
WASTE REDUCTION & RECOVERY MANAGEMENT DIVISION REPORT

2011



Solid Waste Management Branch
City of Vancouver Engineering Services

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SUMMARY: FREQUENTLY ASKED QUESTIONS

Who collects what type of solid waste materials in Vancouver?

Material	Single Family Dwellings (4 units or less)	Multi-Family Dwellings (apartments and condos)	Light-Industrial, Commercial, Institutional (ICI)	Demolition Landclearing, Construction (DLC) Sites	Public Realm ¹
Garbage	City of Vancouver Sanitation Services (~100,000 units)	Private sector waste haulers	Private sector waste haulers	Private sector waste haulers	City of Vancouver Sanitation Services
Recycling ²	City of Vancouver Sanitation Services (~100,000 units)	City of Vancouver Sanitation Services (~58,000 suites) and private hauler under contract with City (~106,000 suites)	Private sector waste haulers	Private sector waste haulers	City of Vancouver Sanitation Services
Yard Trimmings	City of Vancouver Sanitation Services (~100,000 units)	Primarily private sector landscape maintenance companies and waste haulers	Private sector landscape maintenance companies and waste haulers	Private sector waste haulers	Vancouver Park Board
Food Scraps	City of Vancouver Sanitation Services (~100,000 units)	Private sector waste haulers from limited number of properties	Private sector waste haulers from limited number of properties	N/A	Options for special events are under review

Of the sectors the City collects from, how much material is collected?

Table 1: 2011 Summary of Materials Collected in City's Residential Collection Program

Material	Tonnes
Garbage	61,705
Recycling ³	30,485
Yard Trimmings & Food Scraps	25,240

Table 2: Historical Summary 2007-2011

Material	Quantity (tonnes)					
	2007 ⁴	2008	2009	2010	2011	5 Year Average
Single Family Residential Garbage Collection	55,090	62,152	64,430	63,260	61,705	61,330
Single and Multi-Family Residential Recycling Collection ⁵	29,482	33,342	32,011	30,317	30,485	31,130

¹ Streets, lanes, sidewalks, parks, beaches, seawalls and City organized special events.

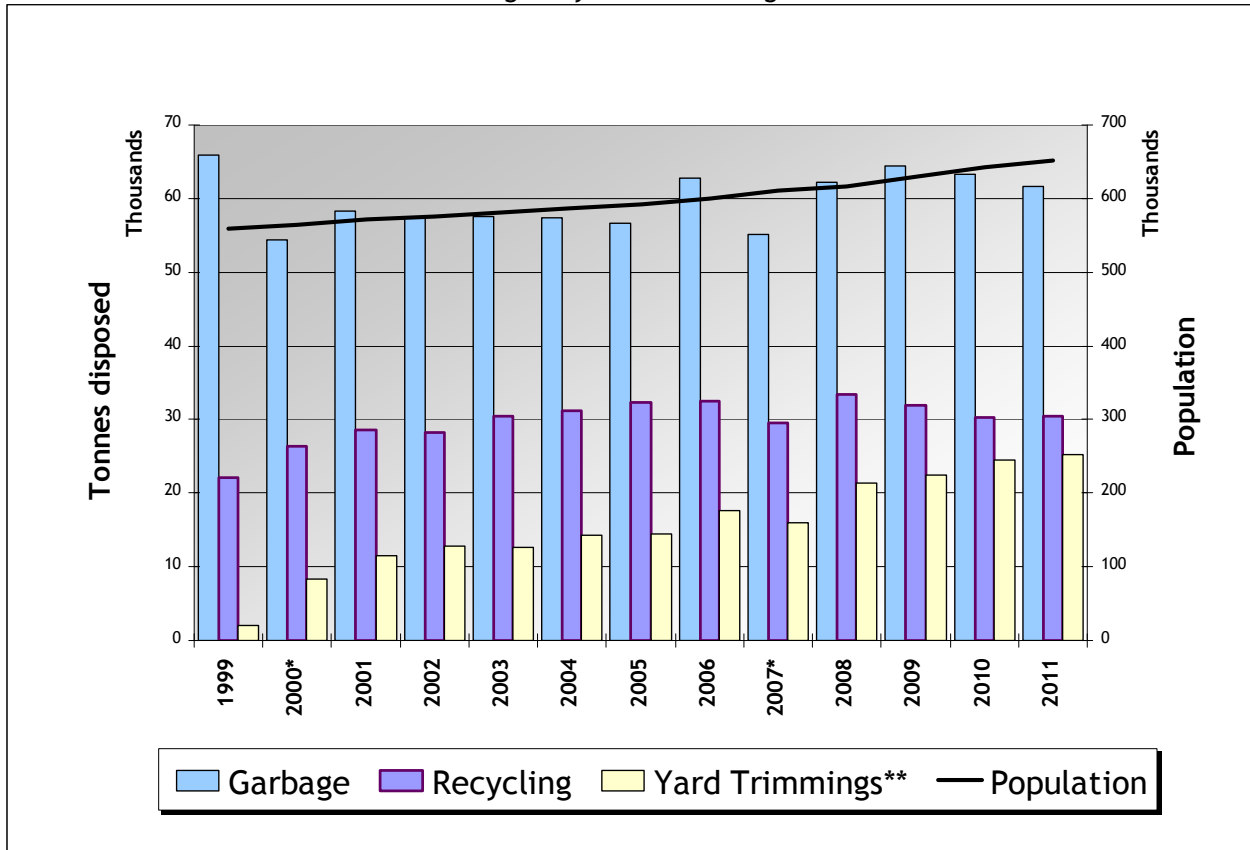
² Does not include materials collected under Product Stewardship Take-Back program.

³ Includes materials collected from multi-family recycling program by City contracted waste hauler.

⁴ City 2007 labour stoppage from July to October.

Single Family Residential Yard Trimmings Collection ⁶	15,950	21,400	22,400	24,530	25,240	21,905
Abandoned Garbage	1,119	1,562	1,742	1,834	1,844	1,620
Street Litter ⁷	6,686	2,780	2,463	2,866	3,643	3,690
Fall Leaf Program ⁸	3,612	4,740	3,240	3,882	4,717	4,040

Chart 1: Annual Materials Collected through City Collection Programs



* Labour disruption in these years

** Includes limited food scraps starting April 22, 2010

How much recyclables are collected at City operated Recycling Depots?

The City operates a recycling depot at the Vancouver South Transfer Station and a residential drop off area at the Vancouver Landfill. Various recyclable items that are not collected through the residential collection program can be dropped off for recycling at these locations.

⁵ Includes materials collected from multi-family recycling program by City contracted waste hauler.

⁶ Includes limited food scraps starting April 22, 2010.

⁷ Includes materials collected from Olympics in February 2010 and from Park Board properties starting July 2010.

⁸ Data from start of October to end of January of subsequent year.

Table 3: 2011 Recyclable Tonnages Dropped Off at City Facilities

Accepted Recyclable Items	Recycling Depot (Transfer Station)	Residential Drop-Off Area (Landfill)
	<i>Tonnes (unless specified)</i>	
Cardboard	723	193
Glass	40	Not Collected
Gypsum drywall	143	1,526
Household batteries & cell phones	2,210 kg	878 kg
Lead acid batteries	25	16
Mixed paper	772	75
Old newspapers	190	
Paint, solvent, aerosol	4	6.5
Plastic containers	43	2
Propane tanks	781 units	1,014 units
Refrigerators, freezers & air conditioners	3,927 units	1,892 units
Scrap metal	2,602	1,228
Tires	Not Collected	38
Waste antifreeze	205 L	2,460 L
Waste oil	615 L	13,420 L
Waste oil filters	Not Collected	10 drums
Wood Waste	1,195	946

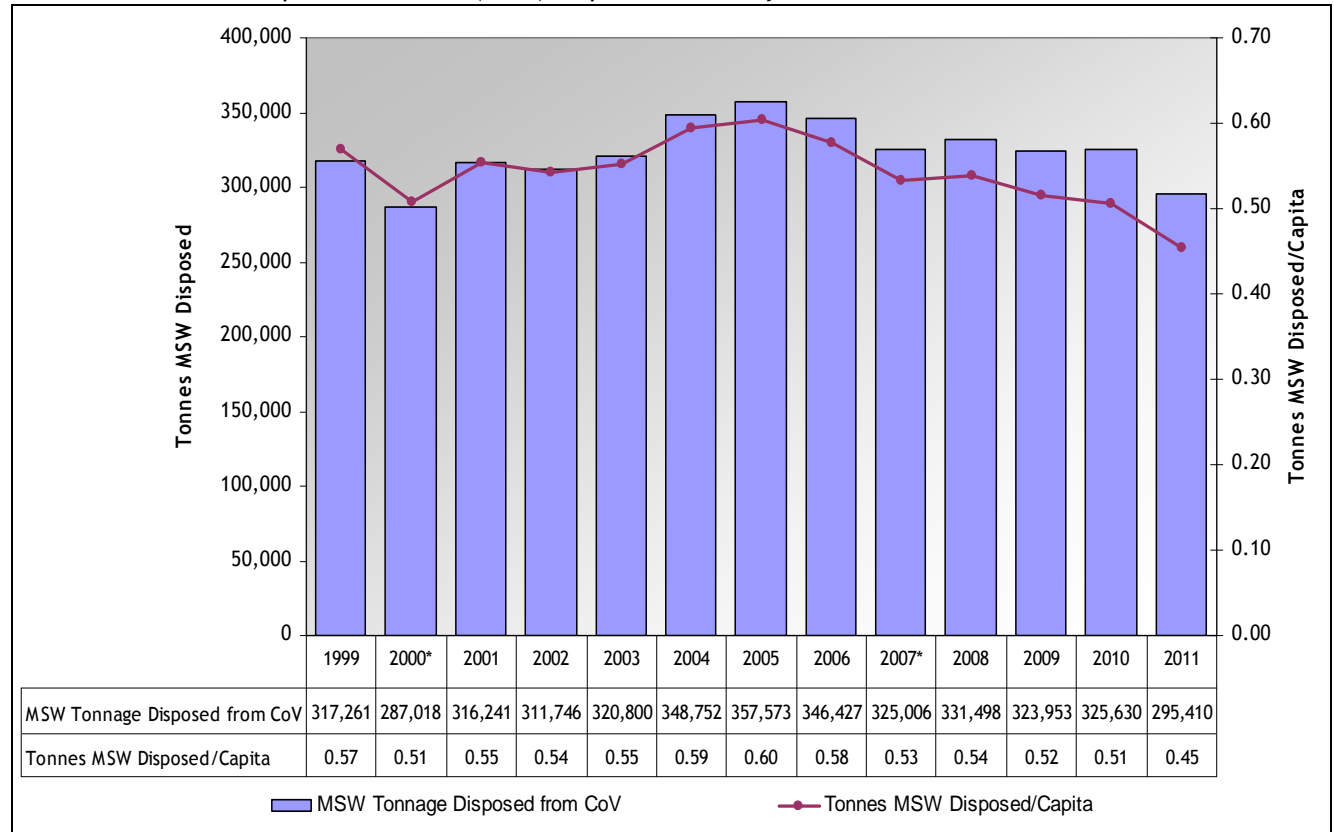
How much Vancouver solid waste is disposed?

Table 4: 2011 Summary

Total population	651,048
Total garbage disposed (residential & ICI sectors) ⁹	295,410 tonnes
Disposed per capita	0.45 tonnes/capita-year

⁹ Includes garbage disposed from City of Vancouver residential and ICI sectors, at all regional facilities. Excludes DLC waste.

Chart 2: Annual Municipal Solid Waste (MSW) Disposed from City of Vancouver¹⁰



* Labour disruption in these years

Between 2007 and 2011 an average of 320,300 tonnes per year of MSW (excluding DLC waste) originating from Vancouver was disposed. While Vancouver’s population grew from 600,000 people to over 650,000 people, the per-capita MSW disposed remained below 0.6 tonnes per person.

How much solid waste is diverted from disposal?

Approximately 55%, and that rate has remained relatively constant over recent years.

Table 5: 2010 Metro Vancouver Municipal Solid Waste¹¹

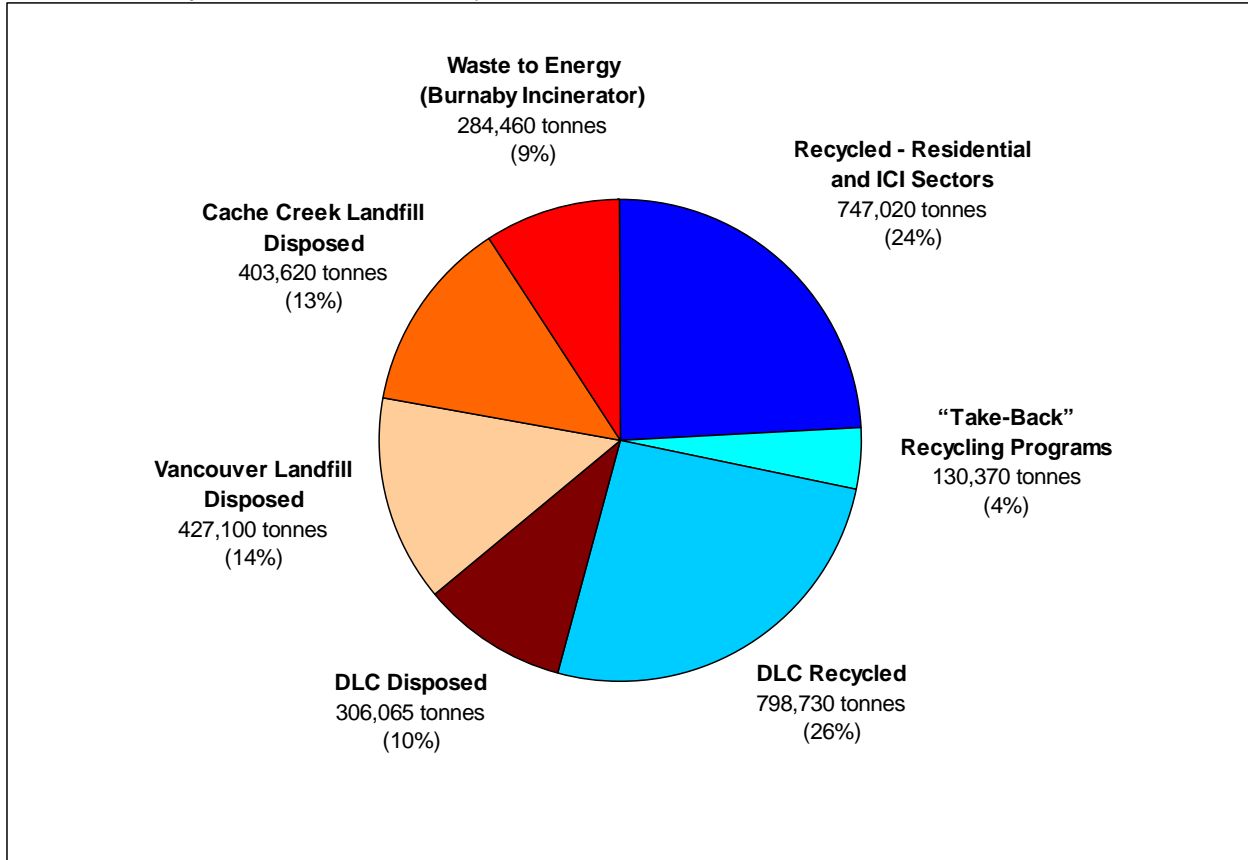
Sector	Total Waste Generated		Disposed		Recycled		Recycling Rate
	(tonnes)	(% of total)	(tonnes)	(% of total)	(tonnes)	(% of total)	(%)
Residential	962,955	31%	582,290	42%	380,665	23%	40%
Institutional, Commercial & Light-Industrial (ICI)	877,275	29%	510,920	36%	366,355	22%	42%
Demolition, Landclearing & Construction (DLC)	1,104,795	36%	306,065	22%	798,730	48%	72%
Product Stewardship (“Take-Back”) Programs	130,370	4%	-	-	130,370	8%	-
TOTAL	3,366,130		1,499,235		1,866,895		55%

¹⁰ Excludes DLC waste. Includes all garbage disposed from City of Vancouver residential and ICI sectors at all regional facilities.

¹¹ From all municipalities in Metro Vancouver.

How much solid waste is managed in the Region?

Chart 3: Municipal Solid Waste and Recyclable Material in Metro Vancouver, 2010¹²



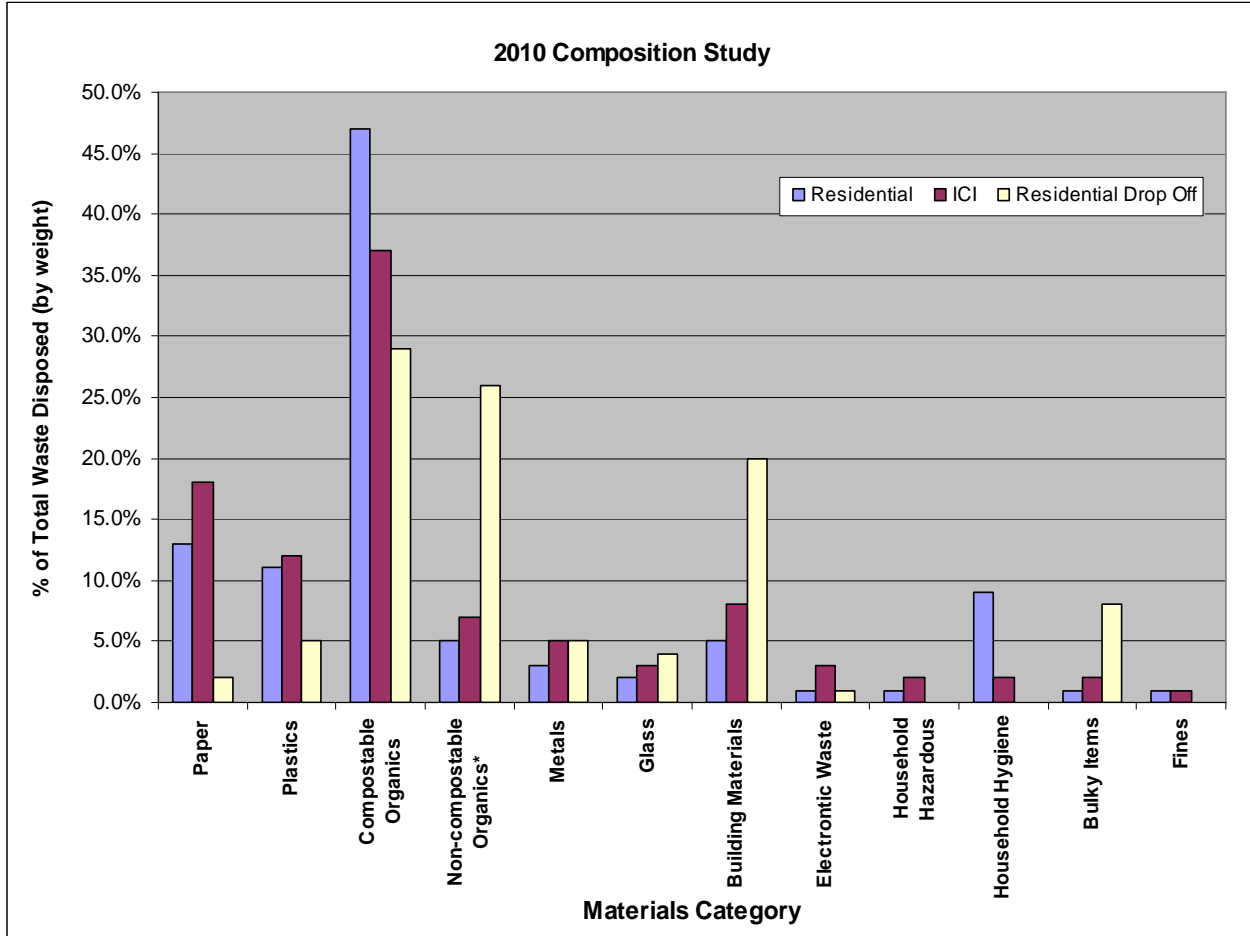
What is in our waste?

Chart 4 shows the overall composition of materials disposed in Metro Vancouver in 2010. Some of the materials entering the disposal stream are recyclable and can, with additional recovery efforts, be diverted through existing or new recycling programs. Other materials in the disposal stream do not have recycling value currently, but may have potential for recovery of energy.

Chart 5 shows the overall composition of materials recycled in Metro Vancouver in 2010.

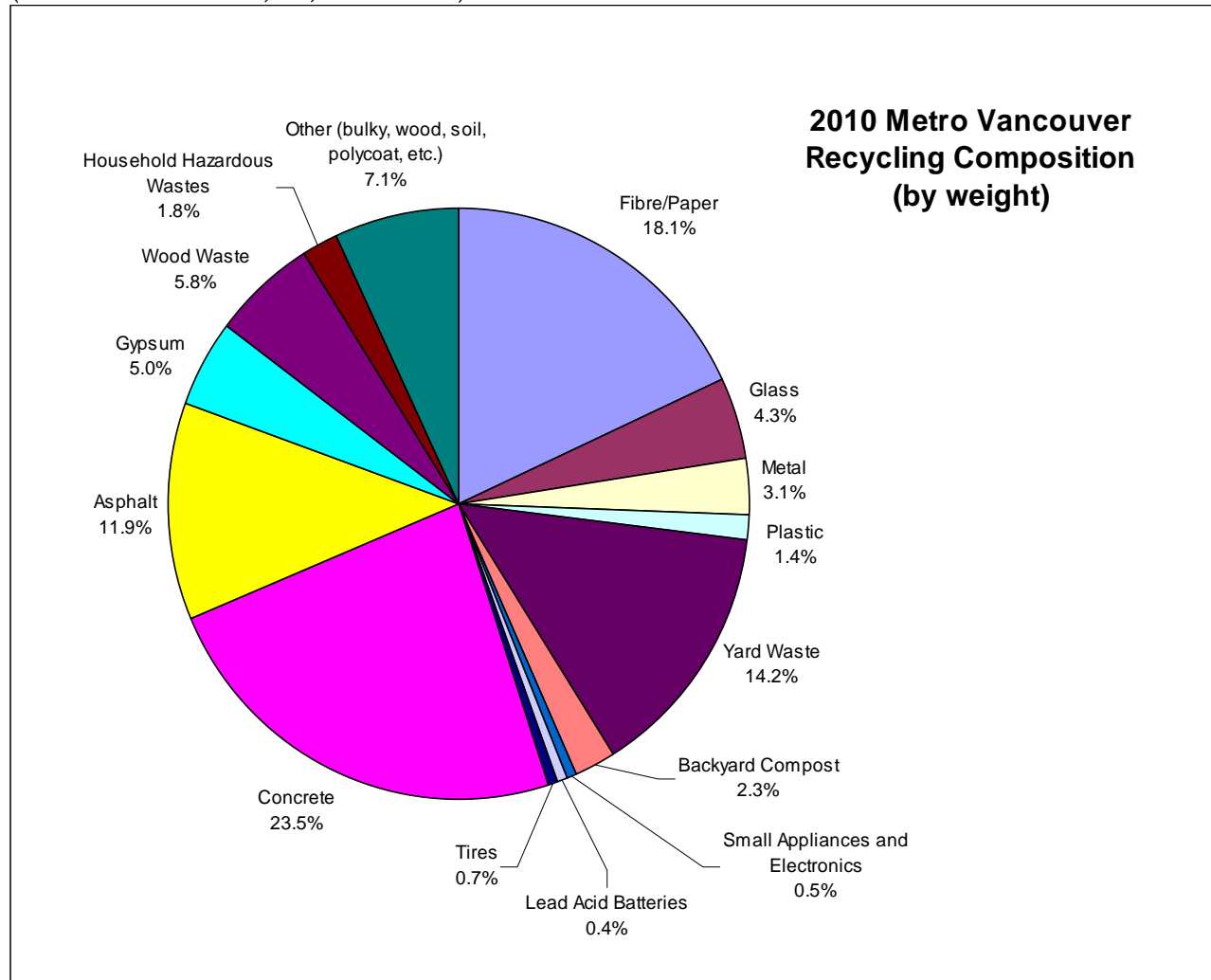
¹² From 2010 waste composition data and study by Metro Vancouver.

Chart 4: 2010 Metro Vancouver Materials Composition Study Results: Waste Disposed to Landfill and Incinerator



* Includes textile, leather, rubber, multiple/composite

Chart 5: 2010 Metro Vancouver Materials Composition Study Results: Materials Diverted for Recycling (combined Residential, ICI, DLC sectors)



Where can I find more information?

CoV Greenest City
CoV Solid Waste

<http://vancouver.ca/greenestcity/index.htm>
<http://vancouver.ca/home-property-development/waste-disposal-and-recycling.aspx>

CoV Solid Waste By-Law #8417
Metro Vancouver
Recycling Council of BC
Product Stewardship Programs

<http://vancouver.ca/bylaws/8417c.PDF>
<http://www.metrovancouver.org>
<http://rcbc.bc.ca/>
<http://www.env.gov.bc.ca/epd/recycling/index.htm>

INTRODUCTION

This report provides an overview of the activities and achievements of the Waste Reduction and Recovery Management Division in 2011 with specific focus on work carried out by the Solid Waste Management Branch and Vancouver Sanitation Services. As required under the Vancouver Landfill’s Operational Certificate, the Transfer & Landfill Operations Branch produces a separate annual Vancouver Landfill report, available online at: www.vancouver.ca/engsvcs/solidwaste/landfill/report.htm. That report serves as Appendix 1 to this report.

Municipal Solid Waste (MSW) referred to in this report consists of all garbage, recycling, yard trimmings and food scraps received from City of Vancouver residential, commercial and institutional sources at all waste disposal facilities within Metro Vancouver. Demolition and Construction Waste (DLC) is excluded from MSW in this report. The Transfer & Landfill Operations Branch manages DLC waste and more information can be found in the Vancouver Landfill annual report.

ORGANIZATION OF RESPONSIBILITIES

The Waste Reduction and Recovery Management Division of Engineering Services plans, designs, builds, improves, manages, maintains, and coordinates solid waste collection, diversion, transfer, disposal and street cleaning activities, programs, projects and facilities for the City of Vancouver.

The Division is organized into three branches, as outlined in Table 6:

Table 6: Branch Responsibilities

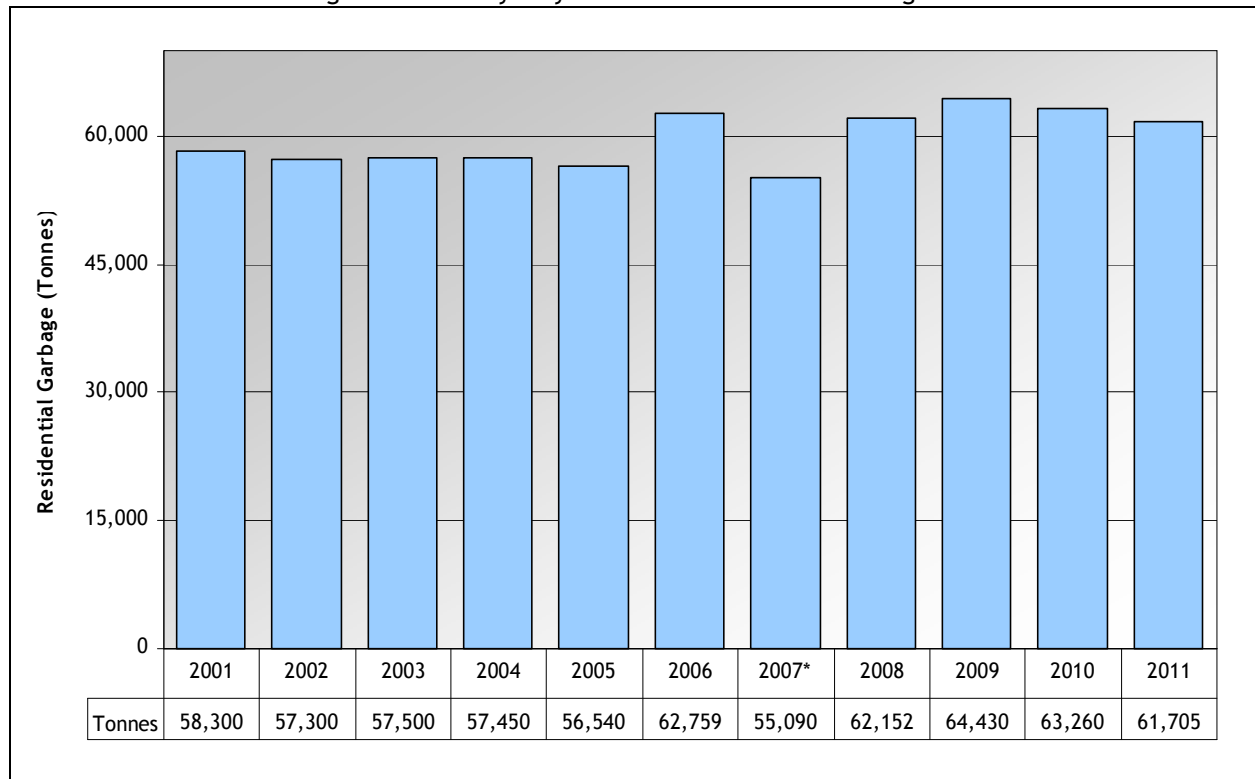
Solid Waste Management	Sanitation Services	Transfer & Landfill Operations
<ul style="list-style-type: none"> Plans, designs and manages implementation of Solid Waste Utility collection, reduction and recycling programs. Operates Clean Streets Program, including coordination of Keep Vancouver Spectacular activities; technical support for street cleaning operations; and inspection and enforcement of illegal dumping and commercial container license requirements. 	<ul style="list-style-type: none"> Collects and transports garbage and recycling (food scraps, yard trimmings and blue box program materials), primarily from the single family sector. Cleans litter and abandoned garbage from streets and lanes, and collects litter and recyclables from public receptacles including parks and beaches. 	<ul style="list-style-type: none"> Operates the Vancouver South Transfer Station (VSTS) and Vancouver Landfill (VLF, in Delta), including the management of various environmental protection systems and assets, a yard trimmings composting facility and public recycling depot.

RESIDENTIAL GARBAGE COLLECTION

The City provides residential garbage collection primarily to single family dwellings, duplexes, small (typically four or less dwelling units) apartment and condominium buildings, townhouses, and small businesses 50 times a year on a five day “skip-a-day” (advance one day for holidays) schedule. Most other properties including large multi-family buildings and commercial properties, are serviced by licensed private waste hauling companies.

Fully automated, cart based waste collection for single family residential properties was implemented City-wide in early 2006. Five different size carts are available ranging from 75 to 360 litres.

Chart 6: Residential Garbage Collected by City of Vancouver Annual Tonnages



* Labour disruption

The 2011 Solid Waste Utility annual garbage collection rates were as follows:

Cart Size	2011 Fee
75 litres	\$91
120 litres	\$109
180 litres	\$131
240 litres	\$154
360 litres	\$200

For the few remaining properties that receive garbage can collection service, the 2011 annual garbage collection fee was \$63 for each collection point and \$38 for each garbage can allocated or purchased.

BLUE BOX & APARTMENT RECYCLING COLLECTION



The City provides residential recycling collection to single family properties and multi-family buildings 50 times a year on a five day “skip-a-day” (advance one day for holidays) schedule. The blue box recycling program provides single family dwellings, duplexes and some small apartment buildings (typically four or less dwelling units) with blue boxes for the collection of mixed recyclable containers (e.g. metal cans, glass and plastic bottles, etc.), blue bags for newsprint, and yellow bags for mixed paper products. These recyclables are collected manually by City crews and delivered to a contracted recycling materials processing and marketing company. The materials are then sold as commodities to recycling industries for remanufacture into new products. Revenue from the sale of the material is shared with the City, and this is used to offset the cost of the recycling collection program.

For the apartment recycling program, the City provides multi-family buildings with wheeled carts, instead of boxes and bags, for the three material streams. The contents of the carts are collected semi-automated - the carts are manually attached to the truck and then mechanically tipped. The City contracts a portion of the apartment recycling collection program to a private waste hauler.

Figure 1: Contracted Areas for Apartment Recycling Program

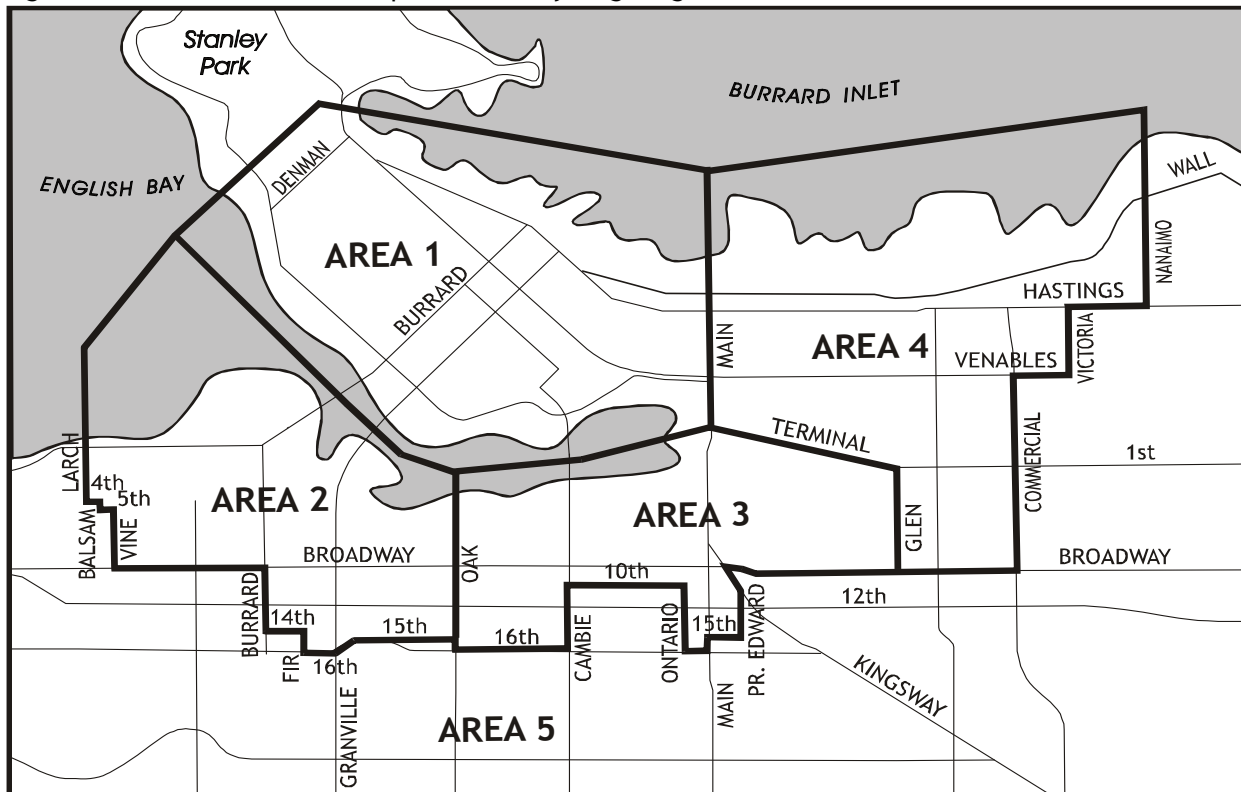
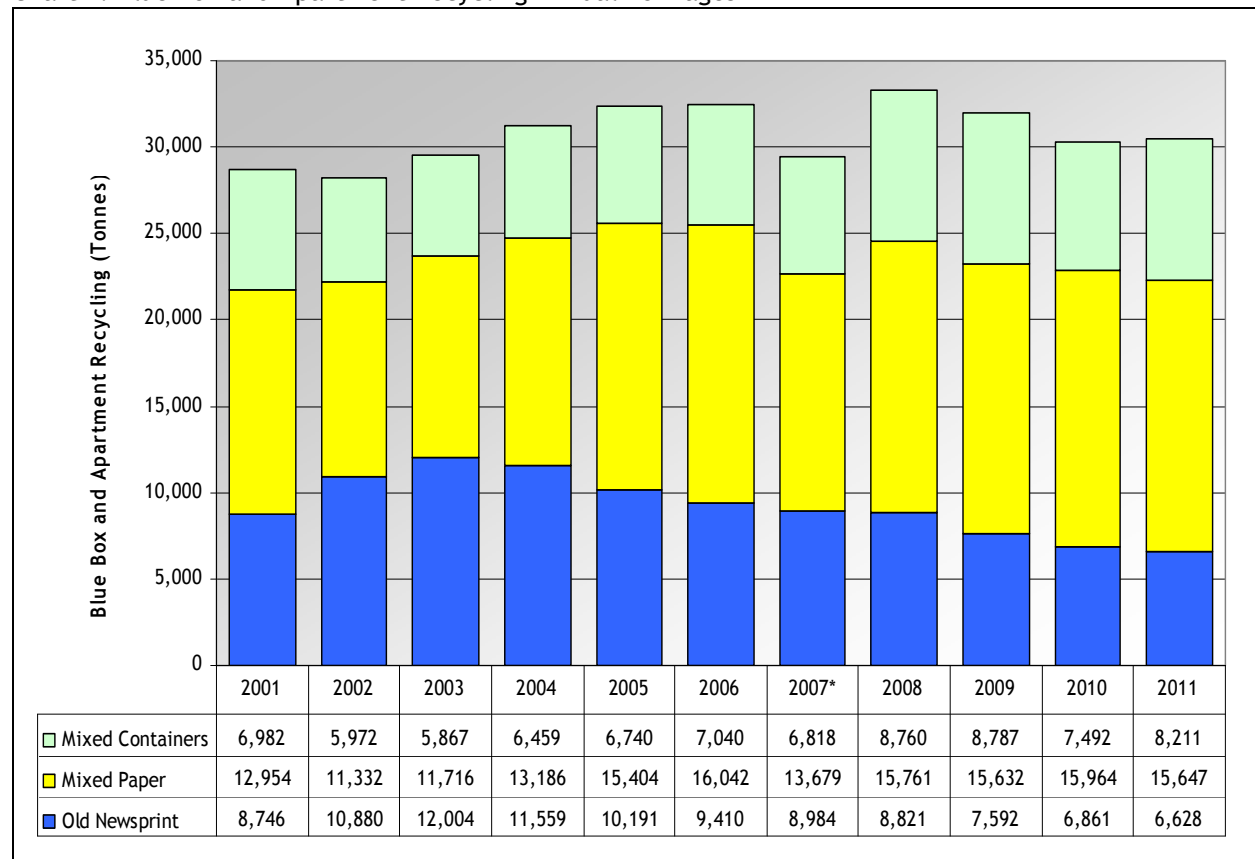


Table 7: 2011 Apartment Recycling Tonnages Collected in Different Areas

Area	Served By	Number of Buildings	Number of Suites	2011 Recycling Tonnage Collected from Area
1	Waste Management of Canada	928	66,900	4,868
2		1,009	22,959	1,670
3		482	15,696	1,142
CONTRACTED TOTAL		2,419	105,555	7,680
4 & 5	CITY CREWS TOTAL	2,578	57,996	4,220

Vancouver's three stream sort-at-source recycling program results in a high quality recycling material commodity and significant revenue from the sale of the recyclables.

Chart 7: Blue Box and Apartment Recycling Annual Tonnages



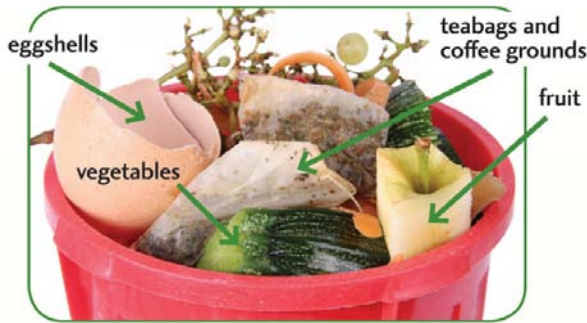
* Labour disruption

The 2011 Solid Waste Utility annual recycling collection fee for each dwelling unit serviced was \$31, except where there is one or more common collection points (e.g. multi-family buildings) the rate was \$23 for each dwelling unit and \$8 for each collection point.

RESIDENTIAL YARD TRIMMINGS & FOOD SCRAPS COLLECTION

The City provides residential yard trimmings collection to single family properties 25 times per year, bi-weekly (every other week).

Since April 22, 2010, residents have been able to place uncooked fruit and vegetable scraps, coffee grounds and filters, eggshells, and teabags into their yard trimmings cart for composting (refer to diagram below). Yard trimmings and food scraps collected from Vancouver residents are processed into compost at Fraser Richmond Soil & Fibre Ltd., Richmond. Options for expanding the program to include all types of food scraps and food soiled paper are being developed.

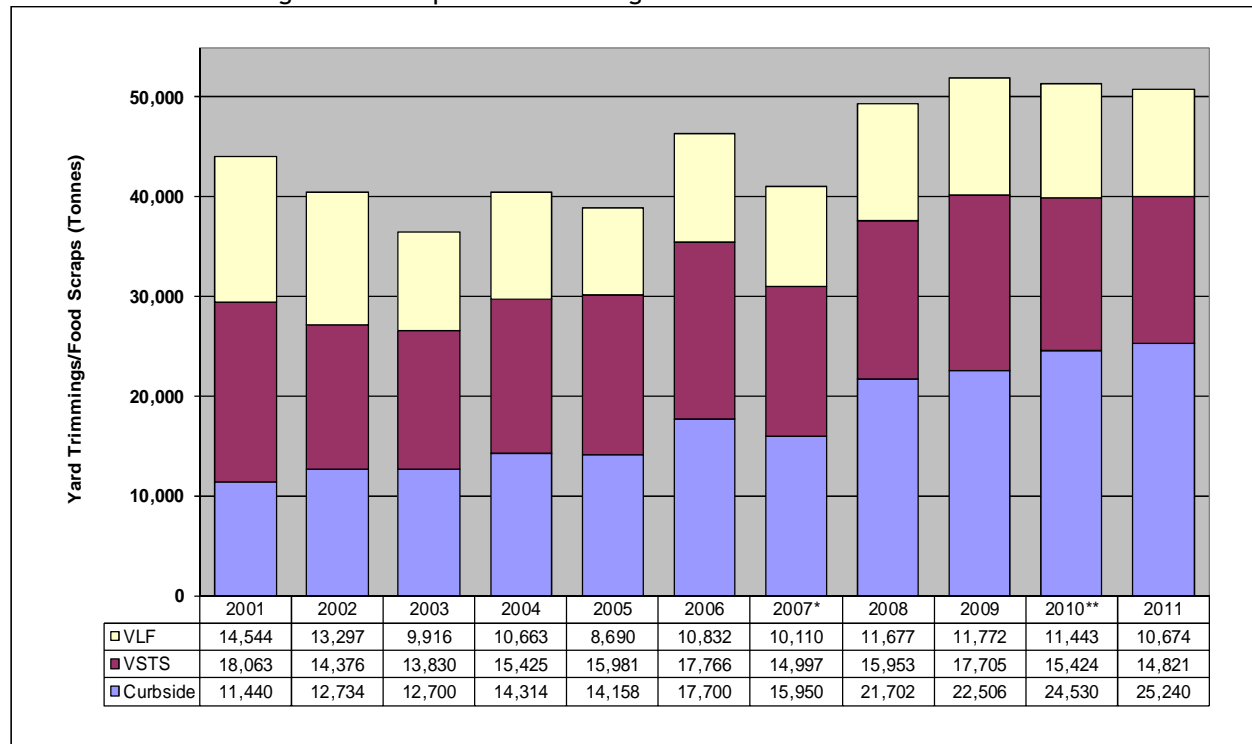


Yard trimmings (without food scraps) directly hauled by residents and contractors to the Vancouver Landfill (Landfill) and Vancouver South Transfer Station are processed into compost by the City at the Landfill's composting facility (Appendix 1).

Since 2006 a cart based fully automated program has been in place for single family residential yard trimmings/food scraps collection. Four different size carts are

available ranging from 120 to 360 litres. Chart 8 indicates the annual tonnage of organics managed by the City.

Chart 8: Yard Trimmings/Food Scraps Annual Tonnages



* Labour disruption

** Limited food scraps collection since April 22, 2010.

The 2011 Solid Waste Utility annual yard trimmings collection rates were as follows:

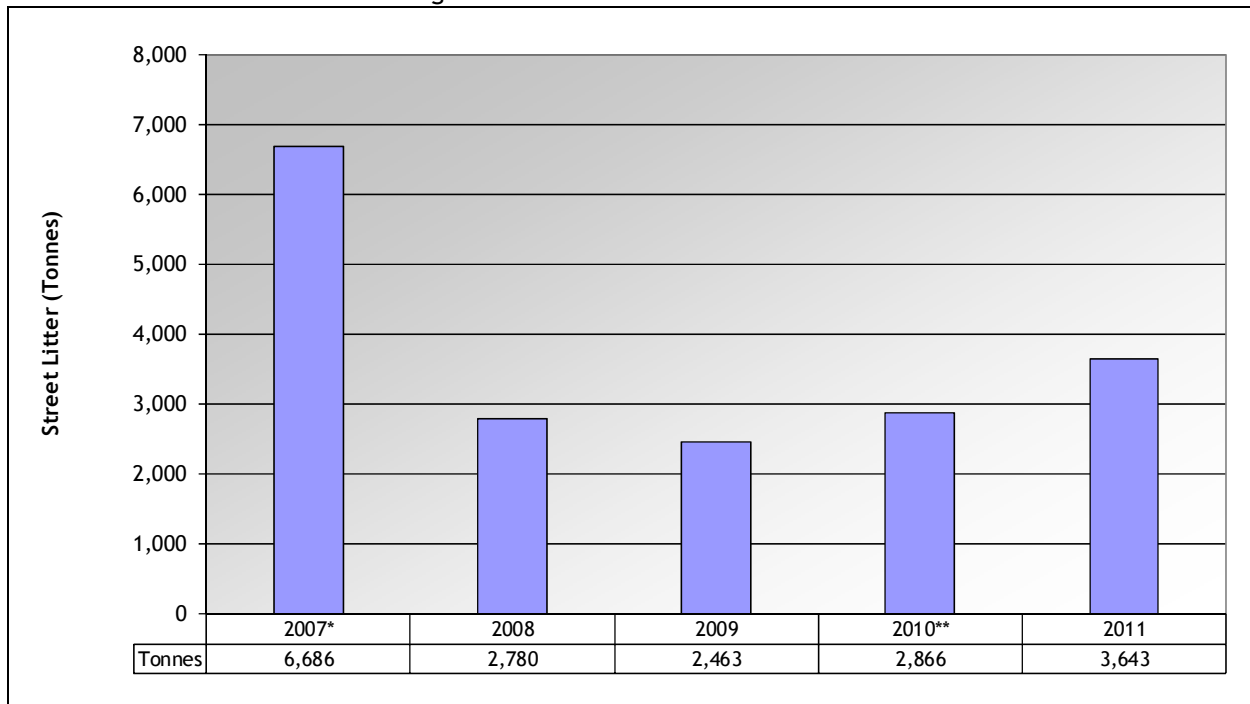
Cart Size	2011 Fee
120 litres	\$46
180 litres	\$54
240 litres	\$61
360 litres	\$75

STREET CLEANING

The City provides street cleaning and public litter receptacle servicing. About 3,200 public litter receptacles are installed on sidewalks, seawalls, parks, and at bus stops throughout the City and are generally emptied daily. Hand cleaning (rake and shovel) is carried out, primarily in the downtown area, and abandoned garbage is cleaned up city-wide. Waste collected from street cleaning operations is transported to the Transfer Station and subsequently transferred to the Landfill for disposal. Many abandoned materials removed from laneways, such as appliances and mattresses, are diverted for recycling.

Commercial and residential streets and lanes are mechanically cleaned by City staff with sweeper and flusher trucks. Residential streets are cleaned by sweeper trucks during fall leaf collection, while arterial and downtown streets are cleaned more frequently. Extra cleaning is provided for major events, such as the Vancouver Marathon, Pride Parade and Celebration of Lights. Flusher trucks are used mainly at night in the summer to clean in the downtown and in downtown eastside lanes.

Chart 9: Annual Street Litter Tonnages



* Labour disruption

** Includes litter from Olympics in February and from Park Board starting in July

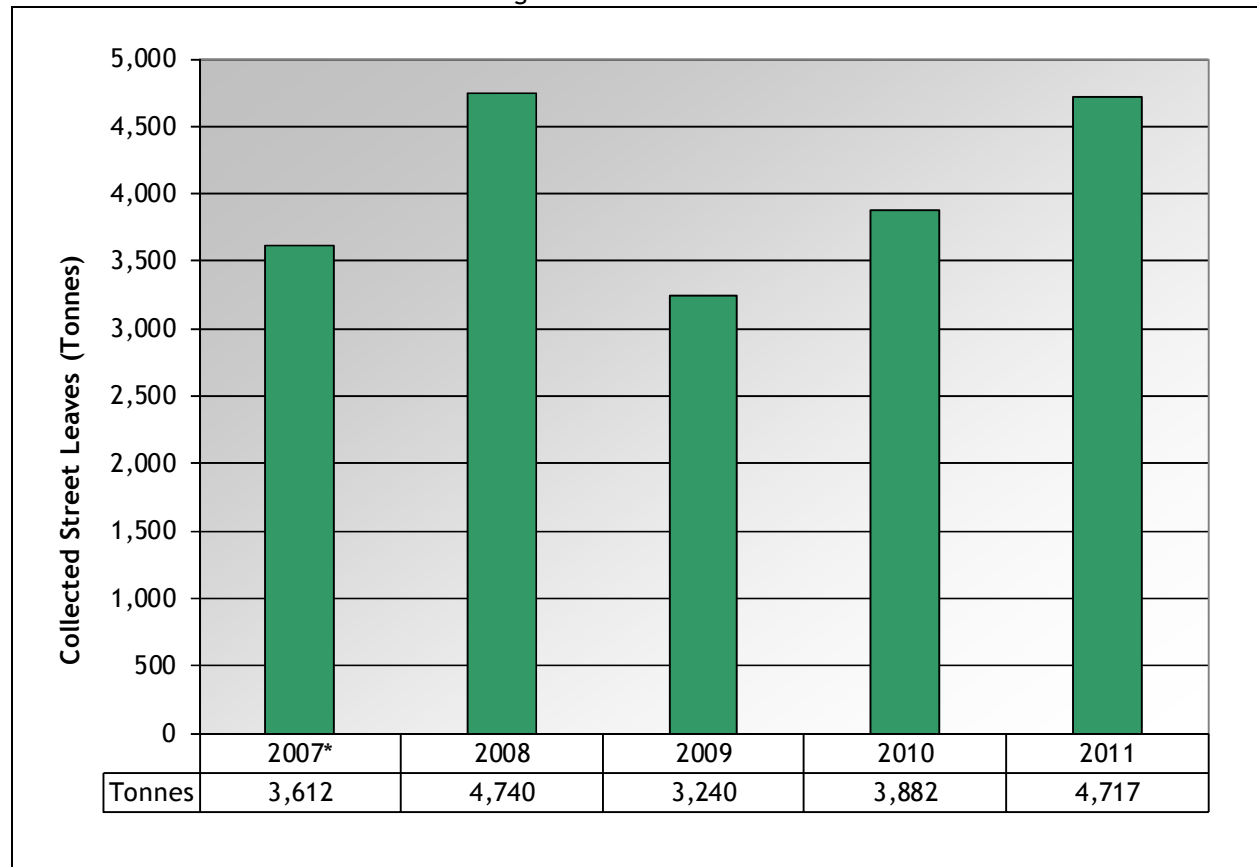
The City provides public recycling through different opportunities. On most public litter receptacles, recycling racks are available for recycling refundable beverage containers. Also, about 50 Multiple Publication News boxes (MPN) have been installed throughout the City and each MPN contains a newspaper recycling compartment. In 2011, about 10 tonnes of newsprint was collected and recycled from the MPNs. In addition, the City is currently working on increasing waste diversion opportunities at special events where various waste streams can be diverted using City customized Zero Waste stations.

FALL LEAF REMOVAL

Annually between October 1 and January 31, unlimited quantities of leaves are picked up from single family properties as part of the fall leaf removal program and composted at the Vancouver Landfill. Leaves are also swept and removed from City streets during this period. To prevent fallen leaves from clogging storm drains during the fall and winter period, residents are encouraged to gather the leaves on their property, as well as on City boulevards and set them out for collection.



Chart 10: Annual Fall Street Leaves Tonnages



* Labour disruption

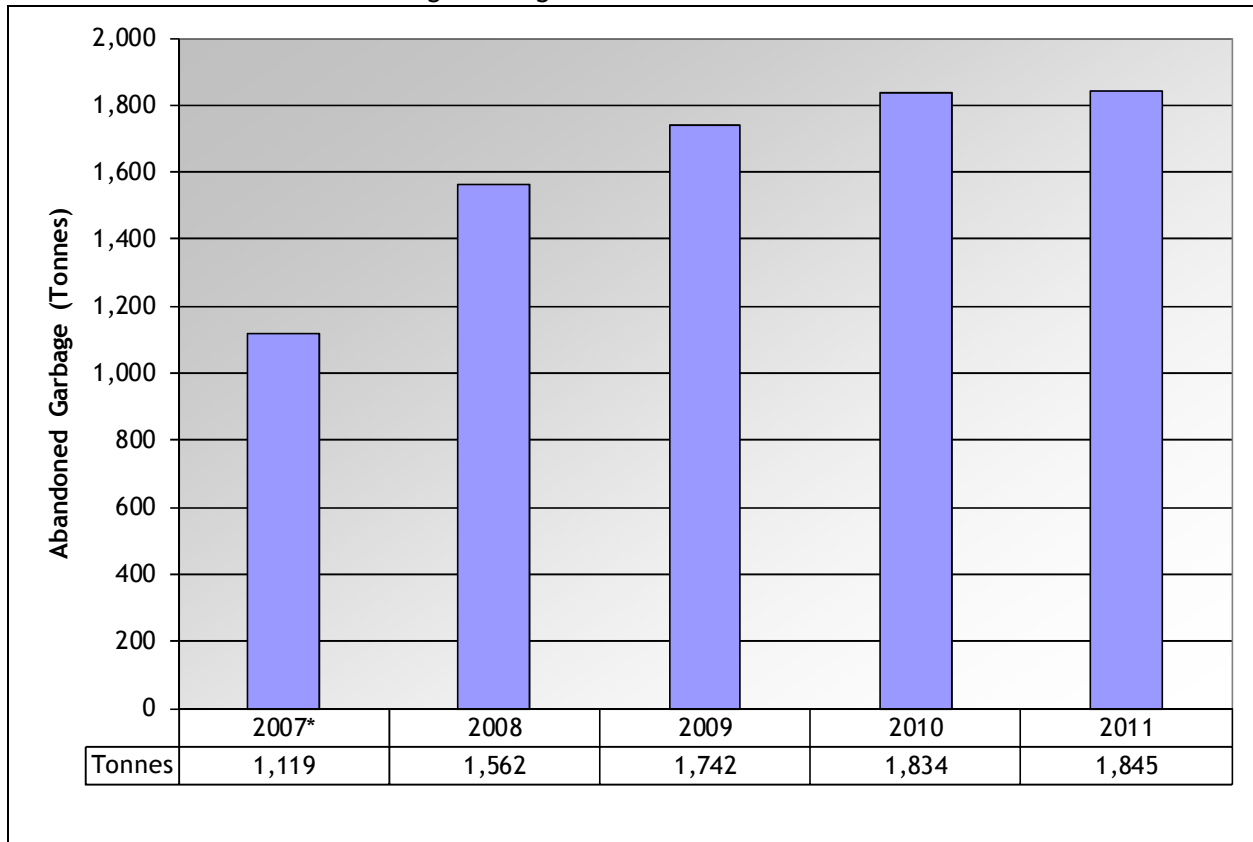
ABANDONED GARBAGE CLEANUP

Abandoned garbage clean-ups are conducted by City crews primarily on an as needed or complaint basis. Frequently used illegal dumping locations in the City are routinely monitored and cleaned up as required.

The most common illegally dumped items include furniture (mattresses, couches) and appliances (refrigerators, washers, stoves). Street Use Inspectors from the Solid Waste Management Branch Clean Streets Team inspect abandoned garbage and pursue by-law enforcement when evidence is available.



Chart 11: Annual Abandoned Garbage Tonnages



* Labour disruption

HOME COMPOSTING PROGRAMS

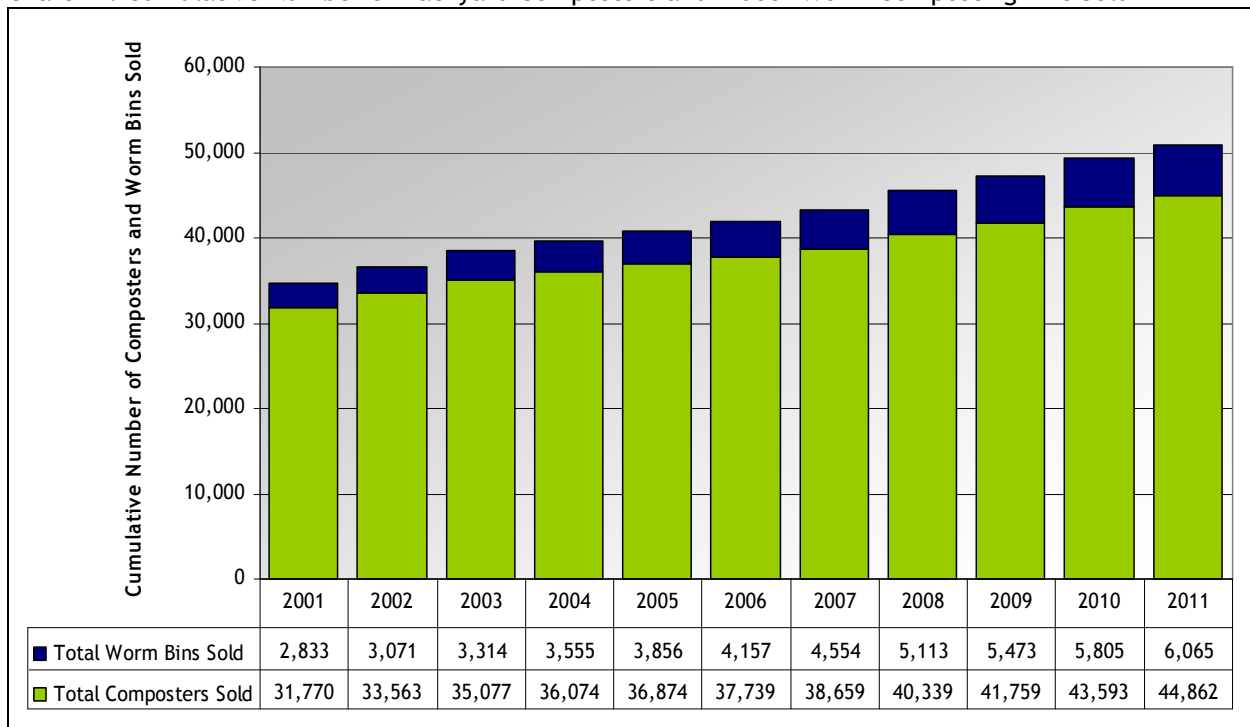
The City provides backyard composters and indoor worm composting bins to Vancouver residents at a subsidized rate of \$25. Backyard composters are available from the Vancouver South Transfer Station, and worm composting bins are available from the Vancouver Compost Demonstration Garden (www.cityfarmer.info). On average, each backyard composter and worm composting bin can divert approximately 250 kilograms and 60 kilograms per year of organic waste from disposal, respectively.



At the end of 2011, a cumulative total of 44,862 backyard composters and 6,065 worm compost bins have been sold since the program began operating in 2001. Approximately 3.5 percent of apartment suites in the City have worm composting bins. Estimated continued use of worm composting bins is about 70 percent. Therefore the apartment home composting rate is about 2.4 percent. A public telephone survey conducted in mid-2007 indicated that about 43 percent of all ground level dwellings compost material. This rate includes backyard composters that have been homemade or

purchased from retail stores, as well as City-provided composters. It is estimated that about 5,700 tonnes per year of organic waste is diverted from disposal through backyard composting.

Chart 12: Cumulative Number of Backyard Composters and Indoor Worm Composting Bins Sold



KEEP VANCOUVER SPECTACULAR

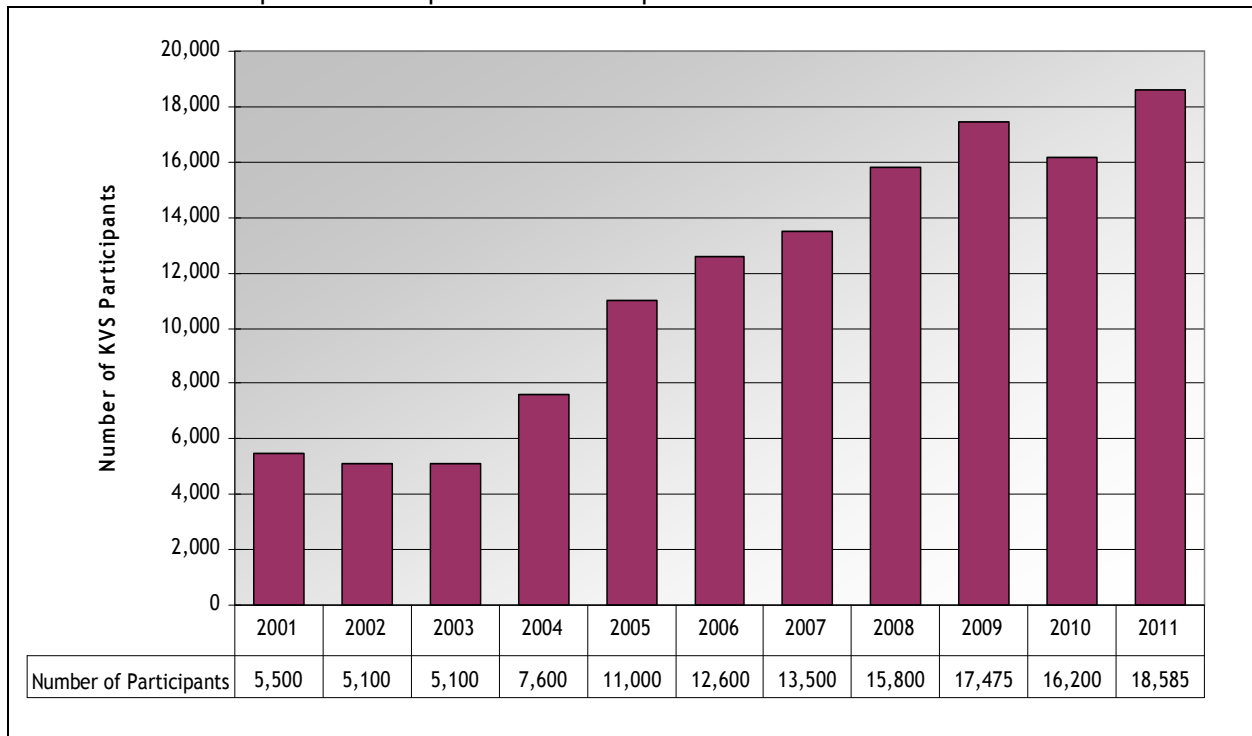
Keep Vancouver Spectacular (KVS) is an annual City-wide Spring campaign that brings together individuals, businesses and neighbourhood groups to participate in community clean-up projects on City streets, lanes and other public areas. By removing garbage and graffiti in their own neighbourhood, citizens gain a sense of community pride and help make Vancouver a great place to live. Most KVS clean-up events take place in May, but there are community groups that organize clean-ups throughout the year.

The number of participants (volunteers) has increased significantly since the program was first introduced. Most of this increase is due to greater involvement of schools in the campaign. The number of participating students has increased from 6,000 in 2004, to 13,700 students from 63 schools in 2010, due to greater promotions of the program to schools.



During the 2011 KVS campaign, approximately 18,585 volunteers participated in the annual event.

Chart 13: Annual Keep Vancouver Spectacular Participants



NOTABLE INITIATIVES & EVENTS

The following initiatives and events were launched or completed in 2011:

- The Greenest City Action Plan (GCAP) was approved by Council in July 2011 with the goal of making Vancouver the greenest city in the world by 2020. The Zero Waste target identified in the plan is to reduce 50% of the total solid waste going to the landfill or incinerator by 2020. This target aligns with the diversion goal identified in the most recent Metro Vancouver regional solid waste management plan.
- Food scraps pilot program was initiated in two areas (Riley Park & Sunset) to test the expansion of acceptable items, various communication strategies, and change in garbage and compostables collection frequency. The data collected from the pilot program is being used to determine strategies for a city-wide implementation.
- The City of Vancouver introduced residential blue box recycling collection to approximately 123 single-family University Endowment Land (UEL) residents in an area immediately adjacent to the City. The City and UEL also signed a letter of understanding to phase in garbage and compostables collection in the future.
- In 2011, the following Extended Producer Responsibility (EPR) programs were implemented: Antifreeze (left over antifreeze and antifreeze containers), AlarmRecycle (smoke and carbon monoxide alarms), and Unplugged (small appliances).
- Approximately 600 apartment recycling carts are replaced, reported as missing or stolen annually which amounts to significant financial liability to the City. Staff initiated a loss control program for apartment recycling carts to track and document cart inventory and use. Further implementation of this new program will be conducted in 2012.
- The City began an on-street Newspaper Recycling Pilot project. The pilot consists of temporary placement of 14 dedicated newspaper recycling receptacles along the Broadway Corridor. The information gathered during the pilot, such as servicing costs, level of contamination and the amount of material collected, will assist in developing strategies for a more extensive and permanent on-street newspaper recycling program.
- In early 2011, the City partnered with industry on a pilot project to deconstruct two Vancouver homes in order to gain a better understanding of the deconstruction process and potential waste diversion rates. Staff also developed a voluntary 'deconstruction permit' option as an alternative to standard demolition for one and two family homes (program underway as of February 6th, 2012). To further support deconstruction activities, the Vancouver South Transfer Station began accepting clean wood waste at a reduced rate and adjustments were made to tipping fees at the Vancouver Landfill for demolition and construction materials.
- As part of a larger initiative to encourage a greater focus on sustainability at special events, 2011 marked the introduction and testing of the City's Zero Waste Stations. The Stations were deployed at two major events, Summer Live and Celebration of Lights, and provided the public with more waste diversion options as well as increased education through the use of volunteers at each Station. In addition, the City partnered again with United We Can to deploy their Urban Binning Units at special events

for the collection of bottles and cans, an initiative that support waste diversion, results in employment opportunities for people with barriers and helps raise the profile of this socially conscious waste diversion activity.

- The 2011/2012 Christmas Tree Chipping Event, organized by the City and the Vancouver Lions Clubs, raised over \$12,000 of donations and over 400 kg of food for local charities. During the two day event, about 3,250 trees were chipped and sent to the Vancouver Landfill for composting.
- In 2011, Keep Vancouver Spectacular (KVS), the City's volunteer litter cleanup program had a record 18,585 participants. Much of the growth occurred outside the traditional KVS campaign (the month of May), as 1,375 volunteers took part in 31 clean ups between June 1st and November 30th.
- Vancouver Sanitation Services (VSS) inherited the Special Events program from Park Board to provide sanitation services for events held in parks and public domain. In 2011, over 900 events were successfully serviced ranging from large events such as Celebration of Lights to picnics or baseball games held in parks. VSS also provided street cleaning on each game night during the Stanley Cup run as well as the post riot clean up.
- Improvements were made to the recycling collection program in 2011 which include the creation of a full time apartment recycling beat to alleviate the work load of blue box collection crews. The employee training manual and training programs for new drivers were reviewed. Also, collection beats and setout location of carts were reconfigured to create a more balanced work load between beats and to increase efficiency of the collection program.

SANITATION SERVICES WORK CREW AND VEHICLE ORGANIZATION

Table 8 summarizes the number of collection vehicles and crews used in 2011. Table 9 summarizes the street cleaning structure in 2011.

Table 8: Refuse and Recycling Collection Crews and Vehicle Inventory Summary

Collection Activity	2011	
	Daily Crews	Total Vehicles
Garbage	16: 1-person crews & 3: 2-person crews	29 Sterling Condor automated trucks, 4 GMC Chagnon rear load trucks, 4 Condor rear load trucks, 1 AutoCar rear load packer, 2 modified Jitneys
Yard Trimmings	5 to 10 (seasonal): 1-person crews & 1 to 3: 2-person crews	
Recycling	On average 24 single-person crews	29 Labrie Mack & Topselect side-loaders, 1 Pickup

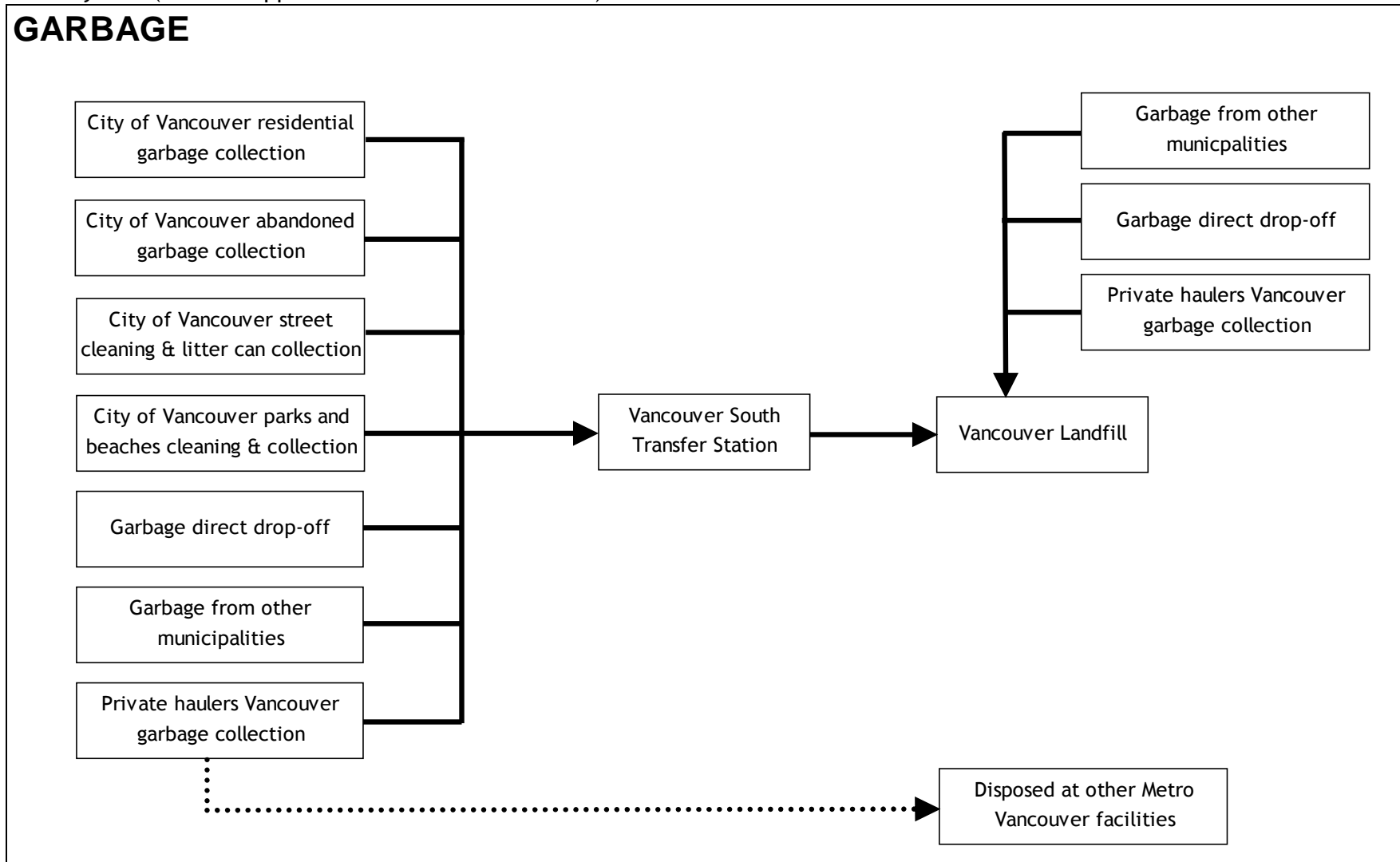
Table 9: 2011 Street Cleaning Crews and Vehicle Inventory Summary

Crews	Day Shift	Afternoon Shift	Night Shift	Total
Sweeper Operator	3	1	2	6
Flusher Operator	0	0	1	1
Abandoned Garbage Driver	4	0	3	7
Litter Can Truck Driver	0	0	4	4
Litter Can Maintenance Staff	0	0	2	2
Container Truck Driver	1	0	0	1
Cart Operator & Hand Cleaner	6	4	8	18
Supervisor	2	2	3	7
TOTAL STAFF	16	7	23	46

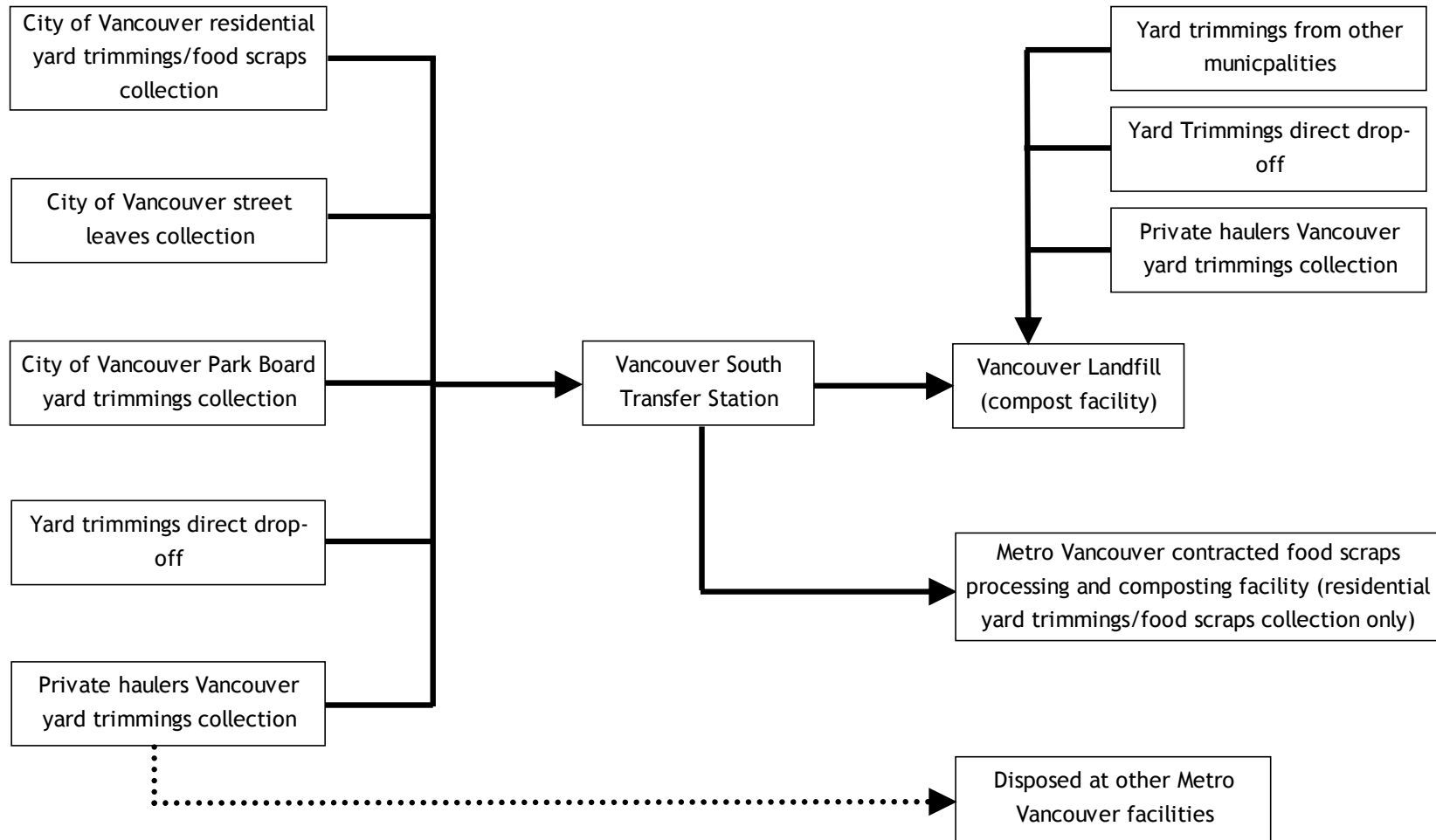
Equipment	Quantity
Larger Sweeper Trucks (for streets and lanes)	7
Medium Sweeper Truck (for bike routes)	1
Flusher Trucks (for streets and lanes)	3
Litter Can Trucks (public litter can program)	5
Power Washing Truck (for public litter can program)	1
Hand Carts (for sidewalk cleaning)	13
Motorized Litter Carts (pick up truck with dump box, primarily for cleaning bus stops)	15
Mini Sweepers (2 walk-behind, 1 drive for cleaning sidewalks)	3
Large Rear Load Packer Trucks (for various programs)	2
Small Rear Load Packer Truck (Fuso for Parks program)	2
Container Trucks (for abandoned garbage program)	2
Appliance Truck (for abandoned garbage program)	1
Supervisor Pickup	4
Tote Pull Truck	1
TOTAL VEHICLES	60

CITY OF VANCOUVER SOLID WASTE FLOW CHART

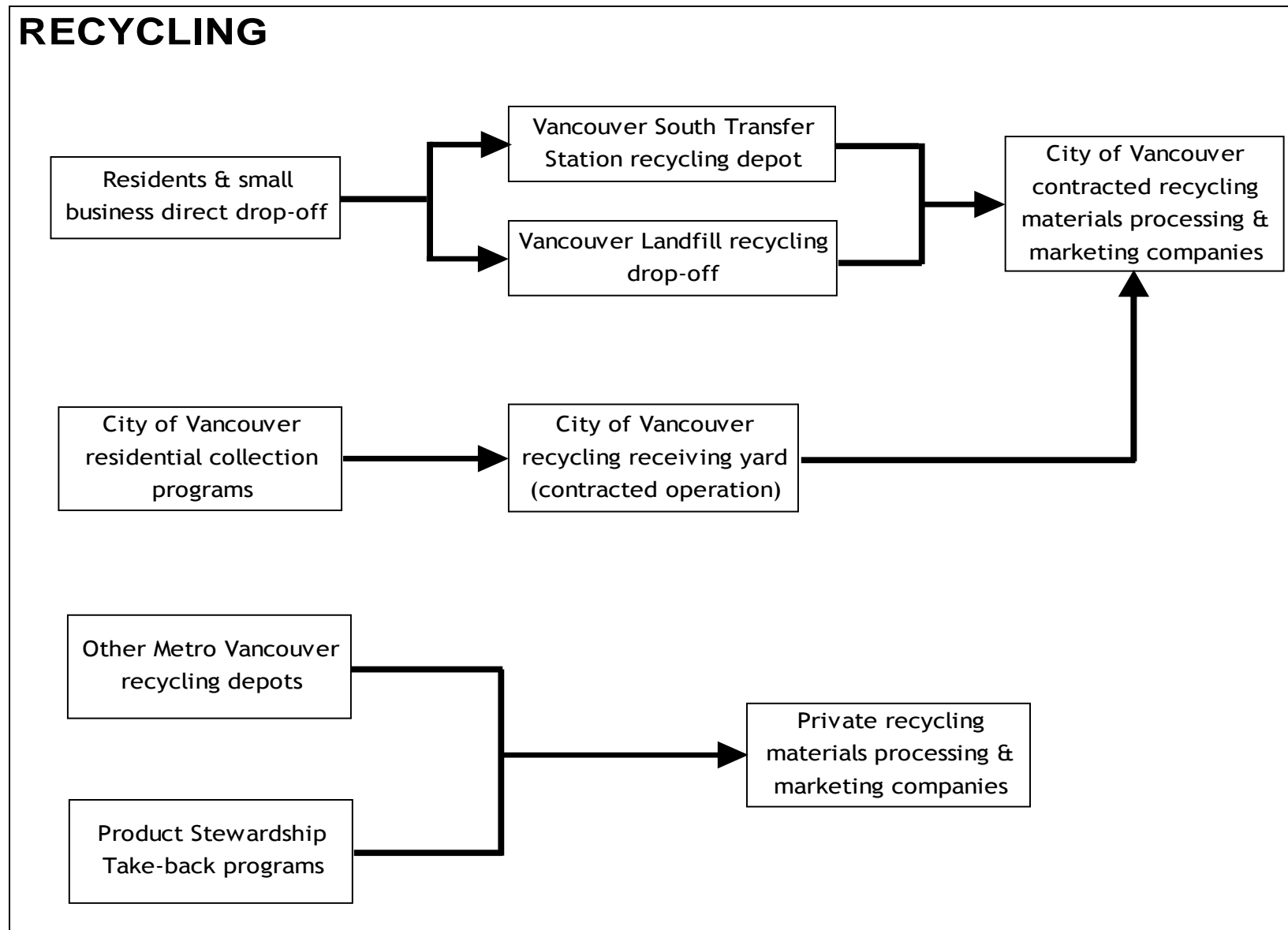
The following charts summarize the flow of garbage, yard trimmings/food scraps and recycling materials within Vancouver's solid waste system (refer to Appendix 1 for more information)



YARD TRIMMINGS/FOOD SCRAPS



RECYCLING



FINANCIAL SUMMARY

Costs and revenues for Vancouver’s solid waste collection, transfer and disposal programs and facilities reside within the Solid Waste Utility (SWU). Separate SWU fees are set annually by Council for each of the three collection programs: Garbage, Recycling and Yard Trimmings/Food Scraps.

Surplus revenue from commercial tipping fees charged at the VSTS and VLF are transferred at year-end to the Capital Financing Fund (Solid Waste Capital Reserve - SWCR). This reserve funds Vancouver Landfill closure and post closure costs, serves as a SWU rate stabilization account, and as a funding/financing source for Solid Waste Utility projects.

The SWU operates on a breakeven principle. Due to variability beyond the City’s direct control, such as changes to market pricing of recycling commodities and the amount of material requiring disposal at Vancouver’s facilities, an annual net surplus or deficit is experienced from one year to the next in the collections programs. Accordingly, the SWU carries an accumulated net surplus or deficit balance which resides in the SWCR and annual SWU fees are set to take into account the prior years’ accumulated net surplus or deficit position.

The Street Cleaning program is funded from the property tax supported budget.

Financial information on programs and operations specific to the Vancouver South Transfer Station and Vancouver Landfill are available in the Vancouver Landfill Annual Report (Appendix 1).

Table 10: Collection Programs Financial Summary

		2007	2008	2009	2010	2011
<i>Solid Waste Collection</i>						
Garbage collection	Revenue	\$9,386,105	\$9,338,715	\$11,746,246	\$12,488,494	\$12,884,156
	Expenditure	\$9,447,060	\$11,024,437	\$11,313,114	\$11,775,437	\$12,266,163
	Surplus/(Deficit)	(\$60,955)	(\$1,685,722)	\$433,132	\$713,057	\$617,993
Recycling collection	Revenue	\$5,608,759	\$5,635,428	\$4,810,010	\$8,327,430	\$9,621,955
	Expenditure	\$4,937,290	\$5,510,995	\$6,884,943	\$7,651,232	\$8,874,430
	Surplus/(Deficit)	\$671,469	\$124,433	(\$2,074,933)	\$676,198	\$747,525
Yard trimmings collection	Revenue	\$4,354,000	\$3,860,790	\$4,882,769	\$5,126,237	\$5,150,309
	Expenditure	\$3,917,425	\$4,334,446	\$4,180,790	\$4,639,992	\$4,934,099
	Surplus/(Deficit)	\$436,575	(\$473,656)	\$701,979	\$664,164	\$216,210
TOTAL	Revenue	\$19,348,864	\$18,834,933	\$21,439,025	\$25,942,161	\$27,656,420
	Expenditure	\$18,518,915	\$21,088,193	\$22,642,064	\$24,066,661	\$26,074,692
	Surplus/(Deficit)	\$829,949	(\$2,253,260)	(\$1,203,039)	\$1,875,500	\$1,581,728

FINANCIAL DETAILS

A breakdown of revenues and expenditures for each service area for the years 2007 to 2011 is provided as follows:

Garbage Collection

The residential garbage collection program is funded by annual SWU fees and sticker sales revenue for pick-up of extra bags of garbage.

Table 11: Garbage Collection Annual Revenues and Expenditures

	2007	2008	2009	2010	2011
Revenues					
Annual User Fees	\$9,360,600	\$9,317,047	\$11,727,349	\$12,474,734	\$12,869,206
Sticker Sales	\$25,505	\$21,668	\$18,897	\$13,760	\$14,950
TOTAL	\$9,386,105	\$9,338,715	\$11,746,246	\$12,488,494	\$12,884,156
Expenditures					
Collection & disposal	\$9,376,331	\$10,961,279	\$11,254,909	\$11,675,759	\$12,191,242
Keep Vancouver Spectacular	\$50,076	\$45,271	\$56,377	\$47,743	\$54,670
VLF free residential garbage disposal	\$20,653	\$17,887	\$1,828	\$51,935	\$20,251
TOTAL	\$9,447,060	\$11,024,437	\$11,313,114	\$11,775,437	\$12,266,163
Surplus / (Deficit)	(\$60,955)	(\$1,685,722)	\$433,132	\$713,057	\$617,993

Recycling Collection

The residential recycling collection program is funded by annual SWU fees and revenue from the sale of recyclable commodities to materials processing companies.

Table 12: Recycling Collection Annual Revenues and Expenditures

	2007	2008	2009	2010	2011
Revenues					
Annual user fees	\$3,520,400	\$3,380,666	\$3,734,053	\$6,449,451	\$7,059,738
Sale of recyclables	\$2,088,359	\$2,254,762	\$1,075,957	\$1,877,979	\$2,562,217
TOTAL	\$5,608,759	\$5,635,428	\$4,810,010	\$8,327,430	\$9,621,955
Expenditures					
Blue Box & apartment recycling program (including promotions & school plays)	\$4,937,920	\$5,510,995	\$6,884,943	\$7,651,232	\$8,874,430
Surplus / (Deficit)	\$671,469	\$124,433	(\$2,074,933)	\$676,198	\$747,525

Yard Trimmings/Food Scraps

The residential yard trimmings/food scraps collection program is funded by annual SWU fees (the sale of compost produced at the Vancouver Landfill off-sets Vancouver Landfill compost facility operating costs - refer to Appendix 1).

Table 13: Yard Trimmings Annual Revenues and Expenditures

	2007	2008	2009	2010	2011
Revenues					
Annual user fees	\$4,354,000	\$3,860,790	\$4,882,769	\$5,126,237	\$5,150,309
Expenditures					
Collection & composting	\$3,753,324	\$4,144,374	\$3,988,892	\$4,231,057	\$4,794,763
Compost & Water Conservation					
Demonstration garden & hotline	\$107,829	\$111,934	\$121,797	\$107,003	\$131,227
Backyard composter & worm bin distribution (subsidy)	\$50,713	\$69,921	\$58,977	\$108,256	(\$4,442)
Christmas tree drop-off/ chipping event	\$5,559	\$8,217	\$11,124	\$15,757	\$12,551
TOTAL	\$3,917,425	\$4,334,446	\$4,180,790	\$4,639,992	\$4,934,099
Surplus / (Deficit)	\$436,575	(\$473,656)	\$701,979	\$664,164	\$216,210

APPENDIX 1: 2011 VANCOUVER LANDFILL ANNUAL REPORT

As required under the Vancouver Landfill's Operational Certificate, the Transfer & Landfill Operations Branch produces a separate annual Vancouver Landfill report, available online at: www.vancouver.ca/engsvcs/solidwaste/landfill/report.htm.



**Solid Waste Management Branch
2011 Waste Reduction & Resource Recovery Division Report**

April 2012