

## Cost of Providing Solid Waste and Recycling Services Survey Results - 2013

The collection of household trash and recyclables is a service provided by most communities in Wisconsin. In most cases these services are provided on a curbside basis for single-family homes as well as multi-family dwellings with up to four units. Additionally many communities also provide opportunities for residents to have curbside or drop-off service for brush and other yard materials. The cost of providing these services is dependent upon a number of factors including frequency of collection, housing density, method of collection and volume of materials collected.

The University of Wisconsin Extension Solid and Hazardous Waste Education Center surveyed a number of communities during July and August of 2013 to collect information regarding the cost of providing waste management services to residential units during 2012. The survey was emailed to 50 communities who were chosen based upon their status as a Wisconsin Responsible Unit (RU) and population. The sample set represented the 50 most populous stand alone RU in Wisconsin. A total of 21 responses were received resulting in a 42% response rate.

### Collection method

RUs were asked if services were provided by an in-house fleet or through a contract with a private service provider. Thirty-eight percent collect utilizing their own employees while 52% contract with a private hauler to provide collection services. The remaining 10% require their residents to contract on an individual basis for these services. The method of collection overwhelmingly favored single-stream with 80% of respondents reporting using this method of collection with the balance utilizing dual-stream collection.

### Program Costs

Communities were asked to provide the volume of materials collected along with the associated cost for solid waste, recycling and yard materials. Costs include all collection, disposal or processing costs. Revenue from the sale of recyclables or compost was deducted from collection and processing costs. Respondents were also asked to provide the number of households their programs serve. The information gathered allows for the calculation of cost on a per ton, per household and per capita basis. The average results are presented in the table below. A cost per ton for yard materials was not included, as many respondents did not include volumes for yard materials.

	Cost/ton	Cost/HH	Cost/person
Solid Waste	\$134.29	\$99.50	\$31.49
Recycling	\$154.52	\$34.82	\$10.89
Yard materials		\$25.60	\$8.04

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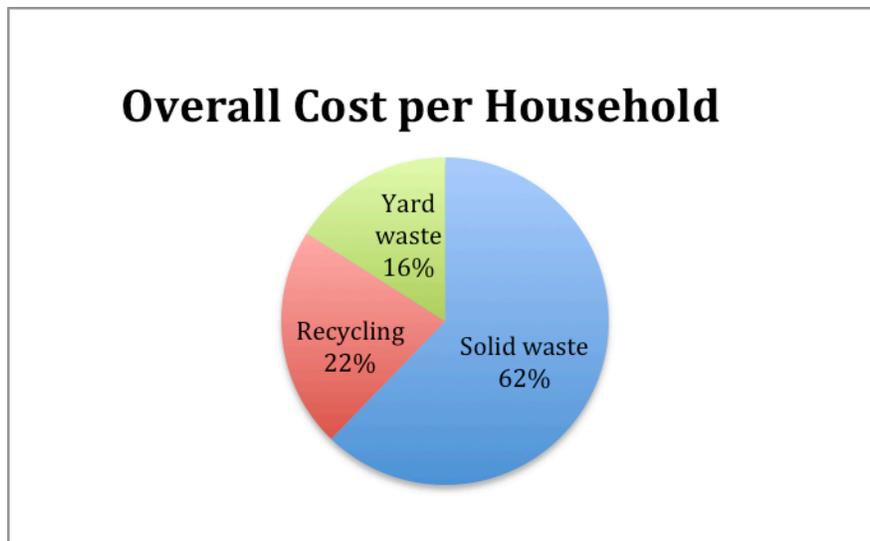
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Overall there was much more variation in the cost to provide recycling services than to provide solid waste services. The cost for solid waste collection and disposal ranged from a low of \$102/ton to a high of \$177/ton. For recycling services the range was from \$71/ton to \$310/ton. The range and variation was consistent on a household and per capita basis as well. The ranges for recycling and solid waste are presented in the table below.

	Cost/ton	Cost/HH	Cost/person
Solid Waste	\$102 - \$177	\$70 - \$168	\$17 - \$52
Recycling	\$71 - \$310	\$10 - \$92	\$4 - \$29

Data analysis efforts were unsuccessful in finding correlations between various components or outputs from the data set. There were no trends between population and cost nor was there a connection with cost to in-house vs. contracted service provider. As an example the lowest cost/ton solid waste was an in-house provider as was the highest cost per ton community.



#### Recycling Rate

The data that was collected also allowed for the calculation of a recycling rate. Without including yard materials a recycling rate of 23% was calculated. When yard materials are included the recycling rate increases to an estimated 37%. The term “estimated” is used in this case as yard material volumes are not generally reported in tons collected. In most cases RU’s reported cubic yards collected which was converted to tons using 400 pounds per cubic yard as a conversion factor.

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October 22, 2013