

Appendix 3 - Rationale for Proposed Collection Service Options for Next Contract

Proposed Collection Service Options:

- 1) **Change the weekly garbage container (bag/can) limits for IC&I and MU properties located inside Designated Business Areas (DBA) from seven (7) containers to four (4) containers per property, as a base service.**

Pros	Cons
1) Fairness & equity: <u>Base Collection Service:</u> - based on the 2018 curbside audits: - average # of garbage containers placed out per week by <u>IC&I</u> properties <u>inside</u> DBAs was 2.1. - in 2018, audits were completed in: Grimsby, Welland (Downtown and North End), Port Colborne (Main St. and Downtown), Lincoln (Beamsville and Vineland), Pelham, Thorold, St. Catharines (Downtown and Port Dalhousie), Fort Erie (Ridgeway, Bridgeburg, and Crystal Beach), and Niagara Falls (Queen, Main St., Lundy's Lane, Clifton Hill and Chippawa) DBAs. - based on the 2016 and 2018 curbside audits: - average # of garbage containers placed out per week by <u>MU</u> properties <u>inside</u> DBAs was 2.0. - in 2016, audits were completed in: Fort Erie (Ridgeway, Bridgeburg, and Crystal Beach), Welland (Downtown and North End), and Port Colborne (Main St. and Downtown) DBAs. - in 2018, audits were completed in: Grimsby, Lincoln (Beamsville and Vineland), Pelham, Thorold, St. Catharines (Downtown and Port Dalhousie), and Niagara Falls (Queen, Main St., Lundy's Lane, Clifton Hill and Chippawa) DBAs. - the proposed 4 garbage container limit should meet the set-out needs of the IC&I and MU properties, based on these audit results, particularly if diversion services are	1) Potential illegal dumping: - if garbage container limits are decreased, there is potential for businesses and residents to illegally dump items. 2) Potential for increased number of complaints from business owners, MU property owners and residents due to reduced container limit: - business owners may potentially complain about this reduction in container limit being provided to their property.

Pros	Cons
utilized. - the proposed 4 garbage container limit will align with the existing 4 garbage container limit for IC&I properties located outside DBAs, and the proposed limit for IC&I and MU properties located inside DBAs. - it will encourage participation in diversion programs, which are under-utilized. <u>Enhanced Collection Service:</u> - based on the 2014 garbage set-outs at enhanced <u>IC&I</u> properties: - Grimsby (12 garbage container limit, twice per week) – average # of garbage containers placed out per set-out: 3.6 - West Lincoln (7 garbage container limit, twice per week) – average # of garbage containers placed out per set-out: 2.5 - Thorold (7 garbage container limit, three times per week) – average # of garbage containers placed out per set-out: 4.5 - based on the 2015 garbage set-outs at enhanced Niagara Falls <u>IC&I</u> and <u>MU</u> properties: - Main Street, Lundy's Lane and Queen Street DBAs – average # of garbage containers placed out per set-out: 5.2 (IC&I) and 2.9 (MU) - audits were completed during the summer months, when the 15 garbage container limit was in effect for food and lodging outlets (1 collection per week). It is a 7 garbage container limit elsewhere, once/week. - based on the 2018 garbage set-outs at enhanced <u>IC&I</u> and/or <u>MU</u> properties: - Grimsby (12 garbage container limit, twice per week) – average # of garbage containers placed out per set-out: 1.6 (MU) - West Lincoln (7 garbage container limit, twice per week) – average # of garbage containers placed out per set-out: 1.7 (MU)	

Pros	Cons
- Thorold (7 garbage container limit, three times per week) – average # of garbage containers placed out per set-out: 1.9 (MU) - NotL (20 garbage container limit, three times per week) – average # of garbage containers placed out per set-out: 6.0 (IC&I) and 6.8 (MU) - St. Catharines (7 garbage container limit, four times per week) – average # of garbage containers placed out per set-out: 2.7 (IC&I) and 1.5 (MU)	

2) Change the weekly garbage container limit for MU properties located outside DBAs from six (6) containers to four (4) containers per property, as a base service.

Pros	Cons
1) Fairness & equity: <u>Base Collection Service:</u> • based on the 2014 curbside audit: - average # of garbage containers placed out per week by MU properties outside DBAs: 2.4 • the proposed four (4) container limit would meet the set-out needs of the MU properties, based on these audit results. • the proposed four (4) container garbage limit will align with the existing four container garbage limit for IC&I properties located outside DBAs, and the proposed limit for IC&I and MU properties located inside DBAs. • it will increase diversion, with less reliance on landfill.	1) Potential illegal dumping: • if garbage container limits are decreased, there is potential for businesses and residents to illegally dump items. 2) Potential for increased number of complaints from business owners, due to reduced container limit: • business owners, MU property owners and residents may potentially complain about this reduction in container limit being provided to their property.

3) Every-other-week (EOW) collection for garbage only (weekly recycling and organics to continue) for all sectors outside DBAs, as a base service. Current garbage container limits would double for all sectors (i.e. LDR properties would be allowed to set out two (2) garbage containers, on an EOW basis).

Pros	Cons
1) Municipal best practice/trend:	1) Potential illegal dumping:

Pros	Cons
- approximately 70% of the municipal comparators (Barrie, Durham, Halton, Markham, Ottawa, Toronto, Vaughan, Peel and Waterloo) provide EOW garbage collection service. Residents have adapted to this change. 2) Increased waste diversion: - waste diversion rates increased between 6% (Peel) and 16% (Durham) for these municipal comparators. This depended on whether they introduced other diversion programs (i.e. organics) at the same time as EOW garbage. 3) Potential contract savings: - annual contract savings for the municipal comparators ranged between \$200,000 (Barrie), Waterloo (\$1.5 million), and \$12 million (Peel), depending on size of the contract and any other contract changes that were implemented (i.e. EOW, carts, etc.). - However, Peel staff reported a one-time initial cost to implement three stream cart collection of \$35 million (based on 325,000 single-family homes), with an estimated annual maintenance and replacement cost of \$1 to 3 million. - avoided Walker disposal costs, if there is a decrease in the volume of garbage collected. 4) Regional disposal capacity: - preservation of existing Regional disposal capacity, if the volume of garbage landfilled decreases. 5) Fairness & equity: - based on the 2015-16 waste composition study, Niagara's LDR properties set out an average of 0.9 garbage containers per	- if residents/businesses are not provided with weekly garbage collection service, there is potential for them to illegally dump items. 2) Potential increased number of complaints, due to reduction in service: - Residents/businesses may complain about this reduction in garbage collection service being provided to their property.

Pros	Cons
week.	

4) Mandatory use of clear bags for garbage, with the option of allowing an opaque privacy bag to be placed inside the clear bag. The clear bag program will be for all sectors (both inside and outside DBAs), as a base service.

Pros	Cons
1) Increased waste diversion: - studies completed by Ontario's Stewardship Effectiveness & Efficiency Fund report that "<i>clear bag programs are successful in decreasing the amount of recyclables being landfilled or incinerated, and have shown that mandatory by-laws and clear bags result in maximum participation and diversion</i>". - implementing clear bags resulted in a 6% increase in Markham's 2014 diversion rate, for a total diversion rate of 81%. - residents are motivated to recycle due to social pressure. 2) Enforcement/safety: - increases awareness of what is placed in the garbage, due to visibility of bag contents. - eliminates (or minimizes) the option of concealing hazardous or other non-acceptable materials (e.g. recyclables and organics) in the garbage. - facilitates education and enforcement of Niagara's Waste Management By-law, where necessary. 3) Fairness & equity: - clear bags are currently being used for diapers by those Niagara residents operating daycares out of	1) Perception of invasion of privacy: - residents using clear bags may complain it is an invasion of their privacy. - this concern is partially addressed by allowing the use of an opaque bag inside the clear bag. - IC&I business groups, who participated in the Region's 2012 consultation sessions for a clear garbage bag pilot, expressed privacy concerns, as well. 2) Potential illegal dumping: - residents and businesses opposing the use of clear garbage bags may potentially illegally dump their garbage. 3) Collection issues: - if a clear bag is placed inside a reusable container, enforcement may become more difficult if driver dumps the contents of the container directly into truck, as opposed to pulling the clear bag out of the container to look at it. - the IC&I business groups expressed concerns about the aesthetics of uncollected bags, which would contain non-acceptable materials, being left in downtown or tourist areas. 4) Other Municipal programs:

Pros	Cons
their households, or families with at least two children under the age of four years old. – these residents may feel the program ensures equal treatment for all households.	• clear bag pilots were implemented in two comparator municipalities (Durham and Markham), however only Markham implemented a full program. • Durham decided not to implement a region-wide clear bag program in 2014, due to a lack of information on the effectiveness of the clear bag in reducing the amount of garbage collected.

5) Establishment of a four (4) item limit per unit per collection for large item service at LDR, MR and MU properties.

Pros	Cons
1) Municipal best practice/trend: • average large item limit is three per residential unit for those municipalities with weekly collection, and four per residential unit with bi-weekly collection. 2) Potential contract savings: • municipalities that implemented collection limits on the number of large items reported contract savings. 3) Fairness & equity: • provides a standardized collection limit for all properties. • Niagara residents set out an average of fewer than 2 large items per collection in 2018.	1) Potential illegal dumping: • if residents are limited in the amount of large items that can be collected, there is potential for them to illegally dump items. 2) Potential increased number of complaints from residents, due to reduction in service: • residents may complain about this reduction in service being provided to their property.

6) Discontinuation of appliances and scrap metal collection at LDR properties.

Pros	Cons
1) Municipal best practice/trend: • approximately half of municipal comparators (Barrie, Hamilton,	1) Potential illegal dumping: • if residents are not provided with service, there is potential for them

Pros	Cons
London, Ottawa, Peel and Windsor) do not provide appliance collection service. 2) Potential contract savings: • municipalities that eliminated this collection service realized a contract savings. In Peel, this was a net annual savings of \$100K. • Niagara's current annual cost to collect these items is \$126K (or \$2,032 per tonne due to the reduced tonnage). • many appliances and scrap metal items are scavenged before municipal contractors can collect them. – for the first two months of 2018, Emterra reported that approximately 60% of the items scheduled for collection were “not out” and were potentially scavenged. • appliance and scrap metal tonnages collected in 2017 were 94% lower than what was collected in 2007. 3) Fairness & equity: • residents have the option to recycle these items, at no cost, at the Region's drop-off depots or a scrap metal dealer, as well as call a scrap metal hauler to collect them.	to illegally dump items. • Barrie reported an increase in illegal dumping when bulky/white goods collection service was discontinued; however it was not sustained (approximately six months). • Peel provided its residents with advanced notice of this discontinuation of service and options for collection, so they did not see any significant increase in illegal dumping. 2) Potential increased number of complaints from residents, due to elimination of this service: • residents may complain about the elimination of this service. • those municipalities that discontinued collection (Barrie, Hamilton, Ottawa and Peel) reported a minimal reaction from their residents.

Audit Results

Base Collection Service Audit Results

Weekly Average Garbage Containers Set Out by IC&I Properties Inside the DBA (Base Collection Area)

Municipality	Audit Year	Average Number of IC&I Properties Participating in Regional Collection Service	Average % of Participating IC&I Properties Using Regional Garbage Collection Service Inside DBA	Average Number of Garbage Containers Per Set-Out	Average % of IC&I Properties Exceeding Garbage Container Limit
Fort Erie	2018	56	88%	1.6	0%
Grimsby	2018	9.0	89%	1.2	0%
Lincoln	2018	18	83%	2.1	3%
Niagara Falls	2015	94.5	87%	2.7	6%
Pelham	2018	34	85%	2.3	3%
Port Colborne	2018	72	88%	2.2	3%
St. Catharines	2018	56	71%	1.7	0%
Thorold	2018	2	100%	1.8	0%
Welland	2018	68	91%	2.0	3%

**Weekly Average Garbage Containers Set Out by MU Properties Inside the DBA
(Base Collection Area)**

Municipality	Audit Year	Average Number of MU Properties Participating in Regional Collection Service	Average % of Participating MU Properties Using Regional Garbage Collection Service Inside DBA	Average Number of Garbage Containers Per Set-Out	Average % of MU Properties Exceeding Garbage Container Limit
Fort Erie	2016	63.5	95%	2.6	7%
Grimsby	2018	2	50%	1.0	0%
Lincoln	2018	21	90%	2.1	5%
Niagara Falls	2015	63	98%	1.8	3%
Pelham	2018	19	79%	2.8	0%
Port Colborne	2016	53	92%	2.5	1%
St. Catharines	2018	16	75%	1.6	0%
Thorold	2018	0	0%	0	0%
Welland	2016	54.5	91%	2.8	3%

**Weekly Average Recycling and Organics Containers Set Out by IC&I Properties
Inside the DBA (Base Collection Area)**

Municipality	Audit Year	Average % of Participating IC&I Properties Using Regional Recycling Collection Service Inside DBA	Average Number of Recycling Containers Per Set-Out	Average % of Participating IC&I Properties Using Regional Organics Collection Service Inside DBA	Average Number of Organics Containers Per Set-Out
Fort Erie	2018	66%	1.9	11%	1.8
Grimsby	2018	56%	1.5	22%	0.8
Lincoln	2018	72%	1.9	17%	1.0
Niagara Falls	2015	61%	2.0	11%	1.3
Pelham	2018	62%	3.1	12%	1.0
Port Colborne	2018	72%	1.6	6%	0.6
St. Catharines	2018	73%	1.5	16%	1.5
Thorold	2018	50%	0.5	0%	0.0
Welland	2018	65%	2.1	9%	2.4

**Weekly Average Recycling and Organics Containers Set Out by MU Properties
Inside the DBA (Base Collection Area)**

Municipality	Audit Year	Average % of Participating MU Properties Using Regional Recycling Collection Service Inside DBA	Average Number of Recycling Containers Per Set-Out	Average % of Participating MU Properties Using Regional Organics Collection Service Inside DBA	Average Number of Organics Containers Per Set-Out
Fort Erie	2016	72%	2.0	16%	0.8
Grimsby	2018	100%	1.8	0%	0.0
Lincoln	2018	52%	2.4	19%	1.1
Niagara Falls	2015	46%	1.3	11%	1.0
Pelham	2018	84%	2.5	32%	0.5
Port Colborne	2016	67%	1.9	19%	1.5
St. Catharines	2018	69%	1.5	13%	1.0
Thorold	2018	0%	0.0	0%	0.0
Welland	2016	72%	2.3	17%	1.0

2014 Weekly Average Garbage Containers Set Out by IC&I Properties Outside the DBA (Base Collection)

Municipality	Average % of IC&I Properties Using Regional Collection Service Outside DBA	Average Number of Containers Per Set-Out	Average Number of IC&I Properties Exceeding 4 Garbage Container Limit	Average % of IC&I Properties Exceeding 4 Garbage Container Limit
Fort Erie	41%	1.7	12	7%
Grimsby	46%	1.8	6	7%
Lincoln	47%	1.7	10	5%
Niagara Falls	43%	1.8	28	7%
Niagara-on-the-Lake	62%	1.3	11	3%
Pelham	37%	1.8	3	6%
Port Colborne	42%	2.1	9	8%
St. Catharines	41%	1.9	35	7%
Thorold	26%	1.7	7	11%
Wainfleet	44%	1.5	1	2%
Welland	39%	1.7	10	6%
West Lincoln	46%	1.4	3	3%
Regional Average:	44%	1.7	11	6%

2014 Weekly Average Garbage Containers Set Out by MU Properties Outside the DBA (Base Collection)

Municipality	Average % of MU Properties Using Regional Collection Service Outside DBA	Average Number of Containers Per Set-Out	Average Number of MU Properties Exceeding 6 Garbage Container Limit	Average % of MU Properties Exceeding 6 Garbage Container Limit
Fort Erie	71%	1.7	1	1%
Grimsby	85%	1.5	0	0%
Lincoln	79%	1.6	1	2%
Niagara Falls	70%	2.0	2	2%
Niagara-on-the-Lake	62%	1.6	0	0%
Pelham	67%	1.7	1	5%
Port Colborne	86%	1.6	0	0%
St. Catharines	69%	1.9	4	2%
Thorold	70%	1.1	0	0%
Wainfleet	70%	1.4	0	0%
Welland	74%	2.0	2	2%
West Lincoln	74%	1.5	0	0%
Regional Average:	72%	1.8	1	1%

2014 Weekly Average Recycling and Organics Containers Set Out by IC&I Properties Outside the DBA (Base Collection)

Municipality	Average % of Participating IC&I Properties Using Regional Recycling Collection Service Outside DBA	Average Number of Recycling Containers Per Set-Out	Average % of Participating IC&I Properties Using Regional Organics Collection Service Outside DBA	Average Number of Organics Containers Per Set-Out
Fort Erie	33%	1.6	7%	1.0
Grimsby	35%	1.8	11%	0.7
Lincoln	41%	1.8	11%	0.8
Niagara Falls	32%	1.7	7%	0.8
Niagara-on-the-Lake	58%	1.9	28%	0.8
Pelham	27%	1.6	12%	0.9
Port Colborne	31%	2.0	8%	1.3
St. Catharines	29%	1.8	9%	0.9
Thorold	21%	1.6	6%	0.7
Wainfleet	37%	1.7	7%	0.8
Welland	28%	1.8	7%	1.4
West Lincoln	34%	1.5	10%	0.7
Regional Average:	34%	1.7	11%	0.9

**2014 Weekly Average Recycling and Organics Containers Set Out by MU
Properties Outside the DBA (Base Collection)**

Municipality	Average % of Participating MU Properties Using Regional Recycling Collection Service Outside DBA	Average Number of Recycling Containers Per Set-Out	Average % of Participating MU Properties Using Regional Organics Collection Service Outside DBA	Average Number of Organics Containers Per Set-Out
Fort Erie	68%	2.0	23%	0.9
Grimsby	76%	1.8	29%	1.3
Lincoln	70%	2.3	27%	0.9
Niagara Falls	50%	1.9	18%	0.7
Niagara-on-the-Lake	54%	2.0	16%	0.6
Pelham	73%	1.7	17%	0.9
Port Colborne	66%	1.6	17%	1.0
St. Catharines	57%	1.8	17%	0.8
Thorold	70%	1.4	35%	0.8
Wainfleet	56%	1.4	7%	0.5
Welland	63%	1.7	19%	1.1
West Lincoln	59%	1.7	15%	0.8
Regional Average:	61%	1.8	20%	0.8

Enhanced Collection Service Audit Results

Weekly Average Garbage Containers Set Out by IC&I Properties Inside the DBA (Enhanced Collection Area)

Municipality	Audit Year	Average # of IC&I Properties Participating in Regional Collection Service	Average % of Participating IC&I Properties Using Regional Garbage Collection	Average # of Garbage Containers Per Set-Out	Average % of IC&I Properties Exceeding Garbage Container Limit
Grimsby	2014	38	88%	3.6	0%
Niagara Falls	2015	147	82%	5.2	6%
NOTL	2018	30	80%	6.0	21%
St. Catharines	2018	77	52%	2.7	0%
Thorold	2014	62.5	94%	4.5	2%
West Lincoln	2014	38	95%	2.5	0%

Weekly Average Garbage Containers Set Out by MU Properties Inside the DBA (Enhanced Collection Area)

Municipality	Audit Year	Average # of IC&I Properties Participating in Regional Collection Service	Average % of Participating IC&I Properties Using Regional Garbage Collection	Average # of Garbage Containers Per Set-Out	Average % of IC&I Properties Exceeding Garbage Container Limit
Grimsby	2018	18	89%	1.6	0%
Niagara Falls	2015	21	95%	2.9	3%
NOTL	2018	17	100%	6.8	12%
St. Catharines	2018	71	94%	1.5	0%
Thorold	2018	30	92%	1.9	0%
West Lincoln	2018	12	100%	1.7	0%

**Weekly Average Recycling and Organics Containers Set Out by IC&I Properties
Inside the DBA (Enhanced Collection Area)**

Municipality	Audit Year	Average % of Participating IC&I Properties Using Regional <u>Recycling</u> Collection	Average # of Recycling Containers Per Set-Out	Average % of Participating IC&I Properties Using Regional <u>Organics</u> Collection	Average # of Organics Containers Per Set-Out
Grimsby	2014	64%	2.6	7%	1.6
Niagara Falls	2015	55%	2.4	6%	4.4
NOTL	2018	57%	2.9	7%	6.0
St. Catharines	2018	52%	2.6	10%	2.4
Thorold	2014	54%	2.2	6%	0.9
West Lincoln	2014	78%	1.8	7%	0.8

**Weekly Average Recycling and Organics Containers Set Out by MU Properties
Inside the DBA (Enhanced Collection Area)**

Municipality	Audit Year	Average % of Participating MU Properties Using Regional <u>Recycling</u> Collection	Average # of Recycling Containers Per Set-Out	Average % of Participating MU Properties Using Regional <u>Organics</u> Collection	Average # of Organics Containers Per Set-Out
Grimsby	2018	78%	0.9	0%	0.0
Niagara Falls	2015	57%	1.1	14%	0.6
NOTL	2018	59%	2.3	0%	0.0
St. Catharines	2018	55%	2.5	7%	2.6
Thorold	2018	67%	1.1	3%	3.5
West Lincoln	2018	67%	1.8	0%	0.0