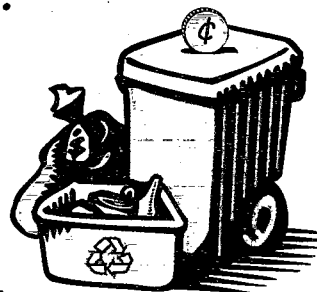




A Listing of Pay-As-You-Throw News and Events

PAYT



BULLETIN

Bigger, Older, Wiser: San Francisco Makes a Good Thing Even Better

San Francisco Fast Facts

- San Francisco's population is 776,733 people (2000 census).
- In 1999, San Francisco disposed of 780,000 tons of waste.
- The same year, the city recovered 568,000 tons of materials.
- San Francisco's recycling rate is 42 percent. (California has a 50 percent waste diversion goal.)

More than 5,000 cities across the U.S. have a PAYT program in place to make garbage collection more equitable and efficient, and many of these are mid- to large-size cities. But the city of San Francisco is a leader to them all, having had a PAYT program in place longer than most cities have had a recycling program. The city's PAYT program, which started in the early 1900s, is one of the oldest PAYT programs in the country.

With years of experience, San Francisco has found out how to make the most of its waste management program. The city's new "Fantastic Three" program, which separates discarded materials by type at the curbside into three 32-gallon containers, is the city's latest step in improving its waste and recyclables collection program across the board. In this program, commingled recyclables are collected in a blue container, food scraps and yard trimmings in a green container, and regular garbage in a black container. A year-long pilot project conducted in one area of the city proved so successful that the city now plans to convert two-thirds of the city's residences to this program.

The innovative Fantastic Three program is the first program in the U.S. to collect food scraps at the curbside for composting. Other California cities, including San Jose, are using the Fantastic Three model to improve their own collection programs, said Lisa Schiller with the city of San Francisco's Solid Waste Management Program.

Schiller added that collecting commingled recyclables is a feature of the Fantastic Three program that many other cities are moving toward. Commingled collection "makes recycling very easy for residents," Schiller said. The recyclables are sorted at the materials recovery facility by the hauler.

In the pilot project, the use of the three separate containers reduces litter because the containers are lidded. It also deters illegal scavenging—since the recyclables are commingled, it is harder for scavengers to abscond with the more valuable recyclables, Schiller said.

San Francisco also recently approved new waste and recyclables collection rates proposed by the city's private waste hauler. Under the new rates, residents who use the 32-gallon can will be charged about \$14.83 per month for waste collection, an increase from the previous rate of \$11.68.

San Francisco "Fantastic Three" improves recycling, Page 1

Austin, Texas, goes automated, Page 3

Massachusetts surveys attitudes toward recycling, Page 2

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As an incentive to recycle more and dispose of less materials, residents can use a 20-gallon can, and those who do will be charged 77 percent of the 32-gallon container rate, or approximately \$11.42 per month. Approximately 8 percent of city residents use the 20-gallon container exclusively right now, and the city anticipates that figure to increase to 17.5 percent of residents within the next 5 years, according to Schiller. The program allows flexibility for higher waste generators—residents can purchase an additional 32-gallon container, for an additional \$14.80 per month, if one container does not suffice.



Another change to the city's PAYT program has been the addition of all apartment buildings, so now all 325,000 residences in the city have access to a PAYT collection program. Apartment buildings in San Francisco are not required to recycle, but putting a PAYT program in place should encourage apartment building managers to promote recycling because it will save them money on their waste collection bills.

Two private waste haulers, Sunset Scavenger and Golden Gate Disposal, both subsidiaries of Norcal Waste Disposal, collect all the commercial and residential waste and recyclables generated in the city. The haulers are responsible for making sure that the recycling containers are not contaminated with waste materials and educating residents about which materials are recyclable.

For more information, contact Lisa Schiller with San Francisco's Solid Waste Management Program, at 415 554-3437.

Want to promote your community's PAYT program?

Contact Jan Canterbury at EPA, at 703 308-7264, or by e-mail at canterbury.janice@epa.gov to share your community's PAYT success stories with the readers of the PAYT Bulletin.

Recycling Is all About Attitude

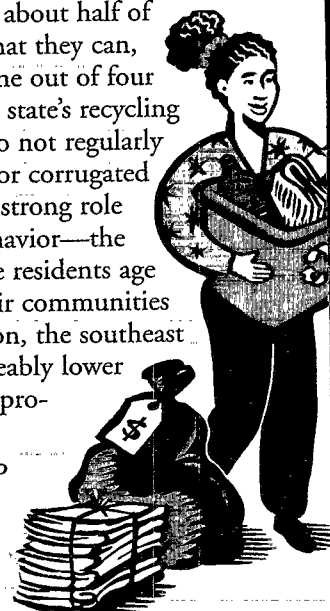
Communities with PAYT programs typically have higher recycling participation rates, and their residents have a better attitude toward recycling, according to a recent survey. The Massachusetts Department of Environmental Protection surveyed 750 state residents and found that recycling participation in PAYT communities exceeds the statewide average by a noticeable margin. Seventy percent of PAYT households say that they are "doing all they can" to recycle, compared with 50 percent of households statewide that do not have PAYT programs. Furthermore, only 14 percent of residents in PAYT communities are not recycling, compared with 27 percent statewide.

Not surprisingly, residents in PAYT communities report that recycling is easy and more convenient, and these residents are less likely to need reminders to recycle than respondents from non-PAYT communities in the state. In addition, residents in PAYT communities are significantly more likely to say that their household is committed to recycling (82 percent), compared with residents in other Massachusetts communities (64 percent).

Recycling rates for specific materials—from newspaper, corrugated cardboard, and paperboard to plastic, glass, and metal containers—are noticeably higher in PAYT communities than in areas that do not have a PAYT program. The difference in recycling rates is most noticeable for paper products, with residents in PAYT communities recycling much more paper products than their non-PAYT counterparts.

Although the report finds that about half of the state's households recycle all that they can, there is room for improvement: one out of four residents do not participate in the state's recycling effort, and one-half of residents do not regularly recycle paperboard, mixed paper, or corrugated cardboard. Demographics plays a strong role in shaping residents' recycling behavior—the state's most dedicated recyclers are residents age 65 or older who have lived in their communities for more than 10 years. In addition, the southeast region of the state reports a noticeably lower level of participation in recycling programs than other regions.

The report, *Massachusetts DEP Recycling Participation Study*, is available online at www.state.ma.us/dep/recycle/recycle.htm#towns.

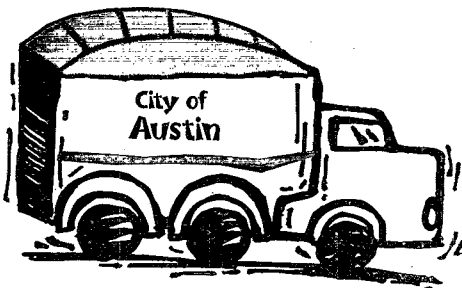


Austin Becomes Fully Automated

Austin, Texas, one of several larger cities that has set up a successful PAYT program, recently made some changes to make its solid waste management system even better. Automation and fee incentives are enhancing the efficiency and cost-effectiveness of the program.

The city is switching from a semi-automated system to a fully automated system, which allows for one-person crews. The new method of collection will be more cost-efficient, and 40 percent of Austin's residents have been converted to the new system, with complete implementation expected by fall 2002.

The city educates residents on how to set out their carts so the automated loaders can handle them without problems. Under the PAYT program, residents have the choice of using 30-, 60-, or 90-gallon carts, each with a different rate. Smaller fees are charged for a second cart. In another program change, extra garbage that will not fit into a cart can now be placed in a bag affixed with a \$2 garbage sticker. Previously, haulers did not collect garbage left in bags without stickers. Now, bags without proper stickers are still collected by hand by the hauler, but residents are charged \$4 per untagged bag.



There's no question that Austin's diversion rates are increasing. Between October 1999 and September 2000, the city kept close to 28.5 percent of its residential garbage from disposal, compared with a 9.8 percent diversion rate in 1991, the year the PAYT program began.

For more information on Austin's program, contact Vidal Maldonado of the city of Austin at 512 462-4312 or vidal.maldonado@ci.austin.tx.us. Educational information and resources for Austin's citizens also are available at the city's Web site: www.ci.austin.tx.us/sws/garbage.htm.

Source Reduction Pays Off in PAYT Programs

While it has been known for some time that PAYT programs help promote source reduction, the extent of that impact has been hard to measure. A new study provides encouraging evidence that this impact can be measured and that it is significant.

The study concludes that PAYT programs reduce landfill disposal by 16 to 17 percent annually, with approximately 6 percent attributable to source reduction.

According to EPA's standard hierarchy, source reduction is the preferred method of solid waste management. Source reduction has been more difficult to measure than other waste diversion methods because of the challenges involved in measuring the amount of waste people aren't generating. Skumatz Economic Research Associates, Inc. (SERA) conducted a study that looks at ways to overcome these challenges.

"Our firm already has a lot of experience measuring things—such as energy conservation—that 'didn't happen,'" said Dr. Lisa Skumatz, principal of SERA. "We therefore had a good idea what the best approaches would be."

A recent SERA study estimated that PAYT programs are available in more than 5,000 U.S. communities, so results from the source reduction study would have immediate, far-reaching implications.

Based on the assumption that recycling, composting, and source reduction are the three primary waste diversion routes, SERA used two methods to conduct its research. The first method, a cross-section analysis, tapped into SERA's database on waste management in more than 1,000 U.S. communities to evaluate PAYT impacts at a single point in time. The results show that average waste generation rates in PAYT communities are 16.1 percent lower than in non-PAYT communities.

The second method, a time-series analysis, applied statistical techniques to data on waste generation from 1960 to 1998 to forecast waste disposal behavior. After controlling for demographics, this method shows that waste generation per person would have been 17.3 percent higher without PAYT. Subtracting results from similar recycling and composting equations, this method concludes that source reduction accounts for 5.8 percent of the waste decreased by PAYT. Because the two different methods generated similar results, the study shows that these are reliable techniques for measuring the impact of PAYT on source reduction.

For a copy of the SERA report, *Measuring Source Reduction: PAYT/Variable Rates as an Example*, contact Dr. Lisa Skumatz of SERA at 303 494-1178 or visit SERA online at www.serainc.com.

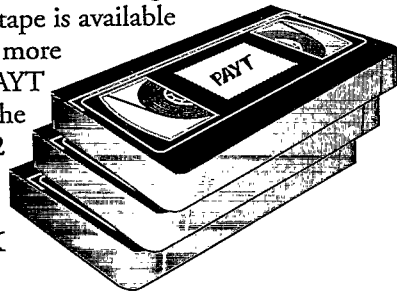
Videoconference Promotes PAYT in Pennsylvania

More than 100 recycling professionals participated in Pennsylvania's PAYT videoconference featured in Lisa Skumatz of Skumatz Economic Research Associates and local experts from three Pennsylvania municipalities who shared their experiences with PAYT in a facilitated panel discussion. Simultaneously broadcast on the Web by GreenWorks.TV, viewers in at least six other states accessed the videoconference.

Sponsored by the Pennsylvania Department of Environmental Protection (DEP) and the Professional Recyclers of Pennsylvania (PROP), the videoconference introduced resources available to local governments and the waste industry for developing PAYT programs. The Pennsylvania DEP and PROP hosted the videoconference to boost the number of PAYT programs in the state, with the goal of helping Pennsylvania increase the state recycling rate from 32.6 percent to 35 percent.

"We have promoted PAYT as a way to make the cost of disposing waste more apparent, therefore, making some of the other alternatives such as recycling and composting, more desirable," said Greg Harder of the Pennsylvania DEP. "The number of PAYT programs in Pennsylvania has increased from 125 to 211 in the past year."

The videoconference can be viewed at <www.greenworks.tv/events/paytwebcast.htm> or a videotape is available from PROP at 800 769-PROP. For more information about Pennsylvania's PAYT programs, contact Greg Harder of the Pennsylvania DEP at 717 787-7382 or gharder@state.pa.us, or access the DEP Web site at <www.dep.state.pa.us> (directLINK "pay as you throw").



PAYT: An Economic Incentive for Reducing Pollution

In a newly released report, EPA evaluates the effect of PAYT programs and other incentive programs on reducing pollution. The report assesses hundreds of economic incentives for reducing environmental pollution. PAYT is discussed as one of the many financial incentives that are supplementing traditional regulatory approaches.



The document reviews the different forms of variable-rate pricing and provides a description of several variable-rate structures by community. It also lists studies of communities where PAYT has been introduced and provides general guidelines for introducing PAYT programs. The report concludes that, in many cases, economic incentives such as PAYT result in greater benefits than traditional regulations for reducing pollution.

A copy of the report, The United States Experience with Economic Incentives for Protecting the Environment, can be downloaded by visiting the Web site at <www.epa.gov/economics> and linking to the report, located on the right-hand side of the page.



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