

Municipality of Chatham-Kent

Appendix A: Jurisdictional Scan

Organic Waste Diversion Program – Feasibility Study
Update

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This review provides a comparative analysis of organic waste diversion programs in various Ontario municipalities to help guide the development of Chatham-Kent's program.

Methodology:

Data for this review was collected from municipal websites, waste management reports, official planning documents related to organic waste diversion programs and correspondence with representatives from other jurisdictions by waste management administration. Municipalities were selected based on their proximity to Chatham-Kent and the availability of relevant data. The following steps were taken to ensure a comprehensive analysis:

Data Collection:

Comprehensive research was conducted to gather information on organic waste diversion programs implemented by municipalities in Ontario.

Selection Criteria:

Data was collected on population size, population density, garbage collection frequency, green bin program implementation, bin features and sizes, acceptable items and liners, pet waste and diapers acceptance, processing facilities, and any other relevant program details.

Municipalities were selected based on their proximity to Chatham-Kent and application of different collection methods for urban vs rural areas.

Preference was given to municipalities with publicly available data on their organic waste diversion programs to ensure accuracy and reliability.

Data Analysis:

The collected data was analyzed to identify correlations and trends among different municipalities' organic waste diversion programs, and to identify which procedures might accommodate Chatham-Kent's needs best in this upcoming addition.

Limitations:

Despite efforts to gather comprehensive data, limitations exist due to variations in data availability and reporting methods among municipalities.

Some municipalities may have implemented organic waste diversion programs that were not captured in this review due to data constraints.

The analysis is based on available data up to the time of the review and may not reflect recent developments or changes in municipal programs.

Population and Density:

Population and density data for selected municipalities are compiled in Table A-1.

Table A-1: List of municipalities studies with select demographic data.

Municipality	Population	Population Density (people/km ²)	Green Bin Program
Chatham-Kent	104,316	42.3	N/A
Essex-Windsor Solid Waste Authority	422,860	229.3	N/A*
City of Sarnia	72,047	439.6	N/A
City of London	422,324	1,004.30	Y
City of Greater Sudbury	22,368	0.6	Y
Region of Peel - Mississauga	1,451,022	1,163.20	Y
Sault Ste. Marie	72,051	324.6	N/A
Norfolk County	67,490	42.2	N/A
Oxford County	121,781	59.7	N/A
City of Guelph	143,740	1,644.10	Y
Peterborough County	147,681	39.1	Y
City of Peterborough	83,651	1,291.80	Y
Simcoe County	533,169	110.6	Y
Waterloo Region	587,165	428.6	Y
Halton Region	596,637	617.8	Y
City of Toronto	2,794,356	4,427.80	Y
City of Ottawa	1,017,449	364.9	Y
City of Hamilton	569,353	509.1	Y
City of Kingston	132,485	293.4	Y
City of Kawartha Lakes	79,247	26.1	N/A
Durham Region	696,992	276.5	Y

Out of the 20 municipalities studied, only 14 currently have a green bin program.

Furthermore, (*) the Essex-Windsor Solid Waste Authority is preparing to launch a green bin program in 2025.

Garbage Collection Frequency (Figure A-1)

Garbage collection frequency varies among municipalities, ranging from weekly to bi-weekly collections. Municipalities with a green bin program tend to have bi-weekly garbage collection schedules (78.6%) whereas the municipalities without a green bin collection program have weekly garbage collection. This correlation suggests that the presence of a green bin program influences the frequency of garbage collection, due to the reduced volume of organic waste requiring collection.

Green Bin Collection Method (Figure A-2)

The correlation between bin sizes and collection methods, whether automated or manual, is significant. Municipalities utilize smaller bins, approximately 40-45 liters in capacity, for manual collection. This is due to health and safety regulations that impose limitations on the maximum permissible weight of the bins. Out of the 14 municipalities with an organics program, half of the municipalities have automatic collection and half manual collection. Additionally, Windsor-Essex is planning to have an automated collection service, and it is included in the below chart as well.

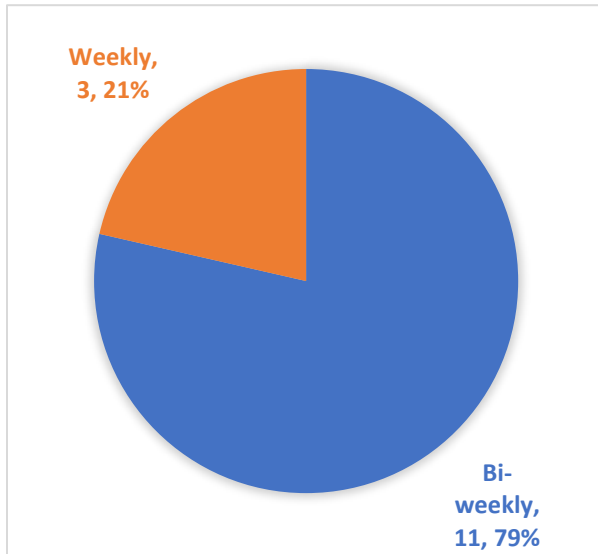


Figure A-1: Frequency of garbage collection in Municipalities with a Green Bin program

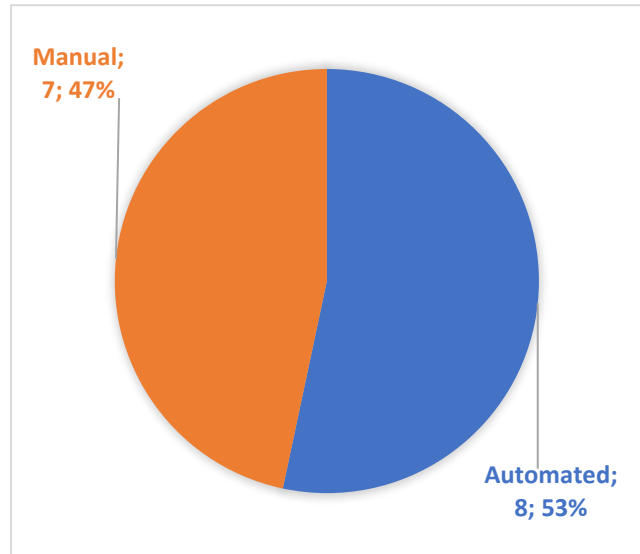


Figure A-2: Manual vs Automated Green Bin Collection

Green Bin Sizes (Figure A-3)

Out of the 14 municipalities with an organics program, 43% of them have bins between 40-46.5 L. Another 36% of the municipality's bins are between 80-100 L. Municipality's with bins from 110-120 L collectively represent 14% of the communities involved. The size difference between municipalities bins is based on program preference and collection methods as mentioned above.

City of Ottawa allows an option between multiple bin sizes, i.e., they could offer bins in the 40-46.5 L range along with the 80-100 L range since both sizes were deemed beneficial for that specific municipality. This

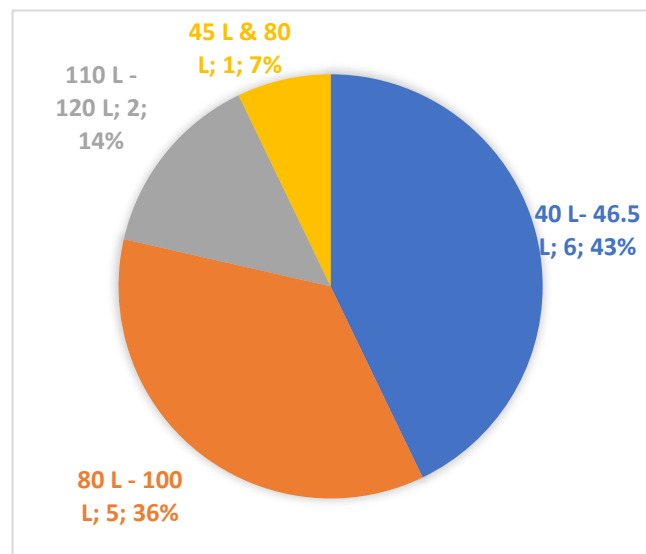


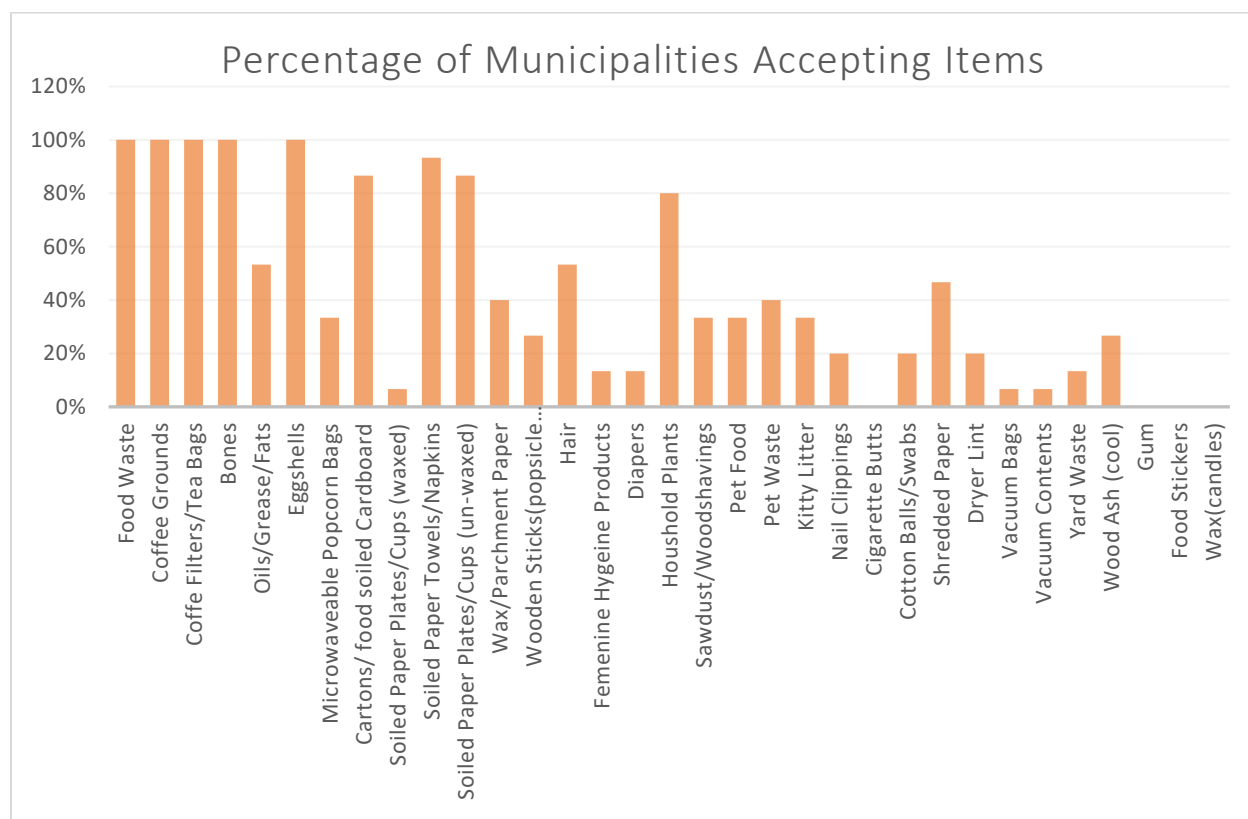
Figure A-3: Green Bin Sizes

allows residents to decide which bin they feel would fit their situation best, as everyone produces different amounts of organic waste.

Windsor-Essex is planning to have green bins in between 80 L and 120 L, depending on their final planning. It is not included in the below chart.

Acceptable Items in the Green Bins (Figure A-4)

Acceptable green bin items vary wildly from one municipality to the next. All municipalities who have a green bin program accept general food waste, coffee grounds, tea bags/coffee filters, bones, and eggshells. These items are the most commonly known “compostable” items from knowledge that residents have acquired from backyard composting.



Handling of pet waste and diapers varies among municipalities. If these items are on the accepted items list, it is usually required that they are packaged specifically to ensure that the municipality will collect these items. These procedures are slightly different from one municipality to the next. For example, some municipalities require that residents package their pet waste in a compostable or paper bag, whereas some ask that residents don't package it at all, and just mix it in with the other waste going in their green bins.

Some commonly un-accepted items in green bins for all municipalities are cigarette butts, gum, food stickers, and candle wax. These items are commonly advertised as un-acceptable because they are items that many municipal residents might assume belong in green bins, however placing these items with other organic waste will contaminate the contents that belong in the bin.

Conclusion:

The comparative analysis highlights the diversity of organic waste diversion programs in Ontario municipalities. Recommendations for Chatham-Kent's program development include considering population density, bin features, and processing methods.