Household Recyclables Study – Call for Data

How many pounds of recyclable material does a household generate per year? What is the commodity profile of that material? If you think your city or county knows, we want to hear from you!

The State of North Carolina seeks to engage the recycling community in a quest to understand this essential number. With this factor in hand, the recycling industry, commodity groups, and state and local recycling programs can:

- Benchmark the total amount of residential recyclable materials generated in a given community, state, or region.
- Gauge the performance of current residential recycling programs against the theoretical recovery maximum.
- Ballpark participation rates by community and by commodity.
- Understand how much of each commodity is in the residential stream (e.g., how many lbs of HDPE, OCC or glass a typical household generates per year). This number is then projectable for any community, state, or region.
- Provide critical data for local or state planning and reporting processes.
- Track the performance of newly proposed mixed waste processing plants.

To date, based on data from North Carolina communities, Alachua County, FL and some excellent information from a recent study in Ft. Worth, TX, results show that a typical household generates about *828 lbs per year of recyclable material*. A broader data set from around the country will help improve the accuracy and validity of this number.

For communities or states willing to share data, here are the essentials pieces required for the analysis:

- Waste and recycling data that is as purely residential as possible.
- Definitive numbers on households served by both solid waste and recycling collection programs.
- Sound data on the total tonnage of recyclable material collected from household sources.
- Sound data on the total tonnage of solid waste collected from household sources.
- A relatively recent residential household waste characterization to determine how much of the disposed solid waste stream is recyclable.
- Helpful but not as necessary is the residential recycling commodity breakdown from your community's MRF.

If your local or state government has these data sets and is willing to share, please contact Rob Taylor at rob.taylor@ncdenr.gov or Matt James at matt.james@ncdenr.gov with the NC Department of Environment and Natural Resources. Questions about data needs can also be addressed to Rob and Matt. Data will be updated and shared as the project continues.

Preliminary results to date on pounds of annual household generation:

Material	Annual Generation:

	Pounds / Household
Corrugated Cardboard	86.7
Newspaper	103.0
Residential Mixed Paper	233.4
Cartons (Aseptic and Gable-topped)	3.9
Rigid Plastics	19.4
PET Bottles	53.6
HDPE Bottles	34.1
Plastic Containers (#3-7)	58.2
Glass Bottles and Jars	155.0
Steel Cans	54.0
Aluminum Cans	23.9
Aerosol Cans	2.9
Total	828.1