



**Implementation of a Sustainable Financing System For Solid
Waste Management in Ontario**

Discussion Paper #3

**Solid Waste Management Fee Structures and
Billing Approaches**

February 2009

E&E Fund Project #160

Prepared For



Acknowledgements

This Project has been delivered with the assistance of Stewardship Ontario's Effectiveness and Efficiency Fund, a Fund financed by Ontario municipalities and stewards of blue box waste in Ontario. Notwithstanding this support, the views expressed are the views of the author(s), and the Association of Municipalities of Ontario and Stewardship Ontario accept no responsibility for these views.

The City of London and the City of Ottawa provided financial and other support to the project.

Table of Contents

Section	Title	Page
1.	Solid Waste Management Fee Structures	1
1.1	Full Fee Recovery	1
1.2	Partial Fee Recovery	2
1.3	Variable Rate Fee Recovery	5
2.	Residential Billing Approaches	11
2.1	Ontario Research	11
2.2	North American Research	15
3.	Non Payment Issues	22

List of Tables

Table 1.1: Pembroke's Waste Management Annual Fees Based on Property Assessments	3
Table 1.2: City of Vancouver's Variable Rate Subscription Fees	7
Table 1.3: St. Albert System Costs and Recycling Performance (1996-2006).....	7
Table 1.4: City of Alberta's 2007 Variable Container Rates	8
Table 1.5: City of Seattle Monthly 2008 Residential Variable Subscription Rates.....	9
Table 3.1: Strategies Used to Address Non-Payment of Waste Management Bills.....	25

List of Figures

Figure 2.1: Pembroke Property Tax Bill.....	12
Figure 2.2: Strathroy-Caradoc Property Tax Bill.....	13
Figure 2.3: City of Ottawa's Property Tax Bill	14
Figure 2.4: City of Vancouver's Pre-Containerized Waste Billing System	16
Figure 2.5: City of Vancouver Mock Variable Containerized Billing System	17
Figure 2.6: City of St. Albert Billing System.....	19
Figure 2.7: City of Edmonton Waste Disposal Bill.....	20
Figure 2.8: City of Airdrie Solid Waste Utility Bill	21
Figure 2.9: City of Seattle Public Utilities Bill (2 pages).....	23

1 Solid Waste Management Fee Structures

This Discussion Paper focuses on billing and administration aspects of sustainable financing systems for solid waste management.

Billing approaches used by municipalities vary according to which funding system best suits the municipality's needs. The most common funding approaches are:

1. All waste management costs are charged through a separate flat fee (e.g. City of Vancouver; British Columbia (pre 2006); and the City of Airdrie, Alberta;
2. Some waste management costs are financed by a separate flat fee and some waste management costs are financed by property taxes or other means e.g. City of Ottawa, Ontario; City of Pembroke, Ontario; and the City of Edmonton, Alberta (until 2009), and
3. Charging all waste management costs through a variable fee based on the volume of garbage disposed (e.g. City of St. Albert, Alberta; Seattle, Washington; and City of Vancouver's new variable container system).

1.1 Full Flat Fee Recovery

As the term full fee recovery implies, all waste management costs are paid through a fee. None of the costs are financed through the property tax base. Often the flat fees will be billed as a separate line item(s) on the property tax bill or will be added to another bill (e.g. water and sewer service charges).

Typically, a municipality will take all waste management costs and divide the total by the number of households (e.g. single family households) in the municipality. Each household will be charged the same flat fee for waste management services regardless of the amount of waste generated.

To date there are no Ontario based communities that finance the full costs of waste management services off the property tax base using a single flat fee. This situation is expected to change with the recent amendments to the *Municipal Act, 2001* which explicitly permit a municipality to charge variable or flat fees separate from the property taxes.

City of Vancouver, British Columbia (Pre – 2006)

The City of Vancouver removed all waste management costs from the general property taxes and included them as separate line items on the property tax bill.¹

Prior to 2006, Vancouver set a flat fee for each municipal waste management and diversion service provided to its residents. The MSW services appeared as separate line items on the property tax bill, households were charged for the following services:

- Garbage – stop fee (\$28/yr), per can fee (\$32/yr) x 2 cans (typical set out) = \$92/yr
- Recycling – stop fee (\$10/yr), service fee (\$9/yr) = \$19/yr
- Yard waste - \$38/yr flat fee

A typical household was charged \$149/yr, which allowed them to place two cans of garbage for collection each week. The combined garbage and leaf and yard waste fee was displayed as a separate line item from the recycling fee. Home owners had an option of requesting additional cans and were charged an additional fee of \$32/year on the bill or they could purchase tags from participating outlets at \$1.50/tag for occasional excess garbage.

¹ Under Metro Vancouver's (formally Greater Vancouver Regional District) Solid Waste Management Plan, all municipalities were required to reach a zero tax-based system by the year 2000

City of Airdrie, Alberta

Residents that receive curbside garbage collection services are billed a waste management levy of \$8.23 bi-monthly and all residents including single family residences, multi-family and condo units are billed an Environmental Services Fee of \$6.99 bi-monthly which covers the costs for recycling, composting, HHW and spring clean up.

1.2 Partial Fee Recovery

With a partial fee recovery system, a designated portion of the waste management costs are financed through a separate flat fee or Pay-as-you-Throw (PAYT) system with a remaining portion being financed through the property tax base. Often the costs associated with garbage collection and disposal will be removed from the property tax base and paid through a separate flat fee, with all waste diversion costs continuing to be financed through property taxes.

While an estimated 47% of Ontario municipalities have PAYT programs in place², the vast majority of municipalities recoup only a fraction of the waste management costs through the price of the tag; for example, the majority of PAYT programs in Ontario use the cost of the tag/bag to finance the cost to collect and/or dispose of the individually tagged bag of garbage. Most programs do not use the PAYT system to finance residential waste diversion programs. The majority of Ontario municipalities with PAYT programs still fund most of waste management costs through property taxes.

Using a flat fee to fund some waste management program costs in Ontario remains an anomaly; however, the City of Ottawa's introduction of a flat fee to cover garbage collection and disposal costs in 2006 established a new trend in sustainable financing of municipal solid waste management systems in Ontario.

Township of Southgate, Ontario

The Township of Southgate provides an automated cart service to residents. Each resident is provided with a 240 litre cart (charcoal) for garbage, a 240 cart for recyclables (blue) and a 240 litre cart for organics (green). Residents may upgrade their garbage carts by:

- Purchasing an additional 240 litre cart, which is charged \$7 per pick up;
- Upgrading to a 360 litre cart, which is charged \$3 per pick up, or
- Purchasing an additional 360 litre cart, which is charged \$10 per pick up.

Residents purchase the extra garbage carts but are only charged when they are placed at the curb. The garbage collection crew record every time an additional or upgraded cart is placed at the curb for collection. The waste management department tracks these records on an Excel spreadsheet which is sent to the finance department on a bi-monthly basis. The residents are sent an individual invoice every two months with the extra charge for pick up services referred to as a "tipping fee" charge. This is the only charge on the bill.

Payment is received by the accounts receivable department and is allocated to the solid waste department upon payment. If the bill is not paid, then the charge is placed on the tax bill as a separate line item and becomes a property tax issue. The extra funds are set aside in a reserve fund for future replacement of trucks. Since the bills are handwritten, no copy of the bill was available.

² The Association of Municipal Recycling Coordinators (AMRC) estimated that in 2005, 123 communities in Ontario had implemented user pay programs of which 65 (61%) were partial user pay programs and 58 (39%) were full user pay programs (AMRC User Pay Guide, November 2005).

City of Pembroke, Ontario

The City of Pembroke charges residents two separate flat fees to pay for different waste management services and systems. All residents are charged a separate flat fee of \$155/hhld/yr to cover the costs of providing waste management related collection and disposal services. The authority to charge the fees is provided in By-law Number 2006-39.

By-law Number 2006-39

A BY-LAW TO IMPOSE AN ANNUAL FEE TO BE CHARGED TO THE OWNERS, HOUSEHOLDERS OR OCCUPANTS OF ANY BUILDING IN THE CITY OF PEMBROKE TO DEFRAY THE EXPENSE OF THE COLLECTION AND DISPOSAL OF WASTE

WHEREAS Section 391 of the Municipal Act, 2001, S.O. 2001, c.25 as amended, provides that a municipality and a local board may pass by-laws imposing fees or charges on any class of persons for services or activities provided or done by or on behalf of it;

And WHEREAS the Council deems it desirable to impose a fee to defray the expense of the collection and disposal of waste provided to the residents and ratepayers of the City of Pembroke;

NOW THEREFORE THE MUNICIPAL COUNCIL OF THE CORPORATION OF THE CITY OF PEMBROKE ENACTS AS FOLLOWS:

- 1. THAT an annual fee of \$155.00 per unit be hereby imposed on each owner, householder or occupant of any building situated in the City of Pembroke receiving such services, to defray the expense of the collection and disposal of waste.*
- 2. THAT the Treasurer of the Corporation of the City of Pembroke may add the fees to the tax roll and collect them in the same manner as municipal taxes.*

In addition, the City of Pembroke provides the authority in By-law 2006-40 to charge residents an additional flat fee to defray the expense of waste management facilities and services, which in this case covers the construction of the Ottawa Valley Waste Recovery Centre. The by-law includes a provision to enabling the city to base the fee rate on property assessments resulting in variable flat fees. The by-law further exempts owners of vacant lands and properties from having to pay this annual fee.

By-law Number 2006-40, provides a schedule of fees for the provision of waste management facilities and services. The residential fees (including fees for multi-family residences) are based on property assessments, as shown in Table 1.1.

Table 1.1: City of Pembroke's Waste Management Annual Fees Based on Property Assessments

Property Assessment Range	Annual Charge
\$0 - \$299,999	\$85.00
\$300,000 - \$599,999	\$170.00
\$600,000 - \$999,999	\$255.00
\$1,000,000 - \$1,999,999	\$340.00
\$2,000,000+	\$425.00

Northumberland County, Ontario

In November 1998, Northumberland County implemented a PAYT system charging \$1.50 for each bag of wet waste and permitting a maximum of 3 to be set out for collection at any one time. In 2005, the PAYT charge was increased to \$2.00/bag, which covered the cost of garbage and recycling collection.

Prior to the County assuming responsibility for waste management services, lower tier municipalities were responsible for collection services and charged the costs back to households. One municipality, Hamilton Township, charged an annual flat fee of \$30 per household as a separate line item on the property tax bill. The Township no longer charges the fee since the County assumed responsibility for collection services.

City of Ottawa, Ontario

In July 2005, City Council approved the implementation of an alternative method to fund solid waste services and to increase the incentive to divert materials from landfill. The new funding approach continues to fund waste diversion and recycling costs for single family and multi-family residential properties through the property tax bill but the costs for garbage collection and landfill disposal are removed from the property tax and funded using a uniform flat fee. The new flat fee will fund the \$21 million system cost to provide residential garbage collection and disposal.

The new funding system includes:

1. A differential flat fee for residential curbside garbage collection and multi-residential bin tipping garbage collection. The 2008 fees for residual garbage collection and landfill disposal are:
 - a. \$82 per household receiving residential curbside garbage collection; and
 - b. \$33 per household receiving multi-residential bin tipping garbage collection.

Residential garbage collection and disposal has been funded through a flat per household fee since 2006. The flat fee is still shown on residential property tax bills, but as a separate line item fee. The flat fee is collected in the same manner as property taxes and is subject to the same penalties and interest rates for non-payment.

The City of Edmonton, Alberta

The City of Edmonton does not operate as a Solid Waste Utility; rather, it operates as a Waste Management Department within the City. The City was, however, the first large Canadian community to finance part of the waste management services using a flat fee for both single-family and multi-family waste management services. The various programs operated by the Waste Management Department are funded through a variety of different sources – the monthly utility bill, property taxes and revenues from tip fees and the sale of recyclables.

In 1995, the City of Edmonton introduced a monthly flat fee to cover processing and disposal activities. The monthly utility fee is used to fund all disposal related activities (i.e. transfer stations, municipal recycling facility, Edmonton Composting facility, landfill disposal and Eco stations). Property taxes are used to fund collection related activities (i.e., garbage and recyclables collection, litter collection and community recycling depots) and public education programs.

Over the years, the City has used the flat fee approach to cover an increasing portion of waste management costs related to new processing and disposal programs. A recommendation that a waste management utility be formed effective January 1, 2009 was approved by City Council in March 2008. Under the full utility, Edmonton residents will pay for waste services through the monthly utility fee only and not through their property taxes.

In 2000, 57% of waste management expenditures were covered by the utility fee, 36% by the tax base and 7% by tipping fees and revenues from the sale of recyclables. In 2006, the average cost per single family household (SFH) for waste management services was approximately \$204 per year, of which an

average of \$45/hhld was collected through property taxes and \$159/hhld/yr was collected through flat fees. In addition, the residential waste management system was also financed through taxes collected from businesses and revenues generated from tipping fees at the City's Clover Bar Landfill and revenues from the sale of recyclables. In 2006, approximately 67% of waste management expenditures were covered by the utility fee, 20% by the tax base and 13% by tipping fees and revenues from the sale of recyclables.

In 2007, the average cost per single family household for waste management services was approximately \$247 per year, of which an average \$65/hhld or 26% (based on assessment value of \$243,500) was collected through property taxes and \$182/hhld/yr or 74% was collected through flat fees. In addition, the residential waste management system continues to be partially financed from taxes collected from businesses and revenues generated from tipping fees at the City's Clover Bar Landfill as well as revenues from the sale of recyclables.

While single family residents pay \$15.17/month (\$182/yr) on their utility bill, residents who live in apartments and condominiums pay \$9.86/month (\$118/yr). Multi-family residents may apply for a multi family vacancy rebate at the end of the year for units not occupied.

In March 2008, City Council voted to create a waste management utility, a city agency that will run the garbage collection and handling system and charge fees to cover the cost. All waste management costs will be charged as a flat fee starting in January 2009 and removed from the property taxes entirely. This change requires an amendment to the Waste Management By-law to allow for conversion of waste management services to a public utility.

1.3 Variable Rate Fee Recovery

Variable rate fee recovery programs employ a full fee recovery approach that enables the resident to choose a range of different fee payments that correspond to different sizes of garbage containers. This is a sophisticated PAYT approach which uses an increasing variable fee structure to encourage waste diversion.

City of Toronto, Ontario

The City of Toronto's Sustainable Financing Plan (*Proposed Initiatives and Financing Model to Get To 70% Solid Waste Diversion By 2010*) was approved by Council on 20th June, 2007 by a vote of 28 to 18 in favour.³ Toronto's program is essentially a full cost recovery program with a twist.

Because the current costs for solid waste services are collected as part of property taxes and cannot be easily removed from the property tax bill, every household will receive an annual rebate equal to the average amount collected through the tax bill. This amount has been calculated at \$209 per household and is equivalent, according to the City's calculations, to the current cost of providing solid waste management services to the average residential house.

Residents then must order one of four sizes of garbage collection carts ranging from 75 litres to 360 litres. Residents ordering the smallest cart (75 litres) will receive an additional \$10 rebate (in addition to the \$209 rebate) and residents

Toronto 70% Target

The City is asking for additional support by

- Developing 3 Working Groups to support future City programs: In Store Packaging Waste Diversion Working Group, Multi-Family Waste Diversion Working Group and 3Rs Working Group; with the mandate to investigate taxes, bans and other legislation on in-store and food service packaging.
- Requesting that the provincial government adopt financial mechanisms to promote, encourage and achieve source reduction or reuse of packaging and products which currently become municipal waste;
- Requesting that the Province of Ontario take immediate steps to extend the stewardship programs of Waste Diversion Ontario to include within 24 months: green bin organics, electronics, mattresses, furniture, carpets and sporting goods.

³ The link to the report to Executive Committee outlining the plan is:
<http://www.toronto.ca/legdocs/mmis/2007/ex/bgrd/backgroundfile-3799.pdf>

opting for one of three larger container sizes will pay the difference between the cost of their container and the \$209 rebate. Residents will be able to choose one of three larger containers. Rates are as follows:⁴

- 75-litre (one bag) - \$209
(no charge on bill)
- 120-litre (1.5 bags) - \$248
(\$248 - \$209 = \$39 on bill)
- 240-litre (3 bags) - \$342
(\$342 - \$209 = \$133 on bill)
- 360-litre (4.5 bags) - \$399
(\$399 - \$209 = \$190 on bill)

The key highlights of the plan are:

- The cost of residential waste management service, plus new programs required to reach 70% will be funded through a variable rate pricing system applied to waste only (diversion at no cost);
- The City's residential waste management system originally cost \$183.5 million (consisting of \$101 million from the single family class (approx \$209/hh) and \$82.5 million from multi-residential class (about \$157/hh) prior to the new cart based program;
- Future annual cost of the waste management system (\$183.5 plus \$54 million = \$237.5 million) works out to a single family system cost of \$271/hh;
- The start date requires the Province to enact a regulation to allow solid waste management service fees to have priority lien status;
- The City purchased 500,000 "residual containers" for garbage for single family homes and moved to an automated collection system;
- Single family homes can subscribe to 4 different garbage container sizes: 75L, 120L, 240L or 360L;
- 5 free tags will be issued to resident per year for special occasions.

City of Vancouver, British Columbia (Post 2006)

Between October 2005 and June 2006, the City of Vancouver launched its new automated variable containerized waste management system. This new system offers residents a range of variable can sizes for garbage and leaf and yard waste. The 2007 fee is based on a two tier system, as follows:

- Garbage
 - 5 cart sizes to choose from (75 litre to 360 litre);
 - annual fee ranges from \$70 to \$147 per household based on cart size;
 - the fee includes the cost of the container, and
 - The fee is based on a \$50 flat service fee + \$27/ 100 litre collection fee.
- Recycling
 - stop fee (\$10/yr) + service fee (\$10/yr) = \$20/yr.
- Yard Waste
 - 4 cart sizes to choose (120 litre to 360 litre);
 - annual fee ranges \$43 to \$62 based on cart size and
 - The fee is based on a \$33 flat service fee + \$8 per 100 litre collection fee.

The container fees increase with the size of the container as shown in Table 1.2.

⁴ Because the current costs for solid waste services are collected as part of property taxes and cannot easily be removed from the property tax bill, every household/multi-unit building will receive a one time rebate equal to the average amount collected through the tax bill. Home owners will put the \$209 rebate towards paying for their individual household's solid waste service charges.

Table 1.2: City of Vancouver's Variable Rate Subscription Fees

Garbage Container (2007 fees)		Yard Trimmings (2007 fees)		Recycling (2007 fee)
Container Size (litres)	Collection Fee (\$50 flat fee service + \$27/100 litre collection fee)	Container Size (litres)	Container Size (litres)	
75	\$70	Not available		\$20
120	\$82	120	\$43	\$20
180	\$99	180	\$47	\$20
240	\$115	240	\$52	\$20
360	\$147	360	\$62	\$20

The average household has experienced a slight increase in waste management service costs (garbage, yard trimmings & recycling) from 2005 to 2007, with the average household paying \$149/yr in 2005, \$161/yr in 2006 and \$172/yr in 2007.

City of St. Albert, Alberta

In January 1994, St Albert established a Solid Waste Utility in which the waste disposal expenditures (private landfill tipping and recycling depot) were transferred from the tax base to the utility bill as a flat fee of \$3.00 per household per month. In 1996 the collection costs were transferred from the tax base to the utility bill as an additional flat fee per month. The total flat fee rate of \$6.00 per month included costs for recycling, waste collection and transportation, and landfill tipping fees.

Initially, the subscription system was very simple. Residents were offered one of three variable container/tag collection service options (2 bags or 1 can, 4 bags or 2 can and 6 bags or 3 cans). If the resident subscribed to 2 bags (or 1 can) per week, then they were not required to use tags. Only those residents who subscribed to a higher level of service (a minority) were issued tags and were required to use them (e.g., if a household subscribed to the 4 bag per week service they received 52 stickers saying 4 bags, etc.). In 2000 and 2006, new options were added to the system (see Table 1.3).

Table 1.3: St. Albert System Costs and Recycling Performance (1996-2006)

	1996	1998	2000	2003	2006
Program highlights and changes	- variable rate program implemented mid 1996 - 3 variable container systems available	- 3 variable container systems available	- variable container program expanded - 4 variable container systems available - separate recycling and composting fee introduced	- no major program changes	- variable container program expanded - 6 variable container systems available
Solid waste charges	Garbage - \$36 - \$108/yr Stickers - \$1.50/each	Garbage - \$54 - \$162/yr Stickers - \$1.50/each	Garbage - \$32 - \$194/yr Recycle/ compost - \$22/yr Stickers - \$1.50/each	Garbage - \$33 - \$230/yr Recycle/ compost- \$39/yr Stickers - \$1.50/each	Garbage - \$19 - \$230/yr Recycle/ compost- \$44/yr Stickers - \$1.60/each

Today, St Albert uses a variable rate container system (the first in Canada) in which residents are charged variable rates depending on the size of the container they place at the curb for weekly waste collection (see Table 1.3). The larger the container (or number of bags), the higher the monthly fee (see Table 1.4 below for 2007 fees). The cost of recycling and composting are added as a separate line item in the monthly rates.

Table 1.4: City of Alberta's 2007 Variable Container Rates

Bag/Tag program	Variable Container System	Monthly Rate
1 bag set out every two weeks	Not applicable	\$1.75
1 bag set out per week	Not applicable	\$3.50
2 bag set out per week	1 can or 121 litre toter set out per week	\$7.00
3 bag set out per week	Not applicable	\$10.50
4 bag set out per week	2 cans or 242 litre toter set out per week	\$14.00
6 bag set out per week	3 cans or 363 litre toter set out per week	\$21.00
A recycling and composting management fee		\$3.65

City of Seattle, Washington

The City of Seattle established its solid waste management services as a utility under the Seattle Public Utilities. It operates the Solid Waste Fund as a public utility enterprise fund of the City of Seattle. The Enterprise Fund was established to account for the solid waste activities of Seattle Public Utilities (SPU). All residential operations are supported by the fund and monies are accrued through variable rate fees charged to residents and through the collection of tipping fees.

All residents within the City of Seattle are required by the Seattle Municipal Code to have garbage containers and pay for garbage service.

SMC 21.36.050 Garbage containers required -- Residential.

A. All owners and occupants of residences and other dwellings shall have and use a sufficient number of garbage containers to hold all of their garbage and ashes. Additional amounts of rubbish, bundled in bundles as defined in this chapter, may be set out for collection. At least one (1) service unit must be a garbage can, mini-can, or collector-supplied cart for all service levels greater than zero (0) units.

Solid waste collection and disposal services are billed at rates prescribed by City ordinances (by-law) passed by the City Council. Variable rates are applied to services provided for both collection of waste from single family residences, multi-family residences and commercial establishments. Every property must have some type of garbage service (or vacancy rate). Residents can subscribe to a backyard service, in which the collection crew will collect and return the garbage cans from the resident's backyard (households are charged an additional fee for this extra service). The cost of the service depends on the number and size of garbage containers as detailed in the Table 1.5.

Table 1.5: City of Seattle Monthly 2008 Residential Variable Subscription Rates

	Collection Type	
Service Level	Curb or Alley (US \$ per month)	Backyard (US \$ per month)
micro-can (12 gallon)	\$11.05	not available
mini-can (20 gallon)	\$13.55	not available
one can (32 gallon)	\$17.65	\$24.70
two 32 gallon cans or one 64-gallon cart	\$35.30	\$49.40
three 32-gallon cans or one 96-gallon cart	\$52.95	\$74.15
additional (per can)	\$17.65	\$24.70
Yard Waste	\$5.35	not available

Seattle has adopted a linear variable rate structure for garbage, whereby rates increase above the actual cost of service as the size of container (or level of service) increases. Therefore, the rate for a second (or third) can is twice (three times) that of a single can, although the cost of picking up that second (third) can is less than this amount. This policy has been in place since the 1989 and has never been changed.

The City provides a waste service subsidy for lower income, seniors and disabled residents whereby customers can save up to 50% on their Seattle Public Utilities water, sewer, garbage and drainage bill if they are:

- A household income at or below 200% of federal poverty level;
- A senior citizen over age 65;
- A disabled person who receives certain disability payments;
- Blind;
- On life support;

AND

- Their income is at or below 70% of the state median income.

The City of Seattle has a mandatory garbage charge for all occupied and unoccupied dwelling units, whether or not the services are being used. However, customers may apply for an exception to this mandatory charge, if a property will not be occupied or used as a residence for a minimum of 60 consecutive days. Garbage and recycling must not be set out for collection during this time. Eligible residential buildings include:

- New construction;
- Single family residences which are unlivable for 60 or more consecutive days; and
- Individual units in a multi-family buildings which are unlivable for 60 days or which have been permanently converted to storage units.

If approved, the garbage bill is reduced to US \$6.85 per month (US \$13.70 bi-monthly) in 2008. The wording of the Municipal Code establishing the Vacancy Rate is provided below.

Seattle Municipal Code
Chapter 21.40 SOLID WASTE COLLECTION RATES AND CHARGES

3. Minimum Charge, No Pickup Service. A charge per month or portion thereof, for each dwelling unit, including single-family dwellings not being used as residences, billed directly to the owner or occupant of Six Dollars and Twenty-five Cents (\$6.25) to cover landfill closure costs, billing, collection, Low Income Rate Assistance, hazardous waste costs, and litter cleanup costs. Effective April 1, 2005, a charge per month or portion thereof, for each dwelling unit, including single-family dwellings not being used as residences, billed directly to the owner or occupant of Six Dollars and Thirty-Five Cents (\$6.35) to cover landfill closure costs, billing, collection, Low Income Rate Assistance, hazardous waste costs, and litter cleanup costs. To be eligible for the minimum charge (zero (0) container rate) a customer may not generate any garbage or rubbish for collection or disposal. With occupied premises, the customer must demonstrate a consistent and effective practice of selective purchasing to minimize refuse, of recycling materials whenever practical, and of composting any yard wastes generated on the premises and the customer must have qualified for the rate on or before December 31, 1988. A customer is not eligible for the zero (0) container rate by hauling his or her garbage and rubbish to a transfer station, disposal site, or by disposal in another customer's containers or by the use of prepaid stickers. Vacant multifamily units do not qualify for the minimum charge.

The City also imposes a US \$10 charge for the establishment of a new account or for each change to an existing account; however, the new/changed account charge does not apply to customers qualified for Low Income Rate Assistance.

2 Residential Billing Approaches

2.1 Ontario Research

Only a handful of communities have been identified in Ontario which charge for solid waste management service as a separate line item on the property tax bill, as described in Section 1.2. Some of these communities are described below.

Township of Southgate

The Township of Southgate provides an automated cart service to residents. Each resident is provided a 240 litre cart (charcoal) for garbage, a 240 cart for recyclables (blue) and a 240 litre cart for organics (green). Residents may upgrade their garbage carts by:


- Purchasing an additional 240 litre cart, which is charged \$7 per pick up,
- Upgrading to a 360 litre cart, which is charged \$3 per pick up or
- Purchasing an additional 360 litre cart, which is charged \$10 per pick up.

No copies of the bill are available.

City of Pembroke

The City of Pembroke itemizes the garbage/recycling flat fee and the waste recovery fee as two separate line items under the special charges section of the property tax bill as displayed in Figure 2.1. The garbage/recycling flat fee is a fixed fee which applies to all single family households, multi-family units and IC&I businesses receiving municipal waste management services. The waste recovery fee is a variable fee based on property assessment and authorized under By-law Number 2006-40. The fees range from \$85 to \$425 depending on the range of property assessments (see Table 1.1 for detail).

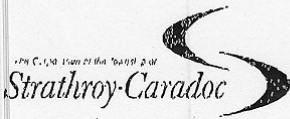
Figure 2.1: Pembroke Property Tax Bill

 CITY OF PEMBROKE / LA VILLE DE PEMBROKE 1 PEMBROKE STREET EAST, P.O. BOX 277 PEMBROKE, ONTARIO K8A 6X3 TEL.: (813) 735-6821 FAX: (613) 735-3660		TAX BILL RELEVÉ D'IMPOSITION SEE INFORMATION ON REVERSE VOIR INFORMATION AU VERSO		SAMPLE BILL	
RYTGAGE NO. / NO D'HYPOTHEQUE XXXXXX		ROLL NO. / NO DE CADASTRE 4764 000 XXX XXX00 0000		BILLING DATE / DATE DE FACTURATION 2006 JULY 24	
ASSESSED OWNER(S) AND MAILING ADDRESS / PROPRIETAIRES(S) FONCIERS ET ADRESSE POSTALE DOE JOHN DOE JANE XXX STREET PEMBROKE ON K8A XXX		ASSESSED PROPERTY DESCRIPTION / DESCRIPTION DE LA PROPRIÉTÉ ÉVALUÉE XXX STREET LEGAL DESCRIPTION 66.00FR 128.70D			
ASSESSMENT / ÉVALUATION TAX / TAXE VALUE / VALEUR RATE / TAUX AMOUNT / MONTANT		MUNICIPAL / MUNICIPALE RATE / TAUX AMOUNT / MONTANT		EDUCATION / SCOLAIRE RATE / TAUX AMOUNT / MONTANT	
EP 100,000 .01639266 1639.26				.00264000 264.00	
LEVY / IMPOSITION MUNICIPAL / MUNICIPALE				EDUCATION / SCOLAIRE	
SPECIAL CHARGES / REDEVANCES SPÉCIALES GARBAGE/ RECYCLING 155.00 WASTE RECOVERY 85.00		SUMMARY / SOMMAIRE MUNICIPAL + EDUCATION LEVIES / IMPÔTS MUNICIPAUX + SCOLAIRES SPECIAL CHARGES / REDEVANCES SPÉCIALES PHASE-IN ADJUSTMENT / REDRESSEMENT PROGRESSIF TAX CAP ADJUSTMENT / REDRESSEMENT DES IMPÔTS SELON LE PLAFONNEMENT CURRENT YEAR FINAL TAXES / IMPÔTS DE L'ANNÉE COURANTE LESS INTERIM BILLING / MOINS FACTURATION INTERIMARE PAST DUE - CREDIT / ARRÉRAGES - CRÉDITS (Y-A / M / D-J)		1903.26 240.00	
		TOTAL TAXES DUE / TOTAL DES IMPÔTS EXIGIBLES		2143.26	
240.00		1ST INSTALMENT / 1ER VERSEMENT Y-A / M / D-J		2ND INSTALMENT / 2IEME VERSEMENT Y-A / M	

Strathroy-Caradoc

In the past, the municipality of Strathroy-Caradoc (a member of the Bluewater Recycling Association (BRA) charged residents for garbage collection as a waste management line item on the property tax bill. Until recently, Strathroy Caradoc separated out waste management services for residential properties as a separate line item (under special charges) on the property tax bill (see Figure 2.2). The municipality charged a flat fee of \$110/hhld/yr to all households. The flat fee was established by dividing the solid waste levy by the total number households listed in the assessment role. All payments went back into general funds and the accounts payable department would issue a cheque to Bluewater. Since 2005, Strathroy Caradoc has implemented a full user pay system, charging \$1.50 for every bag of garbage collected and has subsequently removed the line item fee from the property tax bill.


Figure 2.2: Strathroy-Caradoc Property Tax Bill

FEB-08-06 WED 01:27 PM		STRATHROY CARADOC		FAX NO. 519 245 6353		P. 01/01	
		TREASURY AND TAX DEPARTMENT MUNICIPAL OFFICE, 52 FRANK STREET STRATHROY, ON N7G 2R4 INFORMATION & ENQUIRES (519) 245-1070		TAX BILL		2004 FINAL	
						BILLING DATE 5AUG04	
ROLL NO.		MORTGAGE COMPANY		MORTGAGE NO.			
ASSESSED OWNER/MAILING INFORMATION		ASSESSED PROPERTY					
ASSESSMENT		MUNICIPAL					
TAX CLASS	VALUE	TOWNSHIP RATE	TAX AMOUNT	COUNTY RATE	TAX AMOUNT	TAX RATE	TAX AMOUNT
RTEP	223000	0.00877326	1956.44	0.00438687	978.27	0.00296000	660.08
SUB TOTALS		MUNICIPAL LEVY		2934.71		EDUCATION LEVY	
						660.08	
SPECIAL CHARGES/CREDITS		SUMMARY					
Garbage 110.00		TAX LEVY SUB-TOTAL (MUNICIPAL + EDUCATION)				3594.79	
		SPECIAL CHARGES/CREDITS				110.00	
		2004 TAX CAP ADJUSTMENT					
		FINAL 2004 TAXES				3704.79	
		LFSS INTERIM BILLING				1706.04	
TOTAL 110.00							
EXPLANATION OF TAX CHANGES							
PROPERTY CLASS(ES):		RTEP		PAST DUE/CREDIT		0.00	
FINAL 2003 LEVIES:		3,412.08		TOTAL AMOUNT DUE		1998.75	
FINAL 2004 LEVIES:		3,594.79		EXPLANATION OF PROPERTY TAX CALCULATIONS			
YEAR OVER YEAR CHANGES:		182.71		PROPERTY CLASS(ES):			

City of Ottawa, Ontario

For the time being, the City of Ottawa is using the property tax bill as the best vehicle for timely and accurate billing for the flat garbage fee introduced in 2006. The City removed waste collection and disposal costs from the overall assessment and tax rates and placed them as separate line item and fee on the property tax bill, as shown in Figure 2.3. Single family residents were charged \$78.90 as a separate fee for curbside garbage services in 2006.

Figure 2.3: City of Ottawa's Property Tax Bill

AUG-02-2006 15:29		TRAIL ROAD WASTE FACILITY		613 838 4388 P.03/0	
		SUPPLEMENTARY TAX BILL / RELEVÉ D'IMPOSITION SUPPLÉMENTAIRES			
City of Ottawa Revenue Division / Division des Recettes Ville d'Ottawa Tel/Tél: 613-580-2444 Fax/Télécoleur: 613-580-2457		BILLING DATE / DATE DE FACTURAT JUL/JUIL 21, 2006			
PROPERTY INFORMATION / INFORMATIONS FONCIÈRES					
521		4570-0700-0000-0000 CEN-1000-0000-0000 R-1000-0000-0000 43.54AC 349.57FR 860.49D			
EFFECTIVE PERIOD / PÉRIODE EN VIGUEUR JAN/JANV 01 2006 TO / AU DEC/DÉC 31 2006					
REASON FOR SUPP. / RAISON DU SUPPL. Omit Assmt/Eval Omit					
ASSESSMENT / ÉVALUATION		MUNICIPAL / MUNICIPAL		EDUCATION / SCOLAIRE	
Tax Class / Catégorie d'impoz	Value / Valeur	Tax Rate % / Taux d'imposition %	Amount / Montant	Tax Rate % / Taux d'imposition %	Amount / Montant
RT-TRB	169,000	PARA-TRANPO RURAL	.008054	10.23	
RT-POL	169,000	OTTAWA POLICE D'OTTAWA	.146374	247.37	
RT-FSR	169,000	FIRE/INCENDIE SERV	.021888	36.99	
RT-CAL	169,000	CONS AUTHORITY/AUT DE CONSERV	.005831	9.85	
RTEP	169,000	CITYWIDE / VILLE ENTIÈRE	.540367	913.22	264000 446
SUB TOTALS / TOTAUX PARTIELS		Municipal Levy / Impôts municipaux		Education Levy / Impôts scolaires	
		\$1,237.48		\$446	
SWC-SOLID WASTE/DÉCHETS@578.90		78.90		Tax Levy Sub-total (Municipal + Education) Total partiel des impôts (municipaux + scolaires) \$1,663	

Staff have reviewed the possibility of placing the garbage collection and disposal fee on the City's existing water bill. However, logistical and legal concerns prohibited the City from pursuing this option in 2006. In Ottawa, currently there are over 40,000 residential and multi-residential properties that receive garbage collection services from the City, but are not currently billed on the water billing system. These properties are primarily in the rural areas, where no City water service is provided. In time these properties could be added to the water billing system, but this will necessitate an increase in data management and mailing costs. In addition, some rural properties receive only one water bill per year compared with urban residents who receive six water bills per year. Legal services felt that establishing an inconsistent billing practice could be misconstrued as unfair for those rural residents who are billed only once per year compared with those urban customers who are billed multiple pro-rated bills over the course of the year.

To minimize administrative and potential legal burdens it was decided to place the flat fee on the final 2006 tax bill until further analysis and planning can be done.

The use of the water billing system was further seen to add potential complexities to landlord-tenant relationships. According to city staff, a townhouse or condominium complex with multiple units may receive either curbside garbage collection or bin tipping collection. That same group of units may currently receive individual water bills at the tenant level, or a single water bill payable by the landlord. Applying the fee to the tax bill simplifies the billing process and enables the landlord to easily pass on the flat fee to the tenant through their leases. The use of a flat fee on the final tax bill eliminates a level of potential confusion for landlords and tenants who have differing accountabilities for payment of water bills.⁵

2.2 North American Research


The method used to collect waste management fees varies from community to community throughout North America. Most communities have chosen to use the existing property tax billing structure as the method for billing and collecting solid waste fees. The reason for this approach is best described by City of Vancouver staff, because it was “easier and cheaper to piggyback” on the existing property tax collection system than trying to set up their own payment system. Some communities, such as the City of Edmonton, have made arrangements with an existing energy utility to administer a number of service fees including electricity, water, sewer, and waste on a single bill.

City of Vancouver, British Columbia

The City of Vancouver has removed all waste management costs from the property taxes. All waste management flat fee charges appear as separate line items on the property tax bill. A copy of the pre-containerized property tax bill is provided in Figure 2.4.

⁵ City of Ottawa. April 26, 2006. Solid Waste Flat Fee Funding Implementation Report. Report to City Council

Figure 2.4: City of Vancouver's Pre-Containerized Waste Billing System



CITY OF VANCOUVER PROPERTY TAX NOTICE – 2005

453 WEST 12TH AVENUE, VANCOUVER, B.C. V5Y 1V4 PHONE: 604.873.7633 OFFICE HOURS: 8:30 AM - 5:00 PM MONDAY TO FRIDAY

60443-6

DUE DATE: JULY 5, 2005

5% PENALTY ADDED TO TAXES NOT PAID OR HOME OWNER GRANT NOT CLAIMED BY DUE DATE. SEE REVERSE.

TAX ACCOUNT NO. 126-9323

ASSESSMENT NO. 009-690-172-62

LEGAL DESCRIPTION OF PARCEL

PROPERTY ADDRESS

PROPERTY VALUE INFORMATION	PROPERTY CLASS	LAND	BUILDINGS	TOTAL
2005 ACTUAL VALUES	RESIDENTIAL			
2004 ACTUAL VALUES				
2003 ACTUAL VALUES				
2005 AVERAGED LAND VALUES				
TAXABLE VALUES - GENERAL				
TAXABLE VALUES - SCHOOL				
TAXABLE VALUES - GVTA				

FOR 2006 TAXES, YOU COULD ARRANGE TO PAY IN EQUAL INSTALMENTS BY ENROLLING IN OUR PREPAYMENT PLAN. SEE REVERSE FOR MORE INFORMATION.

2005 TAXES		TAXES PAYABLE IF HOME OWNER GRANT CLAIMED COMPLETE APPLICATION BELOW	
RATES	A GROSS TAXES NO GRANT	B BASIC GRANT UNDER AGE 65	C ADDITIONAL GRANT AGE 65+ & OTHER
SCHOOL LEVY	2.47345	1,366.17	1,366.17
LESS: HOME OWNER GRANT			80.00CR
NET BASIC SCHOOL TAXES		1,366.17	1,286.17
REGIONAL DISTRICT	.10053	55.53	55.53
B.C. ASSESSMENT AUTHORITY	.10168	56.16	56.16
MUNICIPAL FINANCE AUTHORITY	.00033	.18	.18
TRANSPORTATION AUTHORITY	.52367	289.24	289.24
NET OTHER TAXING AUTHORITY TAXES		401.11	401.11
CITY OF VANCOUVER GENERAL LEVY	2.78956	1,540.77	1,540.77
SEWER-2 DWELLINGS		214.00	214.00
WATER-2 DWELLINGS		414.00	414.00
YARD WASTE/GARBAGE	2 CANS	130.00	130.00
RECYCLING MULTI	2 UNITS	28.00	28.00


The City chose to include the waste management fees on the property tax bill because it was “easier and cheaper to piggyback” on the existing property tax collection system than trying to set up their own separate billing and payment system.

In 2006, the City of Vancouver launched a new billing approach to match its new automated variable containerized waste management system. This new system offers residents a range of variable can sizes for garbage and leaf and yard waste.


All related waste management fees are presented as separate line items on the new property tax bill as shown on a mock bill presented in Figure 2.5.

Figure 2.5: City of Vancouver Mock Variable Containerized Billing System

2005 PROPERTY TAX NOTICE
DUE DATE: Tuesday, July 5, 2005



1



FOLIO NUMBER	758-170-81-0000	ACCESS	328544
LEGAL DESCRIPTION			

Property Value		Assessed			Averaged	Taxable		
CLASS		2005	2004	2003	2005 Land	GENERAL	SCHOOL	GVTA
Residential	Land	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	Buildings	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PROPERTY ADDRESS		[REDACTED]			COLUMN A	COLUMN B	COLUMN C	
PID	[REDACTED]	CLASS	RATE		NO GRANT	BASIC GRANT	ADDITIONAL GRANT	
School - Residential			2.75856		1,458.63	1,458.63		1,458.63
Less: Home Owner Grant						-470.00		-745.00
NET SCHOOL TAXES					1,458.63	988.63		713.63
B.C. Assessment			0.11242		59.44	59.44		59.44
Municipal Finance Authority			0.00032		0.17	0.17		0.17
Regional District			0.10988		58.10	58.10		58.10
Transportation Authority			0.29269		154.76	154.76		154.76
NET OTHER TAXING AUTHORITIES					272.47	272.47		272.47
City of Vancouver General Levy			3.06186		1,619.01	1,619.01		1,619.01
Garbage			110.00000		110.00	110.00		110.00
Recycling			19.00000		19.00	19.00		19.00
Sewer			158.00000		158.00	158.00		158.00
Water			306.00000		306.00	306.00		306.00
Yard Waste			38.00000		38.00	38.00		38.00
NET CITY TAXES					2,250.01	2,250.01		2,250.01
TOTAL 2005 TAXES					3,981.11	3,511.11		3,236.11
TAX PREPAYMENTS (TIPP)					-2,530.00	-2,530.00		-2,530.00
Payments/Adjustments					-380.66	-380.66		-380.66
TOTAL OUTSTANDING TAXES					1,070.45	600.45		325.45

City of St. Albert, Alberta

In January 1994, St Albert established a Solid Waste Utility in which the waste disposal expenditures (private landfill tipping and recycling depot) were transferred from the tax base to the utility bill as a flat fee. All aspects of garbage and waste diversion billing and administrative responsibilities were assumed by the City's Water Utility. The Water Utility administers the City's water, sewer and garbage/waste diversion services. When a resident applies for water and sewer services, staff explain the variable rate garbage services and get the resident to sign on at the same time.


Utility bills are issued every two months. The utility bill includes a number of service charges including:

- refuse management service charge;
- recycling and composting service charge;
- water consumption charge;
- water flat rate charge, sewage treatment charge;
- sewer flat rate charge and
- other utility service charges which the City may from time to time add to the utility bill.

A sample of a bill is provided in Figure 2.6.

Figure 2.6: City of St. Albert Billing System

06/14/2006 09:17 FAX 459 1733		FINANCE ST ALBERT		002	
-------------------------------	--	-------------------	--	-----	--



UTILITY BILL

Please bring complete bill when paying in person
BILLING PERIOD: Mar 1, 2006 TO: Apr 30, 2006

FOR SERVICE AT:

READ DATE	METER NO.	NO. OF DAYS	CURR READING	PREV READING	CUBIC METERS	AMOUNT
May 10, 2006	0080513162	58	195	148	47	
PREVIOUS BILL AMOUNT						133.28
Apr 20, 2006	PENALTY					3.33
Apr 20, 2006	PAYMENT					-133.28
May 2, 2006	ADJ PENALTY					-3.33
PAY AS YOU THROW FLAT RATE					7.30	
PAY AS YOU THROW - 1 BAG					6.40	13.70
WATER FLAT RATE 5/8 INCH					14.00	
WATER CONSUMPTION					40.61	54.61
SEWER FLAT RATE 5/8 INCH					17.00	
SEWER TREATMENT 80%					40.83	57.83
STORM SEWER FLAT RATE 1					10.60	10.60

The PAYT bag tags will be delivered to your home between May 25th and June 16th. These will be for use during the last 6 months of 2006. Watch for them in the familiar marked envelope.

Payments received after May 25, 2006 will not be reflected on this statement.

ACCT NUMBER: 10009000

BILLING DATE: May 26, 2006

AMOUNT NOW DUE: \$136.74

AMOUNT DUE AFTER Jun 20, 2006: \$140.16


AMOUNT NOW DUE: \$136.74

AMOUNT DUE AFTER Jun 20, 2006: \$140.16

ACCOUNT NUMBER: 10009000

BILLING DATE: May 26, 2006

PAYABLE AT MOST FINANCIAL INSTITUTIONS



Please submit this portion with your payment

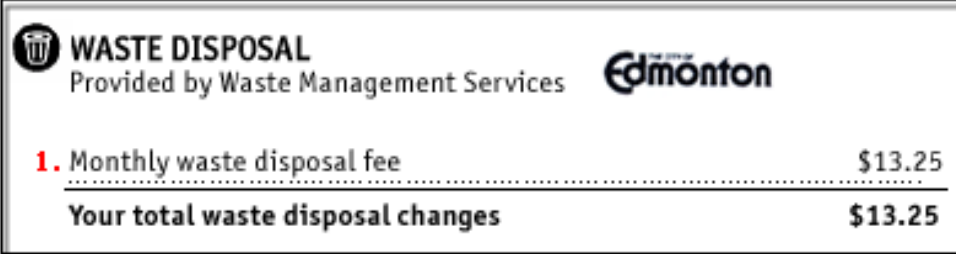
AMOUNT PAID



When the garbage and waste diversion payments are received they get coded to a different general ledger number and passed on to the waste management department. The Utility does not bill its service directly back to the waste management department. Since it is considered a city service, the garbage and waste diversion related administration and billing costs are covered in the Utility's budget. The Utility determines what percentage of time is used for waste management billing and administrative services and incorporates the time into the budget. Since the City decided to separate out the waste management costs from the property taxes and to apply a variable rate approach, the administration responsibilities have become onerous. For example, the Utility is responsible for hand delivering the user pay tags every 6 months (half the cost of mailing), signing up residents for collection, sending out bills and collecting payments, and all other administrative responsibilities other than providing collection services.

The City of Edmonton, Alberta

EPCOR Utilities, which provides power and water services to Edmonton, administers electricity, water, sewer, and waste utility bills. Water, sewer and waste disposal charges are put on one bill. All utility bill fees are collected by EPCOR. EPCOR bills on a monthly basis. A typical waste disposal fee line item is presented in Figure 2.7.

Figure 2.7: City of Edmonton Waste Disposal Bill



	WASTE DISPOSAL	
	Provided by Waste Management Services	
1.	Monthly waste disposal fee	\$13.25
	Your total waste disposal charges	\$13.25

The City has considered financing waste management services solely through the utility bill, however, the proposal was rejected.

City of Airdrie, Alberta


The City of Airdrie issues one bi-monthly utility bill for water, sewer, waste management and environmental services (see Figure 2.8). The waste management levy is based on the number of water meters (if the unit has a water meter then it is billed for garbage services). The levies are published in the Waste by-law. The billing services are administered by two full time staff working within the finance department but their salaries are apportioned back to the water, sewer and solid waste departments.

As soon as the levies are posted, the accounting system posts revenues to the general ledger account. Upon mailing of the utility bill, the revenue shows up in the general ledger and is automatically transferred to the solid waste general ledger. Even if the utility bills are not paid, the solid waste utility counts the fee as revenue. The Finance department will transfer any unpaid utility bill to water and then to the property tax bill (Alberta Government gives approval to do this).

The waste management levy is based on the number of water meters: if a unit has a water meter then it is billed for waste management services.

Figure 2.8: City of Airdrie Solid Waste Utility Bill

Feb. 13. 2006 11:00AM
No. 5502 P. 2



PLEASE RETURN THIS PORTION WITH YOUR PAYMENT.
If payment is made after Due Date, a Penalty of 6%, will be applied to your account.

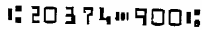
UTILITIES (403) 948-8859
202, 400 Main ST SE
Airdrie, AB T4B 3G8

MURRAY, PATRICIA
MURRAY, WAYNE
375 WOODSIDE CIR NW
AIRDRIE AB T4B 2J8

Account Number: 203572.01

9

Balance Forward 0/0/0000	\$0.00
Current Charges - DUE BY 9/30/2005	\$110.87
TOTAL DUE:	\$110.87
AMOUNT PAID:	



022035720100011087
96

Billing Period		No. of Days	Meter Reading			Consumption
From	To		Previous	Current		
6/21/2005	8/20/2005	60	1636	1671		35

Trans Date	Item	Document Reference	Amount
8/20/2005	Previous Bill Amount		\$123.88
7/31/2005	Payment - Thank You	1028411	(\$123.88)
8/20/2005	WATER LEVY - FLAT		\$33.80
8/20/2005	WATER LEVY - VARIABLE		\$12.65
8/20/2005	SEWER LEVY - FLAT		\$29.34
8/20/2005	SEWER LEVY - VARIABLE		\$19.86
8/20/2005	WASTE MANAGEMENT		\$8.23
8/20/2005	ENVIRONMENTAL SERVICES FEE		\$6.99

NOTE: This account is on a Pre-Authorized Payment Plan.

Account Number	Service Address	Billing Date
203572.01	375 WOODSIDE CIR NW	8/20/2005
Balance Forward - Due Date As Above	Current Charges	Total Amount Owning
\$0.00	\$110.87 Due 9/30/2005	\$110.87



SEE REVERSE SIDE FOR PAYMENT AND PENALTY INFORMATION.
Please allow sufficient time for your payment to reach our office by the Due Date.

City of Seattle, Washington

The utility billing function is co-managed by both the Seattle Public Utility (SPU) and Seattle City Light (SCL). The SPU provides customer service through the call center and walk-in center. The SCL operates and manages the billing system, Combined Customer Services System ("CCSS") for residential and small accounts. Each Service (SPU and SCL) bills and reimburses each other for the services provided. Within SPU, the cost and reimbursements are shared among the three utility funds (Water, Drainage and Wastewater, and Solid Waste). See Figure 2.9.

Figure 2.9: City of Seattle Public Utilities Bill (2 pages)

CITY OF SEATTLE

Account number:
2-33333-222222

TOM JONES

SEATTLE, WA 98106

Property owner:

Service address:

Seattle Public Utilities Bill

Questions? Call 206-684-3000 or 1-800-862-1181 (out of area calls only)
Write us? 700 5th Avenue, Suite 2777, PO Box 34027, Seattle, WA 98124-4027

103984
278
CD-8

Summary of charges as of December 09, 2005
Payments received after December 10, 2005 are not reflected.

Previous balance:	193.22
Payments applied - THANK YOU:	193.22 CR
Balance:	0.00
Total adjustments:	0.00
Current billing:	113.46

TOTAL AMOUNT DUE ON December 30, 2005 \$113.46

WINTER RATES ARE IN EFFECT FROM SEPTEMBER 16 THROUGH MAY 15.

Moving? Call us on the day you move if you are reading your own meter.
To have us read your meter for a fee, call us at least 3 days in advance of your move.

Remember: Account openings and account closings cannot be backdated to a day before you contact us.

Customers are responsible for all charges until an account closes.

Compare Your Water Usage

2004 Bill Months 2005

<p>0.46 0.36 0.27 0.18 0.09 0.00</p> <p>Avg gals/day</p>	<p>This Period No. of days: 60</p> <p>Consumption in CCF: 6 Avg consumption/day: 0.10 CCF</p> <p>Consumption in gals: 4488 Avg consumption/day: 74.80 gals</p>	<p>Same Period Last Year No. of days: 60</p> <p>Consumption in CCF: 7 Avg consumption/day: 0.11 CCF</p> <p>Consumption in gals: 5236 Avg consumption/day: 87.26 gals</p>
--	---	---

1 CCF = 748 gallons

Please tear off remittance stub below and mail it with your payment in the enclosed return envelope.

Please do not write messages on the bill stub, which is machine processed - instead, write to us on a separate sheet and include your account number.

Seattle Public Utilities Bill

Service address:
Property owner: TOM JONES
Account number: 2-33333-222222

TOM JONES

SEATTLE, WA 98106

DUE DATE: December 30, 2005
TOTAL AMOUNT DUE: \$113.46

Enter Amount Paid: \$ _____

Write account number on check. Please do not send cash.

Make check payable and mail to:

CITY OF SEATTLE
DEPARTMENT OF FINANCE
P.O. BOX 34016
SEATTLE, WA 98124-1016

2nd Page of the Bill

<p>CITY OF SEATTLE</p> <p>Account number: 2-33333-222222</p> <p>TOM JONES SEATTLE, WA 98106</p> <p>Property owner: TOM JONES</p> <p>Service address:</p>	<div style="text-align: right;">103984 27B CD-8</div> <h2 style="text-align: center;">Seattle Public Utilities Bill</h2> <p>Statement date: December 09, 2005 Page 2</p> <hr/> <h3>DETAILED BILLING INFORMATION</h3> <hr/> <h4>Water Service</h4> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Service From</th> <th>Service Through</th> <th>CCF Usage</th> <th>Previous Reading</th> <th>Current Reading</th> </tr> </thead> <tbody> <tr> <td>Oct 07, 2005</td> <td>Dec 06, 2005</td> <td>6.00</td> <td>2872.00</td> <td>2878.00</td> </tr> </tbody> </table> <p>Meter Number: PRE-J0099367-1 Service Category: WTR1 Winter Residential 6.00 CCF @ \$2.530 per CCF 15.18 Base service charge 17.50</p> <p><i>Water revenue pays the following costs:</i> 38% for water quality and supply 28% for infrastructure and maintenance 12% for services, billing and emergency response 11% for taxes 5% for administration 4% for environmental investments 2% for revenue stabilization fund</p> <p style="text-align: right;">Current Water Service: 32.68</p> <h4>Sewer Service</h4> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Service From</th> <th>Service Through</th> <th>CCF Usage</th> <th>Previous Reading</th> <th>Current Reading</th> </tr> </thead> <tbody> <tr> <td>Oct 07, 2005</td> <td>Dec 06, 2005</td> <td>6.00</td> <td></td> <td></td> </tr> </tbody> </table> <p>Residential Inside City 6.00 CCF @ \$6.580 per CCF 39.48 63% of sewer revenue is paid to King County Metro for sewage treatment.</p> <p style="text-align: right;">Current Sewer Service: 39.48</p> <h4>Solid Waste Service</h4> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Service From</th> <th>Service To</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Dec 01, 2005</td> <td>Feb 01, 2006</td> <td></td> <td></td> </tr> <tr> <td>Can curb/alley</td> <td></td> <td>1.00 Unit(s)</td> <td>32.70</td> </tr> <tr> <td>Dec 01, 2005</td> <td>Feb 01, 2006</td> <td></td> <td></td> </tr> <tr> <td>Yardwaste</td> <td></td> <td>1.00 Unit(s)</td> <td>8.60</td> </tr> <tr> <td>Dec 01, 2005</td> <td>Feb 01, 2006</td> <td></td> <td></td> </tr> <tr> <td>Recycling</td> <td></td> <td></td> <td>0.00</td> </tr> </tbody> </table> <p style="text-align: right;">Current Solid Waste Service: 41.30</p> <p style="text-align: right;">CURRENT BILLING: 113.46</p>	Service From	Service Through	CCF Usage	Previous Reading	Current Reading	Oct 07, 2005	Dec 06, 2005	6.00	2872.00	2878.00	Service From	Service Through	CCF Usage	Previous Reading	Current Reading	Oct 07, 2005	Dec 06, 2005	6.00			Service From	Service To			Dec 01, 2005	Feb 01, 2006			Can curb/alley		1.00 Unit(s)	32.70	Dec 01, 2005	Feb 01, 2006			Yardwaste		1.00 Unit(s)	8.60	Dec 01, 2005	Feb 01, 2006			Recycling			0.00
Service From	Service Through	CCF Usage	Previous Reading	Current Reading																																													
Oct 07, 2005	Dec 06, 2005	6.00	2872.00	2878.00																																													
Service From	Service Through	CCF Usage	Previous Reading	Current Reading																																													
Oct 07, 2005	Dec 06, 2005	6.00																																															
Service From	Service To																																																
Dec 01, 2005	Feb 01, 2006																																																
Can curb/alley		1.00 Unit(s)	32.70																																														
Dec 01, 2005	Feb 01, 2006																																																
Yardwaste		1.00 Unit(s)	8.60																																														
Dec 01, 2005	Feb 01, 2006																																																
Recycling			0.00																																														

3 Non Payment Issues

Each city surveyed addresses the non payment issue using different strategies. Table 3.1 summarizes the various strategies with detailed descriptions provided below.

Table 3.1: Strategies Used to Address Non-Payment of Waste Management Bills

City	Non Payment Strategy
City of Airdrie, Alberta	<ul style="list-style-type: none"> - as soon as bill is sent, accounting system posts revenues to general ledger and waste management department is automatically paid - any unpaid utility bill is transferred to water and then to property taxes - city is authorized in By-law to shut off water for unpaid bills
City of St. Albert, Alberta	<ul style="list-style-type: none"> - any bill not paid within 21 days is charged a penalty of 2.5% of the unpaid charge - the by-law authorizes the city to refuse collection services for unpaid bills - since the water charge is on the same utility bill as the waste services charge, the city will cut off water services for any unpaid fees - the city also has the option of transferring the unpaid fee to the property tax bill
City of Vancouver, British Columbia	<ul style="list-style-type: none"> - waste management fees appear on the property tax bill and are handled as property taxes - in its by-law, any unpaid waste management fees can be registered as a charge against the land
City of Seattle, Washington	<ul style="list-style-type: none"> - The City has a policy of paying garbage services first since it is easier to turn off water services than decline garbage services - The city will turn off water services for unpaid garbage bills and will refuse to provide collection services for extended periods of non-payment - The city has the authority of issuing a lien against the property for non payment of garbage bill beyond 90 days.
City of Pembroke, Ontario	<ul style="list-style-type: none"> - Waste management fees are treated the same as any municipal tax - If a property tax bill remains unpaid for at least three years then the City will notify the property owner that it is placing a registration on the property which could involve taking over the property and selling it in auction

City of Airdrie, Alberta

The Finance department will transfer any unpaid utility bill to water and then to the property tax bill (Alberta Government gives approval to do this). Less than 1% of utility bills are not paid.

In addition, the Waste By-law gives authority to the General Manager to shut off the water supply to any residence that has defaulted on payment of the waste management portion of the utility bill, after a 30 day period.

<p style="text-align: center;"><i>City of Airdrie</i> <i>15/92 Waste By-law and Amendments</i></p> <p><i>Payment of Rates or Fees</i> 24. In case of default of payment of any collection rates or charges thirty days after the expiration of the day upon which the same shall have become due or payable, the City Manager may, after giving notice, shut off the water supply to any premises in respect of which payment is in arrears or default.</p>

City of St. Albert, Alberta

As written in the by-law, if a resident fails to pay all or a portion of the utility bill within twenty-one (21) days of the date shown as the billing date on the utility bill, the City imposes a penalty charge in the amount set out in the Consolidation of Pay As You Throw By-Law No. 16/96. The penalty charge is equal to 2.5% of the unpaid utility charge. In addition, the by-law stipulates that the City may refuse to provide collection services to payment delinquents.

*City of St. Albert
Consolidation of Pay As You Throw by-law No. 16/96*

Refuse Management Service

20. The City will not provide the refuse management service to any service user who:

(a) is in default in payment of a refuse management service charge or a recycling and composting service charge;

In actual fact, the water utility will shut off the resident's water if any portion of the utility bill is not paid. The utility does not separate out one service from another. The resident receives a reminder notice, followed by a shut off notice and if no payment is received then the utility will turn off the water. For bills that are delinquent over two months, the utility has the option of transferring the outstanding fees to the tax role.

City of Vancouver, British Columbia

The City of Vancouver's By-law No. 8417 stipulates procedures for setting rates, billing and collecting payments due. The by-law stipulates that in the case of unpaid waste management fees, the amount is registered as a charge against the land.

*City of Vancouver
By-law No. 8417
A By-law Respecting the Collection, Disposal, Transfer and Recycling of Solid Waste*

The rates and other amounts payable under this By-law,

(1) are a debt due and payable by the owner and occupier to the City and may be recovered by the City in any Court of competent jurisdiction, and

(2) with respect to solid waste collection service, will form a charge on the land to which service is allocated or to which service is provided.

Any rates or other amounts not paid when due and not already entered on the tax roll of the City under this By-law may be certified by the Director of Finance, and the amount so certified may be entered by the Director of Finance on the tax roll of the City. All amounts, once entered on the tax roll of the City, will form a charge on the land to which they relate and may be collected in the same manner as taxes.

City of Seattle Washington

The City has developed a policy of what utility service gets paid first if it is experiencing issues of non-payment at the end of the year. The City has placed garbage services as the highest priority and ensures that monies are received by the Seattle Public Utility fund first. It is easier to turn off water services than refuse garbage services.

The City issues reminders to residents reminding them of late payments and will notify residents that their water can be turned off if the garbage bill is not paid. The City will refuse to collect garbage if it experiences an extended non-payment of the bill, which depends on the size of the unpaid bill and the

length of time of non-payment. Generally the bill owed must exceed \$500 before the city cuts off garbage collection. After 90 days the city will issue a lien against the property for the unpaid amount.

Seattle Municipal Code
Chapter 21.40 SOLID WASTE COLLECTION RATES AND CHARGES

SMC 21.40.120 Payment of charges -- Delinquency and lien.

Garbage and rubbish collection charges imposed by this chapter shall be payable up to three (3) months in advance at the office of the City Director of Executive Administration and at the same time that water utility charges are due and payable with respect to residences or other dwelling units contemporaneously served, and partial payment on any bill will first be credited to amounts due for garbage and rubbish collection services, then to charges for wastewater services, and the balance to outstanding charges for water services. (Partial excerpt of paragraph)

B. Garbage and rubbish collection charges shall be against the premises served and when such charges have not been paid within ninety (90) days after billing, they shall constitute a lien against the residence or dwelling units served. Notice of the City's lien specifying the amount due, the period covered and giving the legal description of the premises sought to be charged may be filed with the County Auditor within the time required and may be foreclosed in the manner and within the time prescribed for liens for labor and material, as authorized by RCW 35.21.140.

City of Pembroke, Ontario

The City of Pembroke has written into its By-laws that any waste management related flat fees are to be added to the tax roll and collected in the same manner as municipal taxes. All line items on the property tax bill are treated as property tax. The City's tax accounting system does not differentiate between line items and property taxes.

By-law Number 2006-39
A BY-LAW TO IMPOSE AN ANNUAL FEE TO BE CHARGED TO THE OWNERS, HOUSEHOLDERS
OR OCCUPANTS OF ANY BUILDING IN THE CITY OF PEMBROKE TO DEFRAY THE EXPENSE OF
THE COLLECTION AND DISPOSAL OF WASTE

and

By-law Number 2006-40
A BY-LAW TO IMPOSE AN ANNUAL FEE TO BE CHARGED TO THE OWNERS, HOUSEHOLDERS
OR OCCUPANTS OF ANY BUILDING IN THE CITY OF PEMBROKE TO DEFRAY THE EXPENSE OF
THE WASTE MANAGEMENT FACILITIES AND SERVICES

THAT the Treasurer of the Corporation of the City of Pembroke may add the fees to the tax roll and collect them in the same manner as municipal taxes.

If a property tax bill remains unpaid for at least three years then the City will notify the property owner that it is placing a registration on the property which could involve taking over the property and selling it at auction.