

PAYT On the GO...!!!

What Can Our Community Do to Increase Recycling... NOW???

Fact Sheet

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... *A brief description of six very practical steps follows.*

- Ordinances covering:
 - Space for recycling
 - PAYT
 - Districting / contracting / franchising collection
- Establishing a citizen recycling / sustainability committee
- Easy Commercial Programs
- Measurement
- Education
- Apply for Grants

Step 1: Pass Key Ordinances



1. **Ordinances:** Your community can pass ordinances that will directly and quickly increase recycling, but keep a level playing field as well. Find a "champion" on the City / Town council and work on passing one or more of three possible ordinances described below.

- **Ordinance requiring space for recycling:** Pass an ordinance that requires space for recycling that equals the space set aside for trash. This should be designed to cover at least all new commercial construction and significant remodels; many communities also include new and remodeled multifamily buildings in the ordinance.¹ This ordinance removes one of the largest barriers to recycling in the commercial sector - space!
- **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.paytwest.org. If your community does its own collection, the program should be designed to meet the criteria within the ordinance.

¹ Examples of ordinances of this type are found on www.paytwest.org.

- **Ordinance for districting / contracting / franchising:** If your community has multiple haulers providing service, and wants to decrease trash rates, an ordinance establishing districts, franchises, or contracts for collection service can lead to: 1) lower rates because of economies of scale and collection from all households in an area; 2) lower wear and tear on streets from fewer trash trucks plying the same neighborhoods, and 3) "neater" streets, with trash containers out on one day instead of multiple collection days, among other benefits. This type of ordinance can lead to strong benefits for your community; however, it requires political will to pass because 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. Examples of these ordinances and the process are found on www.paytwest.org.

2. Citizen Committee: Establishing a "recycling" or "sustainability" citizen committee in your community (or county) can: 1) provide advice to the elected Council on recycling / sustainability issues; 2) harness the volunteer efforts of interested citizens to increase diversion in the community; 3) provide a "conduit" for new blood for the elected Councils of the future. The requirements for the citizen committee are small - a small budget, a meeting room, and a few hours of staff time - and the benefits to the community can be very large. The community may task them with examining options, setting goals, providing advice on specific programs, or other objectives. You may be surprised at the well-informed, high quality resources you likely have in your community.

**Step 2:
Establish a
Citizen
Committee**



3. Easy Commercial Programs: Attention usually focuses on residential recycling, but on average, commercial waste represents 40-60% of the waste produced in a community. There are several "easy" commercial programs that a community may consider (potentially working with their recycling committee). These can include:

**Step 3: Implement
Easy Commercial
Programs**



- **Small business "sweeps":** volunteers or staff bring small cardboard "deskside" recycling containers, go "door-to-door" to small businesses and drop the containers off, explaining the benefits of recycling and bringing a list of service vendors and various "fact sheets". Door-to-door lowers the cost and administrative "set up" for the program - avoiding the headaches of appointments, call backs, etc.
- **"Green" audit programs / recognition:** There are a number of waste audit "checklists" available on the web that can be adapted to your community, and can be delivered using your staff or citizen committee members that become trained; or you can work with the local energy utility and try to piggyback on an existing energy audit program. Audits can provide practical suggestions for businesses and the visit can provide tailored information or advice for getting past specific barriers at the business. Some communities provide decals or recognition (listing

in newsletter, awards, etc.) for businesses that "pass" the audit or meet specific threshold green requirements for the business sector.

- **Other:** Some communities pass ordinances requiring all businesses to include requirements to recycle in the lease. Several communities require all businesses to file recycling "plans", using checklist forms provided on the community's website.
- **Survey:** One of the most useful exercises is to conduct a commercial sector survey, geared toward understanding current trash practices and relative volumes, what recycling / reduction behaviors are already in place, barriers and needs, and other topics. Helping solve a problem is easier when you understand the situation.²

Call the contacts on www.paytwest.org for more information on these program options.

4. Measurement: A great deal of information on the Community's recycling can be achieved with very little effort. Here's what it takes:

- **"Set out" survey:** Select a random sample of 16-64 homes, randomly distributed around your community, and use staff, volunteers, or temp staff to weigh and observe the garbage and recycling set out for those homes and the following 5 homes.³ Find out the garbage (and recycling) collection days for those houses. You will be visiting those homes and the 5 homes following them with a clipboard and a scale to collect data on trash and recycling "set outs!"⁴

Step 4: Measure Status Quo and Monitor Progress



² Discussions of surveys of this type are found in Skumatz, Lisa A., Ph.D., "Seven Steps to Increase Recycling Cost-Effectively", *MSW Management*, September/October 2002; Skumatz, Lisa A., Ph.D., "Increase diversion cost-effectively - Step 2: Look beyond curbside toward the commercial sector", *Resource Recycling*, August 2002, and other sources.

³ SERA has developed some simple methods you can apply in your town, described in this section. To select random homes, you can enter all addresses into Excel and make a new column and use the function "=rand()". Then copy and save this column as "values" (otherwise the random values change) and sort to select the 16-64 lowest numbers. Another method is to select every "nth" home on a list of addresses in your town or similar effective, but simple, methods - where "N" is your total addresses divided by 16, 45, or 64. The number of homes you select affects the accuracy of your results. 16 homes with the 5 after it leads to a total of 96 measurements; 45 provides 270 households, and 64 measures 383 households. These provide the following accuracy levels for your responses: 96 responses=+/-10% with 95% confidence; 270 measurements provides +/-5% at 90% confidence, and 383 measurements provides +/-5% at 95% confidence. The higher the number (within this range) the better your accuracy at portraying what is happening in your community. The 300 addresses need not EACH be random (and it is impossible to "beat the trash truck" to more than 300 addresses); instead we've picked random "clusters" of homes, and it is possible to "beat the truck" to 50 clusters of houses, and this approach is also random enough for this type of work!

⁴ Gather a set of volunteers, staff, or others, and download the measurement form from www.paytwest.org. You can also make your own form! Make a form with the following columns: address; number of garbage containers; weight of garbage containers; how full garbage containers are (in percentage ranges - 25%, 50%, etc.); number of recycling containers out; weight of recycling containers; eligible materials not set out; other notes. Arm the workers with a reflective safety vest, a laminated badge, a small information sheet describing the project (and noting their information will be kept anonymous, and that the materials are legal to be looked at once they are on the curb - check this in your town), and a clipboard and portable scale. While bathroom scales can work, better are the heavier-duty postal scales available at office supply stores that cost about \$100-\$250 each. They are hardy and weigh consistently. Split up the addresses by area of town and assign them to workers. Walk through the procedures, and send the workers out - alone or in pairs, depending on your town and the number of workers you have - to their addresses. They will need to be at the addresses starting as close to 7am as possible. In towns we've worked in, we usually find we need to go out 2 weeks of collection days, because on the first day we learn what areas are collected really early and go to those early the next week. The "window" during which data can be collected is

- Enter and analyze the data to assess percentage of recycling, education needs (what materials people don't seem to realize they can recycle, or materials they are recycling that they shouldn't), where progress has been made, etc. By tracking this over time⁵, you can monitor the progress in recycling encouraged by your strategies.
- Consider marrying these set out efforts with
 1. A mail or web survey examining current recycling behaviors and awareness, preferences for new programs, willingness to pay for new efforts.⁶ Linking these results with the weight data can be especially powerful in crafting programs and education efforts.
 2. Consider an occasional waste sort, to see what materials still remain in the disposal stream that might be good candidates for "next" programs, or to identify currently eligible materials that households aren't recycling well.⁷

One recommendation - set a community diversion goal (maybe working with your citizen committee), implement some of the strategies suggested in this fact sheet, and measure progress each year!

5. Education: Communities (or counties) can easily develop flyers, brochures, web pages, newsletter articles, magnets, and other educational tools to keep citizens (and businesses) informed about recycling. Good education efforts can increase recycling by 1-3 percentage points (increasing recycling by 5-15%).⁸ This is a great potential area for work by

Step 5: Undertake Education Efforts



usually 7am (after cans are set out in the morning) to about 11am, when too many are collected by the trucks to get much more data. On data collection day, notify your town staff, the hauler, and the police about the project so they can be aware if complaints come in. Our data collection sheets usually include: address, whether recycling & trash were out, number / size / %full for trash containers and weights; number and weights of recycling containers by stream; visual inspection of recyclables that aren't being recycled at the home (key indicators might be recently-added materials); and items they are recycling that they shouldn't (most commonly yogurt containers in many areas). A "notes" section is useful if people are missing containers (indicated by using non-standard containers, etc.). The fullness and weight information provide valuable data in planning PAYT programs and for computing recycling / diversion rates. The last elements (legal / illegal recycling, etc.) can guide educational messages!

⁵ Low cost options are to do this work once per year; better would be collecting the data seasonally to understand what happens during yard waste season, etc. If once a year is the choice, use the same time of year each year.

⁶ Contact the authors / SERA at Skumatz@serainc.com for tips on surveys or a sample of surveys used in other communities.

⁷ Contact the authors / SERA at Skumatz@serainc.com for a description of some simple procedures for waste sorts. To keep it manageable, consider either arranging to have a garbage truck dump a partial load at a safe area at a local transfer station, and sort several hundred pounds. Another option is to use a pickup truck and dump the waste from the first house in each of the randomly selected "set out" homes (select enough to get at least 30 homes) and sort this material. You will need safety glasses, helmets, safe shoes, gloves, and vests (and potentially paper masks) and labeled 5-gallon buckets. Don't sort into more categories than you need for planning purposes! The following categories may be enough: cardboard; current recyclable paper, current recyclable containers, commingled (or separated if you prefer); yard waste; food waste (maybe); some "next" materials you may be considering adding to your program; hazardous materials; and "garbage". Record weights of the 5 gallon buckets throughout the day (we usually conduct the work in about 4 hours), emptying the material into a "done/ remove" pile after weighing it. Adding up the weights will give a good idea of the amount (percent) of recyclables not being recycled, the potential from new materials, etc. This is valuable information for planning, and can be tracked over time to see if your programs or education are helping!

⁸ Skumatz, Lisa A., Ph.D., and John Green, "Evaluating the Impacts of Recycling / Diversion Education Programs - Effective Methods and Optimizing Expenditures", Skumatz Economic Research Associates, Inc, Superior, CO, 2001, and Skumatz and Green, "Evaluating the impact of recycling education", *Resource Recycling*, August 2001.

your citizen committee. Consider translating the pieces into Spanish or other relevant languages. ⁹

6. Apply for Grants: Many states have grant programs, and your staff and citizen committees can apply for grants to support recycling education, help buy containers for recycling or yard waste drop-off programs¹⁰, develop a commercial program, or, perhaps, ***implement PAYT in your community!***

Step 6: Apply for Grants



Tips on Passing a Local PAYT Ordinance – One of the Most Effective Options!! (Part of Step 1)



Your community may want to try to increase recycling, and PAYT brings strong advantages:

- Increases recycling by 50% or more, and increases composting and waste reduction;
- Decreases waste disposed to the landfill by 17%;
- Reduces greenhouse gas emissions and creates jobs;
- Is a fairer system, charging households only for the service they use - like a utility;
- Doesn't increase costs for most cities.

Although a community that uses municipal staff to collect trash may be able to easily implement PAYT, many communities see challenges because households are collected by multiple private haulers.

Happily, there is a very easy and workable option for communities served by private haulers... a hauler PAYT ordinance, passed at the local level. 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 Ordinance

- **Safety Issues:** Requirements for truck and operator safety issues, avoiding leakage, etc.

⁹ Quantitative research has shown that, even with the same types of diversion programs, diversion percentages tend to be lower in areas with high percentages of English as a Second Language (ESL). Education may counteract this effect. Skumatz, Lisa A., "Achieving 50% in California: Analysis of Recycling, Diversion, and Cost-Effectiveness", (1999), for California Chapters of SWANA by Skumatz Economic Research Associates, Inc (SERA), Superior, CO.

¹⁰ Some communities have applied for grants to start yard waste drop-off sites, and the community absorbs the operating costs, including staffing the site (e.g. one community has the site open partial weekend days and one evening for non-winter seasons to improve affordability). This provides a realistic option for yard waste diversion and good service for residents that want to "do the right thing" with their small branches and green materials.

- **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;
 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%¹¹ more in total to the household.¹²
 3. The community should establish auditing rights.
- **Reporting:** 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.
- **Educational responsibilities:** The community may wish to designate minimum requirements for frequency of education about recycling.¹³

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.

¹¹ 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.

¹² 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.

¹³ 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.

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For more PAYT information, tools, fact sheets, talking points, and other materials, see:*

www.paytwest.org

or contact:

Lisa A. Skumatz, Ph.D., Skumatz Economic Research Associates, Inc.

762 Eldorado Drive, Superior, CO 80027

Phone: 303/494-1178 fax: 303/494-1177

Email: Skumatz@serainc.com