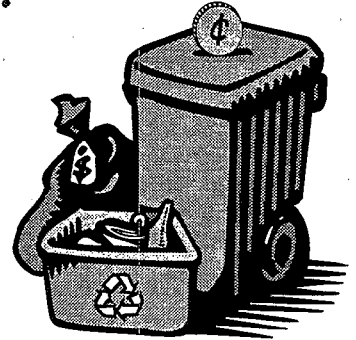


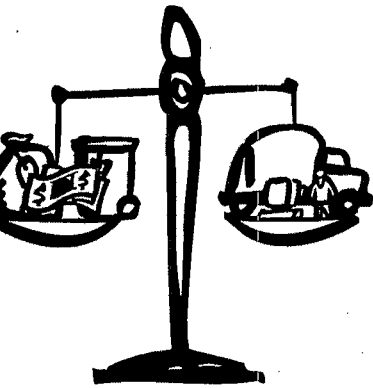


A Listing of Pay-As-You-Throw News and Events

PAYT BULLETIN



Evaluating and Enhancing a PAYT Program: Tacoma, Washington



Pay-as-you-throw (PAYT) practitioners know that developing and implementing a program is just the beginning. To be successful, even well-established programs need to be evaluated on a regular basis. If these status checks reveal any issues of concern, the program might need to be adjusted to ensure that it continues to work well and earn the support of the community.

The city of Tacoma, Washington, implemented PAYT in 1974 and has continually worked to make its solid waste program more effective. In the past few years in particular, Tacoma has made an enormous effort to study and improve its solid waste collection program. In 1995, the city conducted a survey to gauge residents' satisfaction with the PAYT program. Survey respondents offered helpful suggestions on ways to strengthen the waste reduction incentive of the program. Residents commented, for example, that they would be more likely to recycle if more types of recyclables were collected and if recyclables were not required to be separated by material. Residents also reported they would set out less trash if the city offered a financial incentive for reducing waste below their chosen subscription level.

After considering the results of this survey, Tacoma incorporated the residents' suggestions into a pilot study in 1996. Residents in the two pilot neighborhoods could commingle their recyclables and recycle more kinds of materials including mixed waste paper, cardboard, and some plastics. Customers on the two pilot routes also were offered a rebate of up to \$3 per month for setting out less trash.

The results? Participation in the program doubled, and recycling increased 76 percent and 199 percent on the two pilot routes. These results prompted Tacoma to modify its existing program on all collection routes. The city added new types of materials to the recycling collection program and allowed all recyclables except glass to be commingled. Instead of offering the \$3 rebate, which was not widely used in the pilot program, Tacoma added a "mini-can" at a lower rate for small waste generators.

By the end of 1996, Tacoma residents increased their recycling rates by another five percent, and commercial recycling increased by 43 percent. Over 80 percent of residents reported satisfaction with the PAYT program. City officials, however, still felt the solid waste program could be improved. In 1997, they hired a contractor to conduct a full cost accounting assessment of its rate structures. The assessment was intended to determine the city's costs for each of several solid waste services so that consumers could be charged accordingly.

INSIDE

Find an event in
your area!

*PAYT Events
Around the
Country* 2

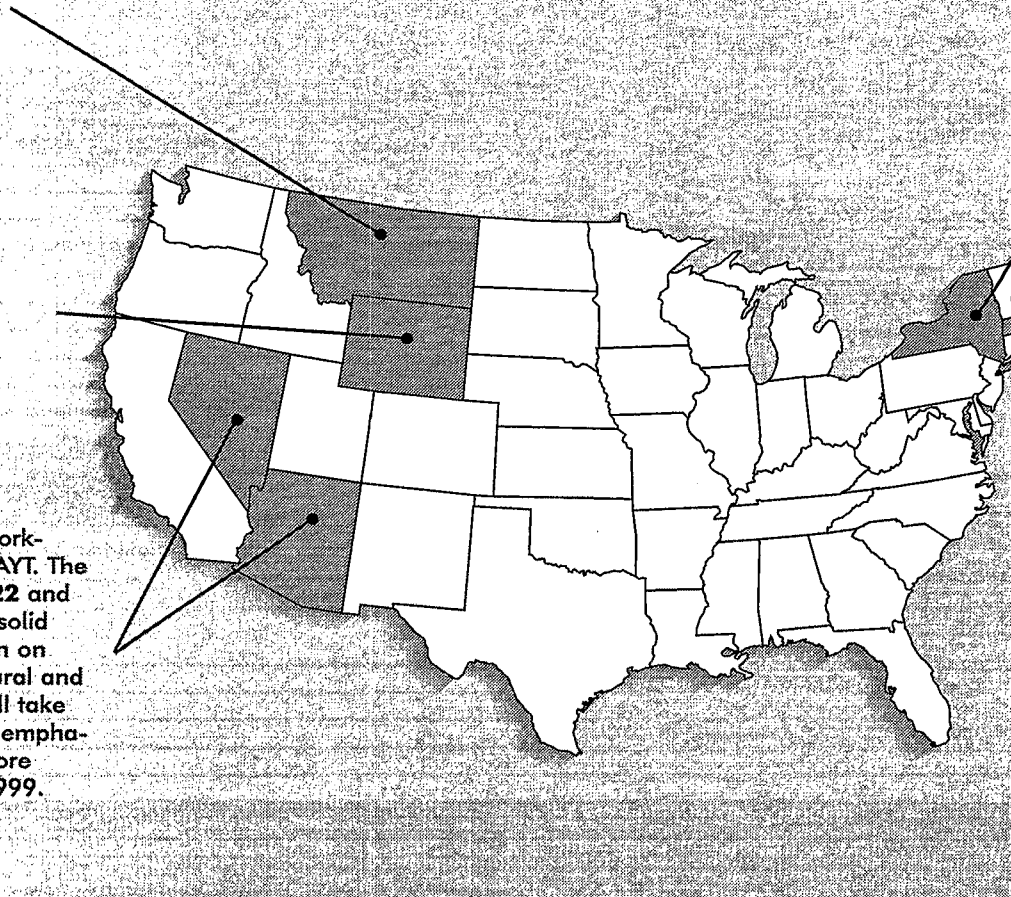
*State PAYT
Initiatives Get
Results* 2

(continued on page 4)

Staff from the **Montana Department of Environmental Quality** are planning to give presentations on PAYT to county commissions throughout the state **this fall**. To request a visit, contact Mark Lambrek, 406 444-3075.

The **Wyoming Department of Environmental Quality** is sponsoring a session on the basics of PAYT at the 1998 Wyoming Recycling Association/Wyoming Solid Waste Management Association Conference, **September 11, 1998**, in Lander. State and local recycling officials, waste collectors, and elected officials will attend the conference. For more information, contact Ken Schreuder, 307 332-6924.

Global Futures Foundation will hold two workshops in Arizona and Nevada in the fall on PAYT. The Arizona workshop is scheduled for **October 22** and will be geared toward local government and solid waste officials. There will be a general session on PAYT and two breakout groups focusing on rural and urban applications. The Nevada workshop will take place in **late fall** in eastern Nevada and will emphasize implementing PAYT in rural areas. For more information, contact Wendy Pratt, 916 486-5999.



State PAYT Initiatives Get Results

PAYT programs continue to turn in strong waste reduction and recycling results. At last count, waste reduction rates averaged 14 to 27 percent in the first year, and average recycling increases came in at 32 to 59 percent, according to data from Duke University. Increasingly, states are viewing PAYT as a valuable tool they can use to help meet their MSW goals.

Mandates are one strategy states use to expand the use of PAYT by their communities. Four states are currently using this method. In 1994, Iowa (Department of Natural Resources, 515 281-4367) made PAYT mandatory for communities who failed to reach the state's goal of 25 percent waste reduction. For most communities, it worked: one year after implementation of PAYT, 96 percent of communities reported a drop in the amount of waste sent to landfills, representing an average drop in waste amounts of 38

percent; 60 percent reported a decrease or no change in the cost of waste collection and disposal; and 97 percent found that recycling rates in their community had increased by an average amount of 52 percent.

Wisconsin (Sherrie Gruder, 608 262-0385) requires communities below the 25 percent recycling rate threshold to implement PAYT. These communities also are required to have a system in place for the collection of recyclables. To help ease implementation, Wisconsin provides funds for communities with PAYT (\$2.9 million per year in 1996 and 1997). Since it was implemented in 1989, the effort has enjoyed strong community support. For example, in a 1993 survey of PAYT communities, 95 percent of respondents said that they would recommend their PAYT program to another community.

After establishing the strongest PAYT program mandate in 1993—a statute requiring any community that charged for solid waste services to use a variable-rate system—Minnesota (Ken Brasilus, 612 758-4334) now has more communities using PAYT than any other state. Washington state (Nick

EVENTS AROUND THE COUNTRY

The New York State Association for Reduction, Reuse, and Recycling is sponsoring an introductory session on PAYT at the New York State Recycling Conference, **October 5 to 6, 1998**, in Syracuse. Conference attendees will include public and private recycling officials. For more information, contact Sharon Fisher, 518 463-7964.

The Massachusetts Department of Environmental Protection is planning a series of workshops focusing on PAYT, source reduction, composting, and recycling. The workshops will take place in **mid-October** in Boston, and are geared toward local elected officials. All workshops will be led by a national expert. For more information, contact Joseph Lambert, 617 574-6875.

For updated PAYT events, be sure to check EPA's PAYT Online at <www.epa.gov/payt>.

Pealy, 206 684-7646) also has a strong mandate, requiring solid waste haulers to offer variable rates to their customers since 1989.

Massachusetts (Joseph Lambert, 617 574-6875) has taken a different tack. Instead of mandates, the state is offering communities incentives to adopt PAYT. Massachusetts is using three types of grants to make PAYT more profitable for its communities: start-up grants, equipment grants, and recycling incentive grants, all funded by money obtained from unredeemed bottle deposits.

For some communities, PAYT start-up costs can prevent local officials from implementing variable rates. To help communities clear this hurdle, the state has created grants targeting new PAYT program costs. For example, Massachusetts provides a grant of \$10 per household (up from \$2 in 1996) to cover custom-printed bags or stickers and printing and distribution of educational materials to residents. Equipment grants are also used. While the grants are available to any community with curbside recycling—even those without PAYT—communities that do not use variable

rates match \$20,000 of the state's purchase of trucks and curbside collection containers. For communities with new PAYT programs, however, the state pays the full cost of these items.

Another incentive project is the Municipal Recycling Incentive Program (MRIP). Under this program, Massachusetts provides grants to all communities (whether or not they have PAYT) based on their reported recycling tonnages. To encourage the use of PAYT, the state has removed some eligibility restrictions and requirements on MRIP funds for communities with existing or new PAYT programs. The bottom line? PAYT communities not only have more access to MRIP funds than nonPAYT communities, but they also have the potential to receive more grants.

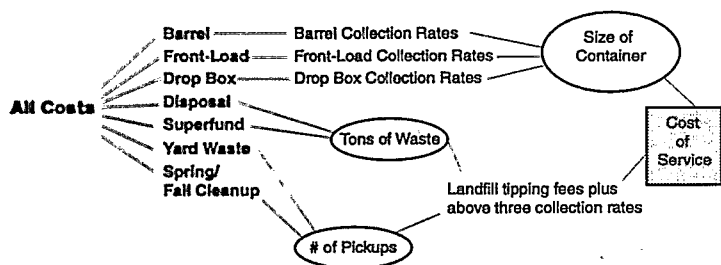
So far, the results are promising. According to Joseph Lambert, the state municipal recycling liaison and PAYT program manager, the grants have resulted in three communities switching to PAYT this year, with seven more expected in the coming year. And these communities are showing results. Foxboro, which started using PAYT at the beginning of 1998, more than doubled its rate of recycling in the first 6 months, from 17 percent to 40 percent. As a result, the city expects to receive about \$12,000 in MRIP grants this year.

The town of Merrimac decided to use PAYT after analyzing and comparing possible responses to the closure of their town landfill. In March of this year, the town implemented PAYT. Patricia Dillon, chairperson of Merrimac's solid waste advisory team, reports that the grants offered by the state made the new program possible. Since then, public praise of PAYT in Merrimac has been effusive, and although no specific data are yet available, Ms. Dillon feels the increase in recycling can be seen just by driving through town and noting the growing number of recycling bins on residents' curbsides.

The city of Needham, which started using PAYT in June 1998, has already experienced significant results with the program. Although many residents were not initially in favor of the new program, town administrator Carl Valente reports that compliance has been over 95 percent and that comments on PAYT since implementation have been nearly all positive. In just 1 month, citywide collection of co-mingled recyclables in Needham rose from three 40-cubic-yard containers per week to three 100-cubic-yard containers per week. In that same month, the amount of paper recycled per week increased by 25 percent, and the amount of corrugated paper recycled rose from 3 tons per week to 7 or 8 tons per week.

To determine the cost of each service, a multistep process was used. First, all solid waste costs were divided into seven categories corresponding to the seven major solid waste services offered by Tacoma: disposal, Superfund landfill, yard waste collection, spring/fall cleanup, and the three container types offered by the city: barrel collection, front-load collection, and drop box collection. To determine how the costs of each of these services would be paid for, the seven categories were allocated to four revenue collection methods: landfill tipping fees, barrel collection rates, front-load collection rates, and drop box collection rates.

Costs for the seven solid waste services were allocated as follows: barrel, front-load, and drop box costs were incorporated into their respective collection rates. Disposal and Superfund costs were proportionally divided among all four revenue categories based on the estimated tons of waste collected by each method. Finally, yard waste and spring/fall cleanup costs were proportionally divided based on the number of pickups made in each method.



Once the cost for each of the seven services had been allocated, the next step was to make divisions within the revenue collection categories to account for the differences in container size. This yielded the final cost of providing collection service in each service category. Lastly, the cost for each individual service was compared to the current (1996) charge for that service.

The study produced some very interesting results. Although the program's revenues covered the overall solid waste costs, the rates Tacoma charged for most services did not match the cost of providing that service. Residents at some service levels were overcharged, while those at other service levels paid too little.

Consequently, city planners decided to revise the rates. Rather than immediately changing prices to equal the cost of service, however, they opted to gradually introduce the changes, with the goal of having rates equal to the cost of service by 2002. Rates were kept stable from 1997 to 1998, but will be increased or decreased at a steady annual percentage rate until 2002. (See table for rate changes for each service level.)

By evaluating and revising its rates, Tacoma was able to determine the exact cost of each solid waste service provided, and charge consumers accordingly. City planners hope that implementing all these rate changes will help Tacoma accomplish the following three goals: 1) send a clearer message to consumers about the cost of waste disposal by charging them more accurately for the services they use; 2) distribute solid waste costs more equitably among consumers by allowing them to pay for exactly the services they use; and 3) ensure a steady and accurate inflow of solid waste revenue to the city. Success with such efforts as customer surveys, pilot programs, and rate restructuring reaffirms Tacoma's commitment to continuously improving its PAYT program.

Service	Annual Change	Service	Annual Change
32-gallon residential container	+6%	32-gallon commercial container	+6%
60-gallon residential container	+8%	60-gallon commercial container	+8%
drop-box collection (compacted)	+3%	90-gallon commercial container	+0%
90-gallon residential container	+3%	300-gallon commercial container	-8%
drop-box collection (non-compacted)	+4 to 5%	front load collection (non-compacted)	-5%



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