

User Pay Program Implementation Guide

Revised December 2005

Association of Municipal
Recycling Coordinators



Stewardship
ONTARIO

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The updated information in the guide is based on survey responses from all of Ontario's user pay municipalities.

The time taken by municipal staff to complete the survey is greatly appreciated.

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1.0 Introduction

From the first program implemented in eastern Ontario in 1991, user pay, or pay as you throw (PAYT) programs have been adopted by well over 100 Ontario municipalities. The AMRC has worked to assist many of these communities - both individually, and with development of its *User Pay Implementation Guide* in 1995. Given the tremendous expansion of these programs and the operational experience gleaned over the past 15 years, it has become necessary to update the guide, providing new insight and lessons learned by PAYT municipalities.

The guide is intended both for those considering implementing a PAYT program (sections 1 to 4), and for those seeking insight on operational aspects of existing programs (sections 5 and 6). The AMRC carried out a detailed survey of all Ontario user pay programs in the summer of 2005. The information provided has been incorporated into the updated guide, and includes a summary of all Ontario PAYT (section 6). Detailed survey responses are available from the AMRC on request. The appendix is an electronic summary of sample bylaws, tenders, vendor agreements and promotional and educational materials.

A note on terminology: the terms “user pay” and “pay as you throw (PAYT)” have been used interchangeably throughout the guide.

Where it was often initially a reaction to crisis (landfill closure, steep price increases to dispose), PAYT has become an established tool to allocate waste costs equitably and to drive waste diversion. It has been shown that a PAYT program is the single most important tool for increasing recycling participation and capture.¹

There are now some 1.5 million households in Ontario that pay directly to dispose of some or all of their waste. Ontario municipalities with PAYT programs now outnumber those without.

1. *User pay/Variable rates—an overview*, Lisa Skumatz, SERA, AMRC User Pay workshop, Milton, Ont. Sept. 29, 2005

1.1 Implementing a pay as you throw (PAYT) program

The conventional property assessment, tax-based system for financing waste management programs does not provide for any direct relationship between the amount paid in taxes and the amount of service for collection, disposal and 3Rs programs provided by the municipality to ratepayers.

Many Ontario municipalities that have moved to PAYT systems have done so to offset cost increases such as those associated with local landfill closures, and to drive participation in 3Rs programs. These municipalities also benefit from avoided waste collection and disposal costs. The following points summarise additional rationales.

A PAYT program makes financial sense

As waste quantities decline:

- Tipping fee expenditures decrease;
- Collection costs may drop as routes can be covered more quickly;
- Extended landfill life reduces hidden waste management costs associated with landfill planning, siting, operation, closure, and maintenance;
- Budgets can be based on costs incurred, rather than avoided costs;
- Residents and businesses can exert more direct control over their costs for collection and disposal of waste;
- Reinforces the principle of “generator pays” - the less waste that is generated, the less that is paid.

From an environmental perspective,

Less waste being generated means:

- More people are composting their organics and returning valuable nutrients to the earth;
- The capture rate of recycled items is increased, so fewer raw materials are consumed;
- Fewer new landfill sites are required;
- Reusable and/or repairable items are more likely to be given to others or donated to charities rather than disposed;
- Purchasing patterns change, for example, to reduce non-recyclable packaging.

A PAYT program makes political sense

Waste management is a prominent public issue:

- With increasing concerns over public spending, a PAYT system has the benefit of making the public aware of the “true cost” of waste management, while providing a viable alternative to control future costs associated with garbage collection and disposal;
- The environment continues to be an important public policy issue and efforts to protect it are more acceptable and better received than ever before;
- The provincial government has set a goal of at 60% waste diversion. A PAYT program is one of the tools that municipalities can use to help achieve this target.

Overall waste reduction and recycling tonnage increase (comparing pre-launch with launch year) are illustrated by the following two charts.
(source: 2005 AMRC user pay program survey).

Figure 1.1 Percentage waste reduction: pre-launch vs. launch year

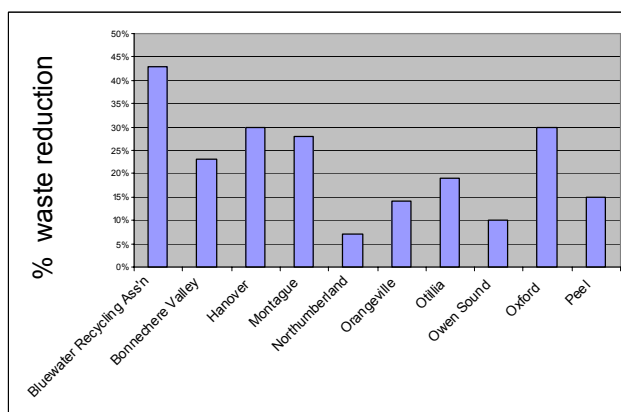
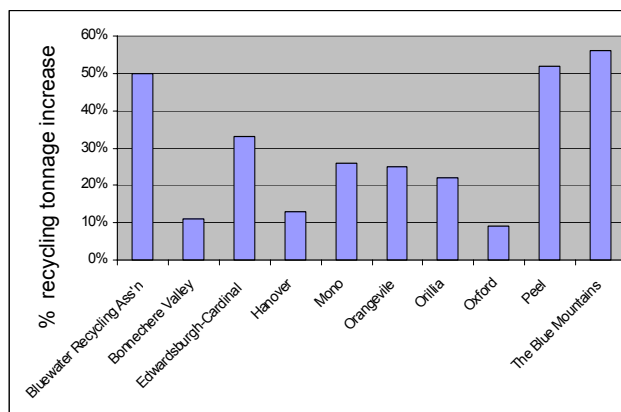


Figure 1.2: Percentage recycling tonnage increase: pre-launch vs. launch year



While many benefits can be derived from implementing a user pay system, there are also challenges or barriers that have been identified as potential “stumbling-blocks” to starting a program. Many of these stumbling blocks can be attributed to a lack of information on the part of groups or

individuals challenging user pay on specific issues. It is important to anticipate these issues and prepare concise responses to avoid misrepresentation of what a user pay system will mean to a community. Some of these challenges and possible responses are given in the following table.

Table 1.1 Challenges to implementing a PAYT program

Challenge	Response
<p>Lack of Political Will</p> <ul style="list-style-type: none"> ➤ Could be the biggest challenge that a municipality faces in implementing a user pay program; ➤ If local politicians do not support user pay, then the program will not be implemented. 	<ul style="list-style-type: none"> ✓ It is critical that politicians are informed about what user pay is and how it will affect their community before they are asked to speak and decide on it in public; ✓ It is also important that politicians are aware of the common arguments used against user pay so as not to be swayed by vocal anti-user pay protesters (remind politicians that the majority is often silent); ✓ Prepare a report detailing the municipality's current waste management infrastructure and the financial impact of a PAYT program; ✓ Invite politicians and staff from user pay communities to address Council.
<p>Equity Issues</p> <ul style="list-style-type: none"> ➤ Low-income households; ➤ Households with many members; ➤ Households with physically challenged and senior members. 	<ul style="list-style-type: none"> ✓ Stress that like all utilities, user pay will give any resident the opportunity to decrease their costs based on their waste reduction - ‘Consumer Save’; ✓ User pay is inherently more fair than the current system. The current system is unfair to small families, singles, seniors, and any one who generates little garbage or makes use of municipal diversion programs.
<p>Social versus Individual Responsibility</p> <ul style="list-style-type: none"> ➤ Individuals are accustomed to municipalities’ providing waste management at no obvious cost. 	<ul style="list-style-type: none"> ✓ Emphasise that user pay is a move to treat waste collection and disposal like a utility; ✓ Like all utilities, the individual is responsible for the amount of waste they produce (or service, garbage collection and disposal, they use); ✓ User pay is more equitable for individuals (i.e., residents who are putting out one bag do not subsidize, through their taxes, those that put out ten bags).
<p>Ineffective Public Consultation</p> <ul style="list-style-type: none"> ➤ Inability to get the user pay message out and sell it to the public. 	<ul style="list-style-type: none"> ✓ Use all methods of informing and consulting with the public that are available (e.g., public meetings, press releases, focus groups, workshops, public steering committees); ✓ Ensure that the press is kept up to date with the status of the user pay program and that the messages they send to the public are correct and clear.
<p>Resistance to Change</p> <ul style="list-style-type: none"> ➤ People become set in their habits; ➤ User pay forces residents to think about an issue they never had to consider before. 	<ul style="list-style-type: none"> ✓ People are ready to accept changes to waste management. For example, people have readily accepted blue boxes, backyard composting and hazardous waste days. User pay is the next logical step; ✓ People will be less resistant to user pay if other waste diversion options (i.e. recycling, composting) are convenient.

1.2 Your current waste management infrastructure

1.2.1 Political infrastructure

One of the first areas to be examined is the current bylaw(s) and allocation of waste management powers to answer the following:

1/ Which level has the power in your municipality to fine: upper or lower tier?

2/ Which level has the power in your municipality to control disposal costs: upper tier or lower tier?

3/ What impact will a PAYT program have if disposal costs are controlled by upper tier?

4/ Municipal garbage bylaw: what does the existing bylaw say with respect to collection/ disposal?

- Basic changes necessary could be, for example, mandatory recycling (or ban on e.g. recyclables, HHW), mandatory organic waste solutions such as ban on grass clippings, leaves, yard waste, or bag limits;
- How are the different waste types defined and handled? For example, categorization of types, including kitchen organics, large garbage/bulky wastes, white goods, construction/ renovation, garden waste, yard material, household waste, blue box items, household hazardous waste, and manufacturing trade waste;
- Who generates? For example, how to deal with households/multi-residential/commercial;
- Where garbage is located and how it should be set out for collection;
- Who is responsible for collection: contractor or municipality?
- Who is responsible for disposal: contractor or municipality?

Sample bylaws from various Ontario PAYT communities can be found in the appendix.

1.2.2 Waste management infrastructure

Your waste management infrastructure needs to be defined in detail. This includes:

a) **Determining true waste management costs**, which include:

- operating costs (collection, hauler, transfer station, landfill);
- capital costs;
- administration;
- recycling;
- composting;
- landfill site closures, expansions or emergency expansions;
- current and future tipping fees;
- 3Rs subsidization;
- current pricing structure (direct/ indirect), and revenue generated by households and IC&I sector.

b) **Itemizing the complete cost of waste management** for inclusion on municipal tax bills if this is not already done (may or may not actually be charged this way). Include amount of subsidization, if any, by business sector;

c) **Determining estimated diversion** and likely absolute savings (tipping and collection savings) and estimate revenue and costs of the program, further work is being carried out on these issues;

d) **Determining the impact of each household** on the total waste management system;

e) **Outlining existing or proposed opportunities** to reduce/reuse/recycle (backyard composting, central leaf and yard waste composting, expanded blue box, HHW program, depots, Zero Waste goals, etc.), and

f) **Ensuring that you have complete baseline data** on current and historical recycling and waste tonnages and costs, garbage bag counts/setouts, household hazardous waste program participation, backyard compost unit distribution and incidence of illegal dumping and follow up.

As well, you will also need to determine how your existing infrastructure will affect, or be affected by, the following program elements:

1. Design of the PAYT system;
2. Development of promotional strategy (public information/education process and materials);
3. Public input to proposed system design (residential, IC&I, haulers);
4. Program launch, and
5. First year information follow up and program review (review of data, impact on other programs, reporting successes to public).

2.0 Designing a Pay as you Throw Program for your Municipality

2.1 Types of PAYT programs

2.1.1 Full PAYT programs

A 'full' user pay program is defined as one in which every individual unit, bag or container set out for collection is paid for directly by the resident (e.g., through the purchase of tags or bags).

Of the 123 PAYT programs currently operating in Ontario, 58 are full and the majority of these (80%) started that way. The remaining 20% evolved from partial programs.

2.1.2 Partial PAYT programs

A 'partial' user pay program is defined as one in which a specific number of units, bags or containers can be set out at no direct cost (i.e., covered in the tax base or garbage rate), but additional units, bags or containers must be paid for directly by the resident (through e.g., the purchase of tags or bags).

Of the 123 PAYT programs currently in Ontario, 65 are partial and 20% have been gradually reducing the number of so-called "free" bags or tags allowed.

The following table outlines some of the relative strengths and weaknesses that have been documented for full versus partial PAYT programs.

Table 2.1 Full vs partial PAYT programs

	Strength	Weakness
Full	<ul style="list-style-type: none"> • Strong and direct economic incentive to reduce waste • Drives more transparent waste management costing • Easier to administer than partial program 	<ul style="list-style-type: none"> • May be tough sell at first • May be seen as "tax grab" if program not well explained or waste portion of taxes doesn't decline sufficiently
Partial	<ul style="list-style-type: none"> • Provides some incentive to reduce waste, varies depending on number of "free" setouts • Can be easier to sell at first and logical precursor to full program • Annual distribution of 'free' tags provides good opportunity for program communications. 	<ul style="list-style-type: none"> • Waste reduction and diversion behaviour variable depending on number of 'free' items allowed • If not properly managed, the move to reduce 'free' items or to full program may be difficult

2.1.3 Utility based systems

Solid waste utilities function in a similar manner to existing municipal water/wastewater utilities. Solid waste costs are removed from the general property tax levy and are replaced with fees based on consumption, or a proxy for consumption, rather than on assessed value of property. The utility functions as a self-sustaining operation, with fees based on full cost-recovery, normally reviewed

annually by Council. This approach has been more common in British Columbia and Alberta and is presently being studied in two Ontario jurisdictions. While it has been suggested that the transparency of costs in a utility-based approach leads to a more efficient system, and may reduce overall waste management system costs, there is some concern that the Municipal Act in Ontario constrains waste utilities. Study is ongoing to resolve this question.

2.1.4. Subscription-based systems

Subscription-based systems are generally utilized by programs that have moved to a utility based approach. Residents pay for waste services based on the size and number of collection containers they use. The collection containers are supplied by the utility and residents are charged an annual flat fee for basic service. They are then charged a set amount per container (prices vary based on container size). Residents decide how many containers they will use.

The City of Vancouver is an example of a variable can subscription program, with rollout to be concluded by January 2006. Garbage container sizes range from 75 to 360 litres with respective approximate annual fees ranging from \$75.00 to \$170.00.

2.2 Options for multi-residential dwellings

Multi-residential housing can pose one of the biggest challenges to municipalities that are implementing a user pay program. This is due to the fact that:

- Some jurisdictions have no direct control over multi-residential housing as it is considered part of the commercial sector, and as such is required to use a private garbage contractor.
- Municipalities generally have no direct contact with tenants. Thus, treating waste collection like a utility can be difficult with the frequent changes in occupancy of a single unit.
- Traditionally, rent has included the costs of services and utilities such as garbage collection, electricity, heating, and water. Individual accountability and any incentive to reduce the use of any services or utility is lost.

There are therefore a number of challenges that may be encountered when trying to include multi-residential buildings in a user pay system. These include:

1. Tenants are not the rate-payers, therefore rate incentives are diluted and indirect;
2. Disposal in common areas allows for anonymity, therefore residents violating waste restrictions cannot necessarily be held accountable;
3. Rate equity is difficult to maintain if different systems are used (cans/bags vs dumpsters). For example, garbage in cans and bags can easily be compacted, thereby decreasing the necessary costs for additional bags, while material in dumpsters is difficult to compact and their large size dictates that there is less possible volume savings. Also difficult to maintain is the equity between multi-residential housing and single-family housing as well as between large and small multi-residential housing. In a multi-residential building, collection only takes place from one location, but tenants may pay the same rate as single-family dwelling residents even though the number of collection stops they require is less. Similarly, small multi-residential buildings could require more stops than larger buildings;
4. Designing rates is complicated if the pricing structure is based on different aspects of collection (i.e., based on number of stops/trucks, amount per unit, volume);
5. Increasing the choice of subscription rates or size of bags increases the complexity and administration costs of the system.

There are several possible approaches for implementing user pay in multi-residential buildings. Although in some instances there might be an initial cost to the owner of the building to retrofit existing garbage chutes and bins, the possible savings to the owner from reduced collection and disposal fees should outweigh any initial costs. The municipality may want to contribute to these retrofits to: (1) offset future costs to the municipality, (2) generate revenue from the user pay program, and (3) create a good rapport with building owners and superintendents who will be responsible for carrying out the day-to-day operations of the user pay system.

It is crucial that tenants have the means to reduce their waste by being given access to municipal waste diversion programs such as recycling and composting prior to implementing a user pay system.

Initially, most user pay municipalities in Ontario were relatively small and the large scale multi-residential dwelling question had not been an issue. Buildings with several units have been treated the same as single-family dwellings. However, there are now a number of larger user pay municipalities with substantial multi-residential populations. The following case studies illustrate how multi-residential user pay has been handled in these jurisdictions.

Multi-res Case study: City of Orillia

- Partial user pay program started in 1997; tags are mailed to residents annually (currently 40 “free” tags per year; additional tags cost \$1.50);
- 120 apartment buildings (over 2,200 units);
- Smaller apartments tag garbage;
- Larger apartments able to receive steel bins for garbage instead of tags. Tagging garbage is not feasible at these locations; must have 9 or more units. Currently 42 buildings (1,200 units) receiving garbage bin service;
- Calculation of bin size: number of units and number of garbage tags given out determines size of bin: multiply number of units by free tag allotment for year (e.g. 10 unit apartment and 40 tags a year = 400 tags/yr);
 - Assume 1 tag goes on one bag (400 bags/ yr);
 - Assume 6 bags = 1 cubic yards’ worth of space (400 bags/6 bags/ yd³ = 67 yd³/yr);
 - Calculate weekly allotment (67yd³/52 weeks = 1.3 yd³/wk);
 - Smallest bin available = 2 yd³;
 - Therefore entitled to 2 cubic yard bin per week;
- Cost for larger bin: If apartment wants a larger bin, they have to pay for it; extra cost is based on tag price:
- Assume 1yd³ = 6 bags (e.g. if they want to increase their bin size by 2 yd³ per week = 2 yd³ X 6bags/ yd³ = 12 bags; 12 bags X \$1.50/bag = \$18.00/wk;
- Buildings are invoiced monthly = (\$18/wk X 52 wks)/12 = \$78/month for extra 2 yd³;
- No charge is levied for collection & disposal unless they are receiving extra lifts or are over the allowable bin size;
- Effective January 1, 2006, apartments must recycle or their garbage collection service may be suspended for up to 90 days.

Multi-residential Case Study: Toronto Multi-res levy

Toronto City Council has adopted the multi-unit waste reduction levy (June 2005).

- Purpose is to provide a **financial incentive** to reduce waste and recycle more, not to generate revenue.
- Levy to be initiated on July 1, 2006 (mock billing from Jan/06 to June/06).
- Levy applies to apartments, condominiums, town homes, and co-operatives.

Each building is given a fixed amount of no-charge waste volume based on the amount of waste the building should produce if it were to recover recyclables on par with single family homes — about 60% of the available Blue and Grey Box materials.

If a building stays within the no-charge waste limit there is **no levy**. If the volume is exceeded, a levy is paid on the excess waste. Billing will be quarterly

City Council has designed the levy to promote **waste reduction**, not a means to generate significant revenue.

Measurement will be done through a metering system that incorporates transponders on each collection bin that electronically send key information (location, date and container volume) to a central database when each collection takes place.

Each building must develop a “**comprehensive recycling improvement plan**”. Plans should include how the building management will improve:

- **Communication** about available recycling systems to tenants/residents;
- The availability of, and access to, **recycling containers** and information;
- The principle is “**recycling should be as easy as garbage disposal.**”

Levy has been set at \$30 per tonne (cost of collection) in excess of the Waste Reduction Target, with an escalating charge to a maximum of \$90 per tonne.

- The levy has been calculated on average to be under \$3 per unit per year – poor recyclers would be charged approx. \$20 per unit per year.
- Levy calculations
 - Cubic yard approximations
 - 1 yd³ = 210 kg of **compacted** waste
 - 1 yd³ = 92 kg of **uncompacted** waste
 - Based on the **collection cost** of \$30/tonne:
 - compacted: 210kg/yd³ x \$30 / tonne = **\$6.30 / yd³**
 - uncompacted: 92 kg/yd³ x \$30 / tonne = **\$2.76 / yd³**.

2.3 Options for the Commercial Sector

Responses to the 2005 survey indicate that a number of municipalities include the industrial, commercial and institutional (IC&I) sector in their user pay programs, generally on the condition that they conform to specific requirements. Of the 55 programs that responded to the survey question on whether IC&I sector waste was included in their user pay program, 45 indicated that it is. Twenty-eight indicated that set out requirements are the same as those for residential. Details on how some of the other programs require set outs are provided in the following chart.

Table 2.1 User pay and IC&I set outs

Program	IC&I Set out
Barrie, City	10 'free' bags per IC&I stop, additional must be tagged
Belleville, City	\$1.00/item; 16 lifts/week; 8 lifts twice weekly
Bonnechere Valley, Twp.	\$1.00/tag or \$5.00/m ³ , no limits
Casselman, Village	Included in program if under five bags
Kawartha Lakes, City	Allowed 4 free bags, all others must be tagged, also 4 cart/week limit on recycling
Killaloe, Hagarty and Richards, Twp.	\$1.00/tag; \$6.00/m ³
Kingston, City	12 'free' bags before tags required.
Marathon, Town	A quarterly rate is charged, based on the time needed to collect: e.g., 5 min=\$260; 5-10 min=\$390, etc.
Mississippi Mills, Town	Provided with 200 tags/yr.
Niagara, Region	Are allowed 7 'free' containers
North Frontenac, Twp.	Charge accounts are set up for local businesses and are then invoiced monthly
Sault Ste Marie, City	Any IC&I sector 4 units or less that can abide by the bag limit is served by the program
Simcoe, County	Small IC&I generators have same limits as residential, unless the individual municipality provides other instructions

2.4 Legislation and Bylaws

Part XII of the *Municipal Act, 2001* provides for municipal authority to impose fees and charges for any activity or service that the municipality provides. The AMRC recommends that the Act be thoroughly reviewed to ensure that each stage of the user pay process conforms to the Act's stipulations. The Municipal Act e-guide on the Ministry of Municipal Affairs and Housing website is a helpful resource:

(http://www.mah.gov.on.ca/userfiles/HTML/nts_1_7746_1.html).

Sections of the Municipal Act relevant to a PAYT programs include:

Part XII Fees and Charges

Services subject to charges

392. A municipality and a local board shall establish and maintain a list for public inspection indicating which of its services and activities and the use of which properties will be subject to fees or charges under this Part and the amount of each fee or charge. 2001, c. 25, s. 392.

Contents of by-law

396. (1) A by-law under this Part may provide for,

- interest charges and other penalties, including the payment of collection costs, for fees and charges that are due and unpaid;
- discounts and other benefits for early payment of fees and charges;
- fees and charges that vary on any basis the municipality or local board considers appropriate and specifies in the by-law, including the level or frequency of the service or activity provided or done, the time of day or of year the service or activity is provided and whether the class of persons paying the fee or charge are residents or non-residents of the municipality;
- different classes of persons and deal with each class in a different way; and
- the exemption, in whole or in part, of any class of persons from all or any part of the by-law. 2001, c. 25, s. 396 (1).

Payment details

(2) A by-law under this Part shall set out when and in what manner,

- the fees and charges are to be paid; and
- the interest charges and other penalties, if any, for fees and charges that are due and unpaid and the discounts and other benefits, if any, for early payment of the fees and charges are to be paid. 2001, c. 25, s. 396 (2).

With respect to fines and waste management, the Act stipulates:

Fines relating to waste

77. (1) A municipality may, in a by-law prohibiting or regulating any matter passed under the “waste management” sphere of jurisdiction, provide that a person who contravenes the by-law is guilty of an offence and is liable,

(a) on a first conviction, to a fine of not more than \$10,000; and

(b) on any subsequent conviction, to a fine of not more than \$25,000. 2001, c. 25, s. 77 (1).

The Minister of Municipal Affairs and Housing continues to have the authority, by regulation, to restrict the application of municipal fee powers. Ontario Regulation 244/02, filed August 20, 2002, maintains current restrictions on the imposition of fees and establishes new procedural rules. The Regulation categorizes fees with varying process rules for each category.

Most municipal fees (e.g., recreational fees, dog tags, parades, photocopies) are subject to the requirement that they be identified on a list of municipal user fees (section 392). Certain fees, including those for waste collection and disposal, are subject to stricter process rules. These include the requirement that municipalities provide public notice of the opportunity to discuss the fees in front of a municipal committee and that the fees be limited to cost-recovery. Municipalities are required to review fees for waste collection and disposal annually – i.e., before the end of the year following the year in which the fees are set.

Relevant sections of the Regulation are excerpted below:

Municipal Act 2001- Fees and Charges Regulation

Waste

4. (1) A municipality or local board does not have the power to impose fees or charges on a person under Part XII of the Act which relate to the management of waste except on a person who, directly or by means of an agent, disposes of the waste,

(a) through a waste collection service or at a waste management facility of the municipality or local board, as the case may be; or

(b) through a waste collection service or at a waste management facility of any other municipality or local board to which the municipality or local board imposing the fees or charges pays costs related to the management of waste.

(2) In subsection (1), the management of waste includes the collection, disposal, reuse and recycling of waste.

(3) Subsection (1) does not prohibit a municipality from imposing fees or charges on a person which relate to the clean up or collection of litter or other waste which has been illegally disposed of on any land.

The Regulation places fees that are often disputed into a category which is subject to more rigorous notice requirements, sunset provisions and cost-recovery limitations:

Conditions re waste, water

12. (1) This section applies only to the power of a municipality or a local board under Part XII of the Act to impose fees or charges for the use of a waste management system, the use of a sewage system or the consumption of water. O. Reg. 244/02, s. 12 (1).

(2) The amount of fees or charges for the use of a waste management system, for the use of a sewage system or the consumption of water shall not exceed the cost of providing the waste management system, the sewage system or the water system, as the case may be. O. Reg. 244/02, s. 12 (2).

(3) A by-law, if not repealed earlier, expires on December 31 of the year following the year in which the by-law was passed. O. Reg. 244/02, s. 12 (3).

(4) Despite subsection (3), in the case of a by-law which was in force on the day this Regulation comes into force, the by-law expires on December 31 of the year following the year in which this Regulation comes into force. O. Reg. 244/02, s. 12 (4).

(5) Amendments to a by-law under Part XII of the Act do not affect the term of the by-law under subsection (3) or (4). O. Reg. 244/02, s. 12 (5).

(6) Before passing a by-law imposing a fee or charge, the municipality or local board, as the case may be, shall,

(a) hold at least one public meeting at which any person who attends has an opportunity to make representation with respect to the matter;

(b) ensure that a minimum of 21 days notice of the public meeting is given, including giving 21 days notice to every person and organization that has, within five years before the day of the public meeting, given the clerk of the municipality or secretary of the local board, as the case may be, a written request for notice of the passing of the by-law containing a return address;

(c) ensure that notice under this section,

(i) sets out the intention of the municipality or local board to pass the by-law and whether the by-law would impose any fee or charge which was not in effect on the day the notice is given or change any fee or charge which was in force on the day the notice is given, and
(ii) sets out the information described in clause (d) or states that the information will be made available at no cost to any member of the public upon request; and
(d) shall make available to the public information setting out,

- (i) a description of the service or activity or other matter for which the fee or charge is being imposed,
 - (ii) an estimate of the costs of providing the waste management system, the sewage system or the water system, in respect of which the fee or charge is being imposed,
 - (iii) the amount of the fee or charge, and
 - (iv) the rationale for imposing the fee or charge.
- O. Reg. 244/02, s. 12 (6).

2.5 Program design measures to discourage illegal dumping

Illegal dumping is often perceived to be the most significant negative result of implementing a user pay program. However, most user pay communities have not found dumping to be as serious a problem as originally anticipated. In fact, many municipalities are concluding that increased incidence of illegal dumping is not necessarily a consequence of user pay programs, but instead, an activity which may increase slightly immediately following program launch and then quickly subside to pre-implementation levels.

The definition of illegal dumping includes the following methods of disposal:

- burning wastes;
- disposing of wastes on other residents' property;
- disposing of wastes on public property or in public waste disposal containers;
- disposing of wastes in commercial or private dumpsters or at one's place of employment;
- transporting wastes to other municipalities for disposal.

2.5.1 Extent of the problem

Despite the attention given to illegal dumping resulting from the implementation of user pay programs, the majority of the programs that responded to the AMRC's 2005 survey indicated that there was no significant, long-term increase in illegal dumping. Of the 34 programs that responded to this question, nine indicated illegal dumping had occurred, generally in the period immediately following program launch, and then tapered off to normal levels. Only two programs indicated an ongoing problem. Both of these municipalities have large rural areas and one, with a significant seasonal influx of tourists, indicated that it is not clear that the increase in littering or illegal dumping is as a result of the PAYT program.

Other studies have determined that the main factors contributing to an increase in illegal dumping are:

1/ Presence of transient or seasonal population: The presence of a sizable transient or seasonal population (e.g., students, tourists, or cottagers) can often be linked with an increase in illegal dumping. It is difficult to effectively communicate with these groups because they are less likely to follow local news and municipal affairs. As a result, information about changes in municipal programs promoted through normal means might not reach them. This is compounded by the confusion seasonal residents may experience over the specifics of the programs in their home municipality and in the local municipality. Pride in the local urban and rural environments, a key incentive for residents to correctly dispose of waste, may not be as strong in the transient population. There is also an increased motivation for seasonal residents to bring waste back to their home municipality to avoid additional costs.

2/ Presence of lower income areas: Lower income areas tend to experience more illegal dumping than other areas of the community. This may be due the perception (or reality) that the pricing system is too expensive.

3/ Presence of rural areas: Rural areas generally tend to experience more illegal dumping than urban areas. The abundance of secluded areas allows offenders to dump with less risk of being caught. Rural residents are also more likely to burn garbage than their urban counterparts.

4/ Perception that disposal pricing system is expensive or unfair: If residents believe that the current pricing system is unfair or too expensive, some will have more incentive to dump illegally. This is especially true in the case of high unit prices; the higher the fee, the more incentive there is to find alternative methods of disposal. If there is a lack of legal alternatives to disposal, the incentive is again increased.

5/ Inadequate access to alternatives to disposal: The lack of legal alternatives to disposal, which include recycling, backyard and municipal composting, reuse centres, and household hazardous waste collection will increase the likelihood of illegal dumping. If not provided with the education and the means to reduce waste, residents may feel that the only way to reduce the cost of their waste is to dispose of it illegally.

6/ Restricted access to landfill: If landfill hours are not convenient for residents wishing to dispose of large quantities of waste, the likelihood of illegal dumping will increase.

2.5.2 Methods of deterring illegal dumping

Municipalities often find it difficult to track and deter illegal dumping because of the clandestine manner in which the offenses take place. Much illegal dumping occurs when residents dispose of their garbage in commercial or private dumpsters. The best measure to prevent this is to lock containers. Most of the remaining offenses occur in secluded areas at unpredictable hours, and as a result it is often difficult to lay the blame on one individual. For this reason, a proactive anti-dumping campaign is likely to be the most effective method of deterring illegal dumping. The key to any campaign should be educating residents about the legal alternatives available to waste disposal and the possible consequences of dumping illegally.

The following is a list of measures that can be taken to deter illegal dumping:

1/ Legislation

Fifty percent of the programs that responded to the question on the survey indicated that they have a bylaw in place. Fines range from \$1,000.00 to \$5,000.00.

Note that enforcement measures taken by survey respondents are detailed in *Section 5.6*.

2/ Promotion and education

Many municipalities produce some form of anti-roadside dumping literature. Others post signs and cameras (sometimes fake) in dumping "hot spots" warning of the fines associated with dumping. One municipality plans to make a public example of the first individual apprehended for illegal dumping. Other promotion and education methods of deterring illegal dumping include:

- Informing residents of existing or expanding waste diversion services offered by the municipality, including the collection schedule for residential blue box collection services and the operating hours of the local landfill;
- Starting a media campaign against illegal dumping. This could include articles in the local newspaper as well as radio and television;
- Starting a "Keep Our Municipality Beautiful" and/or "Adopt a Road" program to instill a sense of pride in the local urban and rural environments;
- Sending letters to those found guilty of illegal dumping, stating the particulars of the event and the possible fines associated with such acts.

3/ Community Involvement

Involving the community in preventing and monitoring illegal dumping activities has two significant effects. First, it decreases the level of acceptance of illegal dumping in the municipality and may increase the amount of "self-policing" that neighbours undertake. In addition, involving the community in clean-up projects increases residents' pride and knowledge of their local environment. Methods of including the community in anti-dumping campaigns comprise:

- Establishing an environmental hot-line for residents to call about illegal dumping sightings;
- Organizing neighbourhood clean-ups;
- Starting an "adopt a road/waterway" program in which citizen's groups volunteer to keep a given stretch of road/water clean;
- Getting volunteers to act as surveillance at dumping hot spots.

4/ Program Modification

Changing the operation of municipal programs can lead to a decrease in illegal dumping. The perception of high or unfair pricing schemes and limited access to legal disposal alternatives often act as incentives to offenders. The following program modifications address these issues:

- Establishing periodic "free" landfill days for residents to bring materials for disposal at a reduced or no charge;
- Holding community-wide goods exchange days;
- Expanding current waste reduction and diversion programs;
- Increasing the operating hours of local landfills, transfer stations and depots.

2.6 Effective internal and external (public) consultation

Although much effort needs to be directed at bringing members of the public into the consultation process, it is critical that internal consultation be carried out to ensure that key staff members understand and support PAYT program goals and ramifications.

2.6.1 Selling user pay to staff and council

Provided that your municipality is not closing a landfill, you may be afforded the luxury of a staged implementation user pay program. It is vital to address the need for an understanding of all of the issues and stakeholder concerns internally early in the process. Gaining support throughout the hierarchy of your organization is the first step towards formal acceptance of a user pay system. The following people and departments in your municipality should be approached:

- Recycling/Environment Committee;
- Senior Management/Treasurer (if you do not get support here, go back to the drawing board);
- Chief Administrative Officer;
- Public Works/Engineering subcommittee;
- Committee of the Whole/Council.

The titles may vary according to your individual municipality or region. It is important to get a commitment in principle before proceeding to Council for approval.

2.6.1.1 Presentation at staff level

A/ Set program objectives first and stick to them.

Examples of objectives are:

- To provide incentive for waste reduction/recycling consistent with diversion objectives;
- To ensure revenue adequacy and stability;
- To avoid or mitigate possible adverse environmental impacts of a user pay system such as illegal dumping or burning;
- To implement and operate the system cost-effectively;
- To address equity issues.

Provide for a round table discussion on some of the advantages and disadvantages of proceeding with a user pay system. Reference the issues highlighted in section 1.1.

Disadvantages:

- Financial impact for low income or large families;
- Could make politicians be perceived as money grabbers;
- Implications if not itemized separately on tax bills.

Advantages:

- Treat system like a utility: the less you use, the less you pay;
- Landfill has closed: new tipping fees/increased transportation costs mean new costs that must be recovered - should it be a general tax levy or a user pay levy?
- Budget constraints/ no increase in municipal taxes;
- By pulling garbage costs out of the main tax levy, user pay is not a new tax levy. Ratepayers have the ability to control their costs by utilizing waste reduction programs;
- Revenues to offset program costs;
- Might allow reduction in taxes;
- Opportunity to address tax unfairness (i.e., business sector subsidy of residential garbage services).

2005 survey highlight – program goals

When asked to list the initial PAYT program goals, the majority response was to drive participation in 3Rs programs and extend landfill life. All indicated that these goals had been achieved.

B/ Contact people who will be affected by change.

This would include: haulers, municipal collection staff, municipal finance department staff. List the problems that could arise and options for handling them. Haulers will be concerned with potential cost increases, loss of revenue, loss of work, establishing where the level of responsibility lies, and enforcement. Make sure that they are on your side - include them in round table discussions. Make sure that they recognize that it is at the staff level only, and that there will be no changes until all input is addressed.

Review the implications for each department in your organisation, reviewing and soliciting feedback on changes to existing procedures and workloads with implementation of a PAYT program.

2.6.2 Community involvement is paramount

It is critical that the public be consulted during the design phase of user pay implementation. Public consultation with respect to fees is mandatory under the Act (refer to section 2.4). Public consultation is a two-way process where representatives from the public work with municipal staff.

Some general background information should be presented at introductory presentations at public consultation meetings. Because the public will be discussing an issue on which they might not have all the necessary and correct information, it is important that the presentations made at the meeting be clear, concise, and consistent. Information that should be presented includes:

- a definition of user pay systems;
- a general description of how user pay systems operate (remember that the details of municipality's program will be determined through public consultation). Discuss how programs in other municipalities work;
- the reasons for implementing a user pay program;
- the potential problems associated with user pay systems. Point out the perceived and real problems, including:
 - the possibility of increased illegal dumping (give examples from other municipalities which show a temporary or no increase in dumping);
 - how to include multi-residential buildings and businesses in the user pay system (mention that this is one of the issues that will be addressed during consultation);
 - the financial aspects of user pay: the costs and savings to both the average householder and the municipality as a whole. Use simple graphs and tables to discuss your calculations. Be sure to explain the graphs and tables in clear language, as some residents will not comprehend diagrams as easily as they do verbal descriptions. Make sure that all the visual aids used in your presentation are easy to read from everywhere in the room. Have copies of your overheads available for those who want them;
 - the next step (the creation of a focus group to determine the finer details of the user pay system, etc.).

Many municipalities use focus groups to clarify and contend with the subtle details of designing and implementing a new program. Focus groups need to be well facilitated and planned (refer to: *Focus Group Report - Optimizing Municipal Blue Box Promotion and Education Programs*, August, 2005, available through the AMRC office). Ideally, these groups should consist of residents representative of the community as a whole. Getting a representative group is often difficult. Using newspaper advertisements to encourage people to become involved is an effective way of gathering a focus group. However, this method will not necessarily generate a group representative of the municipality as the people most likely to join will be those already in support or opposition to the program. Random letters with follow-up phone calls inviting residents to join is more likely to generate a group typical of residents in the community.

Depending on how responsive the community is, twice the number of letters as the number of people desired in the focus group should suffice. If the response is overwhelming, two or more sessions may make focus group meetings more manageable.

2005 survey highlight – program initiation

Survey respondents indicated that the user pay program planning process was initiated by: staff recommendation (20 programs); council (16 programs), waste/environment committee (4 programs), master plan process (3 programs), and public group (2 programs).

2.6.2.1 Identifying allies and opponents

Another approach, possibly better suited to larger communities, is the establishment of a multi-stakeholder steering committee to assist with the planning process. This also ensures community involvement and fosters public education.

It is important that all potential 'allies' and 'opponents' be identified and asked to sit on the committee as this will be the main forum for public debate of the issues surrounding user pay programs. By including both allies and opponents on the committee, you will ensure that all the controversial issues are thoroughly aired and debated in a controlled environment. It will also permit information to be quickly and easily disseminated to the general public through the membership of the various target groups.

In order to identify potential allies and opponents, municipal staff should be aware of the activities of local community groups and their relative stances on the main issues of user pay programs, namely:

- Costs to householders;
- Convenience to householders;
- Impact on small business;
- Impact on current operations;
- Equity in distribution of costs;
- Impact on the environment.

Table 2.2 provides some guidance for identifying issues. The table does not make a distinction be-

tween allies and opponents, but rather tries to identify those groups or associations that might be affected by the issues.

Note that while the media are not included in the table, it is essential to recognize them as stakeholders as well, and include them early and consistently in the planning process. The mandates and opinions of various groups differ from community to community and thus an opponent in one locale may prove to be an ally in another. It will therefore be necessary for each municipality to develop its own community-specific ally and opponent list.

Table 2.2 Identifying allies and opponents

	Cost to householders	Convenience to householders	Impact on small business or business community	Impact on current operations	Equity in distribution of costs	Impact on the environment
Supporting issues	<ul style="list-style-type: none"> ➢ Those who practice 3Rs may pay less under user pay program than under current tax structure ➢ More direct control over costs 	<ul style="list-style-type: none"> ➢ Tags or bags will be sold at convenient locations such as municipal buildings, grocery and variety stores, etc. 	<ul style="list-style-type: none"> ➢ Those who do not have municipal garbage collection could realize a reduction in their tax bills ➢ Potential job/ business opportunities 	<ul style="list-style-type: none"> ➢ Improved fiscal accountability ➢ Possible cost savings in jobs required if automated system ➢ Sustainable waste management system 	<ul style="list-style-type: none"> ➢ Will close or remove gap in disparity in costs between residential and IC&I sector ➢ Those who waste less will pay less 	<ul style="list-style-type: none"> ➢ Encourages waste reduction ➢ Relieves burden on landfills ➢ Generator pays principle
Opposing issues	<ul style="list-style-type: none"> ➢ User pay system might be perceived as double tax ➢ Ability of low income earners to pay ➢ Seen as unfair to large families 	<ul style="list-style-type: none"> ➢ Access to elderly, disabled, etc., depending on point of sale ➢ Theft of tags ➢ Illegal drop-offs of untagged bags in front of households ➢ Potential for counterfeit tags 	<ul style="list-style-type: none"> ➢ Illegal drop-offs in IC&I dumpsters ➢ May be seen as threat to hauler contract: difficulty created for planning, amortizing costs, crews may view as increase in labour and may not want to receive complaints as front line workers 	<ul style="list-style-type: none"> ➢ Possible high initial costs - computer systems, staff reorganization, data collection, promotion ➢ Increased administration costs 	<ul style="list-style-type: none"> ➢ Tax relief for landlords but possibility of no relief in rents for tenants who will pay cost of garbage removal ➢ Core area businesses that receive more frequent service will pay fair share 	<ul style="list-style-type: none"> ➢ Illegal dumping in roadside ditches, neighbouring municipalities with lower tip fees or no user pay
Potential allies and/or opponents	<ul style="list-style-type: none"> ➢ Env'tl. groups ➢ Taxpayer's coalition ➢ Anti-poverty groups ➢ Neighborhood associations ➢ Anti-landfill groups ➢ Senior citizens groups 	<ul style="list-style-type: none"> ➢ Senior citizen's groups ➢ Neighborhood associations ➢ Disability associations 	<ul style="list-style-type: none"> ➢ Small business associations ➢ BIA's ➢ Business development boards ➢ Chambers of Commerce ➢ Waste haulers association 	<ul style="list-style-type: none"> ➢ Politicians/ Council ➢ Senior municipal staff ➢ Municipal employees union ➢ Internal municipal departments ➢ Contractors/ haulers 	<ul style="list-style-type: none"> ➢ Chamber of Commerce ➢ Business development boards ➢ Environmental groups ➢ Taxpayer's coalition ➢ Tenants/Co-op associations 	<ul style="list-style-type: none"> ➢ Environmental groups ➢ Neighbourhood associations ➢ Business development boards ➢ BIA's

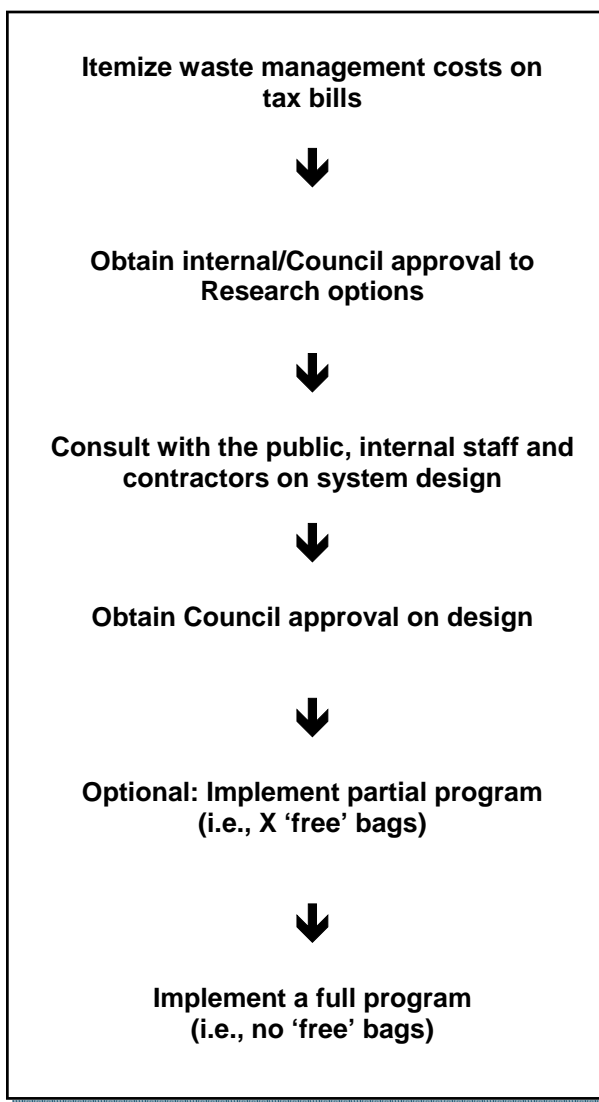
2005 survey highlight – program implementation

The length of time between the decision to implement a PAYT program and program launch ranged from “immediate” to four years with the majority coming in at six months:

- *Killaloe, Hagarty and Richards, Township:* PAYT process initiated by Council; program launch: immediate;
- *Kingston, City:* PAYT process initiated by staff recommendation; program launch: 4.5 months;
- *Mississippi Mills, Township:* PAYT program process initiated by Council and public group; program launch: 6 months;
- *Peel, Region:* PAYT process initiated by staff recommendation; program launch: 4 years.

2.7 Program design – summary

The individual steps in designing a PAYT program are:



3.0 Financial Considerations for Program Design

3.1 Introduction

This section of the User Pay Implementation Guide provides an overview of the current tax-based financing of municipal waste collection and disposal.

In researching the various options necessary to implement a user pay system, municipal staff should have a clear understanding of 1) current program costs, and 2) the costs/revenues associated with a user pay program.

3.1.1 Problems associated with tax-based waste disposal financing

Ontario municipal administrators echo the recurring theme that financing structures for waste collection and disposal need an over-haul. They are calling for a move away from paying for waste management through tax levies, to a more equitable system, like a utility, that is based on direct charges for services rendered.

Most municipalities take a flat percentage from the tax levy to pay for collection and disposal of waste, whether the ratepayers receive services or not. Businesses, therefore, may be subsidizing residential waste disposal through the tax levy, and paying a private hauler to take away waste at the same time.

For the most part, taxpayers are unaware of how much money from their tax bill goes toward paying for garbage collection. Few are aware of how much it actually costs to collect and dispose of their garbage. By not knowing how much it costs for garbage collection, or what they are paying, residents are given little financial incentive to reduce waste. This contrasts sharply with other services like electricity, where residents are billed monthly according to their consumption. By reducing consumption of electricity, residents are rewarded with smaller bills.

In summary, there are three main problems with the current system for payment of municipal curb side garbage collection and disposal costs:

- 1/ Multi-residential buildings and IC&I locations are currently subsidizing municipal residential garbage collection costs in their tax bills.
- 2/ Residents are generally unaware of how much they pay for garbage collection and disposal, and do not know what the real costs for disposal are.
- 3/ The current financing system for municipal garbage collection promotes an 'out of sight, out of mind' attitude that discourages waste reduction at the source.

3.1.2 Methods to recoup disposal costs

In order to solve the problems mentioned above, many municipalities have moved to PAYT systems for financing waste collection and disposal. A key aspect of the user pay system is that each household is billed directly for services so that the costs for the program are clear. There are three main ways that costs for waste disposal can be recouped using this approach:

1/ A fixed-rate billing each month that pays for the average monthly collection and disposal costs.

The fixed-rate billing system is one step away from the common system of taxation to cover garbage collection costs. Residents will pay the true costs for the garbage collection service, and will know what the true costs for the services are. However, there is no incentive for the home owner to reduce the amount of waste being placed at the curb, because the billing rates are fixed.

2/ A fixed-rate billing to cover a basic service level, supported by variable rates based on the weight or volume set out to the curb each collection day.

There are two divisions to the municipal garbage service, collection and disposal. Collection costs are typically less variable than landfill disposal costs because the trucks and staff will still be required to travel all streets on the route and stop in front of homes for garbage. Collection costs will not be reduced a great deal if a resident puts one bag of garbage to the curb instead of three. On the other hand, for every tonne of residential garbage reduction realised, there is a corresponding savings in landfill disposal fees. Therefore, a fixed-rate system for basic collection services, combined with variable rates for the volume of waste being disposed would promote waste reduction. The fixed-rate base would guarantee the municipality enough revenue to cover collection services.

3/ A full, variable-rate billing system that bills households directly for the amount of garbage by volume or weight that is put to the curb.

This is a full, variable-rate billing with no base charge. Residents are billed for each unit of weight or volume (actual weight, or volume in cans/bags).

3.1.3 Long-term financing considerations and cost drivers

Although the initial and short-term costs and revenues can be defined and calculated, it is less straightforward to determine the aspects of various municipal waste reduction programs that will be modified over time and thus affect the long-term financing of the user pay system. Program and operational changes that could affect the long-term financial stability of the user pay system include:

1/ Equipment Costs

The cost of operating and replacing major pieces of equipment may affect the long-term financing of the user pay system. For example, if residents dispose less, it is possible that in the long-term there will be a need for fewer municipally-owned or contractor collection vehicles and thus operational and replacement costs will decrease. However, if residents increase their use of municipal reduction and diversion programs, there may be a resulting increase in the operation and replacement/purchase costs for associated large equipment (i.e., recycling trucks, composting equipment). These latter costs could be offset, however, by the gain in program efficiency for both material collection and processing, by the funding received for the increase in marketed blue box materials, and by increased blue box stewardship funding. Further information is forthcoming on these issues.

2/ Administration Costs

If the user pay system and other municipal programs were to remain static over time, it may be anticipated that administration costs would decrease. However, since most municipal diversion programs evolve over time, administrative costs can be expected to fluctuate. In the AMRC User Pay survey, respondents were specifically asked if additional staff were needed to administer and track the user pay program. The majority of smaller programs indicated that this was not the case, while some of the larger programs did require additional staff. Table 3.1 illustrates the range of increased staffing.

Table 3.1 Staffing to administer and track PAYT program

Program	Administration
Barrie, City	No increase - one person in Finance tracks payment and inventories tags
McNab-Braeside, Twp	One person in Finance to track payments and tag sales
Niagara, Region	One person in Finance
Northumberland, County	Consultant was hired to assist with implementation, and one contract person to assist with increased phone calls in Fall, 1998
Oxford, County	Contract employee in Public Works; Finance has dedicated 0.5 FT equivalent to track inventory and distribute tags
Simcoe, County	Two contract employees to set up bag tag outlets and administer the program

3/ Tipping fees

The implementation of a user pay program will decrease the amount of material going to landfill and thus overall tipping fee revenues will decrease. Problems may occur when municipalities are sending their waste to landfills in other jurisdictions. If total tipping fees paid decrease, the municipality will realise a financial savings.

However, if unit tipping fees are increased to offset declining waste volumes, especially when the budget was set for the lower fee, municipalities will be forced to locate additional funds. This situation is not unique to municipalities with user pay systems. Many municipalities find themselves in a crisis when tipping fees unexpectedly increase. As such, many municipalities maintain a reserve fund. Municipalities with a full user pay system under which residents purchase tags or bags on a regular basis, may find it easier to recoup additional tipping fee costs by increasing the price per bag cost proportional to the increase in the tipping fee.

4/ Extended lifespan of landfill

User pay programs report waste tonnage reductions ranging from 10-50+%. This translates to a savings in landfill space and an extension, in some cases of years, in landfill operations. Savings are realised by delaying the site search and construction process.

5/ Materials allowed for collection or disposal Bans on the material allowed for collection and disposal will affect costs. They will also likely change the long-term equipment operation and replacement costs (i.e., disposal ban on recyclables will increase the cost of operating a curb side blue box program as it is used more) and will decrease the amount of revenue realized from tag/bag sales. Therefore, it is important to analyse the potential financial results of changing the materials allowed for collection and/or disposal prior to implementing the change in order to budget for any short-falls.

As a consequence of these changes to municipal operations and programs, municipalities may have to increase the price charged per bag of waste. This may seem to send a negative message to the residents in the community, especially if the increase is because they have reduced their waste so significantly that program costs are not being covered. Some Ontario municipalities have increased the cost per bag due to increases in tipping fees. The feeling of the residents in these communities was more one of resignation to increasing costs for all goods and services, not that they were being punished for their efforts.

3.2 Administrative aspects

3.2.1 Methods of implementing user pay programs

There are five ways that variable-rate user pay programs can be implemented, whether the base collection rate is incorporated in the fees or not. The five are:

1/ Billing by actual weight of garbage, (weight based system)

Billing by weight of garbage would involve using computerized scales that can weigh garbage as it is being collected and track weights collected at each residence. There is currently no such system operating in Ontario. However, the City of Toronto's Multi-residential Levy system will track waste volumes collected from individual buildings.

2/ Variable rates by size and number of cans or bags, (graduated bag/container)

The second billing system would be based on the volume of bags and cans put to the curb each collection day. The Township of Southgate operates a variation on this system whereby residents set out three carts: one for organics, one for recyclables and one for waste. Collection and processing costs are covered in the basic tax rate. If a household requires an additional cart for waste, however, this cost is billed directly to the resident.

3/ Pre-paid bags based on volume, (metered bag)

The third system would require residents to purchase specially-marked bags for garbage that would be priced high enough to cover program costs. Only pre-paid bags, purchased through outlets like municipal offices, grocery, convenience and hardware stores, would be collected on garbage day. There are a number of bag-based programs in Ontario, including Wellington County, the townships of Edwardsburgh-Cardinal, Bonnechere Valley, East Garafraxa, South Dundas, and Stone Mills, and the Town of Prescott.

4/ Pre-paid stickers or tags to attach to cans or bags (metered tag)

The fourth system would be the sale of stickers or tags that must be placed on bags/cans put to the curb. Bags/cans without proper identification would be left behind by collection crews. The majority of PAYT programs in Ontario use tags.

5/ Billing by volume of subscription container

The fifth method would require residents to subscribe to the number and size of containers they estimate they need. Additional amounts of refuse

could be paid for with a bag or tag. There are currently no such programs in Ontario.

3.2.2 Cost/benefit variables of a PAYT program

Some of the financial savings that may result from the implementation of a user pay program are due to the decrease in the amount of waste produced. This can in turn affect collection activities and costs as follows:

- Less time per stop as average volume declines;
- Fewer trips per day to the landfill/transfer station;
- Reduced collection frequency, and
- Reduced waste requiring disposal.

3.2.2.1 Collection

Savings in collection costs result from the lower amount of labour and equipment that may be required. The type and amount of savings depend upon a municipality's waste collection arrangements.

Potential savings to municipal collection programs include:

- Reductions in overtime pay and temporary labour;
- Opportunity to transfer workers to other areas of municipal works or administration;
- Equipment costs reduced to fewer hours of operation: trucks last longer, fuel, oil, and other operational costs reduced; labour costs associated with maintenance reduced.

Potential savings to contracted collection programs vary depending on the terms of the contract for example, if the contract is:

- One hundred percent variable by tonnage, there is an excellent avoided cost opportunity. However, since the contractor would be subject to a higher fixed-cost risk, a higher payment would be likely be required, or
- Variable by tonnage and total number of stops, with tonnage and number of stops used in determining rate. This allows for reduced cost to the municipality due to volume reduction and there is less risk to the contractor as in the case above, or
- 0% variable by tonnage - does not allow for collection savings based on volume reduction.

3.2.2.2 Disposal

The majority of avoidable costs of waste collection and disposal programs are the variable costs associated with disposing solid waste. By not disposing of one tonne of waste, a municipality receives financial benefits equal to the variable cost of disposing of that waste. The following are the main categories of variable costs:

- Transfer station costs (partially variable);
- Hauling costs (partially variable);
- Current tipping fee (usually entirely variable). If the tipping fee funds 3Rs programs, then as waste reduction is achieved, funding for 3Rs programs declines and the greater the pressure will be to increase the tipping fee, negating the tipping fee savings from reduced tonnages;
- Future tipping fees, after current landfill is full (entirely variable);
- Landfill closure and re-siting: financial and environmental costs (entirely variable).

3.2.2.3 Recycling

Results from the AMRC's 2005 survey indicate that recycling tonnage following launch of a PAYT program can increase by as much as 50%. The potential for program cost increases as a result have been discussed in section 3.1.3, and the cost savings or offsets include:

- Increased revenues on tonnage marketed if municipality retains revenues (variable);
- Unit processing cost decrease with higher throughput (partially variable);
- Increased blue box stewardship funding received (variable).

3.3 Determining the unit cost (bag/tag)

This is a critical exercise in analysing current system costs and planning for the changes that will occur under a PAYT program (i.e., waste reduction, increase in waste diversion activities).

2005 survey highlights – unit prices

Based on the results of the AMRC's 2005 survey, bag/tag prices range from \$1.00 to \$3.00, with the average being in the \$2.00 per tag or bag range. Twenty-two municipalities indicated that the price had increased since the launch of the program.

There were numerous approaches taken by survey respondents to establish the tag price. For example:

- **Orillia:** (Partial, 40 'free' tags/yr., \$1.50/tag) Based on price of collection and disposal: \$1.50 for 10 kg bag or \$150/tonne: \$50 = collection, \$100 = disposal.
- **Stratford:** (Full, \$1.75/tag) Based on the quantity of solid waste collected currently related to the cost of the collection system.
- **Oxford:** (Full, \$1.00/tag); Based on calculations, (estimated) on potential generation and revenues: \$1.00 was determined to cover cost of garbage collection and disposal.
- **Owen Sound:** (Partial, 20 'free' tags/yr., \$2.00/tag); Calculated that one bag was covered by property tax, plus two more cost \$2.00.

Others based the price on cost to provide service (5), fair price (3), partial cost recovery (3), landfill closure and post closure costs (1), and incentive to recycle (2). Interestingly, the majority (13) indicated that the price was based on comparison and/or discussions with other or neighbouring jurisdictions.

The following are the key steps in establishing a unit fee:

1. Establish the financial goal of your PAYT program. Will the per bag/tag or item fee cover waste collection, waste collection and disposal or waste collection, disposal and 3Rs costs?

2. Analyse your waste management budget and system costs. Itemise per household and per tonne costs for waste collection, disposal and 3Rs programs.

3. Determine current garbage set out rates. The average number of bags set out per household per collection. If this is not known, it can be determined through a short-term study of the garbage habits of the residents in the area in which the PAYT program will be operating or from landfill records if volume rather than weight-based records are kept. Determine average bag weight (keeping in mind that average bag weights in a PAYT program will increase over pre-implementation weights).

4. Explore various waste reduction scenarios. Use a range of unit fees (e.g., \$1.00, \$2.00, \$2.50, etc.) For example, if the current set out is 1.5 bags per household per week, do calculations based on a reduction to 1.2, 1, 0.75 and 0.5 bags. Keep in mind that the proposed PAYT program (partial vs full) will have an impact on set out reductions and revenues. Note also that per bag weights will increase.

The rationale for separating the system savings into revenue based on per bag estimates and tipping savings based on total tonnage diverted is illustrated by the following. If the cost of a bag is roughly equal to the tipping fee, then any variation in numbers tends to cancel itself out. For example, if tipping is \$100.00/tonne, this then works out to \$0.10/kg or \$1.00 for the average green garbage bag (10 kg). If diversion is better than expected, revenue falls, but tipping charges fall at the same rate. Similarly, if diversion efforts are not as successful, tipping will go up, but so will revenue from the sale of tags or bags. By roughly cancelling each other out, the waste management budget will be relatively stable - an important factor in the planning as well as the credibility of the program.

2005 survey highlights – variable unit prices

A number of programs indicated that they have a range of tag, bag or item prices depending on size, for example:

- **Newmarket:** (Partial, tag), 3 'free' items/set out) \$2.20/tag; \$11.00 for large item tag;
- **Prescott:** (Full, bag), \$0.75 for small plastic bag; \$1.25 for large plastic bag and \$1.75 for large paper bag.
- **Southgate:** (Partial, one 'free' waste cart per set out), \$7.00 for 240L cart; \$10.00 for 360L cart.
- **Stratford:** (Full, tag), 85 L bag=1 tag; 128 L can=1 tag; 129-130 L=2 tags; 241-360 L=3 tags.
- **Wellington:** (Full, bag) \$1.75 for large bag; \$1.00 for small bag.

The following table illustrates the range of revenue offsets for a sample of PAYT programs.

Table 3.2 Tag/Bag revenue offsets

Program	2004 Tag Revenues	Revenues offset:
Brockville, City	\$109,101 (regular and large item tags)	49% of waste collection costs (includes large item collection)
Kawartha Lakes, City	\$45,684	Portion of total waste management costs
Orillia, City	\$103,980	11.3% of per household waste collection + disposal costs
Oxford, County	\$1,756,255	2004 garbage collection and disposal costs
Peel, Region	\$281,000	General revenue fund, drawn on for waste related costs.

In addition to cash based user pay programs, the AMRC survey uncovered three programs that encourage residents to "pay" for their waste by recycling. Residents in the Townships of Tay Valley, North Frontenac and Addington Highlands may dispose of waste at the township landfills at no direct cost provided they bring in an equivalent volume of recyclables at the same time. Otherwise, they must purchase tags.

4.0 Promotion and Education

4.1 Program launch

The public education and promotion campaign is arguably THE most important element of a user pay program. Because old habits die hard and there will likely be much public opposition to change of any kind, it is imperative that residents be properly educated on all of the aspects of a user pay system, as well as opportunities to reduce waste well in advance of the program launch.

Municipal coordinators are well aware of the need for consistent and ongoing promotion and education to reinforce participation in waste diversion programs. User pay programs require that organised information be made available in advance of launch dates, and that there are adequate resources allocated to dealing with what will amount to a customer service approach to residents' inquiries and concerns. Ensure that front line staff - those fielding many of the questions and calls - are well versed on the issues and arguments of the program. Some ideas for program launch include:

- Have a waste reduction target to meet – this could be by total municipal population or by household;
- Set up a friendly competition with another municipality;
- Tie in with other waste reduction programs such as blue box.

As noted earlier, launching the user pay program can be carried out like the launch of other 3Rs programs and can use elements from these campaigns in similar ways. Options include:

- Press releases;
- Local broadcast media coverage of press conference/information sessions;
- Pamphlets delivered door to door (may be included with 'free' stickers if partial system implemented, however delivering tags door-to-door may cause problems with "missing" tags);
- Tie in with other events such as Waste Reduction or Environment Weeks.

The following are examples of some of the approaches taken in Ontario municipalities:

2005 survey highlight—program launch

The launch of Kawartha Lakes PAYT program coincided with the start of a new recycling contract that saw an expanded list of blue box materials and the addition of a green box for fibre collection (alternating collection weeks for fibres/containers). A series of newspaper ads and fluorescent billboard signs were used to advise residents of an upcoming information insert in their local paper. The insert was a comprehensive environmental services guide that provided information on the PAYT program, the new green box, collection calendar and other waste management/diversion services.

Radio ads were also used. Despite this information blitz, Kawartha Lakes found that they had to do a second and third printing of the guides. It is possible that residents didn't pay sufficient attention to them when they were first received and needed to request additional copies. The city now uses a distribution company that does addressed bulk mailing to distribute the annual program information. Kawartha Lakes also has a very high seasonal population and mails information to the permanent residence of each cottager.

2005 survey highlight—program launch

The two local papers in the Town of The Blue Mountains carried articles on the user pay program for a month prior to launch. Staff at the town were able to work with the papers to ensure that reporting was clear and that program coverage was accurate. Program launch coincided with the implementation of curb side blue box collection. Blue boxes and brochures explaining the new program were distributed door to door three weeks before program launch. Information was also sent to households through mass mailings.

Displays were set up in the local library one to two months before program launch and paid print ads were placed in the local papers during the same time period. Half way through the first year of the program, a newsletter was mass mailed to residents. The town's website and tax notice mailings are also used to provide information.

4.1.1 Commonly Asked Questions

The following are some of the typical questions and issues raised regarding user pay programs. These can be modified to reflect a municipality's program specifics and used to assist both with in house and public education efforts.

What is a user pay or PAYT program for garbage?

It is a program in which a charge is levied for the pick-up and/or disposal of garbage. It is similar to other services such as utilities whereby the less you use the service, the less you pay.

Is this program unfair to large families?

It's true that the more people in your household, the more you'll have to work at reducing waste. However, the user pay program is no more unfair than other utility services such as hydro or water. In fact, the user pay program is actually more equitable than some other service for which we pay. For example, there are many people without children who are paying school taxes.

Won't this program promote an increase in illegal dumping?

Unlikely. Unfortunately, all municipalities have a certain amount of illegal dumping, even in areas where landfill sites offer free residential disposal. Municipalities that have implemented a user pay program report little of no increase above what is normal for their area. Education, backed up by a provision for bylaw enforcement is recommended to help curb this problem.

Will this program be a burden on low income families?

Most other user pay services such as utilities are based on unsubsidized rates: the less you use them, the less you pay. Under a PAYT program all households have the same opportunity to reduce their waste output. If it is a rental property, the landlord is responsible for maintaining a basic level of garbage service (i.e., providing some tags or bags) if that is either in the lease or is the historic role of the landlord.

The cost of garbage collection has always been included in taxes, so why am I paying extra now?

For a program that allows a certain number of 'free' bags and a user fee for anything over that limit you might respond: Because of rising costs, your tax covers the basic cost of providing a collection and disposal service for <number> of bags/cans/items of garbage. The additional fee covers the cost of pick-up and disposal for each additional bag/can/item.

or

For a program in which residents pay a fee for every bag/can/item of garbage, you might respond: Because of rising costs, your tax covers the basic cost of providing a collection service within the municipality. The additional fee covers the cost of disposing of that garbage. -OR- If you look at the notice which accompanied your <date> municipal tax bill, you will see that garbage collection and disposal are no longer collected in your taxes. This is the reason for the recent decrease.

Shouldn't we get a tax cut to compensate for this extra charge?

In some cases, yes, if the cost of bags/tags covers all program costs. In other cases, no: It costs a certain amount of money to keep personnel and equipment on the road to provide this service. What you are paying for in your taxes is the base amount to provide collection to all households within the community.

What will you do with all the extra money you make?

The rates were established to cover the base cost of collection and/or disposal of garbage, not to make money. If costs should decrease, rates will be adjusted accordingly. -OR- User pay brings in two types of savings to the municipality. The first type is the system or absolute savings resulting from reduced tipping fees/collection costs/landfill life brought about by the reduction in waste generated. These savings benefit everyone. The second type of saving is the revenue generated from the sale of tags. This is a "savings" to the municipality (i.e., revenue that it does not have to collect as taxes) but a cost to residents, although in a more equitable manner than the traditional property tax levy.

What's going to stop me from throwing my garbage out on the road/park/someone's dumpster?

You'd be surprised at how easy it is to reduce waste. In fact, there are many households within our municipality who have already cut their garbage to one bag/can per week, or less. Reducing waste also gives you the satisfaction of knowing that you are doing your part to help solve a growing environmental problem. However, should dumping occur, bylaw enforcement officers, police, and concerned individuals are on the watch for violators and hefty fines are in place for offenders.

4.1.2 Social marketing and the social marketing checklist

Social marketing is an attempt to sell an idea or concept to the public by first changing the public's mindset regarding the issue, and then changing their behaviour. An effective way of doing this involves promoting behaviour change at the community level by utilizing direct contact with residents. This is referred to as community-based social marketing and can be directly related to promoting more environmentally friendly behaviour, particularly the concept of 'pay as you waste'.

The idea of user pay waste collection is usually met with apprehension and criticism. This is due to the many perceived barriers that tend to accompany sustainable behaviour. These barriers may be internal (i.e., lack of knowledge) or they may be external (i.e., structural changes like providing diversion programs) to the public. Community-based social marketing attempts to eliminate these barriers. The barriers tend to be area-specific, so the first step to removing the barriers is identifying them through communication with

the public. Once these barriers are known, a community-specific approach to eliminating them can be established.

Successfully promoting a user pay program will involve using prompts and norms to encourage community participation. Prompts are used to remind residents to take part in sustainable behaviours. With regards to a user pay program, it could mean reminding people to use diversion methods which in turn will reduce the resident's garbage collection costs, or it could mean simply reminding residents through posters, of the financial benefits of a user pay system. Norms are an effective way of promoting sustainable behaviour, specifically "pay as you waste", as long as this behaviour is seen as acceptable, and the rewards (e.g., lower costs for less waste at the curb) or punishments (e.g., higher costs for increased waste at the curb) are present.

The following list for an effective communications campaign is adopted from "An Introduction to Community-Based Social Marketing", with permission from Doug McKenzie-Mohr. Ph.D., July 1996. Examples of promotion and education techniques used by existing user pay programs are provided to illustrate each point.

1/ Ensure that your message is vivid, personal and concrete.

Prior to the launch of its full user pay program, the Town of Kincardine published a chart for residents listing property value ranges (e.g. \$110,000 to \$120,000, \$120,000 to \$130,000, etc.) and the annual amount allocated for garbage collection and disposal based on each property value range. Naturally, the higher the property value, the greater was the amount allocated for waste management costs - regardless of how many bags of garbage each resident set out. This was then contrasted with the proposed user pay system in which costs to property owners were based solely on system use - i.e., the number of bags set out for collection.

2/ *Have your message delivered by someone who is credible with the audience you are trying to reach.*

Many municipalities use public meetings and open houses as one of the means of introducing the concept of user fees for garbage collection, and assessing the initial public interest and reaction to them. Invited speakers can include residents, staff, and contractors from nearby user pay communities that are similar in size/demographics to your own who can address questions and issues from their own experience. Note that some of the strongest advocates of a PAYT program can be residents who have made the transition in their own communities. You may wish to consider contacting a neighbouring PAYT municipality to find out if they can suggest one or two of their own residents to assist at your public meeting.

3/ *Ensure that you are familiar with the attitudes of your intended audience, so that the message is not too extreme.*

Public meetings and open houses have been used as opportunities to distribute brief surveys to assess their knowledge of the issues and their support of proposed changes. This approach has been supplemented in some cases by surveys mailed out with tax bills. Door-to-door surveys and focus groups can also be used to assess public awareness.

A number of communities have organized steering committees comprised of local residents, business owners, municipal staff, and politicians to explore the local issues related to user fees, and in some cases, make recommendations for the type of system that should be implemented. This provides an opportunity for gauging public opinion and awareness on user fees, and can provide important community feedback on the scope of the message you should be delivering.

4/ *If you use a "fear appeal" (for example, "local landfill is set to close in six months, costs to ship garbage to another site will mean that our municipality's waste management costs will triple"), make sure that you couple it with specific suggestions on what actions an individual can take.*

Note: It is also important that residents under-

Every municipality that has implemented unit fees for garbage has reported a significant reduction in the amount of garbage collected and disposed, with an attendant reduction in disposal costs. This is a crucial message for residents to hear, along with advice on how they can reduce their own costs if and when user fees are implemented.

stand what and how they currently pay for waste management. Many municipalities itemise waste management costs on their tax bills, and include articles on current system costs in their newsletters prior to the program launch.

5/ *Use a one-sided or two-sided message depending on the knowledge of your audience regarding this issue.*

A 'two-sided' message could be used to compare and contrast the current tax-based system for handling waste management costs with one based on fees for use. This gives you an opportunity to anticipate and answer some of the commonly-voiced objections and concerns raised with user fees, such as equity, large family size, etc.

6/ *Where possible, use personal contact to deliver your message.*

Prior to program launch, a number of municipalities (e.g., Wellington County, Town of Marathon, City of Kawartha Lakes and Town of Orangeville) used such approaches as displays, speaking engagements and door-to-door delivery of flyers and information on the new program.

4.2 Program support and maintenance

The AMRC's 2005 survey asked respondents about the range of communications tools used to keep residents informed of the program on an ongoing basis following launch. The most commonly used methods include: annual calendars, the municipal website, brochures and newsletters. Additional methods include regular newspaper columns and paid print advertising.

An increasing number of Ontario communities have set up customer service departments and have trained their staff to handle residents' queries and complaints - this underscores the fact that these municipalities recognise waste collection and disposal are purchasable service commodities delivered to their clients for a fee.

For those programs that mail tags to residents annually, the mailing is also taken as an opportunity to keep residents informed of any program changes or requirements. Less frequently cited, but well received by residents, are speaking engagements and displays. These latter provide the important opportunity for one-on-one contact.

Respondents were also asked how or if they track feedback from residents – this can be an important means of identifying potential problems. The responses are summarised in section 5.9.

Another critical step in any education campaign is the evaluation of its effectiveness. This is detailed in *Optimizing Blue Box Promotion and Education Programs: A Workbook for Municipal Waste Management Coordinators*, available from the AMRC office, or through Stewardship Ontario.

5.0 Operational Considerations for User Pay Programs

5.1 Introduction

This section details operational aspects of PAYT programs to assist both with initial program planning and changes to existing programs.

5.2 Full or partial

The decision on whether to implement a full or partial PAYT rests on a number of factors, including:

1/ System financing: It may be decided that your municipality wishes to maintain a portion of waste management system costs on the tax base, thus ensuring that specific fixed costs are covered. A partial PAYT system can accommodate variability in setout quantities with less concern that a dramatic decrease in waste can lead to revenue shortfalls.

2/ Waste diversion and reduction: Conversely, a partial system that provides for a large number of “free” bags or tags (i.e., more than 52 ‘free’ tags or bags per year or more than one ‘free’ bag per setout) may not drive the amount of waste reduction and diversion behaviour that is desired. This is where it is critically important to determine during the planning process what the average bag setout is. If most households are averaging one bag per set out already, a partial program may not be the appropriate approach.

3/ The type of program in surrounding municipalities:

PAYT programs are so widespread now in Ontario that this has become an important factor. The 2005 survey uncovered a number of programs that based their unit price decision on what neighbouring communities had in place. One program in western Ontario found that it ‘lost’ significant volumes of waste when creative householders opted to bring their garbage to work or family members in neighbouring jurisdictions in reaction to a local tag price increase. A full PAYT program in a community that is surrounded by partial programs allowing a number of ‘free’ setouts may find this to be a factor. Program planning needs to take this into account by researching what is going on locally, and determining any program changes planned for the near future. It may be an opportunity to work towards a common program.

4/ Administrative considerations: A full PAYT program requires residents to purchase every tag or bag. Every item set to the curb is clearly identified and identifiable by collection crews. A partial PAYT has two options: 1) allowing the set number of ‘free’ setouts to go to the curb with no tag, requiring those above that number to be tagged, or 2) requiring that all items be tagged, and providing the ‘free’ tags either directly by mail or bulk delivery, or for annual pickup at municipal offices. Both approaches can have operational or administrative challenges. The former can lead to problems with claims that untagged items originally had tags that fell off (complaint calls, follow up with collection crews, etc.). The latter requires an increase in administrative time to provide the ‘free’ tags and track the households that have received them.

5/ Political will and ‘what the market will bear:’

There may be unwillingness on the part of senior staff or councilors to move directly into a full PAYT program. Some 20% of the programs in the 2005 survey began as partial programs and evolved into full ones. A further 20% of the existing partial programs have been gradually reducing the number of ‘free’ setouts over the years. This approach may be an option for those communities that experience significant initial opposition to a PAYT program. If this option is pursued with the intention of moving to a full program, however, it is important to make this fact known to residents at the outset, providing clear timelines and intentions.

5.3 Bag or tag, relative costs/benefits; Bag: clear or opaque; Punch card programs

5.3.1 Tags

The majority of PAYT programs in Ontario use tags. These range from 3.5 to 7 inch (length) by 0.5 to one inch (width) brightly coloured self adhesive strips that can be affixed around the neck or to the body of the garbage bag or item. Tags are inexpensive to purchase (\$0.005 to \$0.07/tag, depending on order size, specs and supplier) and distribute. Some programs have also opted to imprint serial numbers for tracking. There are now dozens of tag suppliers in the province and local printers can also be used.

Without exception, however, the tag based programs post explicit bag or item restrictions to ensure that residents 1) conform to bag or item size limits, and 2) keep within bag or item weight restrictions. The purpose of these restrictions is to eliminate the use of oversized bags and mitigate overstuffing. A sample of these restrictions is outlined in the following table.

Table 5.1 PAYT program container restrictions

Program	Container restrictions
Belleville, City	17 gal or 75 L container; max 50 lb; or 61X61X106 cm box
Fort Frances, Town	Container max: 35.97 gal; 40 lb; Bag: 4.25 cubic feet
Georgina, Town	50 lb max., Bags:30X48", Containers: max of 20X36"
Goderich, Town	80 L , 18 gal; 45 lb
Hanover, Town	50 lb; 36X24"
Kawartha Lakes	24X36", if oversize, then counted as two bags
Marathon, Town	Container must be >77.28 L and <163.39 L; max weight of 40 lb.
Meaford, Munic.	77-125 L; 18 kg.
Mono, Town	26X36" bag or 77L container; max 40 lb.
Muskoka, District	1 m X 0.7 m; max 25 kg.
Newmarket, Town	24X36 in. max 50 lb; larger containers require large item tag
Oxford, County	1 tag for: 76X96 cm bag or container <129L, max 20 kg; 2 tags for larger bags or containers 129-240L, max 20 kg. 3 tags for containers >240L.
Stratford, City	85 L bag=1 tag; 128 L can=1 tag; 129-130 L=2 tags; 241-360 L=3 tags

A few tag based programs have reported attempts to counterfeit the tags or cut them in half. These activities were generally easily spotted by collection crews and curbed.

5.3.2 Bags

Bag-based programs limit residents to the use of bags specified and sold by the municipality (and its vendors), thereby controlling waste volume. Another advantage reported by bag programs is that the bags are clearly identifiable by collection crews. Some bag programs provide for two or more bag sizes, sold at different rates. For example, the Town of Prescott sells three different bags charging \$0.75 for small ones, \$1.25 for large ones and \$1.75 for large paper bags, and the County of Wellington sells two sizes, charging \$1.75 for large bags and \$1.00 for small ones.

Among the issues cited by bag based programs are: storage (one program reported having to use an entire office), and packaging for distribution in specific numbers. There may also be concerns raised by bag suppliers or manufacturers on being eliminated from the local market.

The survey uncovered a few programs that mandate the use of clear bags. The intention is to drive waste diversion by making it much easier to spot recyclable materials in the waste. At least one of these programs reported that residents try to circumvent this by first placing waste in opaque bags and placing the opaque bags inside the clear ones.

Table 5.2 on the following page summarises the relative merits of bags vs. tags.

Table 5.2 Tag vs bag considerations¹

Issue	Tags	Bags
Cost	Cheaper to produce: range of colour, adhesive, serial numbers, quantity	\$0.15 - \$0.18 cents per bag (must be recouped through fees)
Local suppliers	Many more to choose from; direct from manufacturer, distributor	
Time to manufacture	A few days to 2 weeks	6-8 weeks
Storage	Tags take up a lot less room	Need to consider secure storage - lock and key
Distribution	More options including mail, especially if partial user pay when giving 52 or 104 free bags/tags	
Ease of identification		Easy to see on the street, stamp both sides, unique colour
Enforcement		Consistent size, no policing if not in right bag, just gets left, straight forward, no argument (like "tag must have fallen off")
Manipulation		Can't be folded creatively, cut in half, stolen
Counterfeiting		Can't be photocopied
Branding		Reminder everyday about user pay program and need to divert
Tracking		UPC code
Promotion opportunities		Print on sleeve, insert in package

5.3.3 Punch cards

Numerous municipalities with landfill-based PAYT programs use punch cards, typically sold or distributed through municipal offices and at the landfill. These cards generally have either 10 or 25 numbered circles, one of which is punched by the landfill attendant for each bag disposed.



5.3.4 Carts

One Ontario program (the Township of Southgate) operates a cart-based collection program. Households are provided with one cart for each of recyclable, organics and waste materials, the cost for collection of which is covered in taxes. Additional carts for waste are provided as requested. Charges are levied per tip: \$7.00 for a 240 litre cart and \$10.00 for a 360 litre cart. The extra tips are tracked by the collection driver, and households are invoiced bi-monthly.

1. Adapted, with permission, "Bag or Tag," presentation at AMRC User Pay workshop, Sept. 29, 2005, Cathy Wiebe, County of Wellington.

5.4 Bag/Tag distribution

5.4.1 Location

With one exception, all PAYT programs contacted in the 2005 survey distribute tags or bags through their municipal offices. Other non-commercial distribution outlets include libraries, recreation centres, senior's centres, post offices, landfill/transfer sites and operations centres. The majority of programs also make tags or bags available through commercial outlets such as convenience, drug, hardware and grocery stores, gas bars and video stores, typically selected to provide good geographical coverage in the municipality and access to tags when non-commercial outlets are closed.

The number of outlets varies based on 1) size of municipality, 2) availability/willingness of outlets to handle tags, and 3) criteria (if any) for the outlets. A sample of the number and types of outlets is provided in the following table:

Table 5.3 Tag/bag distribution, number and locations

Program	Municipal	Commercial
Barrie, City	4: City Hall, Landfill, Senior's Ctr., Rec. Ctr.	22 retailers: grocery, dept. and hardware
Kawartha Lakes, City	23: 6 service centres, 17 libraries	18: mainly variety stores
Oxford, County	10: Local municipal offices and County office	72: Convenience, grocery and drug stores
Peel, Region	54: municipal facilities, libraries, community centres, CRCs, work yards	3: rural stores
Simcoe, County	24: Municipal offices, landfill sites, transfer stations	130: variety stores, grocery stores, gas stations
Wellington, County	11: all 7 County WM facilities; County admin. office and 3 of 7 munic. offices	44: grocery, variety, drug and hardware stores

One program (Sudbury) provides for online tag purchase. Five programs indicated that tags can be ordered by phone and mailed to residents.

5.4.2 Distribution methods

The majority of programs that responded to this question indicated that tags/bags are delivered to outlets by municipal staff. This is often tied in with the collection of consignment or up front fees for the tags/bags. The second most frequently cited distribution method was having outlets pick up tags at municipal offices. Many programs use both these methods for distribution.

It should be noted that tag/bag distribution has evolved in a number of programs since launch in response to some of the challenges encountered. For example, in a geographically spread out municipality with numerous commercial outlets, the staff time required for delivery has been found to be prohibitive. This has been dealt with in a number of ways:

2005 Survey Highlight - tag distribution

- *City of Barrie*: eliminated staff delivery and now delivers by courier;
- *Township of Bonnechere Valley*: eliminated staff delivery and now requires that vendors pick up tags;
- *City of Kawartha Lakes*: eliminated staff delivery and now requires vendors to pick up tags, for which they are given a 10% discount;
- *County of Oxford*: eliminated staff delivery and maintained courier delivery and pick up by vendors;
- *County of Simcoe*: eliminated staff delivery and maintained courier delivery and pick up by vendors.

5.4.3 Information for tag/bag outlets

It is important that tag and bag outlets be provided with material that 1) conveys the fact that tags or bags are available, and 2) provides (at least) contact information on program basics. Respondents to the 2005 survey indicated that they provide items such as posters, window decals and/or cash register stickers for their vendors. It is also important to provide program information to outlets as they act as the first (and sometimes only) point of contact on the PAYT program.

2005 Survey Highlight – information for tag vendors

In addition to providing tag vendors with copies of its Environmental Services Guide, the City of Kawartha Lakes gives each vendor a flow chart that clearly outlines what type of tag needs to be purchased for specific items (i.e., bags, large items, freon-containing items). See appendix for copy of flow chart.

5.4.4 Tracking

As discussed in section 3.1.3, some programs, particularly those with a large number of tag outlets, have found it necessary to increase staff resources to oversee tag distribution and finances. A workable tracking system ensures that vendor and resident concerns are dealt with in a timely manner, and that tag inventories/revenues are properly maintained. A summary of the approaches taken by some Ontario programs is provided below:

Table 5.4 Tag vendor monitoring

Program	Monitoring activity
Kawartha Lakes, City	Locations checked if complaint received.
Kingston, City	Consignment float increased so that restocking would be every two weeks max., require 2 days notice for replenishment.
Lucan Biddulph, Twp	Record serial numbers of tags.
Marathon, Town	Record and act on complaints from residents.
Merrickville-Wolford, Village	Visit weekly to pick up cash.
Niagara, Region	Region's Finance Dept. sells tags to outlets; no changes to date.
Northumberland, County	Staff update vendors monthly on account status; encourage more outlets to come forward.
Orillia, City	Monitor # tags sold, also track large orders.
Oxford, County	Monthly reports are done on vendors tracking delivery of tags and payment of invoices. Occasionally vendors are surveyed on satisfaction of program operation. Outstanding balances on accounts are tracked and followed up.

5.4.5 Summary: Points to consider:

- 1) Tag/bag outlets should be chosen to ensure adequate hours of access and sufficient locations throughout the municipality. It may be prudent to develop a set of vendor criteria to make sure these goals are met;
- 2) A tracking program should provide mechanisms for following up on residents' and vendors' concerns. Tag sales/revenue accounting should ensure that accurate inventories are maintained;
- 3) Consider staff resources, number of outlets, and geographic area when deciding on methods of tag/bag distribution;
- 4) Ensure that vendors are kept informed of what is required of them, and
- 5) Ensure that vendors are kept supplied with PAYT program education materials.

5.5 Vendor agreements and commissions

Having non municipal vendors will make it more convenient for residents to purchase tags, but it is advisable to have some sort of agreement or letter of understanding with the locations. The agreement should address the responsibilities and administrative responsibilities of both the vendor and municipality. Items that should be addressed include:

- Sale price of tags/bags – sales are GST and PST exempt;
- What the municipality will supply to the vendor (signs, information, receipts, etc.);
- How vendors need to order additional inventory;
- Payment for sales: the policies that the municipality will follow;
- Point of contact for information, questions and disputes;
- Vendor requirements in regards to theft and changes in ownership;
- Cancellation of vendor status.

A vendor agreement provides the background and framework to deal with tag/bag vendors. By outlining the responsibilities and rules up front, problems such as vendors' overcharging for tags/bags or unauthorized vendors can be dealt with in a timely manner.

2005 Survey highlight: Vendor Agreements

Of the 47 programs that responded to this question in the survey, 16 indicated they incorporated vendor agreements into their tag/bag distribution program. Samples of these agreements can be found in the appendix.

Of the 46 programs that responded to this question, 36 indicated that vendors receive a commission on tag or bag sales. Commissions ranged from 2% to 20% of sales with the average in the 10% range. The following provides an example of the range of commissions:

Table 5.5 Vendor agreements and commissions

Program	Bag/tag commission	Vendor agreements
Edwardsburgh-Cardinal, Twp.	\$0.25/bag	No
Kawartha Lakes, City	\$0.20/tag	Yes
Northumberland County	Registered vendors can charge an additional 10% above tag cost if they choose.	Yes
Orangeville, Town	\$0.10/tag	No
Oxford, County	3% of sales: \$0.03/tag	Yes
Peel, Region	\$0.20/tag	Yes
Simcoe, County	\$0.20/tag	Yes
Stratford, City	3%; \$0.05/tag	Yes

5.6 Monitoring and enforcement

PAYT programs use a range of approaches for dealing with improper setouts:

- 1) At the curb, collection crews leave items that don't conform to the PAYT program (i.e., untagged, not in required bags, or in excess of maximum number). Many programs have developed 'Oops' stickers that specify the problem for the resident (see appendix).
- 2) For waste that is illegally dumped, programs have a range of approaches, all dependant on being able to identify the owner of the garbage, but the result is that the offender is charged (at least) with the cost of clean-up. Table 5.6 outlines some of the approaches taken.

Table 5.6 Program monitoring and enforcement

Barrie, City	<ul style="list-style-type: none"> Environmental officer charges property owner for cost of collection, disposal, staff vehicle.
Belleville, City	<ul style="list-style-type: none"> Public Works finds untagged, half tagged or overweight bags and writes a standard letter advising homeowner they are responsible and if PW goes to address to collect, homeowner will be charged for collection and disposal.
Georgina, Town	<ul style="list-style-type: none"> Collection is refused and item stickered for incorrect setouts.
Killaloe, Hagarty and Richards, Twp.	<ul style="list-style-type: none"> If bags are left at waste site, these are inspected for name; letter is sent and OPP is notified; at curb, if there is no tag, bag is not picked up.
Loyalist, Twp.	<ul style="list-style-type: none"> Bylaw, \$5,000 fine; \$1,000 reward for information on illegal dumpers
Morris-Turnberry, Municipality	<ul style="list-style-type: none"> OPP enforce illegal dumping when notified by municipal staff.
North Perth, Municipality	<ul style="list-style-type: none"> Enforcement through bylaw - contractor will not pick up untagged bags; compliance is at 99%+.
Northumberland, County	<ul style="list-style-type: none"> Enforcement of bylaw on a call in basis to the waste hotline or bylaw officer (who is also the education coordinator) and issues warnings and tickets.
Orillia, City	<ul style="list-style-type: none"> Two bylaw officers enforce general waste, other bylaw officers enforce illegal dumping. Generally a verbal or written warning first, if re-offend, then invoiced for inspection, pick up, collection and truck fees.
Owen Sound, City	<ul style="list-style-type: none"> In suburbs: bags are tagged and left behind; Downtown: tagged and Works picks up, invoiced for \$54, if owner identified.
Peel, Region	<ul style="list-style-type: none"> Six bylaw officers, compliance notice issued prior to fine.
Sault Ste Marie	<ul style="list-style-type: none"> Daily monitoring of dumping; bags are opened and residents contacted to clean up their debris.
Stratford, City	<ul style="list-style-type: none"> When garbage is reported as illegally dumped, the Waste Reduction Coordinator goes through bags and finds owner. A warning letter is sent. There are charges that can be laid.
The Blue Mountains, Town	<ul style="list-style-type: none"> Warning letters and personal visits made by manager, with some assistance from bylaw officer for identification of violators. "Oops" sticker system used by contractor and manager.

5.7 Illegal dumping and backyard burning

5.7.1 Economic measures to deter illegal dumping

A common concern regarding implementation of user pay systems is that there will be increases in roadside dumping. Overall, evidence does not suggest a strong cause and effect relationship between a PAYT program and illegal dumping.

The following are economic measures that will help to deter illegal dumping:

- Stiff fines to those caught dumping (municipal bylaws). Fines seem to work best in a hierarchy:
 - Short form bylaw allowing a ticket to be issued for infractions. These can be issued on the spot by a bylaw enforcement officer and do not require an expensive or time consuming court process;
 - Clean-up and fine for repeated infractions. Costs can be added to taxes;
 - Court fine, typically \$3,000 - \$5,000. This process is rarely used, especially if the other avenues are promoted and utilized.

5.7.2 Backyard burning

Like illegal dumping, backyard burning (in burn barrels or open pits) is a practice that is known to occur irrespective of whether there is a user pay system in place. It occurs at residences, cottages and on farms (feed bags and bale wrap).

Much work has been done in this area by groups working under the auspices of the Binational Toxics Strategy (Environment Canada and US Environmental Protection Agency). In a study commissioned by the Canadian Council of Ministers of the Environment (CCME), dioxin and furan emissions from backyard burning were estimated to be 12-22% of the total Canadian emissions of these toxics. Once these compounds become air-borne, they settle over a large area and are ingested by animals as they forage, accumulating in humans who consume the meat, milk and eggs. Other toxic compounds produced by backyard burning are similar to those produced by a burning cigarette, and these are ingested by people in the path of the smoke.

The Great Lakes Trash and Open Burning website (http://www.c2p2online.com/main.php3?session=§ion=137&doc_id=289) is an excellent resource for materials and strategies aimed at discouraging the practice.

What can be done:

1) Education: Many people are unaware of the environmental and health effects of open burning (they've always done it and they're fine...). This is where an education program included with your waste diversion literature can begin. Reinforce the environmental and health messages, and include the fact that they are often wasting valuable resources that would be much better recycled.

2) People need alternatives: Recycling (or composting in the case of yard waste) are the key alternatives and should be emphasised as being the desired approach.

If people are burning because of privacy concerns (personal papers, banking information, etc.), encourage the purchase of shredders and make sure that you provide instruction on setout for the shredded paper. Some programs have considered providing vouchers to encourage people to purchase shredders, in much the same way vouchers have been provided for lawn mower mulching attachments.

Plastic waste can be a tougher issue and in jurisdictions where people are burning plastics that are not accepted in a recycling program, there may be an opportunity to work with agricultural groups (for example) on the alternatives for farm plastic. Since burning plastic has a characteristic smell, the culprit is often easily identified and can be charged under your bylaw.

3) Regulation/bylaws: This may be an option for explicitly discouraging backyard burning. Review your current bylaw to establish its current scope and consider adding the following, if it is not there:

*"All open burning of domestic or residential waste, either household and/or yard material, including garden refuse, is prohibited, where "open burning" means the combustion of material without control of the combustion air and without stack or chimney to vent the emitted products of combustion to the atmosphere. Open burning includes the burning of garden refuse in a domestic incinerator (metal or masonry container) operated outdoors, but it does not include charcoal fires contained within barbecues and hibachis for the purpose of cooking food."*²

2. Model Bylaw for Regulating Residential Backyard Burning, Waste, Air and Climate Change Branch, B.C. Ministry of Water, Land and Air Protection, 1997; <http://www.c2p2online.com/documents/BCModelbylaw.pdf>

5.8 Communications tools

The appendix contains numerous examples of the types of materials used by Ontario PAYT programs.

5.8.1 Launch communications

As noted earlier, conveying information on the launch of a PAYT program can be treated like the launch of other waste diversion initiatives and should incorporate as many options as budgets and time allow. These can range from lower cost options such as displays and speaking engagements, incorporating PAYT program information in existing media such as waste management calendars and tax insert newsletters and public service announcements to paid media campaigns using newspaper and electronic media advertising. Examples of approaches used by different programs are provided below:

Barrie, City	<ul style="list-style-type: none"> • Brochure in community paper (once), displays at special events, newsletter in community paper (once), paid print adverts in daily and community papers twice weekly for 2 months, speaking engagements;
Brockville, City	<ul style="list-style-type: none"> • Articles in local paper, radio - once/week for print, 3/day for 2 weeks for radio; brochures and calendars door to door and PO delivery; display in local mall for one week, speaking engagements, 5-6 times/yr.;
Edwardsburgh Cardinal, Twp.	<ul style="list-style-type: none"> • Local newspaper (once), one bulk mailing of brochures, newsletters handed out daily by landfill attendant for 2 months;
Kingston, City	<ul style="list-style-type: none"> • Paid print advert in daily and weekly papers (4-5), PSA (2-3), 2 public meetings, website;
Marathon. Town	<ul style="list-style-type: none"> • Door to door brochures, 4 times/year; weekly newspaper, 30 second radio ads, PSA on public TV channel;
Mississippi Mills, Town	<ul style="list-style-type: none"> • Weekly column in newspaper, mailed flyers, newsletter, twice/year, paid print adverts, website, Council and public meetings;
N. Frontenac, Twp.	<ul style="list-style-type: none"> • One direct bulk mailing, one public mailing with comment sheets;
Northumberland, County	<ul style="list-style-type: none"> • Articles, brochures, media releases, newsletters, paid radio, 8 speaking engagements;
Oxford, County	<ul style="list-style-type: none"> • Brochure mailed as ad mail 2 months prior to launch, paid print ads in newspapers, one month, and one week before, and 1 week post launch; paid radio spots, as for newspapers, website, complimentary tag distribution;
Sault Ste Marie, City	<ul style="list-style-type: none"> • Two paid print adverts, yearly utility bill inserts, one media release, paid radio and TV ads - 60 spots over 2 weeks, speaking engagements as needed;
Simcoe, County	<ul style="list-style-type: none"> • Calendars mailed annually; 2 media releases in various papers prior to launch, newsletters, paid print adverts, reminder cards left by contractors as required, local TV news broadcasts; - approx 6 stories;
Wellington, County	<ul style="list-style-type: none"> • Door to door brochures, once; weekly newspaper adverts, 1/week for 4 weeks; public meetings: 7 in advance of launch; website.

5.8.2 Ongoing communications

Once launched, PAYT program information can be incorporated into existing waste management communications. Among the most commonly used are annual flyers, calendars, newsletters and the municipal website. Additional options include PSA's, regular newspaper columns or articles, and for partial PAYT programs that distribute 'free' tags annually.

The following 2005 survey excerpts highlight the different communications used by various programs. Survey respondents were asked to list what they used as well as which tools they considered most and least effective. It is worth noting the range here, and the reasons cited for most effective and ineffective.

Table 5.7 PAYT program communications

Program	Communications used	Most effective	Least effective
Barrie, City	6 articles/yr. brochures, annual calendar, 5-6 event displays/yr, 10 paid print adverts/yr., contractors leave stickers as needed	Calendar, as it is functional and includes other waste info	Environmental booklet not functional
Brockville, City	Articles, brochures, pamphlets, paid print adverts	Door to door delivery of brochure/calendar	Many residents do not read small daily paper or listen to local radio
Drummond, North Elmsley, Twp.	Annual brochure, newsletters twice yearly, website	Newsletters/pamphlets, by direct mail	Newspapers - the area is served by too many, ads are overlooked.
Hanover, Town	Annual newsletter	Newsletter, distributed door to door with tags	none given
Huron East, Municipality	Brochures, calendar, website	Door to door flyers, inserts in municipal mailings - provides direct contact with ratepayers	none given
Kawartha Lakes, City	Weekly column, annual calendar, displays at events, one door hanger, speaking engagements on request.	Calendar	none
Marathon, Town	Brochure, monthly paid print ads, monthly PSAs	Radio has had an immediate effect in message delivery	Nothing stands out
Mississippi Mills, Town	Articles, brochure twice/yr, newsletters. PSA's (print and electronic), annual tag mail out	Ads in local papers, website and annual tag mail out	Tax and water bill inserts
Mono, Town	Brochures 3 times/year; one calendar/year	Newsletters/pamphlets, by direct mail	none given
Montague, Twp	Annual newsletter, website	Newsletter- reaches all residents	none given
Niagara, Region	Annual brochure and calendar, newsletters 2-3 times/yr, speaking engagements	Brochures and calendars	none given
North Frontenac, Twp.	One municipal information meeting, progress report in Mayor's semi annual letter	Brochure: Garbage Etiquette Handbook	none given
Northumberland, County	Articles, calendars, door hangers (once), media releases, newsletters, paid print and radio advert, website, speaking engagements	Print adverts in newspapers are the most effective, followed by mail out to all homes/businesses, reach est. 80% of population	Radio ads are very costly, and local station not listened to by majority of residents

Table 5.7 PAYT program communications (continued)

Program	Communications used	Most effective	Least effective
Orangeville, Town	Twice yearly articles, brochures 4 times/yr, annual calendars, paid print adverts	Local newspaper - reaches all hhlds in community	Public information centre - poorly attended
Orillia, City	Bi-annual brochure, occasional paid print adverts and PSA's, annual letter with tags	Pamphlets reduce inquiries; home visits for improper set outs.	none given
Oxford, County	Yearly (or as needed) brochure, yearly calendar, paid print adverts as required, reminder cards as required, website	Brochures - waste management program has been evolving/changing; able to provide information and explain aspects of program	Due to fact that program has been changing, nothing has been ineffective
Sault Ste Marie, City	Articles, brochures, media releases	Radio was the most effective, personal contact for violators is extremely effective	none given
Simcoe, County	Calendars mailed annually; newsletters, paid print adverts, reminder cards left by contractors as required.	Calendars and TV	none given
Stratford, City	Annual calendars, stickers left on cans or bags as required, print psa's in local paper approx every 6 months	Site visits - can explain to residents exact reason waste is left; also now have stickers that can be left on bags	none given
The Blue Mountains, Town	Annual brochure, paid print advertising 2/yr., website year round	Door to door - direct contact with household	Newspaper ads: "no one reads the paper" is the most common public reaction

5.9 Feedback tools

An important element of your PAYT program in general, and your communications program in particular is providing opportunities for resident feedback.

This can be as simple as tracking the number and nature of calls, letters and email queries received, and using this information to adjust what you are doing. Other methods include using formal surveys, public meetings and focus groups. Some examples of tools cited from the 2005 survey include:

- *Brockville, City:* Community wide survey of all city services;
- *Mono, Town:* Surveys;
- *North Frontenac, Twp.:* Feedback opportunities - comment sheets;
- *Northumberland, County:* Telephone or mail surveys, phone calls to the Waste Hotline;
- *Orillia, City:* Surveys, public group has assessed program based on surveys;
- *Oxford, County:* Surveys as part of waste management planning process;
- *Peel, Region:* Focus groups, surveys, feedback opportunities incorporated at mall displays, website inquiries;
- *Wellington, County:* Telephone and mail surveys.

5.10 Waste reduction: before and after program implementation

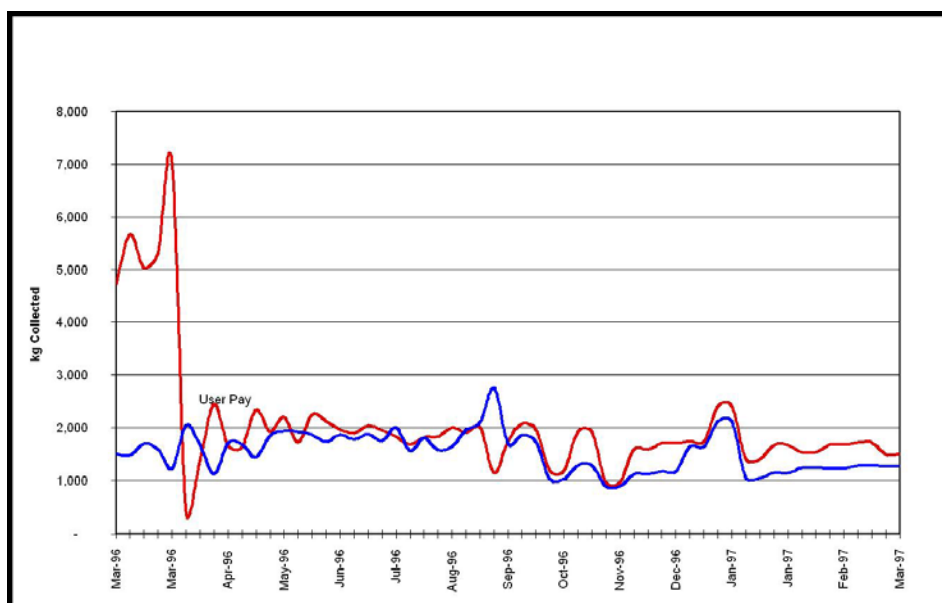
The level of waste reduction that results from the implementation of a PAYT program is dependant on a number of factors, including:

1. Type of program: full vs partial, if partial, number of 'free' items;
2. Scope of recycling program; concurrent addition of new materials;
3. Presence (and promotion) of other diversion programs such as leaf and yard collection/depot; kitchen organics collection/depot; backyard compost unit distribution/promotion, and
4. Presence (and promotion) of reuse/salvage opportunities such as thrift shops, restores, salvage centres, take it back programs.

2005 Survey Highlight – waste reduction
 Of the ten programs that reported on waste tonnages for their pre-launch and PAYT program launch years, the range of percentage waste reduction was 7 to 43%.

The following case study is provided as an example of waste tonnage reduction in two of the municipalities in the Bluewater Recycling Association. A full user pay program was introduced in the village of Hensall in April, 1996. The red line tracks waste tonnage, the blue line recyclables. Note the dramatic decline in waste at launch.

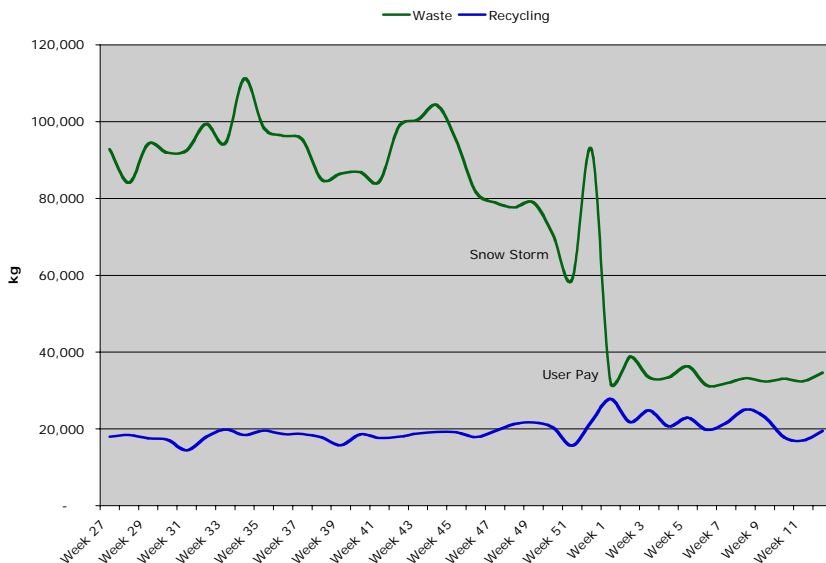
Figure 5.1 Waste and recycling tonnages, village of Hensall (now part of the municipality of Bluewater).



The town of Strathroy, (now part of the township of Strathroy-Caradoc) also in the Bluewater Recycling Association Service Area, launched its

PAYT program on January 3, 2005. Waste tonnage was cut in half.

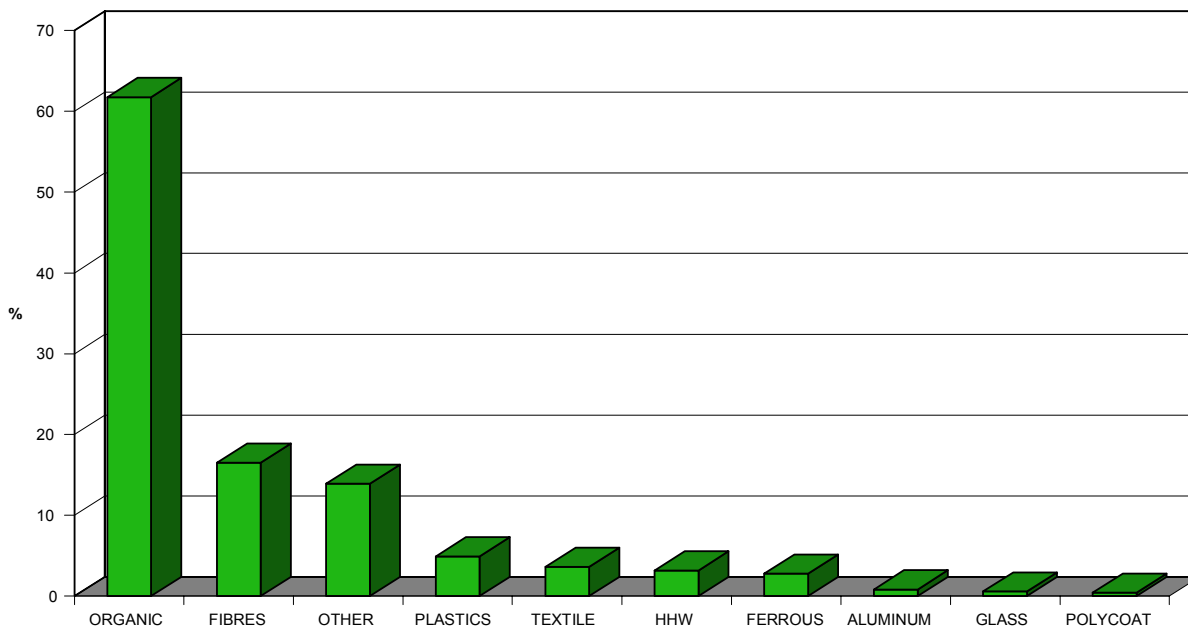
Figure 5.2 Waste and recycling tonnages, town of Strathroy



Bluewater has analysed the residual and recycling streams to determine how PAYT has affected waste generation. The greatest diversion is organic materials, attributed to 1) an increase

in backyard composting (BYC) as evidenced by an increase in BYC sales and 'build your own' enquiries, and 2) an overall change in purchasing habits to buying only what can be consumed.

Figure 5.3 Where is the user pay waste reduction coming from?



5.11 Contract considerations

Implementation of a PAYT program will result in a reduction of waste and an increase in recyclables. As noted earlier, PAYT program planning should include discussion with your contractor(s) on the impending changes and the impacts on collection. If program implementation is planned to coincide with a new collection contract, there are some points to consider in developing the tender(s):

- 1) Per household vs tonnage-based: The number of stops, pre vs. post- PAYT implementation will likely not change significantly. Time per stop might decline somewhat as waste volume declines, and increase somewhat as recycling volume increases (depending on curb side sort).
- 2) As waste volume declines, you will want to benefit from reduced disposal costs.
- 3) You may want to consider asking for separate quotes on collection (the relatively fixed cost) and disposal (the variable cost).

These considerations are covered in detail in the Stewardship Ontario's Knowledge Network under the *Model Contracts and Markets help Desk section*: <http://www.vubiz.com/Stewardship/Welcome.asp>

5.12 Disabled, elderly, or low income assistance programs

One of the most commonly cited concerns when a municipality is considering a PAYT program is the potential impact on low income or elderly families, or on those that may generate greater than average waste volumes due to medical conditions.

2005 survey highlight – assistance programs

Of the 45 programs that responded to this question, 29 indicated that they do not provide any form of assistance for low income or elderly households.

However, you may wish to consider accommodating some contingencies as part of the program planning process. Examples of the range of approaches taken by Ontario PAYT programs are provided below:

Bonfield, Twp.	• Allow 3 free dump days per year (on punch card)
Bonnechere Valley, Twp.	• One free load pass per residential property
Central Frontenac, Twp.	• One amnesty day/year
Clarence-Rockland, City	• Two amnesty periods/year
Kawartha Lakes, City	• At director's discretion if request submitted in writing, exemption for one year only
Kingston, City	• One extra bag allowed without a tag at properties identified with medical exemption by doctor or nurse
Marathon, Town	• Yes, but must be approved by Council
Mississippi Mills, Twp.	• Case by case
Mono, Twp.	• Yes, for seniors or disabled if they use diapers
Niagara, Region	• Residents with medical condition (e.g., incontinence, dialysis) are allowed additional "free" containers
Northumberland, County	• 4 free tags to new residents, subsidies to non-profits
Orillia, City	• Medical exemption, additional tags with doctor's signature
Peel, Region	• Group homes with proof of status
Sault Ste Marie	• Medical waste exemptions
Simcoe, County	• 25 free tags can be sent to residents who submit a medical exemption form signed by their doctor

5.13 Making changes

A significant number of the municipalities that responded to the 2005 the survey indicated that their PAYT programs had undergone changes since implementation. Virtually all of the municipalities that underwent amalgamations in the late 1990's reported that their programs were modified as the newly amalgamated municipalities sought to rationalize services and costs.

These changes can be grouped into three main categories: 1) changes in setout numbers (i.e., number of 'free' items in a partial program), including move from a partial to a full program, 2) changes to the unit price of a bag or tag, and 3) changes in collection frequency.

There are rules of thumb that should be observed for any type of system change:

1) Promotion and education: It is easiest for program changes to coincide with the timing of the annual P&E distribution – e.g., newsletter, brochure or waste management calendar. A media campaign can then supplement this with newspaper and electronic media advertising (as applicable) – include information on the website.

2) Rationale: It is important that a clear message be conveyed on the rationale for the program change. For example, if the number of 'free' setouts is being reduced, residents need to understand that this process is part of the original PAYT program planning and has been intended since program launch: gradual reductions in the number of 'free' setouts are being used to assist residents to accommodate and learn how to divert waste.

Unit price increases may be necessary due to increases faced by the municipality in collection or tipping costs. It is very important that residents understand this and don't misconstrue it as poor cost/revenue forecasting on the part of the municipality.

3) Dealing with tag/bag vendors: Vendors need to be contacted and made aware of upcoming changes, provided with enough lead time and information to make adjustments and provide information to residents. Make sure that any old stock or outdated educational material is collected.

2005 survey highlight – Bag reductions in the City of Brockville

The City of Brockville introduced a partial PAYT program in 1992. Prior to implementation, a setout study indicated that only 8% of households were generating more than four bags per week, so this was authorized by Council as the number of bags that would remain on the tax base. Additional bags required \$1.00 tags.

Setout studies in subsequent years indicated that a very small percentage of households were exceeding four bags, and this information was used to assist Council in its decision to reduce the number of 'free' bags over the years to the present number (one), and gradually increase the tag price to \$2.00.

It appears that no municipality has reduced waste collection frequency as a direct consequence of moving to a PAYT program. However, there are PAYT programs that have moved to bi-weekly waste collection, and the overall waste reduction resulting from user pay has likely been a factor in this move. For example, some PAYT municipalities with significant seasonal populations maintain weekly waste collection through the summer, and switch to bi-weekly over the winter months. Other factors include organics collection: the Town of Mono has a town-wide organics collection program wherein waste is collected bi-weekly.

5.14 Lessons learned

The final question in the 2005 survey was an open ended request for the wisdom gleaned from implementing and operating a PAYT program. It elicited wonderfully broad and candid responses and reflected both the uniqueness and the common ground shared by programs. Not surprisingly, no one said "this is a bad idea, not a good way to handle waste."

Here is some of that wisdom (grouped under approximate headings):

Program launch

- Media coverage <was> very negative, and residents very vocal in opposition at first, but within 6 months complaints drop off, as does incidence of illegal dumping.
- Need more lead time! Implementation was done on a very tight time frame and things didn't go as smoothly as planned. People were upset at first, but they got used to the new system.
- Usual opposition at first, now part of a fact of life; no real vocal objection.
- When implementing a user pay program, there will be some common arguments: "people will throw garbage in the ditches, etc." This has simply not been the case. While it does occur from time to time, there has not been a noticeable increase since user pay. That segment of the population that throws garbage in the ditch would do so regardless. "People can't afford this" It's a popular misconception that waste disposal is free. The public needs to be made aware that the absence of a user pay program means that you are subsidizing your neighbour through taxes. User pay is not only better financial management for the municipality, but more equitable for all. Also, when implementing, don't give the public too much notice - a week tops! When price was increased from \$1.00 to \$2.00, there was a huge run on tags - this needs to be limited.
- There might have been too many changes in too short a time period: county wide user pay, collection schedule changes, routes, recycling fee of \$25 added to tax bill. Public

education also proved to be a challenge. Might have been less stressful to introduce changes over a period of years.

- There will be opposition, but residents will adjust their habits. A one bag limit <partial program> will work for most, but could be difficult during holidays - still worth doing. Enforcement is ongoing and can be challenging. Go for it! It is necessary to get more people recycling and reducing waste.
- Need to keep people informed about the program and educate them on diversion opportunities.

Making changes

- Reduce 'free' bag by reasonable number initially and then gradually reduce by one unit to achieve final goal.
- Stick with original program once Council approves; make changes all at once.
- Try to keep tag price consistent with surrounding municipalities. Increasing the tags costs decreases usage as residents find other methods of disposal (e.g., taking their garbage to work, etc.).
- Phased in approach worked well, communications is key, try to 'give' residents something, monitoring and enforcement is key, research other jurisdictions, but recognise that <your> program is unique; ensure support by staff and Council.
- Take time to implement changes; bag limits should change progressively, and one on one communication is mandatory. When a bag is left curbside, contact must be made with the resident and a database of complaints must be kept.

Full or partial, bag or tag

- It may be better to go to full user pay, with garbage and recycling costs covered in the cost of the tag, and removed from the tax base.
- Go full user pay straight off; maintaining a database for mail out is difficult; spend time trying to figure out how residents will try to cheat the program. Have a well established rationale for determining vendor locations,

setting policies and procedures for tracking inventory (internal) and financial aspects of program (finance dept). Have a set procedure for dealing with vendors that are in arrears. Ensure that tag distribution system is well set, and have a contingency plan. Provide lots of information to residents. Don't give out complementary tags - it can be a nightmare...

- No bagged garbage is accepted at landfill sites, therefore people had to use the bag tag program. When it first started, each ratepayer received 52 bag tags and the cost was added to their taxes. Received complaints from people that had 2-people vs 6-people hhlds and the fairness of putting costs on taxes, therefore moved to full user pay program.
- A full user pay system is easier to monitor and enforce.
- Use clear plastic bags imprinted with municipal logo. There was resistance from users about everyone being able to see their garbage, many residents still use green bag inside clear one. Volume of waste has declined significantly, but it is not certain if that is a result of expanded recycling or rural residents burning refuse.
- <Using a> Bag-based system didn't work as people would double bag (put two bags inside the large clear bags), storage took up one room at municipal office, much work to bundle and sell in lots of 10.
- The system implemented has eased the administrative traffic from a pure bag tag systems, while the two 'free' bag system has still served to enforce the need for a conscious reduction of waste.

Setting fees

- Do not over charge for extra tags; do not charge for replacement blue boxes, bi-weekly garbage collection encourages diversion, one on one contact works best with non-participants, drive by studies and handouts attached to incorrect setouts work!
- Fees should reflect cost of service; fees should be high enough to encourage reduction. There must be a blue box program, or some kind of recyclable collection program in place.

Seasonal residents

- We have a high number of seasonal residents, with the recent switch to curbside collection of garbage, it has been difficult to control those who abuse the system.
- This is a low key user program designed to deal with the large seasonal influx of residents during summer.

General wisdom

- Don't worry about illegal dumping; it has remained unchanged in the city. Don't require tags on 'free' bags - unnecessary. Determine up front if you want to recover full cost or incremental cost of additional bags. More than 2 'free' bags will not affect diversion - bags will just get heavier! Full user pay is needed to change behaviour in any significant way.
- The user pay program provides greater equity to residents by allowing them to pay for only the garbage they produce. Residents are given the incentive to produce less waste through recycling, composting and other waste reduction methods by having those who produce more waste pay more. Also helps in extending the life of the landfill. Forcing people to use garbage cans with lids instead of just bags helps to keep the town's streets cleaner and keeps birds out. The size of the garbage can should be specified and not left open for public judgment.
- Township wanted the pay as you go system as it makes residents aware of how much garbage is going to landfill and to encourage residents to recycle more items, rather than dispose of them. Also residents are levied the same rate of \$130.00 per year for collection, which allows 2 bags per week of garbage and unlimited recycling collection, if they need to dispose more, then they must pay.

- It is a worthy program and good for both the municipality and environment.
- A bag limit/user pay program is effective in reducing waste and increasing participation in recycling, composting, etc. Properly administered, these programs can be operated with few problems.
- People will always try to find a cheaper alternative; if possible make sure it is legal and diversion oriented. Set an appropriate fee to encourage participation and achieve 3Rs goals. Offer compensation to retailers to help offset their costs (this was changed 16 months after launch). Education should focus on how user pay will benefit the resident personally.
- This is the only way to go, it provides incentive to recycle.

6.0 Summary of Ontario User Pay Programs

Table 6.1 Full User Pay Programs

Program	House holds	Program launched	Set out	Bag/ Tag	Bag limits	Cost per bag/tag	Bag/ container restrictions
Addington Highlands, Twp.	2,600	2002	Straight exchange at land-fill: one "free" bag of waste allowed in exchange for equivalent size bag of recyclables	Bag	No	\$2.00/bag	
Adelaide Metcalfe, Twp. (BRA)	955	Approx.: 2000	All bags require tags	Tag		\$2.00/tag	see BRA
Ashfield-Colborne-Wawanosh, Twp.	2,980	Late 1990's	All bags require tags	Tag		\$2.00/tag	
Athens, Twp.	1,326	July 1 in 2004	All bags require tags	Tag		\$1.00/tag	
Belleville, City	19,315	June in 1996 (partial pgm. previous year)	All bags require tags	Tag	6 bags for residential	\$1.00/tag	17 gal or 75 L container; max 50 lb; or 61X61X106 cm box
Bluewater, Municipality (BRA)	2,595	With amalgamation in 2001; at least one municipality had pgm prior to that	All bags require tags	Tag		\$2.00/tag	see BRA
Bluewater Recycling Association (BRA)		Various	All bags require tags	Tag			30 gal, 45 lb
Bonnechere Valley, Twp.	2,260	January in 2003	All waste must be in municipal bags, or if commercial waste, must be tagged	Bag & tag	No limit	\$1.00/bag	26X36 bag
Central Frontenac, Twp.	3,823	1998	Landfills only, all bags must be tagged	Tag		\$1.00/tag	
Central Huron, Municipality (BRA)	2,930	Various dates pre-amalgamation: 1994 to late '90's	All waste is collected privately or taken to landfill	Tag		\$2.00/tag	
Dawn-Euphemia, Municipality (BRA)	855	pre-amalgamation in 1998	All bags require tags	Tag		\$2.00/tag	see BRA
Dryden, City	3,548	October 1 in 1996	All bags require tags	Tag		\$1.75/tag	
Edwardsburgh Cardinal, Twp.	2,866	April, 2002, but original tag program began in 1991	All waste must be in municipal bags	Clear Bag, imprinted with municipal logo	10	\$1.25/bag	40 lb
Elizabethtown-Kitley, Twp.	3,861	With amalgamation in 2001	All bags must be tagged; residents in southern portion of twp. use landfill, others have curbside	Tag	No	\$1.00/tag	

Program	House holds	Program launched	Setout	Bag/ Tag	Bag Limits	Cost per bag/tag	Bag/ container restrictions
Gananoque, Town	2,255	July 1 in 1991	All bags require tag	Tag		\$1.25/tag	
Goderich, Town (BRA)	3,185	1994	All bags require tag	Tag		\$1.50/tag	80 L , 18 gal; 45 lb
Greater Napanee, Town	6,574	1998 - at amalgamation, programs were united	All bags require tag	Tag	3 bags per household	\$1.50/tag	
Huron East, Municipality (BRA)	710	With amalgamation in 2001 for most	All bags require tag	Tag	No limit	\$1.50, \$2.00, \$2.50 depending on ward	45 lb
Kenora, City	7,236	June in 2001	All bags require tag	Tag		\$2.00	25X36 in.; 25 lb
Killaloe, Hagarty, Richards, Twp.	1,555	June,	All bags require tag	Tag	No	\$1.00/tag for residential; commercial: \$1.00/tag; \$6.00/m ³	26X36" bags only
Lambton Shores, Municipality (BRA)	4,440	approx. 2000	All bags require tag	Tag		\$2.00/tag	see BRA
Lanark Highlands, Twp.	3,149	2002	All bags must be tagged for curbside collection in town; Punch card system used at landfills	Tag and punch card		\$1.00/tag; \$10.00 and \$25.00 for punch cards (one punch= 1 bag)	
Leeds & the 1000 Islands, Twp.	5,412	Approx. 1991	All bags require tag	Tag		\$1.25/tag	
Loyalist, Twp.	5,426	January 1 in 2002	All bags require tag	Tag		\$2.00/tag	Max 17 gallon container or 40 lb
Lucan Biddulph, Twp. (BRA)	1,445	July in 2000	All bags require tag	Tag		\$2.00/tag	
Madawaska Valley, Twp.	2,883	Since amalgamation in 2001	All bags require tag	Tag-just switched from bag	No	\$1.00/tag	
Marathon, Town	1,674	March in 1997	All bags require tag	Tag	No	\$1.00/tag	Container must be >77.28 L and <163.39 L; maximum weight of 40 lb.
Marmora & Lake, Twp.	1,570	2001 for amalgamation, pgm already in place	All bags require tag	Tag		\$1.00/tag	
Merrickville-Wolford, Village	1,172	2002	All garbage must be tagged or paid for at landfill gate	Tag	No	\$1.00 urban (curbside); \$0.50 rural (no curbside)	121 L bag or receptacle, 22.7 kg.
Middlesex Ctr., Twp. (BRA)	4,730	January in 1998 (amalg)	All bags require tag	Tag		\$1.75/tag	see BRA

Program	House holds	Program launched	Setout	Bag/ Tag	Bag Limits	Cost per bag/tag	Bag/ container restrictions
Middlesex Ctr., Twp. (BRA)	4,730	January in 1998 (amalg)	All bags require tags	Tag		\$1.75/tag	see BRA
Morris-Turnberry, Municipality	1,268	2002	All bags require tags	Tag	No	\$1.00/tag	26X36" bag or 77L container; max 40 lb
North Algona Wilberforce, Twp.	1,085	Approx. 1995	All bags require tags	Tag		\$1.00/tag	
North Frontenac, Twp.	3,244	May in 2004	Straight exchange at landfill: one "free" bag of waste allowed in exchange for equivalent size bag of recyclables	Tag	No	\$2.00/tag	No, but oversized bags must have two tags
North Grenville, Twp.	5,474	99 or 2000	All bags require tags	Tag	10	\$1.25/tag	
North Huron, Twp. (BRA)	2,151	June 1 in 1995	All bags require tags	Tag	No	\$1.50/tag	40 lb
North Middlesex, Municipality (BRA)	2,345	With amalgamation in 2001; one municipality had UP prior to that	All bags require tags	Tag		\$2.00/tag or \$1.90 if purchasing 100	see BRA
North Perth, Municipality (BRA)	4,375	October in 1998	All bags require tags	Tag		\$2.50/tag	see BRA
Northumberland, County	36,366	Nov 1 in 1998 5 munic joined 6 others in user pay, On Jan1, 1999, all munic became full user pay	All bags require tags	Tag	3	\$2.00/tag; vendors have option of charging \$2.20	30X38", black or green only, 77L, must be labelled "wet"
Oil Springs, Village (BRA)	280	January in 1996	All bags require tags	Tag		\$1.00/tag	see BRA
Oxford, County	39,868	February in 2003	All bags require tags	Tag	No	\$1.00/tag	1 tag for: 76X96 cm bag or container <129L, max 20 kg; 2 tags for larger bags or containers 129-240L, max 20 kg. 3 tags for containers >240L.
Perth East, Corp. (BRA)	3,870		All bags require tags	Tag		\$2.00/tag	See BRA
Perth South, Corp. (BRA)	1,415	1998	All bags require tags	Tag		\$2.00/tag	see BRA
Perth West, Corp. (BRA)	1,830	Mid 90's for individual municipalities, prior to amalgamation	All bags require tags	Tag		\$2.00/tag	see BRA

Program	House holds	Program launched	Setout	Bag/ Tag	Bag Limits	Cost per bag/tag	Bag/ container restrictions
Prescott, Town	1,895	1997	All waste must be in Town bags	Bag	4	\$0.75 for small plastic bag; \$1.25 for large plastic bag and \$1.75 for large paper bag	
Quinte West, City	15,995	1998 (amalgamation)	All bags require tags	Tag		\$2.00/tag	
Sioux Lookout, Town	1,933	January, 1998	All bags require tags	Tag and landfill punch card		\$2.00/tag	
South Huron, Twp, (BRA)	3,950	January in 2001 (prior to amalgamation, some individual municipalities had UP programs from '90's)	All bags require tags	Tag		\$2.00/tag	see BRA
Southwest Middlesex, Twp.	2,255	Unknown	All bags require tags; bags must be translucent (see-through)	Tag		\$1.50/tag	see BRA
Stirling-Rawdon, Twp.	1,917	July 1 in 1998	All bags require tags	Tag		\$1.00/tag	
Stone Mills, Twp.	3,282	pre-2002	All waste must be in Township bags	Bag (switched from tag)		\$1.00/bag	
Stratford, City	12,953	January 1 in 1997	All bags require tags; grocery sized bags require half tags	Tag	No	\$1.75/tag	85 L bag=1 tag; 128 L can=1 tag; 129-130 L=2 tags; 241-360 L=3 tags
Strathroy-Caradoc, Twp. (BRA)	6,990	January 2 in 2005	All bags require tags	Tag		\$1.50/tag	see BRA
Thames Ctr., Municipality	4,457	January 7 in 2001	All bags require tags	Tag		\$2.50/tag	see BRA
Tweed, Municipality	2,280	1998 (with amalgamation)	All bags require tags	Tag		\$1.00/tag	
Tyendinaga, Twp.	1,400	Mid '90's	Landfill only - residents pay as they go	Pay at landfill		\$2.00/bag	
Wellington, County	29,558	January in 2002 (local munic. had pgms in 92, 97, 96)	County-issued stamped yellow bags	Bag	No	\$1.75 for large bag; \$1.00 for small	Large=30X38" Small=24X28" max weight: 40 lb or 18 kg.
West Grey, Municipality	5,096	2000 (with amalgamation)	All bags require tag	Tag		\$1.00/tag	40 lb.
Whitewater Region, Twp.	3,238	2001	All waste must be in Township bags	Bag		\$3.00/bag	

Table 6.2 Partial User Pay Programs

Program	House holds	Program launched	Number of 'free' bags	Set out	Bag/Tag	Bag limits	Cost per bag/tag	Bag/container restrictions
Amaranth, Twp.	1,306	2002	104 tags/year	All bags must be tagged; 104 tags are issued to residents every August	Tag	No	\$1.00/tag	
Arnprior, Town	3,206	Approx. 2000	2 containers or bags/week	First two bags or containers - no tags, remainder must be tagged	Tag	No	\$2.00/tag	Each separate bag or container must be tagged, e.g., even if it's a grocery bag size
Atikokan, Twp.	1,653	Approx. 1997	2 bags/week	First two bags do not require tags	Tag		\$1.00/tag	
Baldwin, Twp.	343	2002	3 bags/week	First three bags - no tags, remainder must be tagged	Tag		\$2.00/tag	50 lb
Barrie, City	44,652	1997	2/setout	First two bags: no tags	Tag	No	\$1.00/tag; \$2.00 as of Sept/05	20 kg; can must have handles
Beckwith, Twp.	2,683	Prior to 2002	80 tags/year	All bags or containers must be tagged; residents pick up 80 tags at beginning of year	Tag	No	\$2.00/tag	
Bonfield, Twp.	1,035	2001/02	104 bags/year	Provide for 104 'free' bags per year on landfill pass (punch card)	Punch card		\$1.00/bag	30X38 in
Brockville, City	8,415	1992	1	1 bag on tax base, anything over requires a tag	Tag	No	\$2.00/tag	22.5 kg
Bruce Mines, Town	255	Approx. 2002, as member of Tri-Neighbours WM Bd	3 per setout	Up to 3 bags can be set out at no direct charge, additional bags must be tagged	Tag		\$2.00/tag	
Calvin, Twp.	260	1997	130 bags per year	Punch card system at landfill, allows for 130 'free' bags	Punch card		\$1.00/bag	
Carleton Place, Town	3,679	July in 1993	60 bags per year	60 bags per year on tax base, all bags must be tagged. Appliances and bulkies require 2 tags.	Tag	No	\$2.00/tag	
Casselman, Village	1,089	2001	2	2 bags on tax base, remainder must be tagged	Tag	2	\$1.00/tag	
Chatsworth, Twp.	2,757	2003	Two per setout	First two bags do not require tags	Tag		\$1.00/tag	
Clarence-Rockland, City	7,546	With amalgamation in 1997	3	Three bags per set do not require tag, bags in excess must be tagged	Tag		\$2.00/tag	
Drummond North Elmsley, Twp.	3,251	January in 1998	2	Two bags per week do not require tag, and bags in excess must be tagged	Tag	No	\$1.00/tag	40 lb.; Bag 26X38"; container 77L
Durham, Region: Municipalities of Clarington, Scugog, Uxbridge and Brock	43,700	2004	3	First three bags as is, additional require tag	Tag	4	\$1.50/tag	20 kg

Program	Households	Program launched	Number of 'free' bags	Set out	Bag/Tag	Bag Limits	Cost per bag/tag	Bag/container restrictions
Eeat Garafraxa, Twp.	798	2002	3	First three bags per set out as is (or first six if Monday after holiday), additional waste must be in Twp. bags	Bag		\$2.00/bag	Max 90 L container; bags: 30X38"
E. Luther Grand Valley, Twp.	985	June in 1995	2	Two bags per collection do not require tag, any additional bags must be tagged	Tag	0	\$1.00/tag	Must be clear bags
Fort Frances, Town	3,823	March in 2004	1 container/bag per set-out	One bag does not require tag, each additional items requires a tag	Tag	No limit	\$1.00/tag	Container max: 35.97 gal; 40 lb; Bag: 4.25 cubic feet
Front of Yonge, Twp.	1,181	prior to 2000	80 tags/year	All bags must be tagged	Tag		\$1.00/tag	
Georgian Bluffs, Twp.	4,666	2000	2 bags per set out	First two bags per setout do not require tags	Tag	No limit	\$1.00/tag	Bag: 26X36"; max 50 lb
Georgina, Town	13,780	1997	1 bag per setout	One bag does not require tag, each additional item requires a tag	Tag	No limit	\$1.00/tag	50 lb max., Bags:30X48", Containers: max of 20X36"
Greater Sudbury, City	63,020	2004	3 per setout	First three bags as is, additional require tag	Tag	No limit	\$2.00/tag	Bag must be ≤125 centimetres ≥ 80 cm in height; no more than 90 cm and no less than 65 cm wide; a max. capacity of 85 L and max weight of 25 kg.
Grey Highlands, Mun.	5,088	2001	75 per year	All bags require tags	Tag		\$1.00/tag	50 lb.
Hanover, Town	3,126	April, 1996	52 per year	All waste must be tagged	Tag	No limit	\$1.00/tag	50 lb; 36X24"
Kawartha Lakes, City	35,887	November, 2001	2 bags per pickup	Two 'free' bags do not require tags. No limit on extra bags, but must be tagged.	Tag	No limit	\$2.00/tag	24X36", if over-size, then counted as two bags
Kingston, City	48,550	May 31, 1997 across amalgamated city	2 for residential, 12 for commercial	Two 'free' bags do not require tags.	Tag	No	\$2.00/tag	40 lb
McNab-Braeside, Twp.	2,918	January in 1996	2	Two 'free' bags do not require tags.	Tag	No	\$1.00/tag	26X32.5" or 67 L
Meaford, Mun.	5,100	1998	1 per setout	First bag per setout does not require tag.	Tag	Two!	\$2.00	77-125 L; 18 kg.
Minden Hills, Town	5,909	pre 2000	2 bags/week	Residents are allowed 2 'free' bags per week, dropped off at landfill; honour system - it is self-declared	Neither - honour system	No	\$1.00 per bag	
Mississippi Mills, Town	4,533	March, 1999	60 per year	All bags must be tagged	Tag	No	\$2.00/tag	50 lb
Mono, Town	2,490	June, 1992 at landfill; 2002 curbside	2002-2004: 2 bags/wk; 2004: 4 bags bi-weekly	Four 'free' bags per bi-weekly setout, additional bags must be tagged	Tag	No	\$1.00/tag	26X36" bag or 77L container; max 40 lb

Program	Households	Program launched	Number of 'free' bags	Set out	Bag/Tag	Bag Limits	Cost per bag/tag	Bag/container restrictions
Montague, Twp.	1,281	January in 1996	Cost of first 90 bags/year is included in waste collection budget	Each property owner is given 90 tags/yr, additional tags must be purchased, all bags must be tagged	Tag	No	\$1.00/tag	Container: 17 gallons; Bag: 26X38"
Muskoka, District	40,805	2004	Three per setout during weekly garbage collection; six per set-out during bi-weekly collection	'Free' bags do not require a tag	Tag	UP program sets limit of 3 bags per weekly set-out. Add'l bags can be set out but they require tags. This is low key UP pgm that is geared to allow for seasonal excess in cottage areas		1 m X 0.7 m; max 25 kg.
Newmarket, Town	19,923	September 1 in 1999	Three per set out	First 3 bags per set out do not require tags; additional bags must be tagged	Tag		\$2.20/tag; \$11.00 for large item tag	24X6 in. max 50 lb; larger containers require large item tag
Niagara, Region	170,528	Staged by municipality: 3 "free": Feb/98 to April/01; 2 "free": Sept. 03 to April/04	Two per set out	Two 'free' containers per household (up to five units); additional containers must be tagged	Tag	No	\$1.00/tag	90X60 cm; max 23 kg
Northeastern Manitoulin & Islands, Town	2,660	Approx. 1995	75 'free' tags/year	All bags require tags	Tag		\$1.00/tag	
Northern Bruce Peninsula, Mun.	4,588	1999	3 per setout	Limit of 3 bags per pickup, additional bags must be brought to landfill for a fee	Bag	3	\$3.00/bag	
Orangeville, Town	9,542	January in 1997	2 per setout	'Free' tags do not require a tag	Tag	No	\$1.00/tag	Max size is 1.0 metre in length, height, width and diameter; max weight is 20 kg
Orillia, City	15,500	July 1 in 1997	40 'free' tags/year	All bags/containers must be tagged	Tag	No	\$1.50/tag	38X32" bag, 36X30" container
Oshawa, City	52,355	May in 2002	4 bags per setout	'Free' tags do not require a tag	Tag	No	\$1.00/tag	
Owen Sound, City	9,313	July in 1999	20 'free' tags/year	All bags require a tag	Tag	3	\$2.00/tag	18 kg.
Parry Sound, Town	2,560	1993	3 per setout	'Free' bags do not require tag; additional bags must be tagged, either for curb or at transfer site	Tag	No	\$2.00/tag	
Peel, Region	340,000	Three phase: June 2001, voluntary, free tags; Feb, 2002, mandatory, free tags; Sept. 2002: tag fees, enforced.	3 per setout	Three untagged bags per setout, additional require tag	Tag	No	\$1.00/tag	36X26"bags, 38X24" containers, 4'X30" wood bundles

Program	Households	Program launched	Number of 'free' bags	Set out	Bag/Tag	Bag Limits	Cost per bag/tag	Bag/container restrictions
Perry, Twp.	1,360	Late 2001; early 2002	6 bags/month (landfill only no curbside)	Residents can dispose of 6 bags/month at landfill, above that they must pay \$1.00/bag	Punch card		\$1.00/tag	
Perth, Town	3,231	1997	52 tags per year	All bags require tags	Tag		\$2.50/tag	
Plummer Additional, Twp.	260	Approx. 2002, as member of Tri-Neighbours WM Bd	3 per setout	Up to 3 bags can be set out at no direct charge, additional bags must be tagged	Tag		\$2.00/tag	
Powassan, Town	1,288	2001	3 per setout	Three untagged bags per setout, additional require tag	Tag		\$1.00/tag	
Prince, Twp.	440	January in 2004	2 per setout	First two bags do not require tags	Tag		\$2.00/tag	18X38 in; max 44 lb or containers max. 24 gal
Rideau Lakes, Twp.	6,695	January on 2005	52 'free' tags per year	All bags require tags	Tag, bags must be transparent	No	\$1.50/tag	Bags must be transparent and not larger than 30X36" or 40 lb
Russell, Twp.	4,524	1999	52 'free' tags per year for residential; 104 for businesses.	All bags require tags	Tag		\$2.00/tag	
Sault Ste. Marie, City	31,751	Jan. 1, 2004 to Jan. 1, 2006	2 per setout	Bags in excess of two require bag tags	Tag and landfill gate fee	No	\$2.00/tag	121L, 20 kg.
Shelburne, Town	1,810	February in 1992	2 per setout	All bags require tags	Tag		\$2.00/tag	
Simcoe, County	113,341	January 1 in 2005, but some local municipalities have had programs in place for several years	2 per setout	'Free' bags do not require a tag	Tag	No	\$2.00/tag	Bag: 36X30"; Can: 17 gallons; max of 20 kg.
Smiths Falls, Town	4,126	1994	2 per setout	First two items are 'free'; Items can range from bag of garbage to appliances, to furniture	Tag		\$2.00/tag	
South Dundas, Twp.	4,053	na	2 per setout	'Free' bags can be any type of garbage bag; additional bags must be purchased from Township or local outlets	Bag, just recently switched from tag program	No	\$1.25/bag	
South Frontenac, Twp.	9,275	Sept. 6 in 2005 (rationalising service and UP pgm. for local munic.)	100 'free' tags per year	All bags require tags	Tag	2	\$3.00/tag	Max.: 20 kg

Program	Households	Program launched	Number of 'free' bags	Set out	Bag/Tag	Bag Limits	Cost per bag/tag	Bag/container restrictions
South Stormont, Twp.	4,300	August in 2005	2 per setout	'Free' bags can be any type of garbage bag; additional bags must be purchased from Township office	Bag		\$1.50/bag	
Southgate, Twp.	2,737	January in 2005		Cart based program (organics, recyclables, waste). First waste cart is tipped no charge; additional waste cart is invoiced.	Neither, is cart based and resident is invoiced, bi-monthly	na	\$7.00 for 240L cart; \$10.00 for 360L cart	All materials must be in carts
St. Mary's, Town	2,400	Fall in 2005	One 'free' bag per set-out	Additional bags require tags	Tag	5	\$2.00/tag	Max: 75 centimetres (30 inches) in height or 45 cm diameter (18 inches); must be specifically manufactured for the purpose of containing garbage; 22 kg. max.
St. Thomas, City	14,814	1997	2 per setout	First two bags do not require tags	Tag		\$1.50/tag	
Tay Valley, Twp.	3,564	Before 2000	40 'free' tags/yr.; also if resident brings one container of recyclables to landfill, can dispose of one bag of waste nc	All bags require tags	Tag		\$1.00/tag	
Thessalon, Town	555	Approx. 2002, as member of Tri-Neighbours WM Bd	3 per setout	Up to 3 bags can be set out at no direct charge, additional bags must be tagged	Tag		\$2.00/tag	
The Blue Mountains, Town	5,087	October, 2003	1	One bag or can as part of the service, and second must be tagged. Additional bags will not be collected	Tag	2	\$1.00/tag	18 kg; Bag: 30X38"; Container 33X22"
Whitby, Town	28,640	1996	4 per setout	'Free' bags do not require a tag	Tag		\$1.00/tag	Receptacles must be no greater than 0.65 m (26") in height (from bottom up to top of receptacle) or 0.5 m (20") in width.

Appendix

If you have received the electronic version of the User Pay Guide, the appendix is included in a separate folder, entitled: "Appendix."

If you have received the print version of the User Pay Guide, the appendix is included on CD.