
<b>Waste to Energy Subtotal</b>			<b>325,322.19</b>

		<b>Total</b>	<b>834,553.03</b>
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## ENDNOTES

1. All solid waste collectors who operate in the District of Columbia are required to register and report annually with the Office of Waste Diversion in the Department of Public Works in accordance with [DC Official Code § 8-1031.05](#) and [DC Official Code § 8-1031.06](#).
2. <https://sustainable.dc.gov/>
3. Residential Waste includes data for the entire DPW serviced, single-family residential sector plus drop-off programs that are open to all residents (including multi-family residents) across the District of Columbia.
4. Includes DPW drop-off + eCYCLE DC from both single and multi-family residential.
5. Approximately 50% of this material was sent for diversion.
6. 67.66% of paint collected via PaintCare was recycled or diverted.
7. Includes textiles from both single and multi-family residential collected at distributed drop-off bins across the city (e.g. Planet Aid).
8. Includes material derived from DPW's food waste drop-off program.
9. Includes landscaper material collected within single-family residential.
10. Since this rate includes only multi-family residential streams, DPW has quality data for 2018. The actual rate will likely be lower once all residential streams are accounted for and included in future years.
11. 834,553.03 tons in Table 3 versus 1,139,846.12 tons in Table 2. The District can currently account for roughly 73% of the estimated citywide solid waste stream.
12. Citywide solid waste includes all solid waste which the District of Columbia generates, including waste derived from residential and non-residential (commercial) sectors. Where calendar year 2018 data was not available, extrapolations were made using relevant years tonnages and population as proxies.
13. It is assumed that 50% of tires were recycled.
14. 67.66% of paint collected via PaintCare was recycled or diverted.
15. This number is lower than the 204.29 tons reported in Table 1 A. This is due to an update from PaintCare after the Waste Characterization Study was developed.
16. 50% of this material was sent for diversion.
17. The National Average per U.S. EPA in 2018 was 4.9 pounds per person per day in 2018.
18. Citywide Waste includes all residential and commercial material that DPW has knowledge of per its Solid Waste Collector Registration & Reporting System, Compuweigh scale weight data, and invoice data (manually calculated) for various District Government operations.
19. Final destination could not be determined.
20. For a full list of locations, please visit DPR's website: <https://dpr.dc.gov/page/community-gardens>.
21. Material collected by PaintCare.
22. Final destination could not be determined.
23. This figure is derived from the FY 2018 invoice for services on behalf of DPW.
24. This figure is derived from the FY 2018 invoice for services on behalf of DPW.
25. This figure is derived from the FY 2018 invoice for services on behalf of DPW.
26. Materials collected via PaintCare.
27. Materials collected via PaintCare.

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