

The Monthly UnEconomist

Garbometric Model 3 - Garbage Rate Comparisons for Commercial Can/Cart/Detachable Container Customers

Garbometric Model 3 is a Microsoft Excel spreadsheet for comparing your community's garbage collection rates for commercial can/cart/detachable container customers with rates in five other communities that have the same transfer station/disposal site garbage tipping fee. A version of this spreadsheet that adjusts for differing tipping fees will be available on ZeroWaste.com shortly.

The model's formulas are indicated by bold-shading of cells with numeric values. The rate structures presented in the model provide a wide range of possible rate structures. As a result, the model user typically should not need to change the formulas provided in the spreadsheet. The user can change non-bold-shaded numeric cells and shaded or unshaded text cells as necessary to conform to the user's needs.

To use the model the user enters:

- Garbage collection rates for each commercial service level in each community in the comparison year.
- Garbage collection pickup and container counts for each commercial service level in your town in the comparison year.
- City garbage bill tax rates (line 29), state refuse tax rates (line 31), and county fees (computed from the per customer fee entered via a formula in line 27) that are billed as line items on a city's garbage bill.
- Garbage transfer/disposal site tipping fees (these data are not used in this version of the rate comparison model).
- Container rental fees for cities that do not include container rental fees in their basic garbage collection fees.

Based on these input data, the model computes the average monthly garbage fee per cubic yard of weekly garbage collection container capacity for each community, as well as the average monthly bill. The latter figure is intended to

adjust for differences among the cities in taxes/fees that are included in the basic garbage rate versus those that are added on as separate line items to the customer's monthly garbage bill.

The model does not, however, attempt to adjust for the cost of recycling in cities that do not include recycling as part of their basic commercial garbage collection service. The user could attempt to include this comparison, but would need to gather data on typical fees for commercial recycling services comparable to those provided by cities that bundle recycling into their garbage collection fees.

There are two cities shown in the model example provided at ZeroWaste.com that offer "no additional charge" recycling service bundled with garbage collection rates. In both cases the commercial garbage collection customer can obtain a cart or detachable container of sufficient size to recycle all their mixed paper. Carts for recycling glass, metal and plastic beverage containers may also be obtained. There is no rental or collection charge for this service, other than the implicit charge that is included in all garbage collection rates regardless of whether the commercial customer recycles or not.

The model computes average fees and monthly bills per cubic yard based on your town's service level counts. This allows the user to see differences between average fees/bills that are due strictly just to differences in garbage rates versus those due to a combination of different rates and customer service level choices in each town in response to their town's garbage rates. Commercial customer container rental and pickup counts typically are not available for other communities, so the model does not provide formulas for computing per cubic yard averages based on the other cities' service level counts.

The model computes averages per cubic yard rather than per customer because the wide disparity in customer size in the commercial garbage collection sector renders per customer comparisons relatively useless. The user can scale the per cubic yard averages up or down to

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calculate typical monthly bills for customers of a particular size by noting the weekly garbage collection container capacity typical for customers of that size.

Finally, as part of the computation of average fees/bills per cubic yard of weekly garbage container capacity, the model calculates total cubic yards of collection container capacity for which commercial customers are subscribing (cell Q25). If your town also gathers information on the weight of garbage collected from commercial customers, you can calculate average pounds collected per yard of garbage container capacity. This figure is often useful in analyzing the disposal cost component of garbage collection fees.

About The Monthly UnEconomist

This monthly online newsletter available at www.ZeroWaste.com (or www.SoundResource.com) intends to provide insight and analysis on the everyday economics of recycling and the unpriced or underpriced environmental benefits of reducing waste disposal and replacing virgin-content products with products manufactured from recycled materials. In addition to *The Monthly UnEconomist*, Sound Resource Management's website ZeroWaste.com also offers recycling markets price history graphs, reports on a variety of topics including the economic and environmental benefits of recycling, and GarboMetrics - elegant, yet not mysterious tools and spreadsheet models for solid waste and recycling.

These materials are all available for no charge at www.ZeroWaste.com. User feedback is encouraged via info@ZeroWaste.com, and substantive comments will be published in our newsletter whenever they add to our understanding of recycling.

As an example of newsletter content, some issues of the *UnEconomist* analyze northwestern and northeastern U.S recycling market prices for nine recycled materials (mixed paper, ONP, OCC, glass containers, tin cans, UBC, PET bottles, HDPE natural bottles, and HDPE colored

bottles). These prices are tracked by online graphs updated quarterly.

In addition, some issues of the *UnEconomist* are devoted to GarboMetrics, economic models for managing and analyzing solid waste and recycling. These newsletter issues explain the structure and use of GarboMetric models provided at ZeroWaste.com for such purposes as designing garbage customer rate structures and correctly comparing garbage rates in different communities. GarboMetric models and corresponding issues of *The Monthly UnEconomist* can be downloaded at no charge from www.ZeroWaste.com.