

# Methods, Limitations, and References

## Public Works – Solid Waste Dashboard

### 1. Data Sources

- a. County Landfill Database (WasteWorks)
  - i. Description: Records material type, material weight in tons, and customer type for all refuse disposed of at County landfills.
  - ii. Update Frequency: Weekly
- b. GreenWaste Recovery Quarterly Reports
  - i. Description: Records total tons of recycling, food waste, yard waste, and solid waste collected. Disaggregation available by customer type.
  - ii. Update Frequency: Quarterly
  - iii. Data Planning: Currently working with vendor to establish weekly updates.
- c. GeoSyntech Useful Life Report
  - i. Description: Estimates cubic yards of airspace remaining in the Buena Vista Landfill. Geosyntech estimates that 1 cubic yard is approximately .57 tons of material. All calculations for the dashboard are in tons.
  - ii. Update Frequency: Biannual

### 2. Dashboard Calculations

- a. Annual Waste Diversion
  - i. Total Diverted Waste (recycled, composted and reused materials)  
Total Generated Waste
  - ii. Notes: There are so many different wastes contributing to the Annual Waste Diversion. The diversion rate can change significantly year to year, especially with contributions from things like construction and natural disasters that vary widely and unpredictably.
- b. Landfill Useful Life
  - i. Estimated Remaining Gross Airspace (cubic yards)  
Average Daily Rate of Consumption<sup>^</sup> (cubic yards/day)

- ii. Notes: Airspace Utilization Factor allows for conversion of cubic yards to tons, and is currently estimated at .57 tons/cubic yard  
^Consumption rate is currently 497 cubic yards/day

### 3. Limitations

- a. No two municipalities account for waste diversion in the same way. Not only are different wastes calculated in different ways, the technology used and processes in which data are tracked are also continually evolving. These variances make it difficult to compare to other municipalities. If universal standards are developed in the future, these dashboards will be adjusted to reflect that.
- b. Materials types are grouped for simplicity. A full accounting of material types collected at the landfill can be found in the appendix of this document.
- c. The data do not account for contamination of diverted tonnage. Recycling, yard waste, and food waste that are contaminated may end up in the landfill.

### 4. References

- a. A debt of gratitude is owed to the City of Boulder, Colorado, for their excellent Zero Waste Diversion website, which served as inspiration to County staff, and can be found here: <https://bouldercolorado.gov/boulder-measures/zero-waste-diversion>