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When to Charge Variable Rates

By Lisa A. Skumatz

- **Rural communities and haulers have had success with variable rate programs throughout the 1990s, reporting significant increases in recycling and customer satisfaction.**

Despite the lack of research and guides on variable rates that are based on small, rural communities, rural solid waste operations are forging ahead successfully, finding answers in custom-tailored variable rates programs, according to Seattle-based Skumatz Economic Research Associates (SERA).

These programs, also known as "pay-by-the-bag" or "pay-as-you-throw," operate under a simple principle: Customers who set out more garbage for collection pay more. Given variable rates' flexibility, rural haulers have been able to make the programs fit their communities and have dealt with difficulties with a little logic and innovation.

And, although such programs might not work in every community, variable rates have proven to be a solution in many small communities and rural areas.

In a nationwide 1997 survey, SERA found nearly 1,200 rural variable rates communities in 32 states (or more than 2,000 rural communities, depending on how you count some unincorporated areas). About 90 percent are located in the Northeast and Midwest, with the highest concentrations in rural New York, Minnesota, Vermont, Pennsylvania, Iowa, Wisconsin and Indiana.

The communities that listed themselves in the

"rural" category included successful program in communities smaller than 100; 75 percent had a population of less than 3,000.

The oldest operating rural variable rate program SERA found was established in 1953, but similar to larger communities, most rural programs began in the early 1990s.

Rural communities are using a variety of variable rates program types. Curbside bag or sticker/tag programs are the most common, and together are used in more than one-half of the surveyed communities. One-quarter operate subscribed can programs, and one-sixth use hybrid programs.

The prevalence of drop-off programs is the biggest difference between large and rural communities: Drop-off programs with per-bag charges (or similar programs) are the choice in one-sixth of the rural variable rates communities.

Why Hybrid/Bag/Tag?

Why do rural haulers or communities select a bag, tag or hybrid program?

• **Easy, low cost implementation.** Collection through bag, tag and sticker systems is clean and easy. Manual collection leaves no containers curbside and the system is easy for customers to under-

stand: If the proper container is not used, it is not collected. In addition, haulers like the minimal capital investment required for these programs.

•**Reduced revenue uncertainty and improved cash flow.** Revenues are a significant concern, especially for haulers. In fact, in two SERA surveys of haulers, revenues were ranked as the major issue, not surprisingly surpassing illegal dumping as a concern.

Revenues from a variable rate system are volatile. However, using a household- or customer-based base fee can help moderate the revenue issue. This option can fit easily with hybrid, bag and sticker/tag programs.

Charging all households will help recover a significant portion of the collection system's fixed costs, regardless of the number of bags sold.

•**Flexibility.** Bag, tag, sticker and hybrid systems are flexible, and programs can be set up with multiple sizes of bags for different customer needs.

•**Billing.** Haulers can use the current billing system, and the charges for the bags/tags do not need to be billed to customers.

Rather, bags can be sold at the local grocery or convenience store. Billing is simplified, and bad debt or late payments are reduced.

And if you have a payment problem from a store, you can refuse to sell them more bags — which is preferable to stopping a customer's garbage service if they fail to pay.

•**Can be used with multiple haulers.** The system can be adapted if multiple haulers are serving customers within unincorporated parts of a county. Several unincorporated county areas use different-colored bags/tags for different haulers. The rates between the haulers can vary, although competition tends to keep them close.

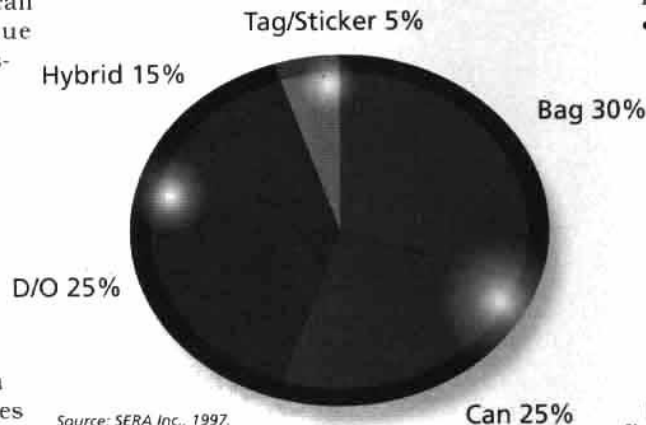
Rural Problems

Problems commonly faced by rural communities differ — especially in intensity — from those faced in urban areas. Haulers and communities interviewed by SERA offered their strategies for addressing these key concerns. For example:

•**Customer resistance.** Rural communities combat this problem with education. Continuing education is important for program success. In one community, one week prior to program introduction, the hauler provided a free sticker with a brochure.

In other cases, officials appear on local talk radio shows to explain the program and answer questions. Local newspapers, face-to-face meetings and civic clubs have been some

Rural Variable-Rate Program Types



Source: SERA Inc., 1997.

of the most effective methods of informing customers of the change to variable rates.

•**Revenue.** Many haulers/communities use customer charges or base fees to cover fixed costs, make revenues less volatile and improve cash flow. Assuming low levels of paid set-outs (or bag sales) can help account for leakage, such as waste brought directly to disposal sites.

Bag, tag or sticker systems also can remove the hauler from collecting bills since they only need to invoice the convenience or grocery stores for stickers.

•**Illegal burning/dumping.** SERA found about 30 percent of the communities in rural areas reported concerns about illegal dumping (approximately the same percentage reported in urban communities).

Many of the surveyed haulers and communities mentioned bans, but noted that they weren't enforced. Some charge high rates for removing burn barrel ash or warn the customer once and then remove the barrel. Hosting bulky waste and ap-

pliance programs or clean up days are suggested to reduce illegal dumping.

•**Difficulties from non-mandatory service.** Rural customers find it easy to get around the system by bringing waste to the landfill, for example.

•**Small staff.** A variable rate program can increase the complexities of bookkeeping, which may be a problem for small office staffs. Hybrid programs, however, may offer a solution for some communities.

Other strategies that rural haulers and communities have used to help implement variable rates programs include:

•**Change the law to allow for variable fees.** Also, establish weight limits and set regulations to require the bag to be closed (and define closed) before it will be collected.

•**Bags, tags or stickers are used frequently** (also used with hybrid systems); some communities have opted to use local suppliers even if the bags or stickers cost more.

•**Some communities or unincorporated counties allow haulers flexibility on rates** (competition is expected to equalize rates). A few haulers reported increasing their market share by offering the variable rate option in several areas where variable rates had not been previously available.

•**Some communities require haulers to be responsible for all public education.**

Rate Setting

Rate setting was found to be of particular concern in rural areas. Some of the factors that make rate setting in these areas more complicated include:

- lack of mandatory service;
- existence of burn barrels and other methods of by-passing solid waste service (illegal dumping, using relative's service, etc.); and
- self-haul service at transfer stations and landfills.

These factors combine to make developing rates more risky, because customers can find ways to avoid — or significantly reduce — using the system.

In fact, in rural projects SERA has conducted, it found that you cannot assume the same average set-outs in rural areas as those found in urban and suburban locations, which may be one to two 30-gallon-equivalents

per week (when a community offers both recycling and yard waste services).

Rural areas may have to plan their rates based on set-outs significantly less than one per household per week because customers can avoid buying bags by burning their waste or dropping it off at the landfill. Also, consider using two-part rates — customer charges or hybrid programs, for example. Some haulers or communities offer the bag/tag program as an option or an alternative to unlimited collection. This also reduces revenue uncertainties but eliminates the variable rate incentive for those customers selecting unlimited collection.

Two additional barriers — low landfill prices and volatile or distant recyclables markets — complicate the economics of switching to variable rate programs. Additional recycling encouraged by the variable rates doesn't save much in landfill costs and doesn't provide much revenue either, making it a difficult program to sell.

Also, in many rural areas, the local landfill may rely almost exclusively on tonnage from a small area. In fact, because of high fixed costs, the landfill may have to increase the tipping fees to make up for the lower tonnage, virtually eliminating savings from tonnage reductions from higher recycling.

Using alternate facilities, where the community is not the sole revenue source and the tip fee is not significantly affected by the community's waste, may be the only way to reap these savings. However, this strategy may not be practical or politically acceptable.

Do Variable Rates Always Make Sense?

Certainly, variable rates programs may not be appropri-

ate for all communities. The decision must be based on local conditions with sustainability as an important consideration.

However, some areas have used variable rate programs where the economics "didn't work." Some were reacting to state goals while others viewed the current prices not reflecting long-term economics. Still others simply felt it was either the "right thing to do" or that it was appropriate to implement along with their recycling program.

It's worth noting that approximately two-thirds of the communities with variable rate programs in two rural states, Iowa and Wisconsin, reported in state-conducted surveys that solid waste management costs either decreased or stayed the same compared to their previous methods.

And the Iowa survey showed that, on average, communities increased recycling by 50 percent.

SERA's research shows that variable rates have been successfully adopted in communities across the country, including many rural areas.

These rural programs have worked when the communities handled their problems in innovative and logical ways. In fact, communities that have adopted variable rates report increased recycling and customer satisfaction.

Despite the various rationales and occasional barriers, more than a thousand small and rural communities have selected a variable rate program that fits their needs — and they made it work. ■

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