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***INCREASING RECYCLING NOW!
IMPLEMENTING RECYCLING AND PAY AS
YOU THROW (PAYT) ORDINANCES,
LEGISLATION, OR CONTRACTING***

Practical Guide and Model Language

Prepared with partial support from American Beverage Association

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INCREASE RECYCLING ... NOW!

1. EXECUTIVE SUMMARY AND INTRODUCTION

Pay As You Throw (PAYT), a system by which households pay for trash service based on the volume of material disposed, has been shown to be the single most effective method of increasing residential recycling. These systems decrease residential tonnage to landfills by about 17%, increase recycling by 50% to doubling, and lead to higher composting and less wasting.¹ PAYT treats trash as a utility – just like electricity, water, and other goods and services. The system is fair – those who use more pay more, and those that reduce through recycling² pay less.

The costs are minimal – two-thirds of communities state that there are NO cost increases for implementing PAYT.³ Research shows that after PAYT is implemented, more than 90% of residents report they prefer PAYT to the old system that used to be in place.⁴ Even more recent research has demonstrated that PAYT is one of the cheapest and most cost-effective methods of decreasing greenhouse gas emissions – much cheaper and faster to implement than commonly-implemented commercial and residential energy efficiency programs!⁵

¹ Skumatz, Lisa A., "Nationwide Diversion Rate Study – Quantitative Effects of Program Choices on Recycling and Green Waste Diversion: Beyond Case Studies", Prepared for SERA, NSDA, MnOEA, APC, EPA Region 5, EPA Region 9, SRI, and Reason Foundation, by Skumatz Economic Research Associates, July 1996. Also see Skumatz, Lisa A., "Measuring Source Reduction: Pay As You Throw (PAYT) / Variable Rates as an Example, Technical report, prepared for multiple clients, included on EPA website, 5/2000, Skumatz Economic Research Associates, Superior CO, and Skumatz, Lisa A. and Juri Freeman., "Pay as you Throw (PAYT) in the US: 2006 Update and Analyses", Prepared for USEPA and SERA, Skumatz Economic Research Associates, Superior, CO, January 2007.

² including, for example, persons on fixed income who previously had no option but to subsidize the large disposers. PAYT provides a link between behavior and bill and offer savings opportunities to those willing to reduce trash.

³Skumatz, Lisa A., "PAYT Frequently Asked Questions", Skumatz Economic Research Associates, Superior, CO 2008.

⁴Skumatz, Lisa A., "PAYT Frequently Asked Questions", Skumatz Economic Research Associates, Superior, CO 2008. Even a recent non-scientific poll by Parade™ magazine, the Sunday insert, shows that the majority of the population prefers the idea of PAYT for trash rates (results reported Sunday September 29, 2008).

⁵ Skumatz, Lisa A., "Recycling and Climate Change: Finding the "Biggest Bang" Community Strategies for Reducing GHG", SERA White Paper, Skumatz Economic Research Associates, Superior, CO 2007, updated 2008; also, Skumatz, Lisa A., "Recycling and Climate Change: Finding the "Biggest Bang" Community Strategies for Reducing GHG", forthcoming, Resource Recycling, 2008.



While concerns are voiced around possible negative outcomes, extensive research and thousands of interviews conclude that there is almost always a greater fear than reality for negative outcomes, and that all of them – even fears of illegal dumping – are either minimal or easily resolved.⁶

The benefits are strong and have been demonstrated in more than 7,100 communities across the nation, available to about 25% of the population.⁷ The barriers to implementing PAYT are NOT technical – instead, the major barrier to PAYT is getting the political will to implement the program.

This paper provides information and model language to support three key and very workable options for getting PAYT in place – and reaping the benefits quickly at a local and/or state level:

- ⇒ Implementing a **local ordinance for PAYT** – starting at the local level if the political will is not available at the state level. Model language, resulting from a study of successful ordinances around the nation, is provided in Appendix A.
- ⇒ Local option for **contracting** for trash service from a private hauler and requiring a PAYT system (a timeline is presented in Appendix B), and
- ⇒ **The best option of all - State legislation requiring PAYT. Model language is presented in Appendix C.**

⁶Skumatz, Lisa A., "PAYT Frequently Asked Questions", Skumatz Economic Research Associates, Superior, CO 2008. Research on illegal dumping shows impacts in only 20% of communities and only for 3 months – and significant impacts in only about 3% of communities!

⁷ Skumatz, Lisa A. and Juri Freeman., "Pay as you Throw (PAYT) in the US: 2006 Update and Analyses", Prepared for USEPA and SERA, Skumatz Economic Research Associates, Superior, CO, January 2007.

2. BACKGROUND ON PAYT

Many communities and counties want to increase recycling, but frankly, don't know where to start. There are LOTS of feasible steps you can take to increase recycling... One of the most effective – and least politically difficult – options is to implement a local recycling and “Pay as you Throw” (PAYT) ordinance.



2.1 About PAYT

Pay As You Throw (PAYT) is a program in which households pay more to put out more trash for collection, and pay less if they put out less trash – behavior affects bill, like electric, water, and other service. Rather than an “all you can eat buffet” system, this turns trash into a utility and reduces overuse of services. PAYT provides a very strong incentive to recycle more, and in fact, PAYT has been shown to be the **most effective** (and most cost-effective) way to increase recycling.⁸ Pay As You Throw (PAYT)⁹ brings strong advantages:¹⁰

- Increases recycling by 50% or more – even in places with drop-off only recycling programs – and increases composting and waste reduction;
- Decreases waste disposed to the landfill by 17%;
- Is a fairer system, charging households only for the service they use – like a utility;
- Doesn't increase costs for most cities;
- Reminds customers every time they pay a bill to reduce (behavior is retained); and
- PAYT is among the cheapest and fastest methods of reducing green house gas emissions!¹¹ (even cheaper than many of the most common energy efficiency programs, and it creates jobs too!)

⁸ Skumatz, Lisa A., “Beyond Case Studies: Quantitative effects of recycling and variable rates programs”, *Resource Recycling*, September 1996, Skumatz, Lisa A., “Nationwide Diversion Rate Study Quantitative Effects of Program Choices on Recycling and Green Waste Diversion: Beyond Case Studies” Skumatz Economic Research Associates, Superior, CO, July 1996, and other publications noted in this document.

⁹ PAYT systems fit with many different collection systems. The program may charge more for bigger cans of trash (potentially in “wheelies”, which can be collected via automated trucks” or for multiple cans of trash. Some communities use special “pre-paid” logo-ed trash bags or fee for special logo-ed bags or stickers.

¹⁰ These quantitative benefits come from Skumatz, Lisa A. and David Freeman, “Pay as you Throw (PAYT) in the US: 2006 Update and Analyses”, Prepared for Skumatz Economic Research Associates and USEPA, SERA, Superior, CO, 2007; or Skumatz, Lisa A. “Frequently-Asked Questions about PAYT”, Skumatz Economic Research Associates, Superior, CO, 2000; Skumatz, “Variable Rates in Solid Waste: ...”, for the Reason Foundation, Los Angeles, 1993, and other citations).

¹¹ Skumatz, Lisa A., Ph.D., “Recycling and Climate Change: Finding the “Biggest Bang” Community Strategy for Reducing Greenhouse Gas Emissions”, 2007, revised 2008, Skumatz Economic Research Associates, Inc. Superior, CO, 2008. Jobs impacts illustrated in Skumatz, Lisa A., Ph.D. and David Juri Freeman, “Colorado Roadmap for Moving Recycling and Diversion Forward: Strategies and Implications”, Prepared for State of Colorado Department of Public Health and Environment, Denver, CO, by Skumatz Economic Research Associates, Superior, CO, February, 2008.

2.2 How to Achieve Recycling & PAYT?

- ⇒ **IF the community uses municipal staff** to collect trash, then the change to PAYT is straightforward. Select a PAYT system, choosing from among a subscribed variable can, or bag, tag / sticker-based systems,¹² and educate residents about the new system.¹³
- ⇒ **IF the community contracts with a hauler/carter** to provide service, then revised PAYT service can be easily implemented at the next contract revision, or may potentially be negotiated sooner than the expiration date.¹⁴
- ⇒ **IF trash is collected by one or more private haulers in the competitive marketplace**, then the easiest option is to **pass a PAYT ordinance**¹⁵ that requires all haulers operating within town / city / county limits to provide service using a PAYT rate structure.¹⁶ This maintains a level playing field, doesn't "take" any hauler customers, and brings the strong recycling performance. The key elements of the ordinance are outlined below¹⁷, and sample language can be found at www.payt.org or www.paytwest.org. A second option is to undertake a districting, franchising, or contracting process, requiring PAYT for the successful / selected hauler(s).

Assuming the community does not currently use municipal staff for collection, one of the key questions is whether to achieve the recycling and PAYT options using an ordinance, or using a contracting process. The table below highlights the advantages of each option.

¹² For detail about these choices, see PAYT frequently asked questions on www.payt.org or www.paytwest.org or see PAYT manuals or toolkits from SERA, from EPA, or from a number of states (including California, Iowa, Wyoming, Illinois, Massachusetts, or many other states). These provide information on technical / administrative / rate aspects of the new system, and implementation and education tips.

¹³ Note that all the research on PAYT indicates that technical issues related to the adoption of PAYT are very straightforward; political aspects can be more complicated. The Citizen's committee may be helpful. Other political "cover" for adopting PAYT may be provided from the results of the household survey (PAYT is usually a fairly high-scoring option in the survey) or from households on fixed incomes that can save money under a PAYT system. The equity of a utility-type system for trash collection is usually very popular with households. Research shows that after the program has been in place, 89-95% of the population prefers the new system and doesn't want to go back to the hold program. (Skumatz, "Frequently-Asked Questions about PAYT", Skumatz Economic Research Associates, Superior, CO, 2000; Skumatz, "Variable Rates in Solid Waste: ...", for the Reason Foundation, Los Angeles, 1993, and other citations).

¹⁴ Sweeteners to induce renegotiation may be to offer contract extensions or similar.

¹⁵ **Pay As You Throw (PAYT) Ordinance:** Passing a PAYT ordinance requires haulers operating within your jurisdiction to use PAYT rates – rates that charge more for households that put out more trash for collection. This turns trash into a utility like electricity – fee for service. Studies show this is the **single most effective strategy that can be implemented to increase recycling** – and it is a continual reminder to recycle more every time the household gets a bill. A summary of the key elements of this highly recommended ordinance is found on the back of this fact sheet, and examples are provided on www.payt.org or www.paytwest.org. If your community does its own collection, the program should be designed to meet the criteria within the ordinance.

¹⁶ The ordinance does NOT "set" PAYT rate levels, but requires a PAYT rate "structure", which is generally legal.

¹⁷ The "best-performing" ordinance includes Curbside recycling for all households with the cost embedded in the trash rate; PAYT implemented with an option for a small (lower-cost) trash container; and significant differentials between trash service rates for different volumes of trash. See details below. Note that the system can also work very well in communities without curbside recycling service.

Table 1. Advantages of Ordinances vs. Contracts for PAYT with Private / Competitive Hauling System

Advantages of Local Ordinance (or State Legislation)	Advantages of Contract
<ul style="list-style-type: none"> • Fewer citizen complaints. Maintains “choice” of service provider for residents, reducing negative citizen feedback. • Less resistance from haulers. Reduces hauler complaints about “taking” business. • Maintains marketplace competition - small and large haulers continue in business in the area (not the case under contracting, where one or limited number of winning hauler(s) is/are selected). • No need to “notice” the state of the change or “taking” of business. • Minimal City effort. City does not insert itself into the provision of service much; no RFP or procurement process and minimal on-going oversight. • Retains “level playing field” for haulers – each implements the program and provides services knowing others will be operating under the same rules. 	<ul style="list-style-type: none"> • One hauler selected, potentially reducing rates (economies of scale) over multiple hauler situation. • Potential reduction in wear/tear on streets if one hauler providing all service. • One hauler to contact if problems arise. • City “control” over hauler and service increased. • Can “designate” facility destinations for materials.

3. Option 1 – Passing a Recycling / PAYT Ordinance



By far, the easiest option to achieve the goals of 1) increased recycling, and 2) more equitable and incentivizing rates, is to pass “recycling and PAYT” ordinance. This is particularly advantageous in areas in which the jurisdiction has historically not been much involved in trash / recycling or in the provision of service. This option tends to lead to far fewer complaints – from residents or haulers – than other options for achieving the recycling and PAYT goals because:

- It retains a level playing field for haulers – The new requirements
- It retains choice for customers.

The key elements of this ordinance¹⁸ are described below. A sample ordinance¹⁹ is provided in the Appendix, along with examples from a number of communities and counties.

3.1 Elements of a Successful, Comprehensive PAYT Ordinance

Happily, there is a very easy and workable option for communities served by private haulers... a hauler PAYT ordinance, passed at the local level... and it can be implemented fairly quickly. Based on a study of ordinances in more than 100 communities and counties, we suggest the following key elements for a comprehensive and successful ordinance.

Key Elements of the Ordinance²⁰

- **Safety Issues:** Requirements for truck and operator safety issues, avoiding leakage, etc.
- **Recycling Opportunities:** All haulers providing service within the community’s/county’s boundaries must:
 1. offer curbside recycling to every single family (or up to X-plex) household with garbage service;
 2. provide recycling service at least every other week;
 3. must collect at least a base set of materials that the community lists (usually newspaper, waste paper, cardboard, chipboard / paperboard, aluminum and steel / bimetal cans, glass bottles, and #1 and #2 plastics, but the list will vary based on your local markets / MRF); and
 4. must provide recycling container(s) that are at least 64 gallons in total size, and are covered (preferred);
- **Fees and PAYT:** The cost of the recycling program must be embedded in the trash rate, with no separate charge, fee, or line-item for recycling. The cost for trash service must be in a PAYT structure. The PAYT system must:
 1. Offer, as its smallest container, a container no larger than 32 gallons, and must offer service in 32 gallon increments above this service;

¹⁸ Examples of necessary ordinances and the process are found on www.payt.org or www.paytwest.org.

¹⁹ Thanks to assistance from Constance Hornig, Esquire on the preparation of the Model Ordinance language and this summary of RFP steps and schedule.

²⁰ See sample PAYT ordinances from other towns and counties on www.payt.org or www.paytwest.org; or use the template ordinance your town may want to adapt and adopt! These are the same elements that are important for state-level PAYT legislation.

2. The cost of the trash container service must be set so that, throughout the service levels available, double the service volume cannot cost less than 80%²¹ more in total to the household.²²
3. The community should establish auditing rights.

- **Reporting and Audit Authority:** The community should require haulers to report the trash and recycling tons collected within the community’s boundaries, with reporting at least quarterly. This will allow the community to monitor progress in recycling. Establishing the authority to audit compliance with the ordinance is also important.
- **Educational responsibilities:** The community should designate minimum requirements for frequency of recycling education (e.g. requiring haulers to provide annual outreach or mailers to customers).²³

Advantages of a Local PAYT Ordinance:

- Covers all haulers, establishing a level playing field for haulers (which they are generally satisfied with) and the new programs bring them business opportunities;
- Better levels of service for residents;
- Better participation and diversion from recycling and other programs;
- More equitable rates;
- Safety, health, and other benefits to the community.

4. Option 2 - Contracting²⁴ for PAYT



A somewhat more complex – but also beneficial – option to achieve PAYT is to undertake an initiative to district or franchise trash collection, or alternatively to contract with a hauler (usually one hauler, or if your town is large, two or more haulers may be selected)²⁵ for trash service.

This is more complex than an ordinance-based process because the political issues are more prickly. The new system may lead to some local haulers being “winners” and others, “losers”, and the losers

²¹ The community may, of course, set a different percentage increment. This value – 80% -- is based on statistical studies that balance two objectives: 1) providing a strong recycling incentive, and this value was found to provide almost the same recycling incentive to households as rates that double for double the service; and 2) backing off from very aggressive rates to recognize the fact that the largest cost in providing trash or recycling service is getting the truck to the door – arguing for flatter rates. This differential tries to provide incentives, but also help decrease the risk of not covering fixed costs of the operations. If a community selects a lower percentage, be careful to provide enough incentive to modify behavior – perhaps not less than 50% extra.

²² For example, if a 32-gallon container costs \$10/month, then a 64-gallon container would cost \$18, and a 96 gallon container would cost \$26, etc. Note that the ordinance sets rate structure, but not rate levels, and thus, is not rate-setting. Haulers may increase the level of the rates they need in order to cover the cost of recycling and the PAYT rate structure.

²³ Often the best programs have both the hauler and the community providing education to households. This establishes the portion for which the hauler is responsible. This can augment community outreach efforts and provide a coordinated message.

²⁴ Similar to options for “districting” or “franchising”.

²⁵ As a note, if your community is large enough to accommodate two haulers, consider splitting the city in two – but NOT in half – and have haulers propose. Pencils are sharpened and the bidders can no longer count on getting half the city if you award the larger share of the city to the lower bidder. This has proved very successful in communities across the country.

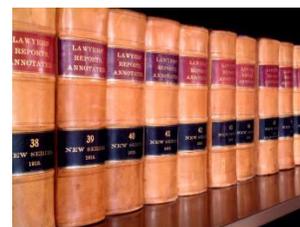


will not usually stay quiet, because their livelihood is affected. However, if your community has multiple haulers providing service, an ordinance establishing districts, franchises, or undertaking a contracting process for collection service can lead to:

- PAYT rates and better recycling (the goal achieved by both strategies – ordinance and contracting);
- lower rates because of economies of scale and collection from all households in an area;
- lower wear and tear on streets from fewer trash trucks plying the same neighborhoods and lower greenhouse gas emissions, and
- “neater” streets, with trash containers out on one day instead of multiple collection days, among other benefits.

A new contract can lead to benefits for your community; however, it requires strong political will to pass the program. Many communities that have taken this approach have heard complaints from residents that they do not like having their choice among haulers taken away – that they like their haulers. In addition, haulers will tend to prefer the “status quo” and fear possibly losing some of their customers – or all their customers if they are an unsuccessful bidder. They will likely oppose the new contracting option. To implement a contract requires a number of steps, outlined in the Appendix.²⁶

5. Option 3 – State Legislation for PAYT



A number of states have adopted legislation requiring PAYT. This is clearly the most powerful and universal way to achieve PAYT. In some cases, state legislation has followed the adoption of local ordinances; in other states, it seems the State has “led the charge” for PAYT legislation. State legislation has taken the following forms:

⇒ Strong State PAYT requirements:

- Washington – requires PAYT for all collection overseen by WUTC regulators;
- Minnesota – PAYT one of three strategies negotiated if communities / counties haven’t met 35% or 50% goals
- Iowa has legislation that requires communities not reaching goals (25% by 1994; 50% by 2000) to implement PAYT. It is not clear how aggressively this is being enforced currently.
- Oregon – PAYT is on a list of 8 possible program elements in the law. Communities with populations of 4,000-10,000 must implement 3 of these strategies; communities of 10,000 population or greater must implement 5 of the strategies on the list.²⁷
- California – communities not reaching the state goal pay a heavy fine; PAYT is recognized as a successful program for helping reach the goal.

⇒ Other: Wisconsin initially required communities not reaching goal to implement PAYT (or possibly other strategies). These requirements have been relaxed or apparently deleted from the legislation over time.

Summary of PAYT Legislation in Key States

²⁶ Thanks to assistance from Constance Hornig, Esquire on the preparation of the Model Ordinance language and this summary of RFP steps and schedule. Thanks also to Gary Horton from Western Disposal, Boulder Colorado for assistance on schedules and other information.

²⁷ Or just four strategies if they implement the first 3 on the list.

Summary of Legislation Specifics on legislation in key states follow.

Minnesota: The Statutes have been revised several times. The 2007 version of the statutes require recycling centers for all communities, and require communities with populations at or above 5,000 to implement curbside recycling collecting at least four materials, and other requirements. The statutes also require adoption of goals of 25% for non-metropolitan areas and 35% for metropolitan areas by the end of 1993, and goals of 35% / 50% by end of 1996. The Commissioner is responsible for monitoring progress for each county, and if progress is not achieved, negotiations will commence to implement strategies such as “organized collection, curbside recycling, and volume based rates” (PAYT).

As a consequence of current and past incarnations of the regulations, PAYT is widespread in the state.

Washington: The Washington Utilities and Transportation Commission (WUTC), by statute and rules, encourage rates that intend to encourage recycling. They have historically required PAYT rates. This covers the rates and tariffs overseen by the WUTC, which includes all solid waste collection companies not under contract to a city, and excluding cities providing their own service.

Over the years, PAYT rates are nearly universal in Washington, both for those covered by the WUTC and for Cities and their contracted haulers.

Oregon: Oregon’s Opportunity to Recycle Act (1983) establishes a set of program elements, one of which is PAYT²⁸. This act requires a convenient drop-off recycling location for source separated recyclables in cities of less than 4,000 residents and curbside collection of source separated recyclables in cities with populations of 4,000 or more. The act also includes a public promotion and education requirement. Oregon Senate Bill 66, passed in 1991, expanded the Opportunity to Recycle Act to include containerization of recyclables, and expanded the education requirements. It also required cities with populations of at least 4,000 but less than 10,000 to choose three elements from the list of eight²⁹ to expand their recycling programs. Cities of 10,000 or more may choose to implement the first three elements on the list plus one more, or implement any five elements from the list.

As a consequence, Oregon has very high penetration of PAYT programs.

Iowa: Iowa’s Code 2003 Chapter 455D.3 requires communities that do not reach the diversion goals (25% by 7/1/94; 50% by 7/1/00) to: 1) pay an extra abatement fee / higher per-ton fee to the state; 2)

²⁸ Defined much more specifically than other states as “(h) solid waste collection rates that encourage waste reduction, reuse, and recycling through reduced rates for smaller containers, including at least one rate for a container that is 21 gallons or less in size. Based on the average weight of solid waste disposed per container for containers of different sizes, the rates on a per pound disposed basis shall not decrease with increasing size of containers, nor shall rates per containers serviced be less with additional containers provided.”, ORS 1993-36-501 Recycling 459A.010

²⁹ The list of 8 elements, in order includes: 1) durable recycling containers (i.e. curbside bins); 2) weekly curbside recycling collection, the same day as garbage collection; 3) expanded promotion and education; 4) collection of at least four principal recyclable materials from each multi-family housing complex, having five or more units; 5) an effective residential yard debris collection and composting program; 6) commercial and institutional recycling or source-separated material from firms employing ten or more individuals and occupying 1,000 square feet or more in a single location; 7) expanded recycling depots and expanded education to increase depot use; and 8) residential solid waste collection rates that encourage waste reduction, reuse, and recycling, through reduced rates for smaller containers and a rate which does not decrease on a per pound basis for large containers. SB66 also require that landlords with five or more dwelling units in cities that have implemented multifamily recycling service, provide recycling containers, on-site collection service, and recycling information.



notify the public of the failure to meet goal³⁰, **and** 3) implement PAYT. It is unclear how aggressively these requirements have been enforced.³¹

However, as a consequence of current and past incarnations of the regulations, PAYT is widespread in the state.

5.1 Considerations and Discussion

Based on our analysis of PAYT legislation at the state level,³² the most effective and least complex legislation is one that mandates PAYT clearly and embeds curbside recycling in the costs.

Although the flexibility allowed by the Wisconsin and Iowa legislation³³ is attractive (allowing freedom unless goals aren't reached), they suffer from discussion over the level of diversion that has been reached – measurement methodology can become a central element in the discussion and that is a significant difficulty.³⁴ Given the tradeoffs, it seems most appropriate to follow the lead of energy and utility practices and legislation – all power, most water, and other similar resources are required to be charged by usage. That approach keeps it simple and fair.

Opt-Outs or Options:

Mandatory language is probably the most effective, considering complexities and outcomes (that is the language presented in Appendix C). To make the programs most acceptable and economic, it may be useful to set a “cut off” for the size of community covered. Thus, our only suggestion for a possible “opt-out” from a pure PAYT mandate would be based on population. Allowing communities smaller than 4,000 (as in Oregon) to have more flexibility may achieve the primary goals of the program (high diversion) while minimizing administrative headaches in small communities that may have difficulty assembling larger recycling tonnages that are more attractive to recycling markets.

Although “opting out” of mandatory curbside recycling is a possibility, the alternative is optional recycling, which dramatically undermines the opportunity to recycle – a key element expressed as early as Oregon’s groundbreaking legislation that is now almost 20 years old.³⁵

³⁰ Note that one interviewee indicates that the working requirement for notification is that a county / responsible unit not reaching goal must either write a letter to all residents explaining that they did not reach goal (and why) and/or take out a full page ad in the newspaper with the same content. I am rechecking this interpretation.

³¹ The State is also considering legislation that approaches the issue using a more “environmental-stewardship” approach.

³² Skumatz, Lisa A., Ph.D., “Model Variable Rates / PAYT Legislation: Elements, Options, and Considerations for State Level Legislation in Solid Waste”, SERA Research Report Series 9599-1, revised 2001; Skumatz Economic Research Associates, Superior CO.

³³ We have been studying PAYT legislation in the US for more than 15 years. Some of the research is contained in Skumatz, Lisa A., “Model PAYT / Variable Rates Legislation: Elements, Options, and Considerations for State Level Legislation in Solid Waste”, SERA working paper 9599-1, revised 2001, revised 2008, Skumatz Economic Research Associates, Inc. Superior, CO. and in numerous publications in *Resource Recycling* and other publications.

³⁴ Skumatz, Lisa A. Ph.D., and David Juri Freeman, “Measuring Success in Diversion... “Best Practices”: Alternative Measurement of Recycling and Diversion”, SERA Research Report, Updated May 2007, Skumatz Economic Research Associates, Inc., Superior, CO. Difficulties in measurement are also highlighted in Skumatz, Lisa A., “Achieving 50% in California: Analysis of Recycling, Diversion, and Cost-Effectiveness”, prepared for California Chapters of SWANA, April 1999, Skumatz Economic Research Associates, Superior, CO.

³⁵ Our research shows that if households are charged separately (and significantly) for curbside recycling as an option, only about 5-10% -15% sign up for the program. This is far under the achievement from programs in which the cost is embedded in the trash fees, where 85% and higher participation rates are realized. Skumatz, Lisa A., Ph.D., “Frequently Asked Questions in PAYT”, Skumatz Economic Research Associates, Inc. Superior CO, 2008.

Key Legislative Elements:

The key elements for successful the legislation are identical and parallel to the considerations discussed in Section 3.1, namely:

- Background / safety regulations: incorporating whereas clauses, and basics of truck safety, etc.
- Curbside recycling: making recycling available for all, with costs embedded in trash rates, and “curbside recycling” service levels specified in terms of materials collected, size of containers, frequency of collection.
- Fees and PAYT: specifying container sizes, PAYT rate structure differentials, and similar elements
- Reporting and Audit Authority: assuring the communities and/or the state get regular reports of tonnage progress, and the authority to review haulers for performance
- Education Responsibilities: clarifying the entities responsible for providing education about PAYT and diversion options.

Appendix C includes model legislation.

THAT’S IT – One of the most effective steps your community or State can take NOW to increase recycling!!

Your town will see MUCH more recycling if you undertake these steps. Additional help and guidance is provided below in the tips and end notes – and don’t forget to look on the websites mentioned. Good luck, and feel free to call or email for additional help.

Prepared by Skumatz Economic Research Associates, Inc. (SERA) with partial funding from American Beverage Association. For more PAYT information, tools, fact sheets, talking points, and other materials, see: www.payt.org or www.paytwest.org or www.paytnow.org or contact:

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APPENDIX A – MODEL LOCAL RECYCLING / PAYT ORDINANCE

AN ORDINANCE OF THE [insert name of THE GOVERNING BODY] OF [insert name of LOCAL JURISDICTION³⁶], REGARDING IMPLEMENTATION OF VARIABLE RATES FOR COLLECTION OF CURBSIDE RECYCLABLES BY SERVICE PROVIDERS OPERATING IN THE [insert name of LOCAL JURISDICTION]

ORDINANCE NO. 20XX-x

SECTION 1. [Chapter x] ___ of the [local jurisdiction code] is added as follows:

101. **FINDINGS.** The [GOVERNING BODY[of the]LOCAL JURISDICTION] makes the following findings:

(a) **Disposal of wasted resources.** In 2007, residents and businesses in this [LOCAL JURISDICTION] discarded over _____ tons of materials for disposal, or _____ pounds per capita. (These materials are referred to in this [Chapter], as “municipal solid waste”.) But an estimated ___% of these discarded materials and could be reused, recycled or put to other beneficial use, resulting in significant energy and resource savings.

[(b) **Green house gas or non-beneficial disposal.** An estimated ___% of these discarded materials are disposed in landfills that do *not* collect and burn discharged landfill gases and therefore emits green house gases into the atmosphere. An estimated ___% of those discarded materials are disposed in landfills that collect and burn, but do not *recover* landfill gases for beneficial purposes or generate power. As these landfills reach permitted capacity, it is becoming more difficult and expensive to site, permit and develop new landfills]³⁷.

(c) **Variable Rates: disposal diversion incentive.** Increasingly, state and local governments across the United States and the world require that waste generators pay **variable rates** (or PAYT / Pay as You Throw): charges for refuse and garbage collection services that incrementally increase with disposed refuse and garbage volume (such as 32, 64 or 96 gallon carts) or weight, with lesser or no charges for recyclables and / or organics collection services, to encourage recycling and discourage disposal. Variable rates do not necessarily reflect actual operational costs but rather constitute behavioral incentives (or disincentives) proportionate to the waste they discard.

(d) **Avoided disposal cost component of variable rates.** Diverting materials from disposal saves and reduces disposal costs, both operating and capital. [Landfill capacity is preserved and landfill life extended, deferring siting, design, permitting and construction costs for new cells.] Therefore, the incremental portion of variable rates represents not only the incremental operational and capital costs of collecting, transporting and disposing of more materials, but also an avoided cost of disposing of those diverted materials.

³⁶ Such as “City Council” or “County Board of Supervisors”.

³⁷ Adapt this finding to local disposal options.

(e) **[LOCAL JURISDICTION] responsibility.** The responsibility for protecting the public health and safety through responsible municipal solid waste management has historically been the responsibility of [LOCAL JURISDICTION].

(f) **Fairness of paying for use.** Increasingly, other local governments are funding municipal solid waste management costs through service fees proportionate to use, as is done for water, sewer and electric utilities. Residents and businesses generally perceive that paying for one's own service, and not subsidizing some one else's greater service, is equitable. In order for customers to see the cost savings they realize from discarding less, and recycling more, it is important that municipal solid waste services are itemized on customers' bills, and that billing is relatively frequent (not annual or semi-annual).

102 **[LOCAL JURISDICTION] POLICY.** In order to provide generators of municipal solid waste with the financial incentive to divert municipal solid waste from disposal by source reduction, reuse, recycling or other beneficial use, the [GOVERNING BODY] declares that it is **[LOCAL JURISDICTION]** policy to establish and charge variable customer charges for municipal solid waste collection, transportation and disposal services.

103 **REFUSE AND GARBAGE SERVICE LEVEL OPTIONS.** Every public or private provider of residential refuse and garbage service must offer each of its customers the option to subscribe to different levels of service with different capacities of refuse and garbage containers, such as 32, 64 and 96 gallon carts. For residential customers, one option must be small, the approximate capacity equivalent of a 32 gallon cart. If a customer does not exercise its option, the provider may establish a default level of service, such as a 32 gallon cart.

104 **MANDATORY RECYCLABLES SERVICE.** Every municipal or private provider of residential refuse and garbage service must offer each of its residential customer's curbside recyclables collection service at least every other week, in lidded containers no smaller the 64 gallons capacity. The [insert APPLICABLE ADMINISTRATOR³⁸] may define "residential" for purposes of this Chapter³⁹ and promulgate regulations governing additional recyclables collection service specifications and standards, such as prescribing the types of recyclables that the provider must collect (for example, newspaper, waste paper, cardboard, chipboard / paper board, aluminum and steel / bimetal cans, glass bottles and #1 and #2 plastics).

³⁸ such "Director of Public Works", "Director of Natural Resources" or "Director of Health"

³⁹ or alternatively:

- "Residential" has the meaning provided in INSERT RELEVANT LOCAL CODE CITATION, such as Section XX of the City/County Code" or
- "Residential means "related to detached, single family homes or duplexes, other than condominiums or townhouses."



104. **VARIABLE RATES.** Every provider of residential refuse and garbage collection service must charge variable rates described in Section 101(c) for the corresponding level of service. To the extent permitted by the State constitution and applicable law, the provider may structure its incremental charges on either a cost-basis or incentive-basis.

105. **INCENTIVE STRUCTURE OF VARIABLE RATES**

(a) **Prescribed variable rate increments.**

(1) **Multiples prescribed by service providers.** As a condition of any permit, license or franchise to collect residential recyclable materials or as an obligation under any contract to collect residential recyclables materials⁴⁰, the permittee, licensee, franchisee or contractor must structure the increments of its variable rate at a prescribed multiple of the smallest level of service offered, such as increment equal to 80% or more of the charges for a 32 gallon cart (for example, \$10 for a 32, \$18 for a 64 and \$26 for a 96 gallon cart, respectively).

(2) **Multiples prescribed by [LOCAL JURISDICTION].** The [GOVERNING BODY] by resolution may prescribe a specific multiple applicable to all permittees, licensees, franchisees or contractors uniformly. However, that prescription of a specific multiple may not be construed as regulating or in any way setting the underlying service rate multiplicand, which the provider may establish and set in its sole discretion.

(b) **Remittance to [LOCAL JURISDICTION].** Subject to any preconditions or prohibitions under applicable law, the [LOCAL JURISDICTION] may require a permittee, licensee, franchisee or contractor to remit to the local government the incremental variable rate receipts that the permittee, licensee, franchisee or contractor collects from customers. The local government may establish rules and regulations governing the collection, holding and remittance of the incremental variable rate receipts held by the permittee, licensee, franchisee or contractor prior to remittance, including, without limitation, provision of security bonds.

105. **CUSTOMER NOTICE.** Every public or private provider of residential municipal solid waste collection service must give each of its customers written notice of service options and corresponding variable rate charges upon commencement of service and at least annually thereafter.

106. **IDENTIFICATION OF MUNICIPAL SOLID WASTE SERVICE CHARGES.** If any public or private provider of residential municipal solid waste collection service bills any customer for more than one service (such as municipal solid waste collection and water services), on each bill the

⁴⁰ Or alternatively, implementation merely as a local law . /code requirement: "Every public or private provider of municipal solid waste collection service. . . ."

provider must clearly identify the variable rate charges for municipal solid waste services and itemize them separately from charges for other services.

107 COMBINATION OF REFUSE AND RECYCLABLES COLLECTION CHARGES. On each bill, every public or private residential of municipal solid waste collection service that provides both refuse and recyclables collection service must combine charges for refuse and recyclables collection service and may not itemize them separately, one from the other.

108. BILLING FREQUENCY. Every public or private provider of residential municipal solid waste collection service must bill each of its customers at least quarterly, once every 3 months.

110 REPORTING. Every public or private provider of residential municipal solid waste collection service must keep records of the weight or volume of refuse and garbage, and recyclables that it collects and disposes or diverts. A [LOCAL JURISDICTION] may also require by law or regulation, each provider collecting municipal solid waste in the [LOCAL JURISDICTION]'s jurisdiction to report those weights or volumes to the [LOCAL JURISDICTION] no less than quarterly and in the format that the [LOCAL JURISDICTION] requests.

110. [LOCAL JURISDICTION] COMPLIANCE AUDIT. A [LOCAL JURISDICTION] may audit a municipal solid waste provider's subscription, billing and other relevant records to determine whether or not the provider has complied with the provisions of this Chapter at the provider's office located nearest to the [LOCAL JURISDICTION] during hours that the office is open for business, on at least one week's notice.

109. DEFINITIONS. The following words used in this chapter have the meanings ascribed to them in [INSERT CROSS REFERENCE TO A PROVISION OF ANY EXISTING LAW THAT DEFINES MSW TERMS]: [municipal solid waste, [LOCAL JURISDICTION], refuse, garbage, recyclables, residential, source reduction, disposal, etc.]

APPENDIX B – SCHEDULE / STEPS FOR RFP PROCESS FOR CONTRACTING FOR PAYT SERVICE FROM HAULERS

ITERATIVE PROCESS OF PREPARING CONTRACTS AND RFP--REACHING PARTICIPANT CONSENSUS	Sample timeline ⁴¹
Identify programs and services to be required / meetings with relevant decision-makers / staff; review programs / services / options from other locations; start assembling list of potential RFP recipients (wide distribution to allow potential designation of facilities, etc.)	Week 1-X
Begin drafting RFP and compiling MSW information for proposers	Week 2
Decisions on programs, procurement structure	Week 3
Begin drafting contract(s); contract covers services to be delivered, liquidated damages, responsibilities, etc.	Week 4-5
Distribute first draft of contract to procurement team for comments	Week 6
Discuss comments / questions	Week 7
Incorporate comments	Week 7-8
Distribute second draft of contract to decision-makers / staff and counsel for review-and-comment	Week 8
Identify draft evaluation criteria and weighting and pass / fail criteria; consider options for evaluation process and evaluation committee members	Week 9
Finish first draft of RFP and distribute for review	Week 9-10
Decision-makers and staff submit comment and questions on contract(s); procurement team reads/ responds-- conference calls to discuss / clarify	Weeks 11-12
Incorporate comments into second draft of contract (s)	Weeks 13-14
Submit comment and questions on RFP; procurement team reads/ responds-- conference calls to discuss / clarify	Week 13
Incorporate comments into second draft of RFP	Week 14
Distribute final draft contact(s) to procurement team for final read-through prior to issuance	Week 15
Procurement team reads contract, notes any corrections	Week 16
Distribute final draft RFP to procurement team for final review prior to issuance	Week 16
Final corrections of RFP for distribution to procurement staff for release	Week 17
Procurement staff prepares RFP for on-line release – publishes notice /advertises interstate (RE MRF, disposal designations)	Week 18
RFP, PROPOSERS' QUESTIONS, PARTICIPANTS' CLARIFICATIONS, PROPOSALS, AND EVALUATION	
Community issues RFP and draft contract	Week 19
Contractors submit Expressions of Interest	Week 20
Contractors submit questions and comments on RFP and draft Contract	Week 22
Procurement team summarizes potential proposers' policy / program / business questions for staff / decision-makers	Week 23
Decision-makers / staff / procurement department respond to potential proposers' comments	Week 24
Accepted comments incorporated into RFP, contract(s), procurement team reads through and releases amendments / clarifications – issues final RFP	Week 25
Proposals due	Week 28
Procurement team reviews and evaluates proposals, conducts due diligence, optional interviews and site visits; evaluate price proposals	Week 29
Procurement team meets to discuss evaluations, desirability to issue Best and Final Offer (BAFO) to incorporate acceptable proposers' exceptions and proposers' additional commitments into final agreement	Week 30
POSSIBLE BAFO (Best and Final Offer)	
Draft BAFO; determine desired changes in service, to be requested of proposers	Week 31
Community issues request for BAFO, with Contract reflecting any changes based on proposed contract exceptions / service supplements	Week 32
Contractors submit BAFO	Week 34
FINALIZATION / APPROVAL OF CONTRACT / IMPLEMENTATION	
Procurement team evaluates BAFOs – meet to discuss and direct procurement team	Week 35
Procurement team holds negotiations (such as any contractor exceptions) with top 2 or 3 contractors (limited to e.g. 2 apiece) – reports results / recommendations	Weeks 36 and 37

⁴¹ Certainly this schedule / steps and timeline would differ for each community; this is included only as a guideline.



Recommended contractor submits required contract documentation (insurance, guaranties, etc.) and executes agreement	Week 38-39
Work session or other process with relevant governing body - meet to approve contract (special meetings, if necessary?)	Week 40
Contractor purchases any containers, vehicles and implements its transition plan	As needed
Contractor commences service	As agreed

Sample RFPs are included in Appendix F.

APPENDIX C – MODEL PAYT LEGISLATION FOR THE STATE LEVEL

SENATE / ASSEMBLY BILL #

INTRODUCED BY _____

DATE:

An act to add Sections ____ to the [Public Resources] Code.

The People of the State of _____ do enact as follows:

SECTION 1. [Chapter] ___ of the [Public Resources] Code is added as follows:

101. **LEGISLATIVE FINDINGS.** The Legislature finds, as follows:

LISA, PLEASE DRAFT FINDINGS YOU WOULD LIKE TO MAKE.

(a) **Disposal of wasted resources.** In 2007, residents and businesses in this state discarded over _____ tons of materials for disposal, or _____ pounds per capita. (These materials are referred to in this [Chapter], as “municipal solid waste”.) But an estimated ___% of these discarded materials and could be reused, recycled or put to other beneficial use, resulting in significant energy and resource savings.

(b) **Green house gas or non-beneficial disposal.** An estimated ___% of these discarded materials are disposed in landfills that do *not* collect and burn discharged landfill gases and therefore emit green house gases into the atmosphere. An estimated ___% of those discarded materials are disposed in landfills that collect and burn, but do not *recover* landfill gases for beneficial purposes or generate power. As these landfills reach permitted capacity, it is becoming more difficult and expensive to site, permit and develop new landfills.

(c) **Variable Rates: disposal diversion incentive.** Increasingly, state and local governments across the United States and the world require that waste generators pay **variable rates** (or PAYT / Pay as You Throw): charges for refuse and garbage collection services that incrementally increase with disposed refuse and garbage volume (such as 32, 64 or 96 gallon carts) or weight, with lesser or no charges for recyclables and / or organics collection services, to encourage recycling and discourage disposal. Variable rates do not necessarily reflect actual operational costs but rather constitute behavioral incentives (or disincentives) proportionate to the waste they discard.

(d) **Avoided disposal cost component of variable rates.** Diverting materials from disposal saves and reduces disposal costs, both operating and capital. Landfill capacity is preserved and landfill life extended, deferring siting, design, permitting and construction costs for new cells. Therefore, the incremental portion of variable rates represents not only the incremental operational and capital costs



of collecting, transporting and disposing of more materials, but also an avoided cost of disposing of those diverted materials.

(e) **Local government responsibility.** The responsibility for protecting the public health and safety through responsible municipal solid waste management has historically been the responsibility of local governments. Local governments may fulfill their responsibility by providing municipal solid waste services with municipal employees or through the private sector.

(f) **Fairness of paying for use.** Increasingly, local governments are funding municipal solid waste management costs through service fees proportionate to use, as is done for water, sewer and electric utilities. Residents and businesses generally perceive that paying for one's own service, and not subsidizing someone else's greater service, is equitable. In order for customers to see the cost savings they realize from discarding less, and recycling more, it is important that municipal solid waste services are itemized on customers' bills, and that billing is relatively frequent (not annual or semi-annual).

102 **STATE POLICY.** In order to provide generators of municipal solid waste with the financial incentive to divert municipal solid waste from disposal by source reduction, reuse, recycling or other beneficial use, the Legislature declares that it is State policy to establish and charge variable customer charges for municipal solid waste collection, transportation and disposal services.

103 **REFUSE AND GARBAGE SERVICE LEVEL OPTIONS.** Every public or private provider of refuse and garbage service must offer each of its customers the option to subscribe to different levels of service with different capacities of refuse and garbage containers, such as 32, 64 and 96 gallon carts. For residential customers, one option must be small, the approximate capacity equivalent of a 32 gallon cart. If a customer does not exercise its option, the provider may establish a default level of service, such as a 32 gallon cart.

104 **MANDATORY RECYCLABLES SERVICE.** Every municipal or private provider of refuse and garbage service must offer each of its residential customers curbside recyclables collection service at least every other week, in lidded containers no smaller than the 64 gallons capacity. A local government may define "residential" in its jurisdiction by law or regulation, but if it does not, then "residential" [has the meaning provided in INSERT RELEVANT STATE CITATION, such as Section XX of the Public Health Code] / [means "related to detached, single family homes or duplexes, other than condominiums or townhouses."] A local government may also prescribe the types of recyclables that must be collected (such as newspaper, waste paper, cardboard, chipboard / paper board, aluminum and steel / bimetal cans, glass bottles and #1 and #2 plastics).

104. **VARIABLE RATES.** Every provider of refuse and garbage collection service must charge variable rates described in Section 101(c) for the corresponding level of service. To the extent

permitted by the State constitution, and notwithstanding any other provision of State law or regulation, the provider may structure its incremental charges on either a cost-basis or incentive-basis.

105. INCENTIVE STRUCTURE

(a) **Prescribed variable rate increments.** If a local government permits, licenses, franchises or contracts with a private provider of municipal solid waste collection service, then the local government may require as a condition of the permit, license or franchise or as an obligation under a contract, that the permittee, licensee, franchisee or contractor structure the increments of its variable rate at a prescribed multiple of the smallest level of service offered, such as increment equal to 80% or more of the charges for a 32 gallon cart (for example, \$10 for a 32, \$18 for a 64 and \$26 for a 96 gallon cart, respectively). The local government may not prescribe a specific multiple if the permittee, licensee, franchisee or contractor demonstrates to satisfaction of the governing board of the local government that the prescribed multiple does not recompense the permittee, licensee, franchisee or contractor for its costs of providing services plus reasonable profit.

(b) **Remittance to local government.** If the local government approves, sets or regulates rates and charges for municipal solid waste collection services that are privately provided, the local government may establish an incremental variable rate charge in addition to and above a private provider's approved, set or regulated compensation charges. The local government may require that the provider remit those incremental variable rate charges to the local government. The local government may establish rules and regulations governing the collection, holding and remittance of the incremental variable rate charges, including, without limitation, provision of security bonds.

105. **CUSTOMER NOTICE.** Every public or private provider of municipal solid waste collection service must give each of its customers written notice of service options and corresponding variable rate charges upon commencement of service and at least annually thereafter.

106. **IDENTIFICATION OF MUNICIPAL SOLID WASTE SERVICE CHARGES.** If any public or private provider of municipal solid waste collection service bills any customer for more than one service (such as municipal solid waste collection and water services), on each bill the provider must clearly identify the variable rate charges for municipal solid waste services and itemize them separately from charges for other services.

107 **COMBINATION OF REFUSE AND RECYCLABLES COLLECTION CHARGES.** On each bill, every public or private provider of municipal solid waste collection service that provides both refuse and recyclables collection service must combine charges for refuse and recyclables collection service and may not itemize them separately, one from the other.

108. **BILLING FREQUENCY.** Every public or private provider of municipal solid waste collection service must bill each of its customers at least quarterly, once every 3 months.

110 **REPORTING.** Every public or private provider of municipal solid waste collection service must keep records of the weight or volume of refuse and garbage, and recyclables that it collects and disposes or diverts. A local government may also require by law or regulation, each provider collecting municipal solid waste in the local government’s jurisdiction to report those weights or volumes to the local government no less than quarterly and in the format that the local government requests.

110. **LOCAL GOVERNMENT COMPLIANCE AUDIT.** A local government may audit a municipal solid waste provider’s subscription, billing and other relevant records to determine whether or not the provider has complied with the provisions of this Chapter at the provider’s office located nearest to the local government during hours that the office is open for business, on at least one week’s notice.

109. **DEFINITIONS.** The following words used in this chapter have the meanings ascribed to them in [INSERT CROSS REFERENCE TO A PROVISION OF ANY EXISTING LAW THAT DEFINES MSW TERMS]: [municipal solid waste, local government, refuse, garbage, recyclables, residential, source reduction, disposal, etc.]

APPENDIX D –SAMPLE LOCAL ORDINANCES FOR PAYT

APPENDIX E –SAMPLE STATE LEGISLATION FOR PAYT

APPENDIX F –SAMPLE RFPS FOR RESIDENTIAL COLLECTION WITH PAYT



