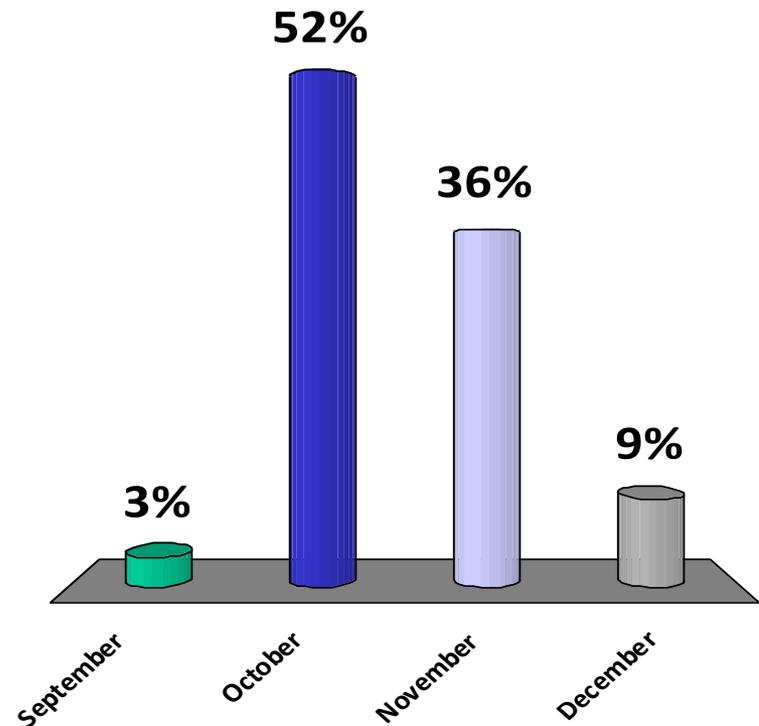


Water and Waste Department Organics Diversion Strategy Symposium

September 9, 2015

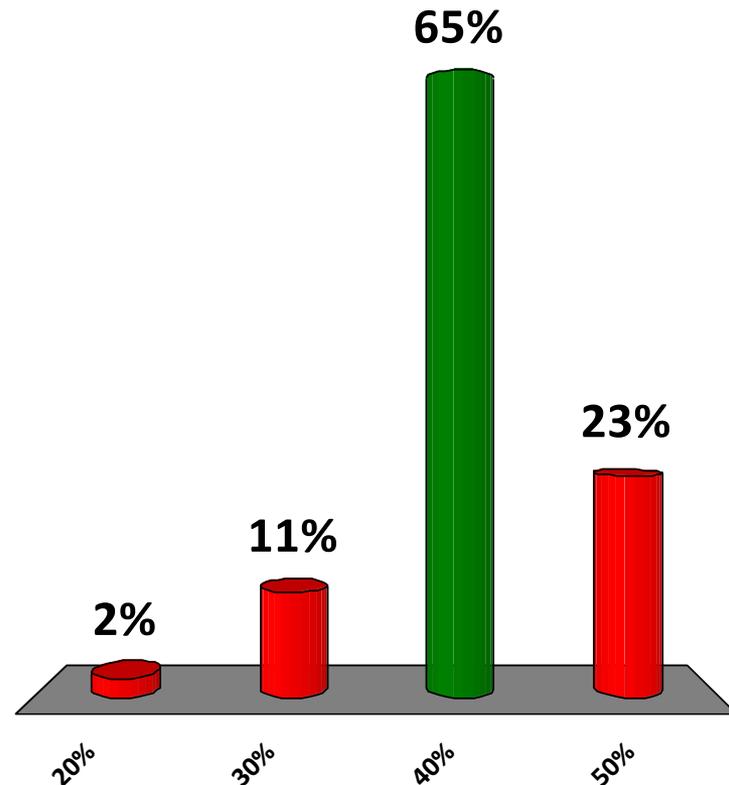
When will the snow first fall in 2015?

- A. September
- B. October
- C. November
- D. December



Organics make up how much of Winnipeg's garbage?

- A. 20%
- B. 30%
- C. 40%
- D. 50%



What was Winnipeg's residential waste diversion rate in 2014?

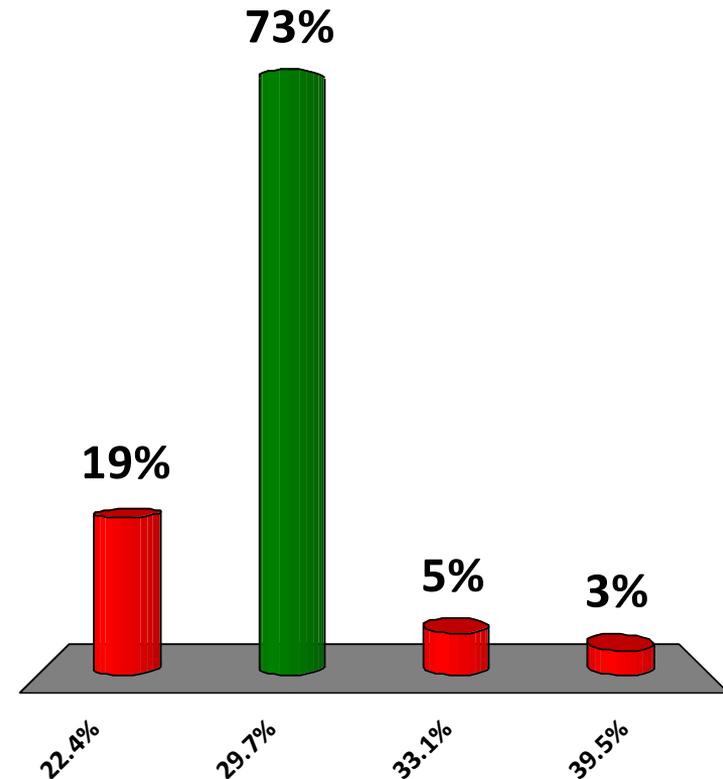
A. 22.4%



B. 29.7%

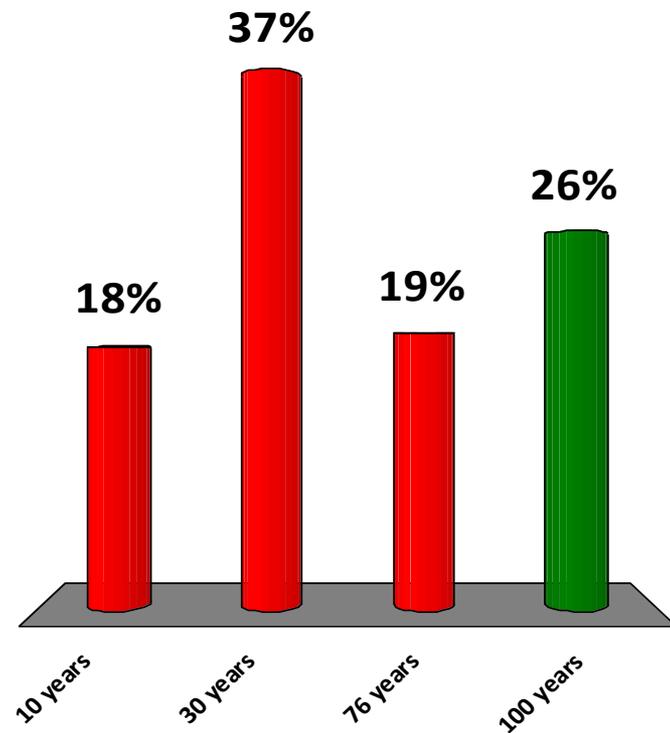
C. 33.1%

D. 39.5%



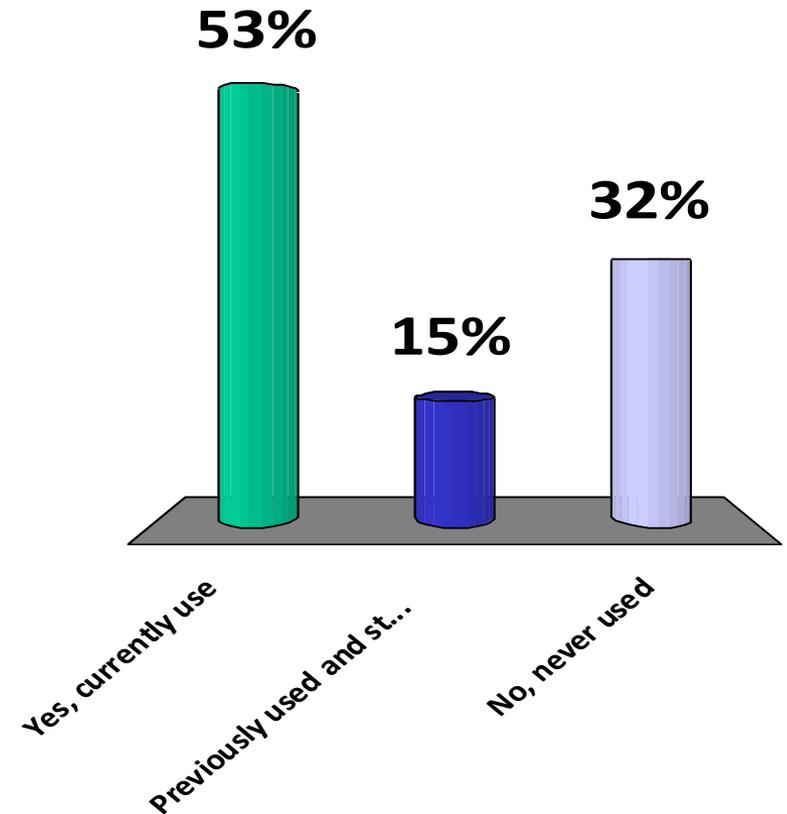
What is the estimated remaining lifespan of the Brady Road Resource Management Facility?

- A. 10 years
- B. 30 years
- C. 76 years
- D. 100 years



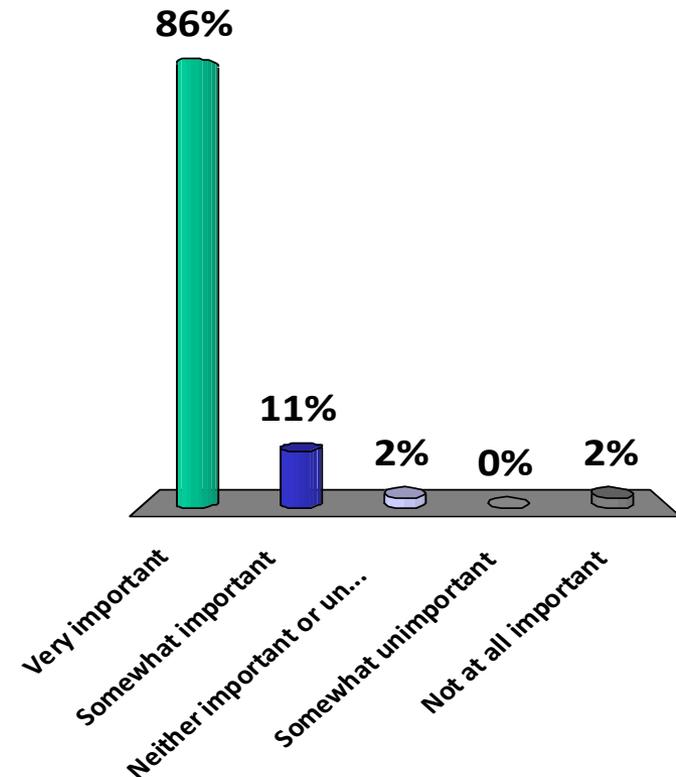
Does your household have and use a backyard composter?

- A. Yes, currently use
- B. Previously used and stopped
- C. No, never used



How important is it for Winnipeg to divert and compost more organic waste?

- A. Very important
- B. Somewhat important
- C. Neither important or unimportant
- D. Somewhat unimportant
- E. Not at all important



HDR



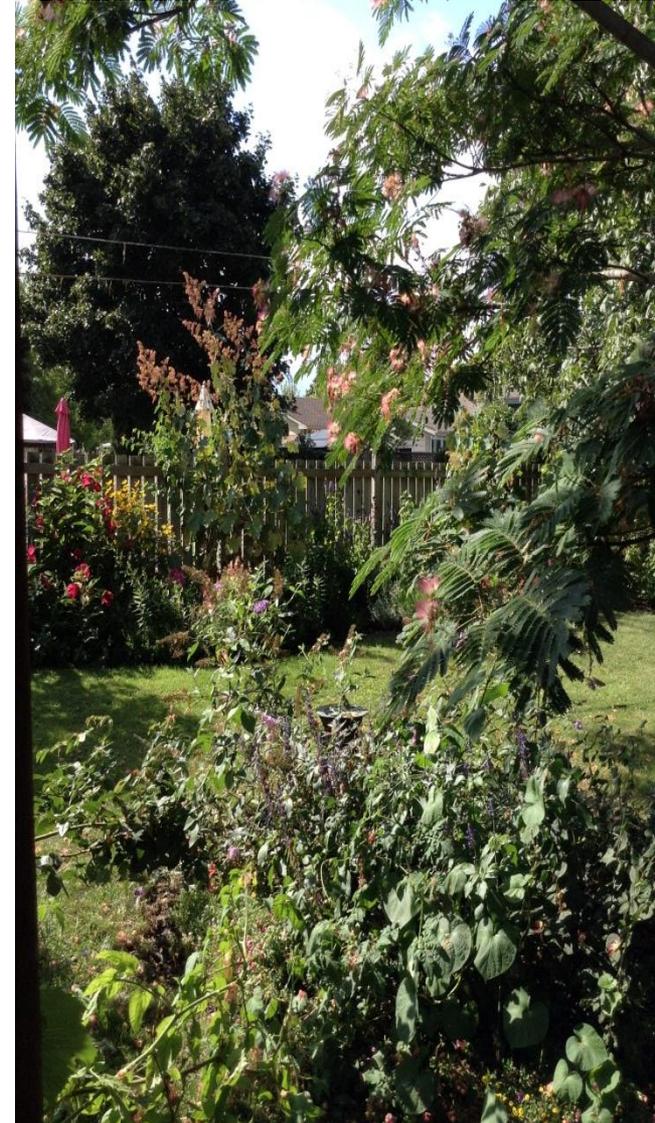
WINNIPEG ORGANICS SYMPOSIUM

SEPT 9, 2015



A BIT OF BACKGROUND – JANINE RALPH

- Promoted organics diversion for 25 years – starting with backyard composting project
- Developed some of the first municipal curbside collection programs in Ontario
- Has tested virtually every type of compostable bag and container
- Continues to improve personal organic diversion rate



OVERVIEW

- Why consider expanding organics diversion?
- Where is Winnipeg today?
- How are organics managed in other Canadian Cities?
- Best practices in other Jurisdictions
- Considerations and Options
- How does organic waste impact the environment?
- Goals - sustainable, environmental, cost-effective



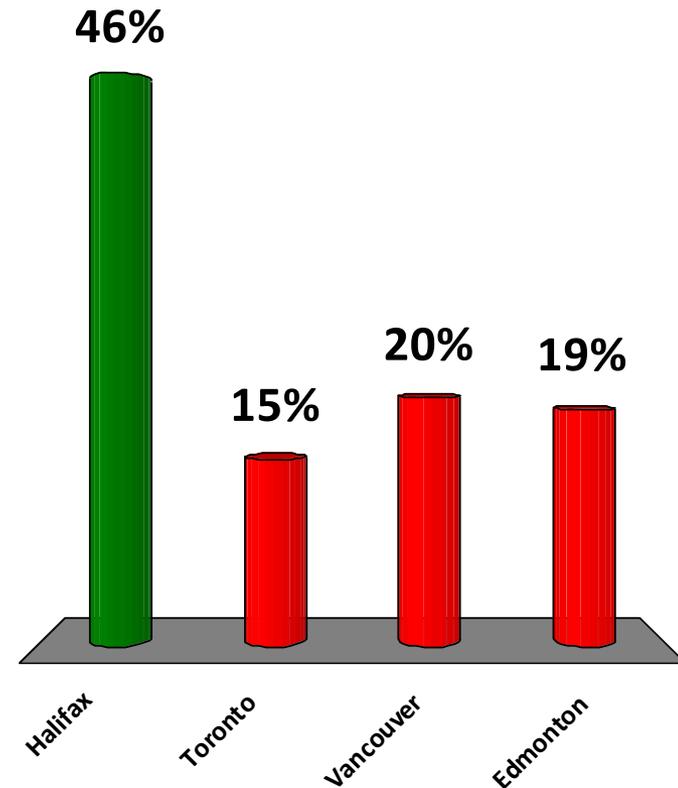


WHY EXPAND ORGANICS DIVERSION ?

- Organics diversion required to reach or exceed 50% residential waste diversion
- Provinces with highest percent of composting households have highest residential diversion rates
- Organics are a primary contributor to leachate and landfill gas when disposed in landfill
- Disposed organics are a lost resource

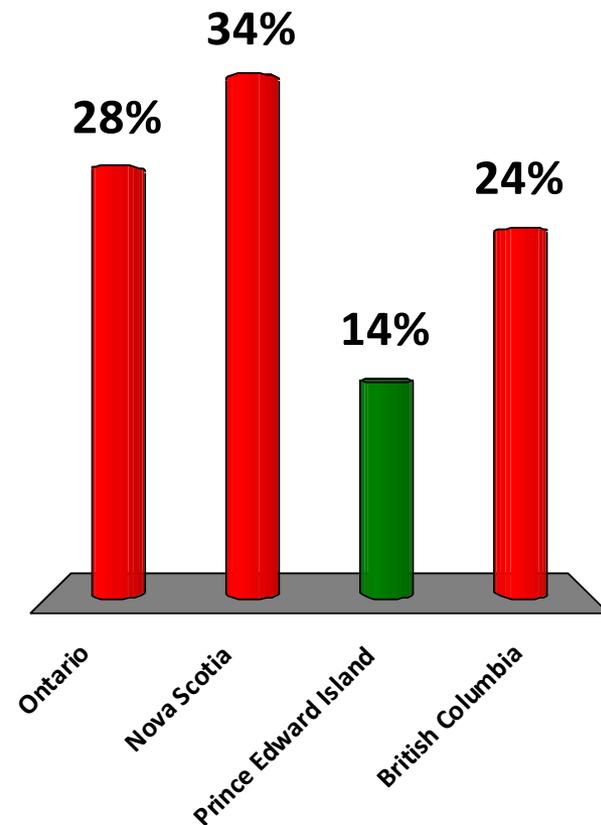
Which one of these cities was the first to introduce a green bin collection program?

- ✓ A. Halifax
- B. Toronto
- C. Vancouver
- D. Edmonton



As of 2011, what province had the highest percentage of households that composted kitchen waste?

- A. Ontario
- B. Nova Scotia
- C. Prince Edward Island
- D. British Columbia



As of 2011, what percentage of households in Canada used curbside programs to collect kitchen waste?

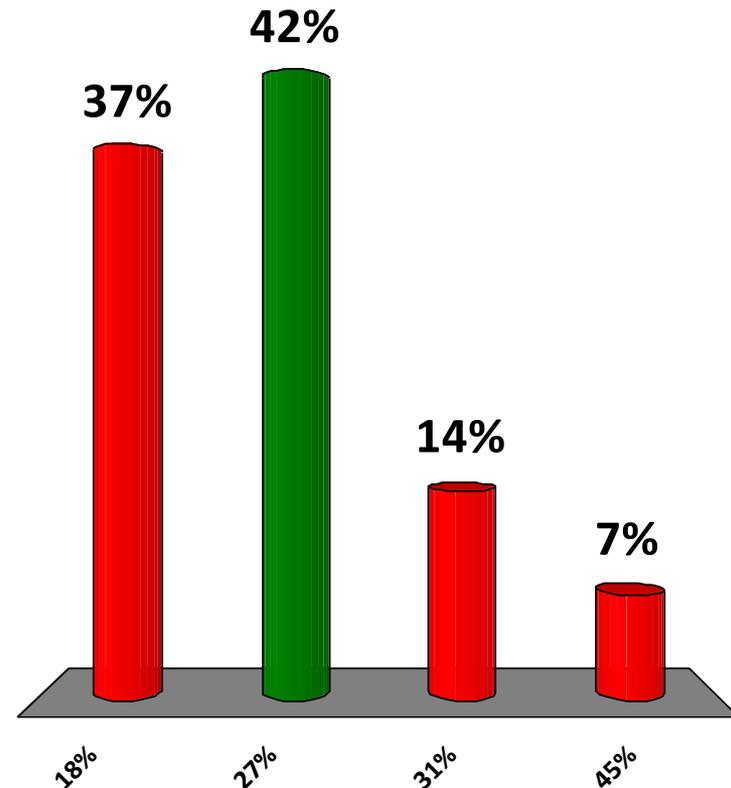
A. 18%



B. 27%

C. 31%

D. 45%



WHERE IS WINNIPEG TODAY?

- Promotes the first R – 'REDUCE'
- Promotes awareness of the benefits of grasscycling and backyard composting
- Leaf & yard collection
- Christmas tree collection depots
- Leaf & yard waste and organics from City operations hauled to and composted at Brady Road
- City diversion rate improved from 18.1% in 2011 to 28.1% in 2013
- Developed windrow composting facility at Brady Road, composted 29,000 tonnes in 2014



HOW ARE ORGANICS MANAGED IN OTHER CITIES?

Jurisdiction	Reported Diversion Rate	Organics Program	Program Notes:
Halifax Regional Municipality	52% residential 248 kg/HHD/year	Weekly cart collection of food and other organics. Separate leaf & yard collection. Allows paper liners. Two private composting plants.	Provincial organics ban. Bi-weekly garbage collection. New clear garbage bag program.
City of Ottawa	52% residential 160 kg/HHD/year residential (food, tissue/towelling)	Weekly cart collection of food . Separate leaf & yard collection. Allows paper liner bags. One private composting plant.	Bi-weekly garbage collection.
City of Hamilton	55% residential 120 kg/HHD/year (food only)	Weekly cart collection of food other organics. Separate leaf & yard collection. Paper or compostable plastic liner bags. City-owned composting plant and outdoor compost site.	One bag limit for garbage. Co-collects green bin and yard waste. Sells some composting capacity
City of Edmonton	Over 50%	Processes mixed garbage to remove organics. Multi-step processing to produce liquid fuel.	Easy to use - very high per household cost.
Surrey British	Approx. 60%	Weekly cart collection of food and other	Bi-weekly garbage

BEST PRACTICES

- Mandatory diversion / organics disposal bans
- Weekly organics collection
- Bi-weekly garbage collection/garbage restrictions
- Allow for all food waste and compostable paper fibre
- Allow use of liner bags
- Provide kitchen and curbside containers
- Frequent and clear promotion & education
- Split between municipal owned and contracted processing capacity



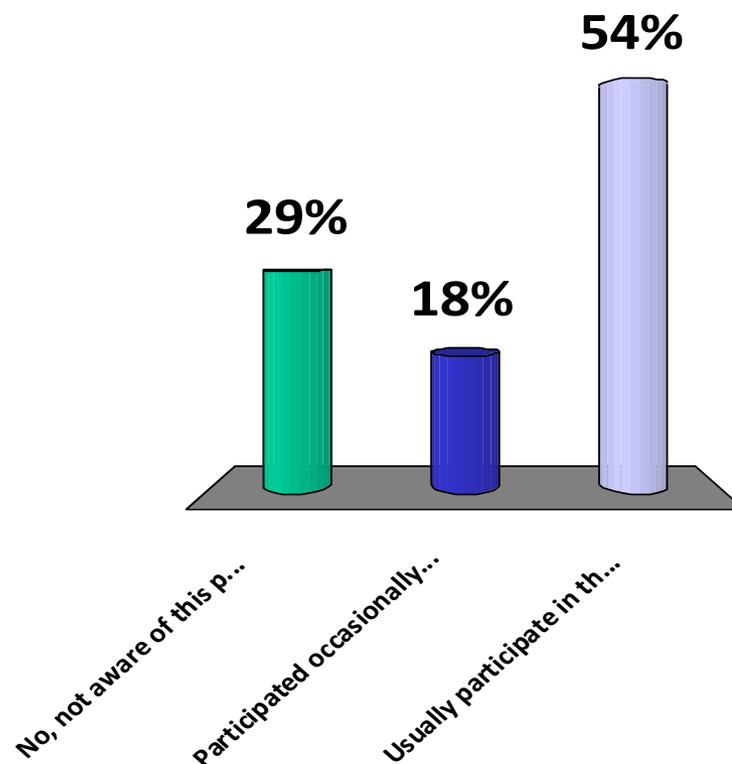
CONSIDERATIONS FOR PROGRAM DEVELOPMENT

- Consider the needs of the generator
- Make decisions on an integrated system basis
- Understand organic material characteristics and quantity
- Consider both primary elements (curbside green bin) as well as secondary supporting elements (backyard composting)



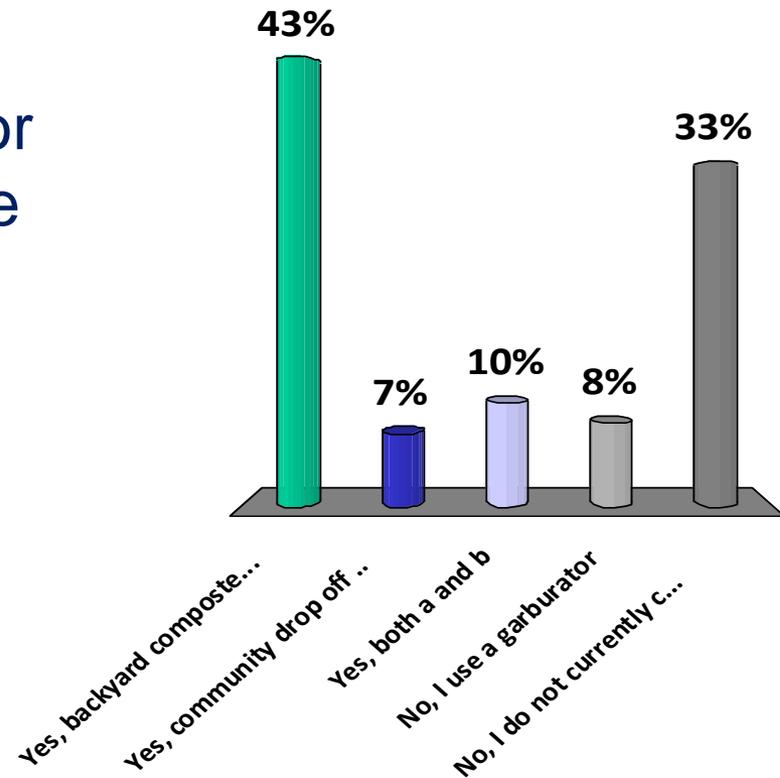
Have you participated in the City of Winnipeg's curbside yard waste program?

- A. No, not aware of this program
- B. Participated occasionally in the program
- C. Usually participate in the program



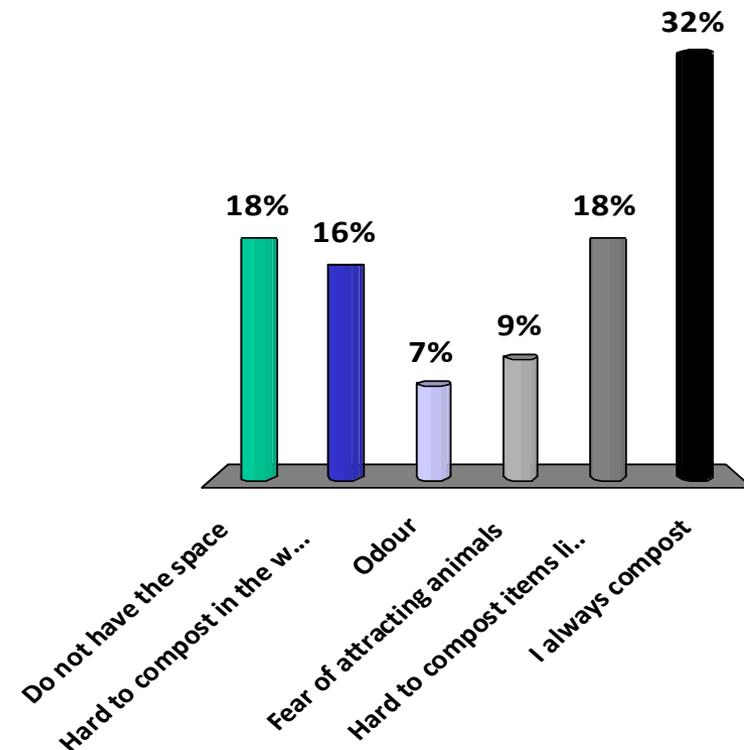
Do you currently compost food waste at home?

- A. Yes, backyard composter and/or worm bin
- B. Yes, community drop off or commercial pickup service
- C. Yes, both a and b
- D. No, I use a garburator
- E. No, I do not currently compost food waste



What is the main reason you wouldn't compost?

- A. Do not have the space
- B. Hard to compost in the winter
- C. Odour
- D. Fear of attracting animals
- E. Hard to compost items like corn, avocado shells, etc.
- F. I always compost



OVERVIEW OF SYSTEMS

Material	Collection	Processing	Performance:
Vegetative food waste	<ul style="list-style-type: none"> ▪ Bi-weekly with leaf & yard, in existing container ▪ Weekly garbage 	<ul style="list-style-type: none"> ▪ Outdoor windrow 	Cost + Diversion+
Vegetative food waste	<ul style="list-style-type: none"> ▪ Separate weekly collection, new green bin ▪ Bi-weekly leaf & yard ▪ Weekly garbage 	<ul style="list-style-type: none"> ▪ Outdoor windrow 	Cost ++ Diversion +
All food waste plus compostable paper	<ul style="list-style-type: none"> ▪ Separate weekly collection, new green bin ▪ Bi-weekly leaf & yard ▪ Compostable liner bags ▪ Bi-weekly garbage 	<ul style="list-style-type: none"> ▪ Covered outdoor windrow ▪ Indoor composting ▪ Anaerobic digestion 	Cost ++ Diversion +++++
All food waste plus compostable paper	<ul style="list-style-type: none"> ▪ Separate weekly collection, new green bin ▪ Bi-weekly leaf & yard ▪ Compostable liner bags ▪ Weekly garbage 	<ul style="list-style-type: none"> ▪ Covered outdoor windrow ▪ Indoor composting ▪ Anaerobic digestion 	Cost +++ Diversion +++
All food waste, compostable paper, pet waste	<ul style="list-style-type: none"> ▪ Separate weekly collection, new green bin ▪ Bi-weekly leaf & yard ▪ Compostable liner bags ▪ Weekly garbage 	<ul style="list-style-type: none"> ▪ Indoor composting ▪ Anaerobic digestion 	Cost ++++ Diversion +++++
All food waste, compostable paper, pet waste, sanitary waste	<ul style="list-style-type: none"> ▪ Separate weekly collection, new green bin ▪ Bi-weekly leaf & yard ▪ Compostable liner bags ▪ Weekly garbage 	<ul style="list-style-type: none"> ▪ Indoor composting ▪ Anaerobic digestion 	Cost +++++ Diversion +++++

IMPACT OF ORGANIC DISPOSAL ON THE ENVIRONMENT

- Societal – poor allocation of resources
- Agricultural / soils – loss of nutrients and organic matter
- Greenhouse gas – disposed organics are primary contributor to landfill gas generation
- Water resources – high moisture content, primary contributor to leachate
- Landfill capacity – organics take up landfill space



IMPORTANCE OF PLAN REFLECTED IN STUDY GOALS

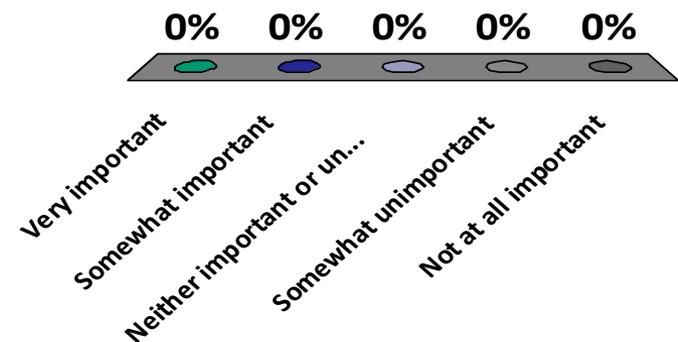
- Improve and sustain performance of the Diversion System and achievement of the CIWMP goal of 50% residential diversion
- Increase participation in the City's waste management plan and engage residents and other stakeholders in organics diversion initiatives
- Reduce the environmental impact of organics management
- Implement a sustainable organics management program that balances social, environmental and financial needs of City residents



HDR

How important is it for Winnipeg to divert and compost more organic waste?

- A. Very important
- B. Somewhat important
- C. Neither important or unimportant
- D. Somewhat unimportant
- E. Not at all important



Group Breakout Questions

- What stood out to you from the Panel presentation and discussion?
- What are the most important things for the City to consider as it creates a plan to manage and divert more organic waste?
 - What should the economic, environmental and social outcomes for the plan be?
 - What should organics waste diversion do for Winnipeg?
- What would a compelling and convenient Organics program look like for you?
 - The success of an organics program depends on how well it is used. How could we get good participation in a new program?
- As planning continues what information might be important for public and stakeholders to know or hear about?

Water and Waste Department Organics Diversion Strategy

**<http://wwdengage.winnipeg.ca/grmp/organics/>
wwdfeedback@winnipeg.ca**