

GAP Assist

Tools to support GAP

Demonstrating Results of Waste Management with GAP

This GAP Assist tool can be used as a quick reference for the types of information GAP recipients should put in their GAP solid waste management progress reports, as well some common waste estimation approaches. Refer to the [Supplemental Guidance](#) for more information.

The national waste generation rate is
4.9 pounds per person per day.



TYPE

- Appliances & Electronics
- Construction & Demolition Debris
- Household Hazardous Waste
- Compostable Material
- Mixed Recyclables
- Unsorted Trash
- Used Oil
- Automotive
- Tires



ORIGINATION

- Commercial
- Household/Residential
- Industrial
- Institutional/Government
- Unauthorized Dumping
- Unknown



$65 \times 456 / 202 =$
147 cubic yards
per year

AMOUNT

- Landfill Scale Receipts or Tipping Fees
- Collection Invoices or Receipts
- Transport Manifests and Invoices
- Large Platform Scale
- Handheld Luggage Scale
- [Calculate from Available Data](#)



FINAL DISPOSITION

- Composted
- Burned/Incinerated
- Landfilled
- Recycled
- Backhauled
- Sent to Hazardous Waste Facility

Determining Amount: Calculations

The following are a few examples of common waste estimation approaches, but grantees are not limited to using these methods.

Dumpster Formula

(Volume (length in feet x width in feet x height in feet) x # of times emptied) x percentage full (if not full)/27 = volume in cubic yards

For example: Assume the container has 20 Yd dimensions (11 ft x 6 ft x 8 ft), picked up 6 times in the reporting period.



$$\begin{aligned} 11 \text{ ft} \times 6 \text{ ft} \times 8 \text{ ft} &= \\ 528 \text{ ft} \times 6 &= \\ 3,168/27 &= \\ \hline 117 \text{ CY} \end{aligned}$$



$$\begin{aligned} 11 \text{ ft} \times 6 \text{ ft} \times 8 \text{ ft} &= \\ 528 \text{ ft} \times 6 \times .5 &= \\ 1,584/27 &= \\ \hline 59 \text{ CY} \end{aligned}$$



$$\begin{aligned} 11 \text{ ft} \times 6 \text{ ft} \times 8 \text{ ft} &= \\ 528 \text{ ft} \times 6 \times .25 &= \\ 792/27 &= \\ \hline 29 \text{ CY} \end{aligned}$$

Truck Bed Formula

(Volume (length in feet x width in feet x height in feet) x # of times emptied)/10 = volume in cubic yards

For example: Assume the pickup beds are emptied 10 times in the reporting period.



$$\begin{aligned} 6 \text{ ft} \times 5 \text{ ft} \times 1.5 \text{ ft} &= \\ 45 \times 10 \text{ loads}/27 &= \\ \hline 17 \text{ CY} \end{aligned}$$



$$\begin{aligned} 8 \text{ ft} \times 5 \text{ ft} \times 1.5 \text{ ft} &= \\ 60 \times 10 \text{ loads}/27 &= \\ \hline 22 \text{ CY} \end{aligned}$$

Household Trash Formula

(Volume of can in gallons x total number of cans of each volume)/202 gallons per cubic yard = volume in cubic yards

For example: Assume the number of household containers being counted is 456.



$$\begin{aligned} 65 \times 456/202 &= \\ \hline 147 \text{ CY} \\ \text{per year} \end{aligned}$$

To learn more about how EPA is using GAP data, see [GAP Hub FAQs](#).

To contact GAP Support, email us at GAP@epa.gov.

Indian Environmental

General Assistance Program

American Indian Environmental Office

