2ND REPORT OF THE

ADVISORY COMMITTEE ON THE ENVIRONMENT

Meeting held on January 10, 2018, commencing at 12:15 PM, in Committee Room #3, Second Floor, London City Hall.

PRESENT: S. Ratz (Chair), M. Bloxam, S. Hall, M. Hodge, J. Howell, N. St. Amour, T. Stoiber, D. Szoller and A. Tipping and J. Bunn (Secretary).

ABSENT: K. Birchall, S. Brooks, R. Harvey, L. Langdon and G. Sass.

ALSO PRESENT: W. Abbott, T. Arnos, L. Maitland and J. Stanford.

I. CALL TO ORDER

1. Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

II. SCHEDULED ITEMS

2. Update on the EA for the Expansion of the W12A Landfill

That it BE NOTED that the attached presentation from J. Stanford, Director, Environment, Fleet and Solid Waste, related to an update on the Expansion of the W12A Landfill, was received.

III. CONSENT ITEMS

3. 1st Report of the Advisory Committee on the Environment

That it BE NOTED that the 1st Report of the Advisory Committee on the Environment, from its meeting held on December 6, 2017, was received.

4. 2017 ACE Budget

That it BE NOTED that the 2017 Advisory Committee on the Environment Budget summary, was received.

5. West London Dyke Erosion Control - Municipal Class Environmental Assessment - Notice of Study Commencement

That it BE NOTED that the Notice of Study Commencement from C. Gorrie, and S. Bergman, Stantec Consulting Ltd., related to the West London Dyke Erosion Control Municipal Class Environmental Assessment, was received.

IV. SUB-COMMITTEES & WORKING GROUPS

6. Waste Sub-Committee Report

That it BE NOTED that the Waste Sub-Committee Report, from its meeting held on October 11, 2017, was received.

V. ITEMS FOR DISCUSSION

7. Advisory Committee Member Contact Information Consent Form

That it BE NOTED that the Advisory Committee on the Environment held a general discussion with respect to the Advisory Committee Member Contact Information Consent form, as appended to the agenda.

8. Urban Agriculture Steering Committee

That D. Szoller BE APPOINTED to the Urban Agriculture Steering Committee as the Advisory Committee on the Environment representative, as per the terms of reference for the Urban Agriculture Steering Committee.

9. Resilient Cities Event Report

That it BE NOTED that the Advisory Committee on the Environment (ACE) held a general discussion related to the report, dated January 8, 2018, entitled "Resilient Cities Conference: Preparing London for a Rapidly Changing Future"; it being noted that a final version of the report will be submitted to the February ACE meeting for consideration of the ACE.

10. 2018 ACE Event(s)

That it BE NOTED that the Advisory Committee on the Environment (ACE) held a general discussion related to event ideas that could be hosted by the ACE in 2018.

11. 2017 ACE Work Plan

That review of the 2017 Advisory Committee on the Environment Work Plan BE DEFERRED to the February meeting.

12. 2018 ACE Work Plan Discussion Points

That it BE NOTED that the Advisory Committee on the Environment (ACE) held a general discussion related to the 2018 ACE Work Plan.

VI. DEFERRED MATTERS/ADDITIONAL BUSINESS

13. (ADDED) EEPAC March Meeting Invitation

That it BE NOTED that the Advisory Committee on the Environment was extended a verbal invitation to attend the Environmental and Ecological Planning Advisory Committee meeting to be held on March 15, 2018 at 5:30 PM, at which Ellen Schwartzel, Deputy Commissioner for Environmental Commissioner of Ontario, will be attendance to discuss a variety of environmental issues.

VII. ADJOURNMENT

The meeting adjourned at 1:59 PM.

NEXT MEETING DATE: February 7, 2018

UPDATES

- Residual Waste Disposal Strategy
- 60% Waste Diversion Action Plan
- Resource Recovery Strategy
- Key Provincial Direction and other updates

Advisory Committee on the Environment

January 10, 2018

Overview

Part 1 – Update 4 Key Project Parameters

Part 2 – November/2017 Open House Information – EA Focus

Part 3 – 60% Waste Diversion & RR Strategy

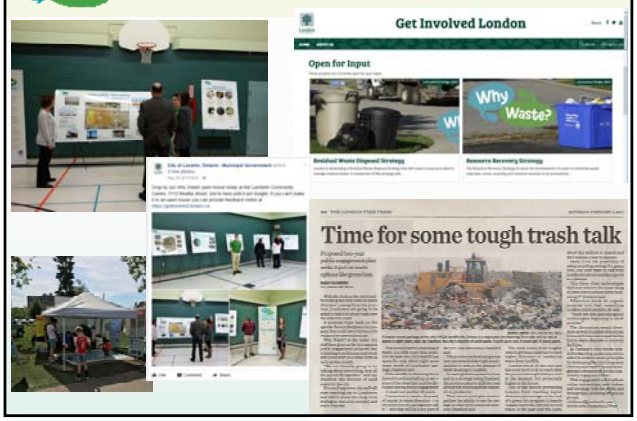
Part 4 – Other Updates

Part 1 – Update on 4 Key Project Parameters

Council direction Feb/17 included:

- Solicit feedback on 11 Draft Guiding Principles
- Solicit feedback on 4 key parameters as part of Terms of Reference development
- Canvass municipalities responsible for waste management within the proposed service area to determine interest in using any future waste disposal or future resource recovery facility
- Further reports to CWC via the WMWG

Solicit Feedback



Residual Waste Strategy
(All 4 Approved by Council October 30, 2017)

Four Key Parameters for the Proposed Expansion of W12A Landfill

1. Expand to 2050 (25 years beyond existing capacity).
2. Place limits on annual tonnage that can be landfilled.
3. Consider allowing neighbouring municipalities to use new/expanded facilities.
4. Commit to increasing residential waste diversion from 45% to 60%.

1. Length of Time

6

Considerations	New Disposal Planning Periods (years)			
	20	25	30	35
Consistent with Other EAs	✓	✓	✓	✓
Consistent with Waste-Free Strategy	✓	✓	×	×
MOECC Comments	✓	✓	×	×
Understanding of Community Considerations	✓	×	×	×
Financial Considerations	×	✓	✓	✓

2. Limits on Annual Tonnage

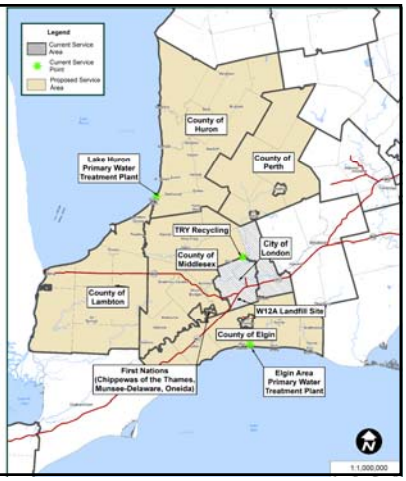
- Current limit = 650,000 tonne/year
- Proposed limit = 500,000 tonne/year

Consideration	Tonnes
Existing Service Area (estimated peak)	377,000
Additional from Expanded Area (average)	53,000
Contingency (about 15%)	70,000
Total	**500,000**

3. Service Area (Disposal)

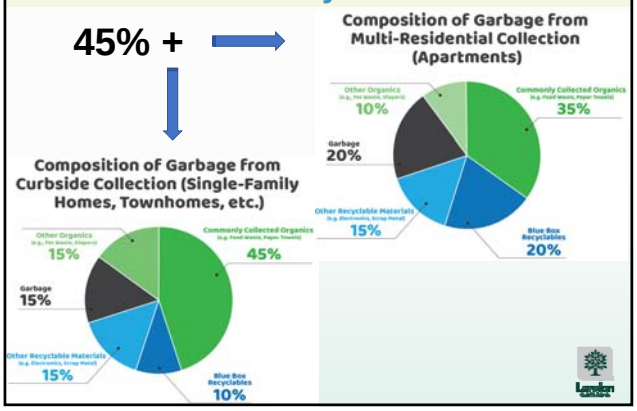
Consider allowing neighbouring municipalities to use new/expanded facilities.

Note; use of potential resource recovery facilities has a larger potential area.



4. Diversion from 45% to 60% by 2022

45% +



Part 2 - Second Series of Open Houses (November 29 & 30, 2017)

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WELCOME

to the Second Series of Open Houses for the Residual Waste Disposal and Resource Recovery Strategies

Today you will learn about:

- Environmental Assessment for Proposed W12A Landfill Expansion, including:
  - Purpose of the proposed landfill expansion
  - Landfill expansion alternatives (know as 'Alternative Methods') being considered
  - Proposed criteria (known as "environmental components") to compare and evaluate the 'Alternative Methods'
  - Proposed studies to gather data about the proposed criteria
- Resource Recovery Strategy including:
  - Update on changes to waste management and diversion coming from the Province
  - Potential programs/initiatives to get to 60% waste diversion
  - Key technologies for advanced diversion and resource recovery
- How you can be involved, stay informed and provide feedback

getinvolved.london.ca/WhyWasteDisposal

getinvolved.london.ca/WhyWasteResource

Existing Design

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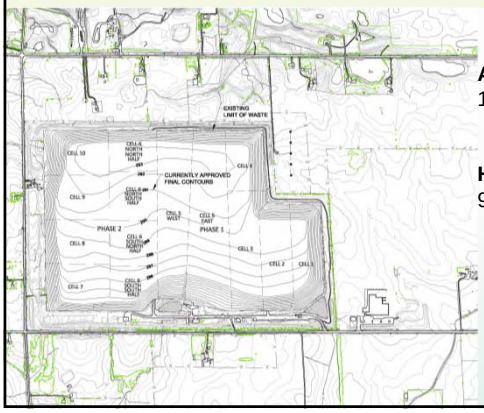
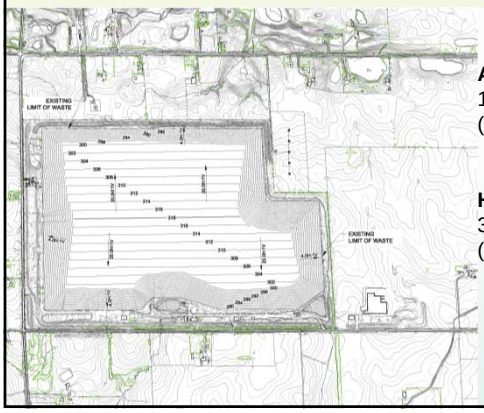


Area
107 hectares

Height
9 metres high

Design Concept 1

12

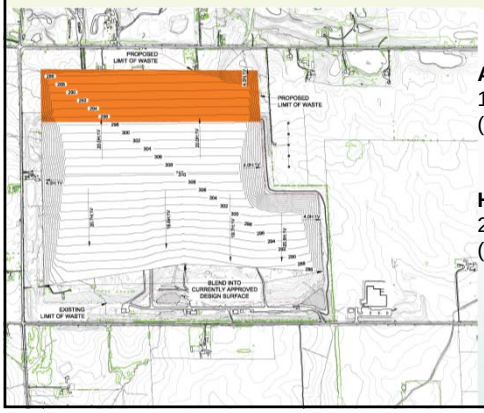


Area
107 hectares
(no change)

Height
35 metres high
(increase of 26)

Design Concept 2

13



Area
134 hectares
(increase of 27)

Height
27 metres high
(increase of 18)

Design Concept 3

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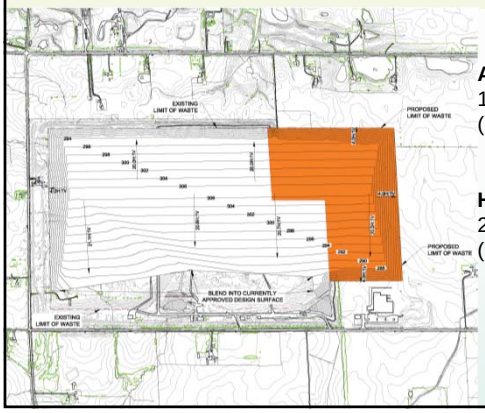

Area
143 hectares
(increase of 36)

Height
24 metres high
(increase of 15)

Visual Impact – Worst Case

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Environmental Components

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Category	Proposed Environmental Components	
	Environmental Component	Environmental Sub-components
Environmental	Atmosphere	• Air quality (including dust, odour and greenhouse gases) • Noise
	Biology	• Aquatic ecosystems • Terrestrial ecosystems
	Geology & Hydrogeology	• Groundwater quality
	Surface Water	• Surface water quality • Surface water quantity
Social	Agriculture	• Agriculture
	Archaeology	• Archaeology
	Culture	• Cultural heritage landscapes • Cultural heritage resources (including built heritage)
	Land Use	• Current and planned future land uses
	Socio-economic	• Local economy • Residents and community
	Visual	• Visual
Technical	Design and Operations	• Technical Considerations • Financial Considerations
	Transportation	• Traffic

Top Ranked
- Groundwater Quality
- Aquatic Ecosystems
- Terrestrial Ecosystems
- Air Quality

Bottom Ranked
- Heritage Landscapes
- Heritage Resources
- Archaeology
- Noise

EA Key Upcoming Dates

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Major Activity	Date / Timeframe
Waste Management Working Group	February 2018
Submission of Draft Proposed Terms of Reference (ToR) to Civic Works Committee (CWC)	March 2018
Seek stakeholder input on Draft Proposed Terms of Reference	April/May 2018
Public Participation Meeting (PPM) at CWC	June 2018
Council approval of Proposed ToR and submission to the Province	June/July 2018

PART 3 – 60% Waste Diversion & RR Strategy

With respect to organics. . . Council approved on October 30, 2017:

d)The W12A Landfill expansion be sized assuming the residential waste diversion rate is 60% by 2022 noting this does not prevent increasing London's residential waste diversion rate above 60% between 2022 and 2050.

60% Diversion Action Plan & Resource Recovery Strategy

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Key information presented for:

- Food Waste Avoidance
- Home Composting
- Community Composting
- City Waste Organics – Curbside
- City Waste Organics - Multi-Residential
- Other Recyclables

Example - Food Waste Reduction

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Tell us how much you want us to invest in this initiative?[1]	Moderate (investment of resources)	Significant (investment of resources)
How will resources be invested?	• Promotion and community outreach programs, and information to households.	• Same as Moderate plus provide each household with a food waste reduction tool kit to help them reduce food waste.
How much closer will it get us to the 60% goal?	0.12% (190 tonnes)	1.3% (2,100 tonnes)
Annual cost	$180 K	$1.2 M
Cost per household	$1	$7
Cost per tonne	$950	$570
Expected annual household savings	$ 1 M	$10 M
GHG[2] avoided	600 tonnes	6,100 tonnes
GHG reduction for every tonne diverted	2.9 tonnes	

Getting to 60% by 2022

Achievable with Today's Technologies

Component	Diversion Rate	Comment
Existing Diversion	45%	• Blue Box, leaf/ yard, depots, etc.
Food Waste Avoidance & More Home Composting	0.5% to 1.5%	• Drive by education and awareness
Source Separated Organics (Green Bin)	8% to 10%	• May need to go to biweekly garbage
Other Programs	4% to 5%	• Reduction, more recycling, etc.
Total	**60%**	

60% Diversion Action Plan & Resource Recovery Strategy

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Revised Timeframe – Tied to Provincial Direction, Policies & Legislation

	Current Timeframe	Revised Timeframe
Draft 60% Diversion Action Plan (i.e., how to achieve 60%) – for final comments	March - April 2018	**May - June 2018**
Final 60% Diversion Action Plan	May - June 2018	**July - August 2018**
Draft Resource Recovery Strategy – for final comments	May - June 2018	**July - August 2018**
Final Resource Recovery Strategy	July - August 2018	**January 2019**

Part 3 – Other Updates Recycling Markets

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Proposed Food and Organic Waste Framework

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CWC Report (Jan. 9, 2018)

COMMENTS ON ENVIONMENTAL BILL OF RIGHTS REGISTRY - PROPOSED FOOD AND ORGANIC WASTE FRAMEWORK

Draft Amended Blue Box Program Plan

25

CWC Report (Jan. 9, 2018)

REQUEST FOR COMMENTS ON THE DRAFT AMENDED BLUE BOX PROGRAM PLAN (PREPARED BY STEWARDSHIP ONTARIO)

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Questions ?????

ADDITIONAL SLIDES

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NOTE- The following slides are not part of the overall presentation.

However to accommodate available timeframes with different audiences some slides may be provided in hard and/or electronic copy and not referred to in the verbal presentation

Home Composting

Tell us how much you want us to invest in this initiative?[1]	Existing (Home Composting Program)	Moderate (investment of resources)	Significant (investment of resources)
How will resources be invested?	- Promoted seasonally, sell at cost at Town Depots	- Moderate additional promotion and 50% subsidy of composters	- Significant additional promotion and outreach and 75% subsidy of composters
How much closer will it get us to the 60% goal?	3.5% (included in 45% current diversion rate)	0.2% (300 tonnes)	0.7% (1,100 tonnes)
Annual cost	$150 K (saved in avoided landfill/processing costs)	$130 K	$210 K
Cost per household	No additional	$0.75	$1.20
Cost per tonne	No additional	$450	$190
GHG[2] avoided		240 tonnes	900 tonnes
GHG reduction for every tonne diverted		0.8 tonnes	

Community Composting

What type of program? [1]	Low Tech (Private)	Low Tech (Public)	High Tech (Public)
How will resources be invested?	• Composting at apartment buildings where residents can compost kitchen waste using large backyard composters or three-compartment wooden composters.	• Community locations where citizens can compost their garden or kitchen waste using large backyard composters or three-compartment wooden composters.	• Community locations where citizens can compost their garden or kitchen waste using technologies such as small-scale digesters or mechanical composting units.
How much closer will it get us to the 60% goal?	0.01% (20 tonnes)	0.01% (20 tonnes)	0.1% (200 tonnes)
Annual cost	$2 K	$4 K	$80 K
Cost per household	$0.01	$0.02	$0.45
Cost per tonne	$150	$300	$400
GHG[2] avoided	16 tonnes	16 tonnes	160 tonnes
GHG reduction for every tonne diverted	0.8 tonnes		

City Wide Organics - Curbside

What type of program?[1]	Curbside Green Bin Program	Mixed Waste Program
How will resources be invested?	• Weekly collection of kitchen organics from approximately 120,000 curbside households. • Organic waste is separated by homeowners and placed out for a separate organics pickup.	• Residents would continue to place organic waste in garbage. • Organic waste would be separated from garbage at a mixed waste processing facility to be composted or anaerobically digested
How much closer will it get us to the 60% goal?	9% (14,000 tonnes)	14% (22,000 tonnes)
Annual cost	$3.5 M	$7 M
Cost per household	$20	$40
Cost per tonne diverted	$250	$300
GHG[2] avoided	11,000 tonnes	18,000 tonnes
GHG reduction for every tonne diverted	0.8 tonnes	

City Wide Organics – Multi Res

What type of program?[1]	Multi-residential Green Bin Program	Mixed Waste Program
How will resources be invested?	• Weekly collection of kitchen organics from approximately 55,000 multi-residential units. • Organic waste is separated by homeowners and placed out for a separate organics pickup. Collection carts would be stored in a common common area similar to how recycling is stored.	• Residents would continue to place organic waste in garbage. • Organic waste would be separated from garbage at a mixed waste processing facility to be composted or anaerobically digested.
How much closer will it get us to the 60% goal?	1.5% (2,500 tonnes)	5% (8,000 tonnes)
Annual cost	$1.3 M	$2.4 M
Cost per household	$7	$14
Cost per tonne diverted	$500	$300
GHG[2] avoided	2,000 tonnes	6,400 tonnes
GHG reduction for every tonne diverted	0.8 tonnes	

Other Recyclables

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How will resources be invested?[1]	Moderate (Collection at an EnviroDepot)	Significant (Semi-annual collection + EnviroDepot program)
	The data below reflect the two investment options.	
	Carpet	Mattresses & Box Springs	Wooden Furniture
Impact on Diversion	0.1% (160 tonnes)	0.3% to 0.6% (500 to 1,000 tonnes)	0.1% (160 tonnes)
Annual cost[2]	$50 K to $140 K	$0.5 M to $1.1 M	$9 K to $90 K
Cost per household	$0.30 to $0.80	$3 to $6	$0.05 to $0.50
Cost per tonne	$350 to $850	$900 to $1 K	$50 to $500
GHG[3] avoided	400 tonnes	1,300 to 2,600 tonnes	600 tonnes
GHG reduction for every tonne diverted	2.6 tonnes	2.6 tonnes	3.8 tonnes

Other Recyclables

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How will resources be invested?[1]	Moderate (Collection at an EnviroDepot)	Significant (Semi-annual collection + EnviroDepot program)	
	The data below reflect the two investment options.		
	Electrical Equipment, Metal	Textiles	Bulky Plastics
Impact on Diversion	0.1% to 0.2% 160 to 320 tonnes	0.2% to 0.5% 320 to 800 tonnes	0.03% to 0.06% 50 to 100 tonnes
Annual cost[2]	$20 K to $110 K	$0 K to $110 K	$20 K to $80 K
Cost per household	$0.10 to $0.60	$0 to $0.60	$0.01 to $0.40
Cost per tonne	$125 to $350	$0 to $150	$400 to $800
GHG[3] avoided	700 to 1,400 tonnes	3,000 to 8,000 tonnes	50 to 100 tonnes
GHG reduction for every tonne diverted	4.4 tonnes	10 tonnes	1 tonne

Waste Reduction and Reuse

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How will resources be invested?		Moderate Investment	Significant Investment
Program Cost for Examples		Per household Net annual cost	
Lending libraries	• Lending of materials and equipment that are used infrequently means less product production and can save money for households. Tool sharing libraries, for example, are being developed in London.	$0.25 $45 K	$0.50 $90 K
Repair workshops	• There is potential to reduce waste through repair and reuse workshops. These workshops will train interested citizens on how to fix household items (e.g. bikes, furniture, etc.) and extend their lives.	$0.25 $45 K	$0.50 $90 K
Promote reuse events	• Explore options for reuse events to facilitate trading, selling or giveaway of materials for reuse (e.g., furniture, toys) in a convenient, yet structured way so that the events do not contribute to litter or illegal dumping.	$0.25 $45 K	$0.50 $90 K
Waste reduction education and outreach	• Increase of general awareness campaigns on waste reduction (e.g., in addition to the above, buy in bulk, buy products that last, repair products, avoid disposable products, unsolicited mail opt-out, etc.)	$0.55 $100 K	$1.10 $200 K

Waste Reduction Policies

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Do you support changes to the By-law to increase waste diversion? Indicate which of the examples below you support.	Yes	No

Expand & enforce material bans

Some materials are banned from collection at the curb and landfill (e.g., electronics, scrap metal, appliances, and tires). This could be expanded to include materials that can be recycled/composted now or in the future, such as: Blue Box recyclables, wooden furniture, mattresses, carpet, and organics. An expanded list of banned materials may require additional enforcement to be effective.

Clear bags for garbage

Some municipalities have introduced clear bags for garbage to facilitate enforcement of material bans. Generally, clear bag programs have an allowance for one non-clear privacy bag.

Reduced garbage container limits

Further reduction of garbage container limits may be implemented in conjunction with new diversion programs, such as a city-wide organics program. This may also be accomplished by reducing frequency of collection of garbage (from once per six business days to bi-weekly collection).

User pay

In larger communities, user pay for garbage is typically restricted to cart based programs; residents pay an annual fee based on the size of cart they select.

Performance-based incentives

Some examples include: use of incentives such as point reward systems, or a "gold box" for correct recycling, rebate in User Pay programs for selection of the small size cart.