

US EPA ARCHIVE DOCUMENT

Implementing and Monitoring Unit Pricing

Having carefully planned and designed a unit pricing program that best reflects the needs and concerns of your community, you can now get started. Implementing a unit pricing program is an ongoing process, requiring persistent attention to a wide range of details. This part of the guide focuses on the central issues concerning unit pricing implementation, including public education, accounting, and administrative changes. Suggestions also are included for collecting data and monitoring the program once it is in place.

There are two distinct schools of thought about the timing of unit pricing implementation. One maintains that unit pricing should be implemented within a specified time frame and that rate adjustments, complementary programs such as recycling, and any other changes be made all at once. The other believes that households respond better when they are asked to make changes in small, manageable increments over time.

The final decision about which path to follow is a local one based on the views of your agency, the local government, community organizations, and the households themselves. In most towns, residents will prefer to modify their habits as infrequently as possible. In this case, it might be easiest to implement a package of changes all at once, rather than ask for a series of adjustments six months apart.



Implementation Activities

Many tasks need to be performed during unit pricing implementation. While the exact activities vary from community to community based on program design and local conditions, certain tasks pertain to nearly all unit pricing programs. These include conducting public relations and reorganizing your solid waste agency's administrative office. (Both of these activities are discussed in detail below.) Other common tasks include:

- **Establishing legal authority.** Generally, to implement a unit pricing program, your solid waste agency needs the authority to set and approve waste collection rates and bill accordingly, establish an ordinance mandating the use of the waste collection service, establish penalties for illegal dumping, and spend solid waste agency funds for activities beyond those associated with traditional solid waste management services (for example, public education). If your community lacks the authority to implement and enforce any portion of the unit pricing program, the first step will be to draft the necessary ordinances in consultation with your legal counsel.
- **Procuring containers.** You also will need to purchase the necessary waste containers, bags, tags, or stickers for the program. Once the size and design specifications are established, you can seek vendors for the required materials. In some cases, a request for proposal (RFP) might be placed to solicit competing bids from several vendors. This can help you procure the necessary materials at the least cost to your agency. After a vendor is selected and an order placed, storage and distribution plans will be needed. In particular, communities planning to use local retailers to distribute bags, tags, or stickers should identify and negotiate with local merchants to arrive at a mutually beneficial arrangement. Communities developing a can-based system will need to inform residents of the can options, have residents select the number and size of cans they will use (if a variable can system is used), and distribute the cans to all residents.
- **Assisting groups with special needs.** If your community is planning to assist residents with special needs, such as multi-family, low-income, physically handicapped, or elderly residents, you will need to develop a list of qualification criteria. In addition, you might need to devise special applications and train staff to review cases. Procedures should be established for resolving any disputes or complaints that could occur during the review process. If you are planning to include multi-family residents in your program, consider planning and conducting a pilot program before you switch to unit pricing. In this way, different systems and technologies can be tested prior to launching the actual program.

- **Establishing complementary programs.** If you have decided to launch or expand recycling or composting efforts, bulky waste collections, or other complementary programs in conjunction with your unit pricing program, you will need to coordinate the many steps involved in establishing these programs. Depending on the resources available and on local conditions, these steps could include purchasing or modifying existing equipment, hiring and training collection staff, identifying local markets for recyclables, and contracting with buyers.
- **Ensuring enforcement.** Enforcement procedures could be established to address the possibility of illegal dumping or burning of waste, “borrowing” of tags or stickers from neighbors’ bags, or nonpayment of fees. If necessary, enforcement staff can be hired and procedures developed for investigating incidents. In many cases, these inspectors will need to receive training, equipment, and facilities. Establishing special collections for certain wastes (such as bulky items or materials such as paints, pesticides, and other items considered household hazardous waste), combined with fines for violations, can help prevent illegal dumping or burning. Also, to help instill an environmental ethic in the community which can further reduce the potential for illegal dumping, consider establishing regular citizen cleanups, “adopt-a-highway” projects, and other programs that will gather residents together and focus their interest on maintaining and improving their community.



To ensure a successful recycling program, team members will need to coordinate carefully the collection and marketing of recovered materials.



BARRIERS

Public Education and Outreach

As discussed in Part II, public outreach during the planning and design stages enables decision-makers to learn more about residents’ waste management needs, to inform them of the benefits of unit pricing, to solicit input on the goals of a unit pricing program, and to get feedback on a tentative rate structure. Such efforts are essential for building support among residents for unit pricing.

During the implementation phase, the public outreach program should have two goals: 1) to build on earlier efforts to increase public acceptance of unit pricing and 2) to provide residents with the detailed information they need to understand and participate in the new program. Participants at EPA’s Unit Pricing Roundtable agreed that well-informed residents are easier to serve and more likely to be satisfied with the new program. Building public support and providing program specifics typically begins approximately three months before program implementation. These activities are often continued in varying degrees throughout the program.



EDUCATION

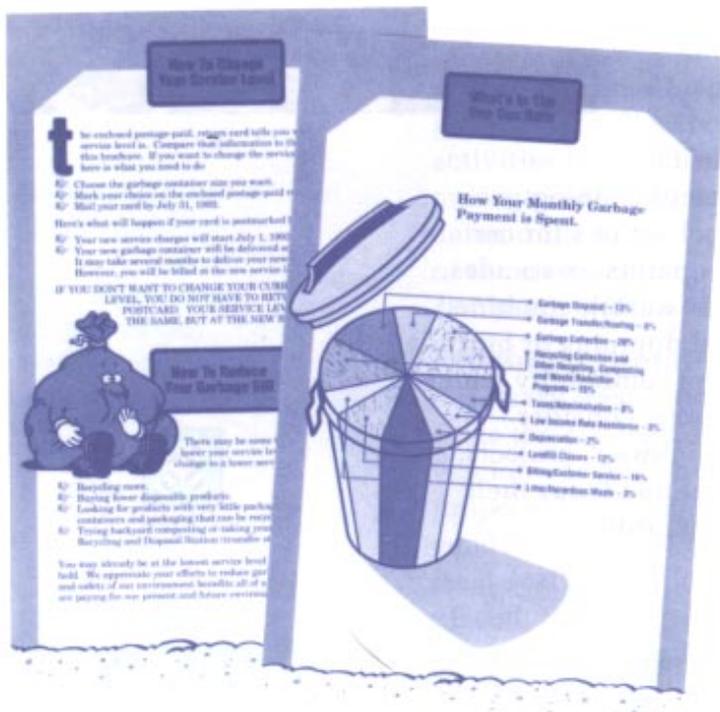
The first step is to determine the scope and content of your community relations effort. All such efforts need to convey to residents the exact structure of the new unit pricing program. Be sure to relate all essential information, including:

- The types and costs of all services offered under the new program.
- The schedule for collections.
- The means by which fees will be collected.
- The methods or outlets for purchasing cans, bags, tags, or stickers.
- The penalties for noncompliance.

When imparting this information to the community, make sure that all instructions are clear and simple. Explain any unit

pricing concepts that residents might not understand. If you are producing written materials, consider translating the text into more than one language, depending on the makeup of your community. Use illustrations whenever possible to convey key concepts. Sometimes local copying shops or printers will donate their services to help produce these materials.

Also, be sure to discuss the waste management goals for the community and show how the new unit pricing program will help meet those goals. If you had organized a citizens advisory council or an informal gathering of community or civic groups to help you with public outreach during the planning stage, you might reconvene this group to plan your implementation outreach



As part of its public outreach program, Seattle's Solid Waste Utility is conveying important information about unit pricing using a series of engaging pamphlets.

efforts. Such a group can help you develop an effective message and ensure that you reach all segments of the community.

Offer citizens information on how to alter their purchasing and behavior patterns to prevent and reduce waste. Tips on waste prevention options, such as reusing containers, renting seldom-used equipment, and donating unwanted items, are useful. Encouraging residents to purchase recyclable items and goods with recycled content also is important. In addition, the message is likely to have a greater impact if information on additional benefits, such as saving energy and preserving natural resources, is provided. If residents make the program's goals their goals too, they are more likely to make long-term behavioral changes.

There are many ways to convey the specifics of the program to the community. While the solid waste agency will need to decide which methods to use and how often to repeat the message, some avenues to consider include:

- Introducing the program with a flyer or letter from a local official or recycling coordinator.
- Enclosing inserts in utility bills that discuss the program and answer common questions. Direct mailings to households also can be used.
- Developing posters or flyers for distribution in stores, libraries, schools, and other public places around the community. Retail stores will be especially valuable if your program uses bags, tags, or stickers that are distributed through retail outlets. You can leave flyers, posters, newsletters, and other materials with these stores, and ensure that the retailers themselves are familiar with the program.
- Producing newsletters that discuss the need for the program, answer questions, and provide updates about the program's progress.
- Establishing a telephone hotline to provide residents with immediate answers to their questions.

Drafting press releases and developing media spots for radio or cable television. Through the media, you can reach a broad range of residents.

Additional outreach techniques can be employed based on your community's particular conditions. For example, if you feel that a specific group of residents, such as senior citizens, are not receiving enough information to participate effectively, you might consider reaching out to senior centers, local churches, and other institutions to ensure that everyone is familiar with unit pricing.

Some solid waste agencies opt to conduct public education campaigns using existing inhouse staff. Others hire one or more qualified individuals to conduct these activities or pay outside consultants to perform public outreach. This decision is typically based on the size of your community, the scope of your program, and the available resources.

Keep in mind that public outreach is an ongoing process. A consistent flow of information, designed to answer questions, receive input, and communicate any changes made to the program after it has been implemented, will help maintain interest in the program. In addition, an ongoing campaign can continue to inform and educate citizens about new ways to prevent or reduce waste.

Reorganizing Your Solid Waste Agency's Administration

Depending on their current structure and the scope of the new unit pricing program, some solid waste agencies will not have to make significant changes in the way they administer solid waste collection services. Such communities can switch to unit pricing using only some overtime work from existing employees. Other programs, however, could require new administrative and accounting systems and staff to handle the changes in billing, tracking costs and revenues, managing operations, and maintaining customer relations. In some cases, larger communities planning more complicated unit pricing systems have found it worthwhile to hire analytical, financial, and customer service staff to handle both the transition and ongoing requirements of the program.

Getting Your New Administrative Office On Line

The keys to transforming your solid waste agency's administration into an efficient team capable of handling its new responsibilities are:

- Anticipating the level of expertise that will be necessary, both during program implementation and ongoing operation.
- Giving funding priority to areas that hold the greatest opportunity for savings or pose the greatest risk of financial problems.
- Meeting temporary needs during the transition with temporary help, rather than locking into a level of employment that proves excessive in the long run.

While the process of reorganizing an administrative system for a new unit pricing program can seem daunting, performing the switch as a series of steps with clear objectives in mind will help make the process manageable. Generally, communities with unit pricing programs have found that the process of reorganizing the administrative office should take place between three and six months before the start of the program.

The first step is to define the new responsibilities the administrative office must assume once the program has reached its steady state, as described in Part III. Consider all the functions, such as public relations, customer service, economic analysis, financial management and tracking, and enforcement, that the office will need to perform. With steady-state as the goal, try to create a new office that matches these needs rather than accommodate your goals to the skills that are available. After establishing

the functions and related skills required of your new administrative office, you should then begin to reorganize the office to meet these responsibilities.

During the process of defining new responsibilities, remember that the unit pricing program will change the administrative office's functions significantly. The office will be operating a revenue recovery system that pays for the work of the solid waste agency, rather than justifying funding levels to the municipality's budget office. The office will find it has an unprecedented level of influence on customers' behavior through the price signals it sends. This brings additional responsibility for the proper design and management of these price signals. Managing these new functions requires the office to have access to a range of skills, including:

- **Economics.** Developing the unit pricing rate structure and related forecasts of revenues, costs, and total community use of waste collection, recycling, and composting programs.
- **Public relations.** Developing outreach and education activities and managing customer service representatives. This function includes interaction with the general public, as well as local interest groups, elected officials, and the news media.
- **Financial and logistical management.** Billing households or collecting revenues from the sale of bags, tags, or stickers; developing debt management strategies; managing cash reserves; and developing a distribution system for the program's cans, bags, tags, or stickers.
- **Enforcement.** Ensuring that households pay for the level of solid waste services they receive.



COSTS

In addition, several important suggestions were offered during EPA's Unit Pricing Roundtable for organizing your administrative office's financial operations. Be sure to establish access to a cash reserve to help the office cover periods of unanticipated revenue reductions. Repeated instances of revenue shortfalls, however, could signal an imbalance between the services offered and your program's rate structure.

Preparing existing administrative staff for the changes that will result from the switch to unit pricing is another important step. While the change initially might not be viewed positively by all employees, conveying the positive aspects of the switch might help ease concerns. In addition to the reorientation of the office away from traditional collection and disposal services to a new emphasis on waste prevention, recycling, and composting, employees should be informed of the opportunities for staff training and development in new areas, such as public relations and customer service, that the new program will create.



HIERARCHY

Furthermore, when organizing the new office, communities should be aware that expanding the administrative office requires a delicate balancing of resources: while allocating too much funding to the office could cut into the savings that unit pricing programs offer, underfunding the office can result in inefficiencies and poor revenue recovery. This is



TRADEOFFS

particularly true during the implementation and transition periods, before the unit pricing steady-state has been reached. During this period, using temporary labor or employees on loan from other municipal agencies might help to cover short-term budgeting, analytical, and other tasks.

Developing a Schedule

Organizing the many steps involved in planning, designing, and implementing a unit pricing program into a clear schedule is an essential step for most communities. While the exact schedule of steps should be viewed as flexible, establishing an overview of the entire process will help eliminate the possibility of any serious omissions. Table 4-1 presents a detailed timeline for your reference. (The dates listed on the timeline represent the number of months before or after program implementation each step should be initiated. Program implementation is defined as the date on which actual service changes begin.)

While the dates have been established based on the experiences of a number of communities with unit pricing programs in place, local conditions and needs will inevitably affect the exact timing of your program's development. Many factors affect how you adapt this timeline to your community's needs, including equipment changes, contractual changes, financing requirements, and employment, as well as political factors (such as the nature and structure of the local political process and the potential existence of a perceived solid waste crisis). In most cases, the level of political support is the most important variable, routinely cited by communities as responsible for either significant delays or rapid progress in the implementation of their unit pricing programs. Most of the remaining steps can be conducted fairly routinely in 3 to 12 months, depending on system choices, size of the community, and types of solid waste collection and administration systems in place.

Program Monitoring and Evaluation

As solid waste management has grown more challenging in recent years, local officials are finding that they have greater freedom to develop and implement new systems for managing waste. At the same time, however, their efforts also are subject to a higher level of scrutiny. Within the context of tightening municipal budgets and increasing demands for city services of all types, local officials must be able to discuss budget needs and priorities in a compelling way, using reliable data to support their case. Specifically, a thorough process of collecting and analyzing data about the performance of the unit pricing program will:

- Provide the facts about the cost-effectiveness of the unit pricing program that local officials need to justify the current budget.
- Enable planners to justify future budget needs by demonstrating that the new spending on the program could in fact **save** money in the long run.
- Help reassure bond rating agencies of the cost-effectiveness of the unit pricing program, thereby reducing the cost of financing it through bond sales.
- Allow planners to accurately compare the performance of any complementary programs, enabling them to reallocate resources among the programs to increase the overall effectiveness of unit pricing.
- Generate concrete, understandable, and accurate information that can help other communities considering unit pricing.



Collecting and analyzing unit pricing data will help the solid waste agency adjust its program to changing circumstances.

Moreover, this data will enable solid waste agency planners to adjust the unit pricing program to unforeseen circumstances, ensuring that the effort and attention paid to planning, designing, and implementing the program will not be wasted. Typically, program monitoring and evaluation begins about six months before the date of unit pricing implementation, when information on the old waste management system is gathered. These data will act as a benchmark against which the progress of the unit pricing program can be measured. Monitoring and evaluation begins as soon as the new program is launched and continues throughout the program.

Data collection is the first step in program monitoring and evaluation. While the exact types of data a community collects will vary from one area to another, most municipalities track:

- Changes in the community's waste generation rate
- Costs incurred, both in starting up and in operating the new program
- Revenues received under the program

Communities often begin by collecting data on the amount of waste disposed of, recycled, and composted before and after the program's implementation. Estimates of the amount of material illegally dumped can be calculated as well. To allow for a more comprehensive analysis, the waste generation rates can be tracked by month and year, and, if possible, by origin and destination. In addition, the data can be further broken down by facility, customer group (such as residential, multi-family, commercial, or industrial), and program (for example, drop-off versus curbside services). To gain a more accurate picture of the impact of their program, some communities also estimate the amount of waste that would have been generated in the absence of the unit pricing program.

The specific costs that a community might want to research include disposal costs and tipping fees; new administrative costs, including public



COSTS

relations, billing and invoicing, inventory and distribution of bags, tags or cans, and additional customer service staff; and direct program and service costs such as wages, supplies, consultant services, and postage. Costs for monitoring and cleaning up illegal dumping can be included as well.

In addition, to increase the usefulness of cost data, communities might want to attribute different expenses to specific components of unit pricing (such as administrative labor or container costs) and track these separate cost categories by month and year. Be careful, however, to distinguish between short-term expenses and long-term investments for needed facilities and equipment. During this process, take care to separate transition and startup expenses from the ongoing operational costs of unit pricing. If possible, initial capital costs should be allocated over time and across programs. Collecting data on the revenues resulting from unit pricing tends to be simpler. Communities typically track revenues by type of program and customer category.

To closely track a new unit pricing program, communities also might want to develop data on the number of subscribers or participants, broken down into type of service and program; the service and subscription levels (if a variable can program is used); the inventories of bags or tags held by distributors or manufacturers; the weight of containers set out (if possible, through surveys); and the numbers of phone calls and letters and the issues raised.

Program evaluation can yield misleading results, however. To help avoid some common data collection and evaluation mistakes, panelists at EPA's Unit Pricing Roundtable recommended avoiding focusing on participation rates as a measure of success. While a study of participation levels can help guide program modifications, they are not useful for gauging overall progress since they do not address cost issues and tend not to distinguish between casual and committed participants. Likewise, panelists recommended that communities also consider factors beyond overall waste reduction when evaluating a program. For example, intangible issues, such as dissatisfaction with the program among residents of multi-family buildings, would not be reflected in an analysis that focused exclusively on waste reduction numbers.

Tips for Data Collection and Program Monitoring

- Get data from several different angles if possible (for example, waste quantity generation rates for both collection services and disposal facilities).
- Don't simply accept the numbers as they are generated. Consider the possibility that factors such as underlying shifts in categories, definitions, or reporting might affect the accuracy of the results.
- Be sure to carefully track costs. Without accurate and attributable data, the impact of your cost-effectiveness evaluation will be reduced.

Table 4-1.
Schedule of Implementation Activities

Implementation Activities	Months Prior to or Following Program Implementation						
	9	6	3	0	3	6	Ongoing
Customer Relations							
<i>Public outreach</i>							
Brief management and elected officials	X						
Conduct focus groups on rate program design and issues	X	X					
Develop information materials for council and press		X					
Hold council hearings and public hearings		X					
<i>Public relations/education</i>							
Issue RFP for public relations firm, if needed	X						
Design educational materials, bill stuffers		X					
Review/refine educational materials			X				X
Produce educational materials			X				X
Distribute educational materials			X				X
<i>Customer service staff</i>							
Request customer service representative (CSR) computers and workspace, if needed	X						
Advertise for CSRs			X				
Obtain and install CSR computer equipment			X				
Hire and train CSRs			X				
Release temporary CSRs					X		
Planning and Analysis							
Hire rates analyst (part- or full-time)	X						
Determine rate setting procedure and calculate rates		X					
Refine rate structure			X				X

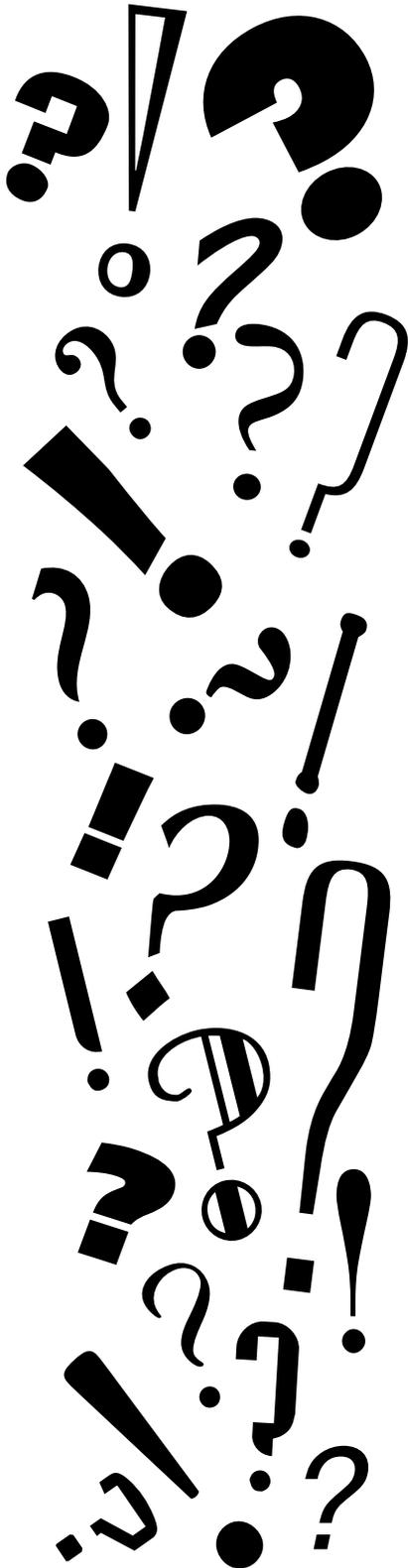
Table 4-1 (continued).
Schedule of Implementation Activities

Implementation Activities	Months Prior to or Following Program Implementation						
	9	6	3	0	3	6	Ongoing
Containers and Enforcement							
<i>Bags, tags, or stickers</i>							
Set specifications for sticker or bag and design logo	X						
Issue RFP for sticker or bag manufacture	X						
Select manufacturer		X					
Negotiate with retail outlets for sticker or bag distribution	X						
Finalize sticker or bag distribution plans		X					
Begin selling stickers or bags in stores					X		
Design error tags	X						
<i>Cans</i>							
Issue RFP for can purchase and distribution	X						
Decide on can size and purchase containers		X					
Have residents select can size		X					
Distribute cans			X				
Replace lost, stolen, or wrong-sized cans					X		X
<i>Enforcement</i>							
Establish preliminary enforcement procedures	X						
Request equipment and facilities for inspectors	X						
Finalize enforcement procedures		X					
Train inspectors			X	X			
Release temporary inspectors						X	
Special Groups							
Negotiate with welfare agencies	X						
Develop exemption/discount criteria	X						
Determine responsible office	X						
Create procedures for qualification, disputes, etc.		X					
Finalize criteria and procedures		X					
Train inspectors or qualifiers		X					
Conduct qualifications			X				

Table 4-1 (continued).
Schedule of Implementation Activities

Implementation Activities	Months Prior to or Following Program Implementation						
	9	6	3	0	3	6	Ongoing
Multi-Family Planning							
Evaluate level of multi-family need	X						
Evaluate multi-family pilot options	X						
Conduct pilot program, if appropriate		X	X				
Changes to Other Programs							
Determine which complementary services to offer		X					
Decide funding source for new and existing complementary programs		X					
Modify unit pricing program to cover these costs, if necessary			X				
Modify diversion program contracts and procedures as necessary							X
Ordinances							
Draft final ordinances for new program		X					
Draft ordinances, as necessary, for illegal dumping and burning, recycling, and special collections		X					
Enact ordinances			X				
Data Collection							
Analyze information needs and design reporting procedures	X						
Finalize procedures	X						
Conduct baseline data collection		X					X
Begin postimplementation data collection				X			X
Conduct data analysis and program modification					X		X

questions & answers



Is it really necessary to explain the new program repeatedly through so many different avenues?

Not all citizens find garbage fascinating, nor will they immediately understand the reasons for a new waste management program. Explaining a new program more than once is not rude or insulting—it's a courtesy to people who would like to participate but have other things on their minds. Also, because unit pricing requires that residents pay attention to details such as labeling waste containers with stickers or buying bags from the municipality, hearing the message several times increases the chance that all residents will get the information they need.

Does unit pricing require us to completely reinvent our solid waste agency?

It does require a significant review of your agency's goals and structure. But this examination of new needs and existing employees could lead to the discovery of some previously untapped skills in your agency.

Do I really need to follow this detailed timeline? Half the items in it are not likely to come up in our community.

Select what you need from the timeline. The timeline lists the many possible kinds of new activities that a unit pricing program could require. It is designed to help solid waste officials think about specific activities, thereby supplementing the broad concepts that are stressed elsewhere in this guide.

Our municipality is on a tight budget. Do we really need to spend money on data collection and monitoring?

While many of your unit pricing decisions face budgetary constraints, data collection is essential for planning and for ensuring cost-effectiveness. The right kind of information can show which types of unit pricing program and rate modifications can best meet the community's needs over time.

Points to remember



Be sure your public education campaign uses a **consistent, simple message** that clearly communicates the goals of the unit pricing program.



To ease the **administrative transition**, clearly define the responsibilities of the office, the level of expertise that will be necessary, and any new staff that need to be brought on.



Give **funding priority** to areas that hold the greatest risk of financial problems or hold the greatest opportunity for savings through effective management of limited administrative budgets.



Establish a **flexible schedule** for your unit pricing program that reflects the political, technical, and economic concerns and issues in your community.



Be sure to **evaluate** your program's progress periodically, including collecting and analyzing data on waste generation rates, costs and revenues, and the attitude of residents toward the program.



To improve your data collection, make **providing numbers** part of the contract (or franchise or license agreement) with your haulers. Ask for monthly reporting, and provide forms and definitions to ensure you receive the information you require.

Case Studies

Public Education

A View From Austin, Texas

While Austin, Texas, is a very environmentally aware community, our Environmental and Conservation Services staff realized that behavior does not always correspond to stated attitudes. To give our new unit pricing program a good chance of success, we realized a strong public outreach program was needed. Since unit pricing terms such as “variable rates” and “volume-based pricing” are not particularly user-friendly, our first challenge was to come up with a name that would convey the nature of the new program to city council members, customers, and our own solid waste service workers. The name we came up with was “Pay-as-You-Throw,” which has economic as well as environmental appeal.

Then, we initiated a pilot program beginning with a three-phase marketing plan to reach out to the 3,000 participating single-family households. In the first phase, the Preimplementation Phase, we worked very hard to sell the program in the community. We lined up support from interest groups, asked city council members to talk about the program, and encouraged the media to write positive editorials.

During the second phase, the Implementation Phase, we had a more specific challenge. We have had curbside recycling in Austin since 1982 and good experiences with recycling behavior. With a well-established recycling program, however, when we brought the program to the pilot households, people were asking “Why do we need to do this when we’re already recycling?” Our biggest challenge was to inform people about the need to further reduce waste and encourage them to use our unit pricing program in conjunction with recycling. After implementation, we learned from both attitudinal surveys and from direct observation of recycling bins that recycling had increased from 50 to 80 percent in some neighborhoods when unit pricing was introduced.

The third phase of our public outreach program was the Maintenance Phase. Once the program was in place, we realized it was important to continue trying to raise awareness. It was during this phase that we introduced what became our single best educational tool—a brief, colorful newsletter included with each garbage bill. Called “Waste Watch,” the newsletter contains features on the garbage collectors, dates of the brush/bulk pickup in each neighborhood, discussions about our unit pricing goals, and other features. We knew that only 15 to 25 percent of our customers read the usual utility inserts. However, after we provided more sophisticated information in an appealing format, our survey results showed a rise in readership.



Administration Staffing

A View From Darien, Illinois

Darien, Illinois, with a population of 21,000, moved from a franchise flat-fee system to a franchise sticker system in May 1990. Their administrative staffing needs were unchanged: one person from the city oversees the activities of the franchise hauler. City council members and existing staff put in overtime to develop details of the new system and negotiate with the hauler during the implementation process. The hauler has reported some increased accounting complexity but no increased staffing needs. Research indicates that this level of small, temporary increases in administrative needs during implementation of a new or revised unit pricing program is typical of many smaller communities.



Administration Staffing

A View From Seattle, Washington

The Seattle Solid Waste Utility, an enterprise fund, operates a variable can subscription system with recycling fees and other charges embedded in the collection rates. Billing is performed in cooperation with the Seattle Water Department at a cost to the Seattle Solid Waste Utility of \$1.9 million per year.

To manage this program, the utility employs two rate-setting staff, four finance staff, and three accountants. Another \$15,000 to \$20,000 per year is spent on consulting services, mostly to assist with setting rates. Additionally, Seattle's 22 full-time customer service representatives and 9 refuse inspectors help to meet the service and enforcement needs of the new program.

