

**TOWNSHIP OF MALAHIDE
WASTE MANAGEMENT MASTER PLAN
2020 REVISION**

FINAL REPORT & RECOMMENDATIONS

March 2020

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Glossary of Terms and Acronyms

Bag Tag: A clearly identifiable sticker approved for sale by resolution of the Council of the Municipality and used to indicate that a fee has been paid.

Best Practices: Waste system practices that affect Blue Box and other recycling programs and that result in the attainment of provincial and municipal Blue Box and other material diversion goals in the most cost-effective way possible.

Blue Box: A plastic container, often blue in colour, for conveying acceptable recyclable materials. Also refers to a municipal curbside recycling program.

Bi-Weekly Collection: The collection of materials set out at curbside one day every two weeks.

Capture Rate: The total quantity of a waste that is diverted for recycling as a percentage of the total quantity of that waste generated.

CIF: Continuous Improvement Fund.

CRC: St. Thomas Community Recycling Centre (CRC), is a designated location where recyclable materials (Blue Box, organics, HHW, WEEE, scrap metal, tires, etc.) can be dropped off into segregated bins.

Garbage: Black/green bag or reusable container of waste set at the curb for disposal in the landfill.

Green Bin Program: Diversion of organic waste including food waste, non-recyclable paper and sometimes including diapers, sanitary products, and pet waste.

HH: Household (HH), a residential single family detached housing unit.

HHW: Household Hazardous Waste. Also sometimes referred to as Municipal Hazardous or Special Waste (MHSW).

IC&I: Industrial, Commercial & Institutional. Waste generated from industrial processes, or commercial or institutional activities.

IPR: Individual Producer Responsibility (IPR) is a framework to work towards the goal of zero waste. IPR means that product manufacturers are responsible for the full life cycle costs associated with their products including the environmental cost of production and managing the product at the end of its life, whether that be for reuse, for recycling, or safe disposal.

KG: The metric weight measurement of Kilogram.

Markets: Persons, corporations, organizations or partnerships willing to purchase or accept in exchange for a fee, recyclable material processed through or at a recycling facility.

MHSW: Municipal hazardous or Special Waste. Includes the following materials that are considered hazardous waste materials generated from the municipal sector (paints, solvents, adhesives, pesticides, acids/bases, aerosols, fuels and batteries). Also sometimes referred to as Household Hazardous Waste (HHW).

MECP: The provincial Ministry of the Environment, Conservation and Parks responsible for regulations governing waste management practices. Formerly known as the Ministry of the Environment (MOE).

MR: Multi-Residential building with greater than 6 self-contained residential dwelling units.

MRF: Materials Recovery Facility where recyclable materials from the Blue Box are sorted prior to sending to markets.

Organic Waste: Waste including food waste, non-recyclable paper streams, and leaf and yard waste. All of this waste can be diverted away from landfill disposal to composting at a centralized composting facility or through backyard composting.

P&E: Promotion and Education materials prepared and distributed by a municipality to help promote the proper participation in waste management and waste diversion programs.

PRO: Producer Responsibility Organization (PRO), is an organization retained by a producer to arrange the establishment or operation of a collection or management system for the producer's products.

Producer: Businesses that produce or import products that are sold to consumers which include packaging and/or end of product life waste. Formerly known as Stewards under the *Waste Diversion Act*.

Recyclables: Materials diverted in the Blue Box program or other municipal recycling programs.

RPRA: Resource Productivity and Recovery Authority (RPRA) is a non-crown corporation created under the *Waste Free Ontario Act* (WFO).

Stewards: Businesses that produce or import products that are sold to consumers that include packaging and/or end of product life waste.

Tonne: The metric weight of 1 tonnes is 1,000 kilograms. This is equivalent to approximately 2,200 pounds.

User Pay: Pay as You Throw. Defined as a program in which every individual unit, bag, or container set out for collection is paid for directly by the resident, commonly by the purchase of bag tags. Other examples of user pay systems are the utility based system and the subscription based system.

Waste: A general term that describes all waste generated including “garbage,” recyclables, organic waste, leaf and yard waste, MHSWS, and WEEE.

Waste Diversion Rate: A waste diversion rate is the percentage of waste diverted from landfill through means of diversion programs (Blue Box, composting, etc.). Waste diversion rate is determined by dividing the total quantity of waste diverted by the total amount diverted and disposed.

WEEE: Waste Electrical and Electronics Equipment. This includes any broken or unwanted electrical or electronic appliances including computers, phones and other items that have reached the end of their usable life.

WK: A week consisting of 7 consecutive days.

Zero Waste: The philosophy of taking a cradle-to-cradle approach to managing waste where “industry has to redesign products and processes to reduce waste before it is made, as well as designing products for greater reuse.”

Executive Summary

1. Introduction:

The Waste Management Master Plan 2011 (the Plan) is a long term guiding document, created in consultation with the community, for all aspects of municipal decision-making regarding waste management. The Plan takes into account social, economic, and environmental objectives, and integrates them with municipal planning. The Township of Malahide Council established a formal committee to review the current Plan and make recommendations to the Council on how best to move forward.

The Waste Management Master Plan Revision Committee (the Committee) was comprised of members of Staff and Council; the CAO/Clerk, Director of Physical Services, Director of Finance, Mayor, Deputy Mayor, and a member of Council. In addition, another member of Council was appointed to act as an alternate. The Physical Services Clerk acted as the administrative support to the Committee.

The 2020 Revision was undertaken as recommended by the 2011 Plan and in preparation for the Township to issue an RFP for waste collection services in 2020. The Committee reviewed the 2011 Plan and goals, current regulations and forthcoming regulatory changes, facilitated public input, recommended targets, and reviewed relevant strategies to ensure successful implementation. This Plan will encompass a 5 year planning window.

There were a number of Key questions that were addressed as part of the 2020 Revision including:

- Does the current waste diversion target need to be revised?
- Are existing service levels sufficient or are changes required?
- Is the current funding model effective?
- Can costs be reduced?

2. Current Conditions:

The waste generated in the Municipality comes from two sectors; Residential and IC&I. The waste under municipal control comes largely from the residential sector with small amounts of garbage and Blue Box waste coming from the commercial sector. The focus of this plan is waste that is under municipal control.

Table 1 depicts the overall average residential waste disposed and diverted in 2018 that is managed by the Municipality. Table 2 depicts the annual costs of that waste management.

Table 1 Waste Disposal and Diversion 2018

Population	
Single Family Households	3225
Multi-Residential Households	0
Total Households	3225
Population	9300
Disposal	
Curbside Collection	1,495 tonnes
Diversion	
Curbside Collection	464 tonnes
Depot	34 tonnes
Returns*	120 tonnes
On-Property*	12 tonnes
Total Waste Diverted	630 tonnes
Total Waste Generated	2125 tonnes
Residential Waste Generated kg/capita/year	230 kg/capita/year
Diversion Rate (%)	29%

*Derived from RPRA information

Table 2 Summary of Annual Costs 2018

Garbage Collection	\$183,339.47
Garbage Disposal	\$105,586.19
Blue Box Collection	\$148,088.71
Blue Box Processing	\$41,748.49
Other Costs	\$50,687.63
Total	\$529,450.49
\$/tonne	\$249
\$/household	\$164
\$/capita	\$59

It costs approximately \$530,000 to manage waste annually. This works out to about \$249/tonne of waste generated by residents that is managed by the municipality. The annual cost of waste management is on average about \$164/household and \$59/capita.

3. Planned Waste Management System:

The focus of the 2020 Revision will be to maximize the use of well-established waste diversion programs. Given the changes anticipated as a result of the Province's Waste Free Ontario Act, the Township may be best served, at this stage, to not implement any significant changes beyond that of the current program. Existing programs should be optimized in an effort to encourage

residents to continue to divert materials from landfill as this ultimately helps to reduce the cost of the waste management program and is beneficial to the environment.

The key factors of increasing waste diversion and lowering program costs respectively include:

- Expanding current diversion programs, adding new diversion programs, promotion and education, increasing the convenience of waste diversion; and
- Decreasing waste disposal by limiting the allowable amount, decreasing the convenience, promotion and education).

The goal of the Revision is to ensure that there are sufficient cost effective programs to manage waste collection, disposal, and diversion. A number of objectives follow:

- Increase diversion rates;
- Mitigate effects of decreasing revenue; and
- Improve public education.

It should be noted that there is a Provincial waste diversion goal of 50% by the year 2030. The Revision will recommend targets for a 5 year window, and therefore should set a diversion rate target of 40% by year 2025 in order to meet the 50% goal in year 2030.

It is recommended that additional promotion and education funds be allocated in order to increase the capture rate of recyclables. The Curbside Audit identified an opportunity to divert a further 8% from the garbage stream by increasing the Blue Box materials Capture Rate. Capturing the additional recyclable materials will help to increase the Township's current total Diversion Rate of 29% up to about 35%. The curbside audit and the 2019 resident survey also identified the opportunity to improve the capture rates of other materials such as scrap metal and hazardous waste. Removing these materials from the waste disposal will increase the overall diversion rates for the municipality and decrease disposal costs.

It is recommended that an optional provision for bi-weekly winter garbage collection, partnered with weekly recycling collection should be included in the next Request for Proposal for garbage collection services. Review of the current waste collection program identified several other opportunities to increase the diversion rate and decrease costs. Decreasing the frequency of garbage collection is one method for decreasing the annual tonnage of garbage landfilled and associated costs. Making strategic changes to the bag tag system could also help decrease costs. Changes such as finding efficiencies or implementing incentive programs may help to promote the program and decrease overall costs.

4. Cost and Financing Strategy:

The current funding model for the waste management plan is a 60/40 split between the general tax levy and program revenues. It is recommended that the focus of any changes to the funding

model be on the collection and disposal of garbage, which will remain under municipal control. The summary of the current program costs and revenues identified one method of maintaining the current funding model by continuing the established practice of increasing fees annually. This will increase consumer awareness when generating waste and can be used to offset annual contractual cost increases.

Increased promotion and education (P&E) is required to implement any changes to the current waste management program. P&E is vital to the success of implementing bi-weekly winter garbage collection, increasing diversion capture rates, and making any changes to the bag tag system.

5. Implementation Timelines:

The following implementation timeline is recommended:

- Council approval of this Plan in April 2020;
- Circulate waste collection RFP in 2020;
- Adopt new P&E strategies in 2021;
- Adopt changes to Bag Tag System in 2021;
- Achieve minimum 35% waste diversion rate by 2023, and 40% diversion by 2025;
- Undertake annual review of waste disposal and diversion, and identification of necessary improvements.

6. Conclusion:

This Plan Revision has set out a strategy for waste management over the next 5 years. The focus of this Revision has been to reduce the amount of waste directed to landfill and increase the amount of waste diverted. This Revision to the Plan recommends a diversion rate target of 40% by year 2025 in order to meet the Provincial of 50% goal in year 2030.

This Revision investigated ways to improve waste diversion in the short-term. A waste diversion strategy for increasing the capture rate of Blue Box recyclables as well as other diversion such as scrap metal and hazardous waste is recommended. A garbage collection strategy that includes bi-weekly winter garbage collection is also recommended for finding cost savings and for decreasing total waste sent to landfill.

The focus of this Revision will be to optimize well-established waste diversion programs, in an effort to encourage residents to continue to divert materials from landfill as this ultimately helps to reduce the cost of the waste program and is good for the environment.

Main Report

1. Introduction:

The Waste Management Master Plan (the Plan) is a long term guiding document, created in consultation with the community, for all aspects of municipal decision-making regarding waste management. The Plan takes into account social, economic, and environmental objectives, and integrates them with municipal planning. The Township of Malahide Council established a formal committee to review the current Plan and make recommendations to the Council on how best to move forward.

The Waste Management Master Plan Revision Committee (the Committee) was comprised of members of Staff and Council; the CAO/Clerk, Director of Physical Services, Director of Finance, Mayor, Deputy Mayor, and a member of Council. In addition, another member of Council was appointed to act as an alternate. The Physical Services Clerk acted as the administrative support to the Committee.

The Revision was undertaken as recommended by the current Plan and in preparation for the Township to issue an RFP for waste collection services in 2020. The Committee reviewed the current Plan and goals, current regulations and forthcoming regulatory changes, facilitated public input, recommended targets, and reviewed relevant strategies to ensure successful implementation. This Plan will encompass a 5 year planning window.

There were a number of Key questions that were addressed as part of this Plan including:

- Does the current waste diversion target need to be revised?
- Are existing service levels sufficient or are changes required?
- Is the current funding model effective?
- Can costs be reduced?

1.1. Documents used to Develop the Plan

There were a number key documents that played a critical role in the development of the Plan. Discussion papers, provincial legislation, and public sector consultations were all referenced.

The **Waste Free Ontario Act (WFO) 2016**, replaces the previous *Waste Diversion Act 2002*. The WFO Act introduces a new producer responsibility framework, wherein producers are operationally and financially responsible for the management of their end-of-life products and packaging. Municipalities have been advocating for this transition because municipal waste systems are not well positioned to respond to the rapidly changing composition of products and packaging, the necessary investment in collection and processing infrastructure, and the

demands of end markets. The intent is to create a circular economy, with *zero waste* by minimizing the use of raw materials and packaging, and maximizing recovery of used materials.

Only Schedule 1 & 2 of the WFO Act 2016 have been proclaimed:

WFO Act, Schedule 1: ***Resource Recovery and Circular Economy Act (RRCEA)***, identifies provincial interest, full producer responsibility, 3R's objectives, service standards, P&E requirements, and establishes the Resource Productivity and Recovery Authority (RPRA).

The RRCEA outlines a framework for IPR in the province and the Ontario Government is responsible for designating materials for transition to IPR. The RRCEA also established RPRA to regulate businesses and ensure their compliance with IPR requirements. IPR requires producers of products and packaging to meet mandatory and enforceable targets for the collection and recycling of their products and packaging. The RPRA Board of Directors oversee registry, performance, compliance and enforcement. With IPR, producers have choice in how they meet their requirements. They can collect and recycle products and packaging themselves, or contract with producer responsibility organizations (PROs) to help them meet their requirements.

WFO Act, Schedule 2: ***Waste Diversion Transition Act (WTDA)***, continues operation of existing diversion programs without disruption until transition is completed, eliminates existing programs after transition, and directs RPRA to provide oversight of Stewards, and compliance and enforcement of legislation.

Under the new system, producers can either directly operate recycling services, or they can contract out with service providers, including municipalities. Municipalities are considered a potential 'service provider' to producers to help them fulfil their obligations. There is no proposed legislated 'role' for municipalities in the new legislative framework.

There are provisions in the *Waste Diversion Transition Act* for municipalities to be paid 50% of their costs to operate blue box systems and the Minister has the authority to increase the funding percentage municipalities would receive as programs transition from the current legislative framework, the *Waste Diversion Act (2002)* to the new *Resource Recovery and Circular Economy Act (2016)*.

Reducing Litter and Waste in Our Communities: Discussion Paper

In June 2019, the Ontario government appointed a Special Advisor on Recycling and Plastic Waste to urgently address waste management issues. The goal of the Ontario government is to decrease the amount of waste going to landfill, increase the province's overall diversion rate, and reduce greenhouse gasses from the waste sector. This goal will include a 50% diversion rate by 2030, and 80% diversion by 2050.

Transitioning the Blue Box Program to Full Producer Responsibility: AMO & CIF Consultations

In August 2019, the Ontario Government announced that the Blue Box program is transitioning to full producer responsibility. In the fall of 2019, AMO & CIF held consultations regarding this

transition. This consultation proposed a timeline for transition starting in 2023 and concluding in 2025.

1.2. Stated Problem

A review of the current waste management system helped identify some issues/challenges including:

- Stagnant waste diversion rates;
- Decreasing revenues for Blue Box materials;
- Capture rate of recyclables not at 100%;

1.3. Goals and Objectives

The goal of this Plan is to ensure that there are sufficient cost effective programs to manage waste collection, disposal, and diversion. A number of objectives follow:

- Increase diversion rates;
- Mitigate effects of decreasing revenue; and
- Improve public education.

2. Current Conditions:

To develop the Plan, a good understanding of the current Waste Management System is required.

The current system consists of:

- Weekly curbside garbage collection and disposal;
- Weekly curbside Blue Box program;
- Limited fall curbside collection of leaves and yard waste;
- Depot for other waste, i.e. MHSW, WEEE, large articles, etc.; and
- Promotion and Education (P&E) program.

The municipality does not currently collect or process any of its waste streams. This is all undertaken by external contracts.

The following sections present a detailed overview of the waste management programs.

2.1. Waste Generation

The waste generated in the Municipality comes from two sectors; Residential (single family and multi-residential), and Industrial, Commercial & Institutional (IC&I). The waste under municipal control comes largely from the residential sector with small amounts of garbage and Blue Box

waste from the commercial sector. The focus of this plan is for waste that is under municipal control.

Table 2.1 depicts the overall average residential waste disposed and diverted in 2018 that is management by the Municipality. Table 2 depicts the annual costs of waste management as managed by the Municipality.

Table 2.1 Waste Disposal and Diversion 2018

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Diversion Rate (%)	29%

*Derived from RPRA Datacall

The annual population growth rate is estimated, based on municipal planning documents, to grow at about 1.4% per year. Approximately 20 new single family homes are being built each year.

2.2. Waste Collection

All waste is collected through a private sector contractor. The current contractual agreement is in place until 2021 with Antonissen Trucking Inc. All waste is collected on a weekly basis, with the entire municipality receiving collection over the course of a five day period. There is a limited collection of leaf and yard waste that occurs over four weeks in the spring and four weeks in the fall for the villages of Port Bruce and Springfield.

An eligible property receives an annual allotment of garbage bag tags. There is no limit to the number of bags that may be set out for collection each week, but each bag must have a tag placed on it. Additional tags may be purchased at the municipal office for a nominal fee.

Blue Boxes are collected within a dual stream system, one box for approved containers and one for approved cardboard and printed paper materials. All eligible properties received two Blue Boxes free of charge during the Blue Box program implementation. Moving forward, all owners of newly built homes are provided with two Blue Boxes upon being granted occupancy of the residence. Additional Blue Boxes may be purchased at the municipal office for a nominal fee.

In 2016, a curbside audit was conducted to determine resident participation in the Blue Box program. A total of 100 homes were audited in the 3 area municipalities. Given the diverse makeup of the types of homes in the 3 municipalities, each municipality chose three main residential groups which would best represent this diversity. In Malahide, the representative sample areas chosen were a seasonal/tourist area, a rural area, and a hamlet/urban area. All the areas were sampled 4 times (each season) over a one year period.

The audit was then compared to the 2016 Waste Management Program results, as reported to Council, which combines information from the Resource Productivity and Recovery Authority (RPRA), the London Materials Recycling Facility (MRF), the Green Lane Landfill, the collection contractor, and the annual Household Hazardous Waste and Electronics Depot. A full report summarizing the curbside audit is included in Appendix 1.

Figure 2.2.1 depicts the proportions of the Blue Box Recycling Stream, as identified in the Audit, averaged over all three municipal locations. Quantities were measured in kilograms per household per week (KG/HH/WK). The Curbside Waste Audit found the average amount of materials in the Blue Box Recycling Stream per household, amounted to 2.5 kg per week. The majority, 93% or 2.3 kg of the materials found in the Blue Box Recycling Stream during the Audit are accepted as part of the Blue Box Program. Only 7% of the Recycling Stream was composed of non-recyclable materials per the current Blue Box Program. This Residue Rate (contamination) is slightly lower than the other municipalities audited, and was within the average Residue Rate (contamination) of neighbouring municipalities as identified in the MRF Audit.

Figure 2.2.1 Blue Box Recycling Collection Stream – KG/HH/WK

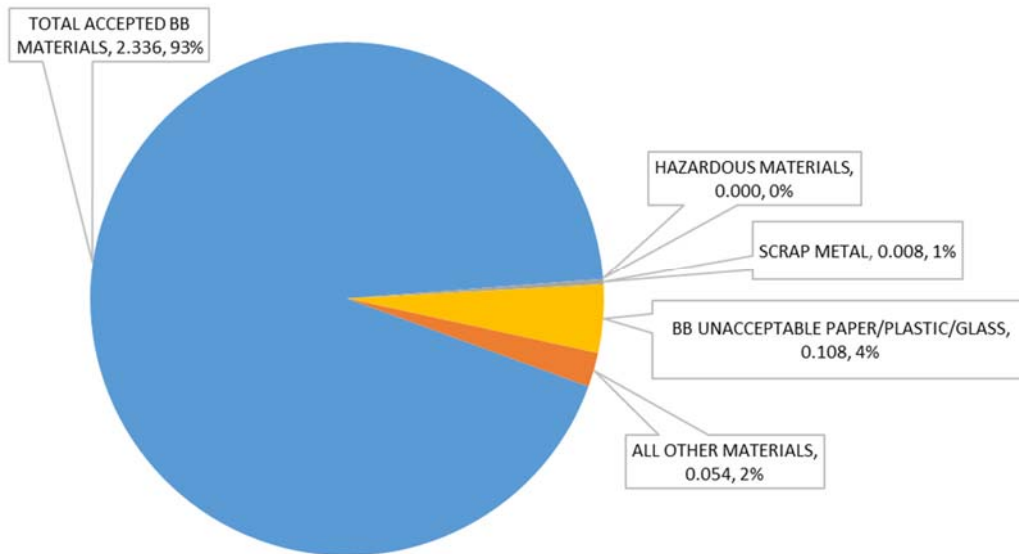


Figure 2.2.2 depicts the proportions of the Garbage Collection Stream, as identified in the Audit, averaged over all three Township of Malahide audited locations. Quantities were measured in kilograms per household per week. The average amount of materials in the Garbage Collection Stream per household, amounted to 11.83 kg per week. The majority (9.7kg) of the materials found in the Garbage Collection Stream during the Audit were items that belonged to the “Other Materials” category.

Notably, there was a 0.1 kg portion of the Garbage Collection Stream attributed to Scrap Metal, and Hazardous Materials. These materials have disposal alternatives such as being dropped off at the Community Recycling Centre in St. Thomas. There was also a 0.93 kg portion of the Garbage Collection Stream attributed to Blue Box Accepted Materials.

Figure 2.2.2 Garbage Collection Stream – KG/HH/WK

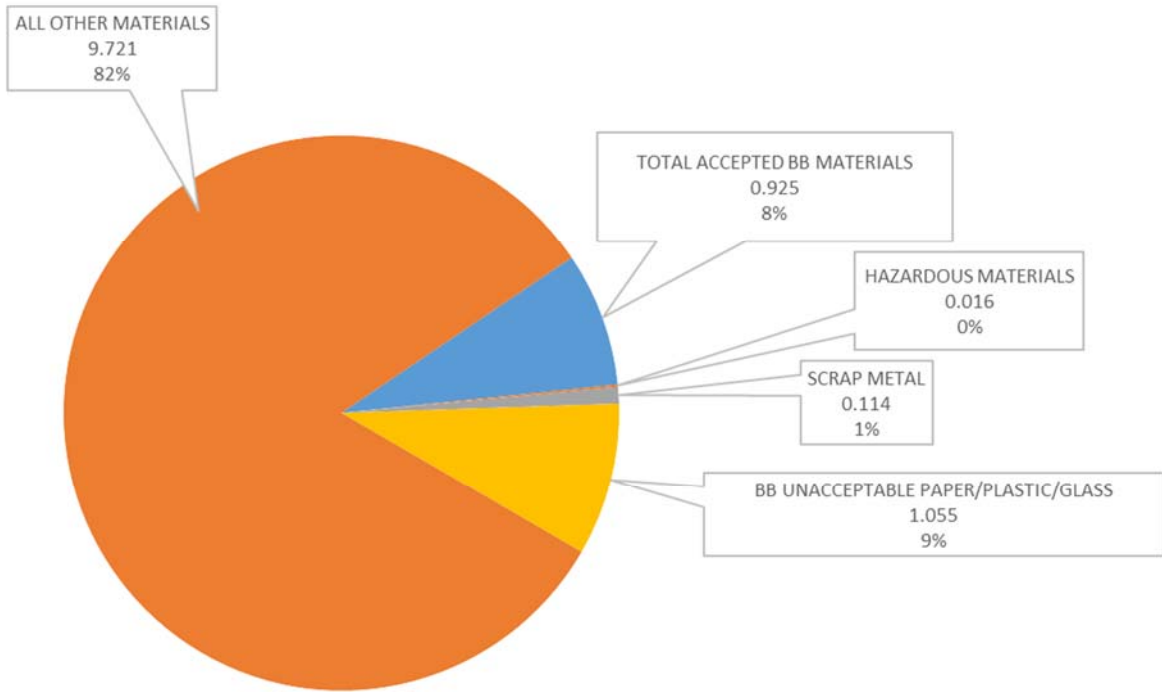
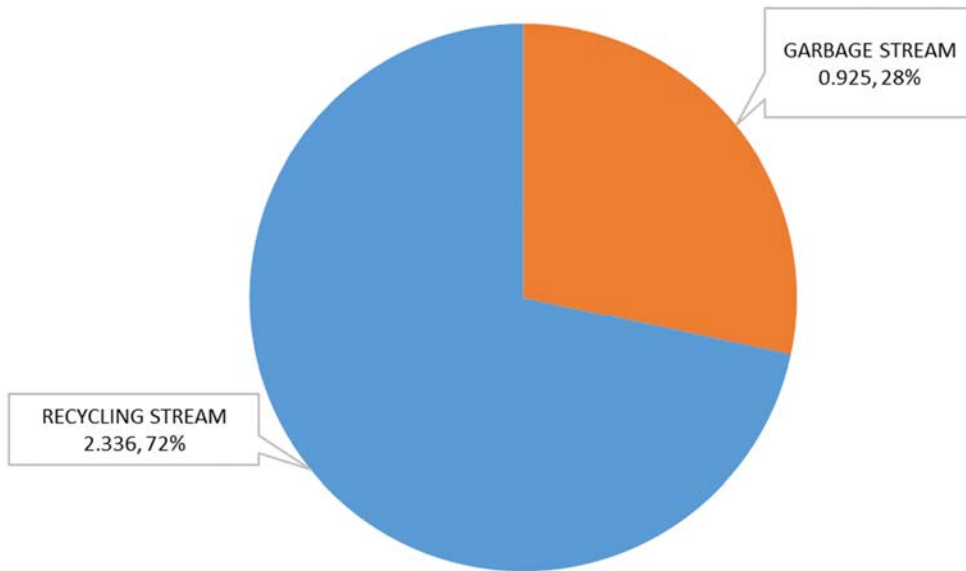


Figure 2.2.3 depicts the Township's Capture Rate of Blue Box Accepted Materials shown as a percentage. Quantities were measured in kilograms per household per week. It is important to have information regarding these un-captured recyclables as they directly relate to the Township's overall Diversion Rate.

Figure 2.2.3 Capture Rate: Blue Box Accepted Materials – KG/HH/WK



The Audit identifies that the Township only captures 72% of recyclable materials into the Recycling Stream. The Township of Malahide Waste Management Master Plan identified a Capture Rate of 53% in 2009. Although the Capture Rate has increased from 2009, the remaining 0.93 kg per household, per week equates to 151.76 tonnes of uncaptured recyclables per year, across the entire Township. The cost of disposing this quantity of recyclables in the Garbage Stream is \$10,465.37 based on current pricing.

The recyclables were further broken down into the individual types of recyclable materials to better understand why these materials were not being captured in the Recycling Stream. Recyclable Paper Packaging, Plastics, and Metals had about 1/3 of their total quantity remaining in the Garbage Stream. When the audited locations in the Township were compared, it was identified that seasonal/tourist areas had the most recyclables going into the Garbage Stream. Staff suspect that this may be a result of the seasonality of the area and inconsistencies with Blue Box Programs across the province, as some of these residents reside in other Municipalities.

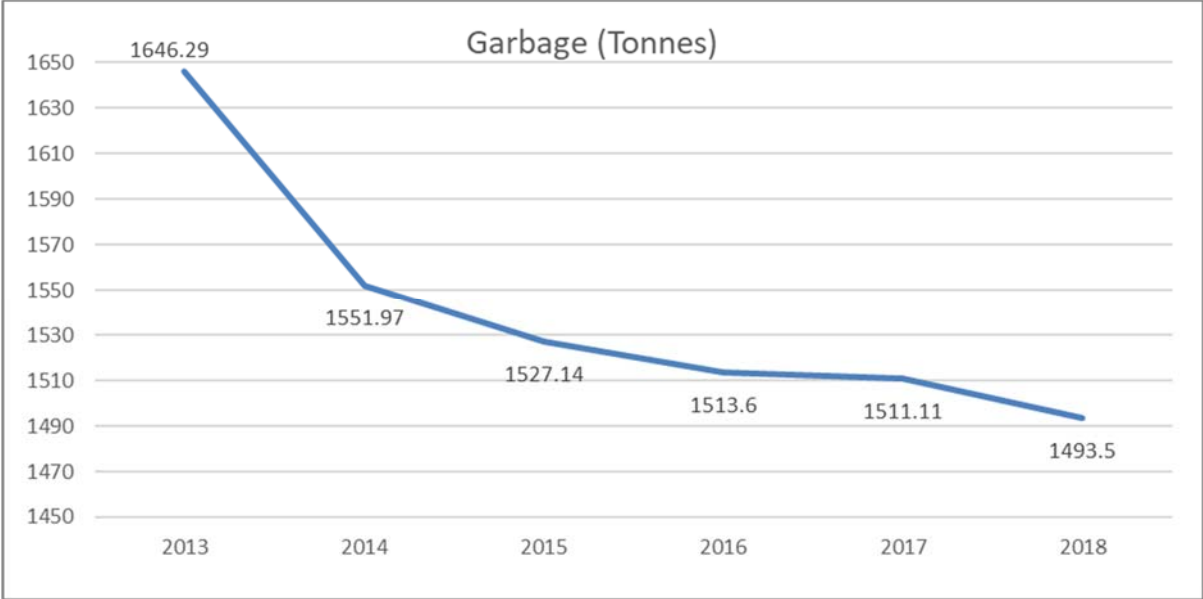
Overall, the audit found that the quantity of the Township of Malahide Waste Stream was much higher than that of the other municipalities. The overall Diversion Rate based on the Audit information was only 17%. The 2016 Waste Management Results identified a Diversion rate of 26%. The Staff suspect that the Diversion Rate of the 2016 Waste Management Results is more representative of the township as a whole. Factors that may contribute to a lower diversion may be purchasing attitudes and demographics, which were not accounted for in the Audit. When compared to the other audited municipalities, the Township is capturing 10% fewer materials out of the total potentially recyclable materials.

2.3. Waste Disposal

All garbage is landfilled through external contracts. Currently, a contractual arrangement with the City of Toronto allows municipal garbage to be taken to the Green Lane Landfill. A new contract was negotiated in 2019 that will extend this contract until 2030.

Figure 2.3.1 depicts the annual garbage tonnage disposed from 2013 to 2018. The trend shows the annual tonnage of garbage disposed in the municipality has been decreasing by about 1% annually in recent years.

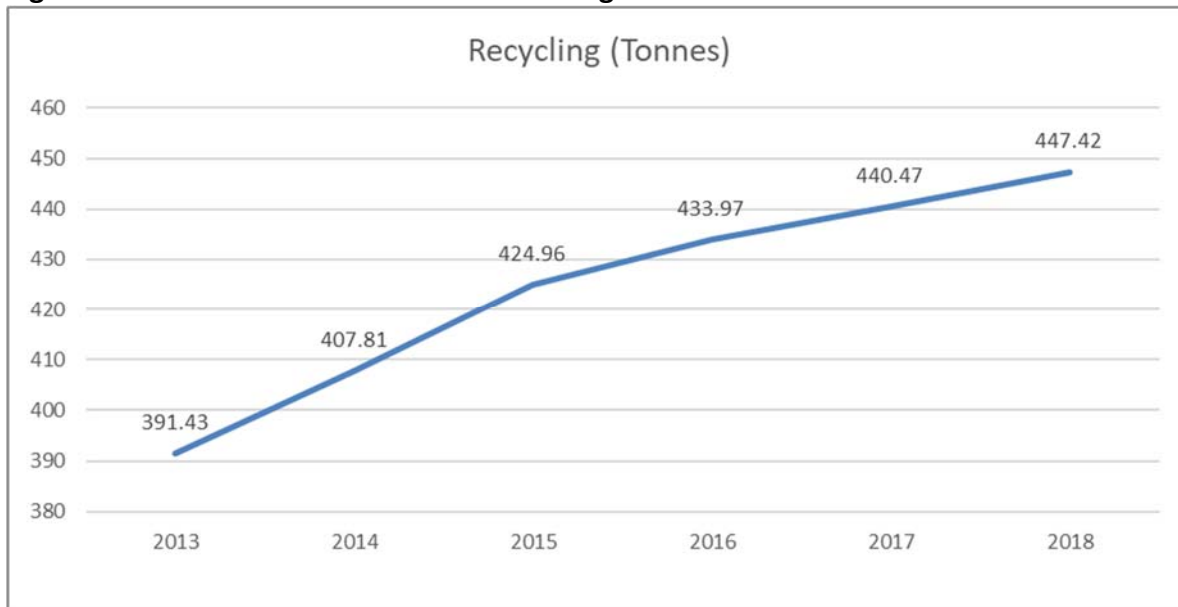
Figure 2.3.1 Annual Garbage Disposal Tonnage



All Blue Box processing is undertaken through external service providers. Currently, a partnership arrangement is in place with the City of London to allow Blue Box materials to be taken to the Materials Recycling Facility (MRF) for processing. The City of London has extended its’ contract with Miller Waste for the processing services at the MRF until 2020.

Figure 2.3.2 depicts the annual Blue Box materials tonnage being delivered to the London MRF from 2013 to 2018. The trend shows the annual tonnage of Blue Box materials increasing by about 1.5% annually in recent years.

Figure 2.3.2 Annual Blue Box Material Tonnage



In 2017 a new agreement was made with the City of St. Thomas for resident usage of the Community Recycling Centre (CRC). This depot is available year-round, and replaces the previous annual drop-off event held for HHSW and WEEE. This depot also allows for the drop-off of large articles and mixed solid waste, construction/demolition materials, leaf and yard waste, WEEE, tires, scrap metal, and Blue Box materials. The spring and fall collection of yard waste within the villages of Port Bruce and Springfield is disposed of at the CRC.

2.4. Current Program Costs & Revenue

Table 2.4.1 depicts the annual program costs as of 2018. It costs approximately \$571,000.00 for the municipality to manage waste annually. This includes all waste collection, disposal and processing, as well as depot fees, administration costs, promotion and education, and supplies.

Table 2.4.1 2018 Program Costs

COSTS	2020 BUDGET	% OF TOTAL
GARBAGE COLLECTION	\$196,747.96	35%
GARBAGE DISPOSAL	\$110,654.71	19%
BLUE BOX COLLECTION	\$158,491.41	28%
BLUE BOX PROCESSING	\$51,000.00	9%
OTHER COSTS	\$54,105.92	9%
TOTAL	\$571,000.00	100%

Table 2.4.2 depicts the annual program revenue as of 2018. The program revenue sources amount to approximately \$227,000.00 annually. This includes provincial grants, sales of bag tags,

and the annual flat fee for eligible properties. The annual flat fee and the fee per bag tag were not set to fund any specific element of program costs.

Table 2.4.2 2018 Program Revenue

REVENUE	2020 BUDGET	% OF TOTAL
FLAT FEE	\$133,000.00	59%
BAG TAG SALES	\$16,000.00	7%
OTHER GRANT/SALES	\$78,000.00	34%
TOTAL	\$227,000.00	100%

The total program revenue only funds about 40% of the total program cost. The remaining 60% of the program is funded through the general tax levy.

2.5. Summary

The review of the waste generation identified approximately 2125 tonnes of waste generated in the municipality annually. Of the total 2125 tonnes of waste, 1500 tonnes of garbage is disposed of annually at the Green Lane Landfill and 630 tonnes of waste is diverted through various means. The current municipal diversion rate is about 30%.

It should be noted that the Provincial waste diversion goal of 50% is required by the year 2030. The Plan will recommend targets for a 5 year window, and therefore should set a diversion rate target of 40% by year 2025 in order to meet the 50% goal in year 2030.

In recent years the primary method of increasing the diversion rate has been by decreasing the annual allotment of garbage bag tags. This has affected the trending information by decreasing the annual tonnage of garbage being landfilled and increasing the tonnage of Blue Box materials being processed. The diversion rate may become stagnant if no new decreases are made to the annual allotment of garbage bag tags without implementing new strategic methods of decreasing the tonnage of garbage and increasing the tonnage of diverted materials.

The Curbside Audit identified an opportunity to divert a further 8% (120 tonnes) from the garbage stream by increasing the Blue Box materials Capture Rate. Capturing the additional 120 tonnes of recyclable materials will help to increase the Township’s total Diversion Rate to about 35% and decrease Waste Disposal Costs.

The review of waste collection also identified several other opportunities to increase the diversion rate and decrease costs. Increasing promotion and education, decreasing the frequency of garbage collection, and decreasing the annual allotment of garbage bag tags are possible opportunities for decreasing the annual tonnage of garbage landfilled.

The summary of the current program costs and revenues identified possible opportunities to decrease waste disposal costs by changing consumer behaviours. Increasing fees may increase consumer awareness when generating waste and will also help to mitigate low revenue from diversion processing.

3. Public Consultation:

Public consultation included the following:

- Notification of this Study on the Municipal web-site;
- Steering committee meetings; and
- Public survey.

A steering committee meeting was held on 2 October 2019 to kick-off the revision of the Plan. The focus of the meeting was used to discuss the scope of the revision to the Plan and to highlight the main concerns. A subsequent steering committee meeting was held on 29 October 2019 to discuss the strategy for revising the plan and for public consultation.

A survey was developed to obtain input from residents, including participation through hard copies made available at the Township office and a digital copy made available on the Township website. This survey was conducted from November 2019 to December 2019. The intent of the survey was to establish the current waste management behaviours of the community and gauge community opinion on possible future waste management options.

Two hundred and twenty (220) residents completed the survey. A full report summarizing this survey is included in Appendix 2. A total of 11 questions were posed to residents. The questions were divided into 3 categories including Demographics; Current Habits; and Future Waste Management.

Respondents were most likely to be between the ages of 60-79 and live in a 1-2 person household. Respondent were most likely to set out 1 garbage bag, 1 container blue box, and 1 cardboard blue box, on average per week. The majority of respondents also compost on a frequent basis, and use the services at the St. Thomas Community Recycling Centre for hazardous waste, electronics, and large articles. There was an 8% portion of respondents that reported putting hazardous waste in with their garbage.

Based on survey results, respondents are almost evenly split regarding bi-weekly winter garbage collection. About 37% were not interested, 31% were interested, and 32% either needed more information, did not care, or did not answer the question. There were no major concerns reported in the comment section of the survey related to bi-weekly winter garbage collection.

The majority of respondents did not want the number of the annual allotment of bag tags to change moving forward. Respondents also requested that the current funding model for the waste management program remain the same. There were many comments by respondents

regarding the annual allotment of bag tags, garbage collection, and the funding model for the program, a few examples are as follows:

- More tags should be provided in the annual allotment for farms and businesses;
- That a User Pay funding model would be more fair and transparent; and
- Fear of illegal dumping if any changes are made to the current program.

These results should be viewed as a “snap-shot” of resident opinion and function as part of the overall public consultation process.

4. Waste Management Strategies:

Currently about 2125 tonnes of waste per year is managed by the Municipality. The current diversion rate is about 30% and comes primarily from a Blue Box Program.

As noted in Section 1.3 the goals and objectives of future waste diversion are:

- Increase diversion rates;
- Mitigate effects of decreasing revenue; and
- Improve public education.

The focus of this Plan revision will be to maximize well-established waste diversion programs. Given the changes anticipated as a result of the Province’s Waste Free Ontario Act, the Township may be best served, at this stage, to not implement any significant changes beyond that of the current program. Existing programs should be optimized in an effort to encourage residents to recycle more and continue to divert materials from the Garbage Stream as this ultimately helps to reduce the cost of the waste program and is good for the environment.

The key factors to increasing waste diversion and lowering program costs are:

- Increasing waste diversion (e.g. expanding current diversion programs, adding new diversion programs, promotion and education, increasing the convenience of waste diversion); and
- Decreasing waste disposal (e.g. limiting the amount of waste disposal, decreasing the convenience of waste disposal, promotion and education).

4.1. Diversions Programs:

Based on the analyses of the 2016 curbside audit, there is opportunity to increase diversion through increasing the capture rates of Blue Box recyclables. This would decrease the overall cost of waste disposal and mitigate the effects of lowering diversion revenue within the current system. This strategy would require some promotion and education which would have a limited cost.

The curbside audit and the 2019 resident survey also identified the opportunity to improve the capture rates of other materials such as scrap metal and hazardous waste. Removing these materials from the waste disposal will increase the overall diversion rates for the municipality. Improved promotion and education regarding the diversion of these material to approved depots and drop-off locations.

4.2. Garbage Collection Program:

There is an opportunity to decrease program costs by initiating a bi-weekly winter garbage collection. A bi-weekly winter garbage collection would make waste disposal less convenient and therefore may decrease the total waste disposal by encouraging more diversion. The results of the resident survey indicated that this strategy would require significant promotion and education for resident participation, having an associated cost.

The 2019 resident survey indicated that the majority respondents would like to see the annual allotment of 60 garbage bag tags remain the same in future years. There was some respondent feedback regarding the cost of printing tags for the purpose of disposing waste. Making strategic changes to the bag tag system could help decrease costs. Changes such as finding efficiencies or implementing incentive programs would help to promote the program decrease overall costs.

4.3. Funding:

The current program funding model allows for possible opportunities to decrease waste disposal costs by changing consumer behaviours. Increasing the annual flat fee or the cost of purchasing bag tags may increase consumer awareness when generating waste, could help to mitigate low revenue from diversion processing, and can be used to offset annual contractual cost increases.

The 2019 resident survey identified that the current funding model of a 60/40 split between the general tax levy and program revenues is the most favorable for residents. The main consensus was that although residents would like the program funded in a more transparent way, there was fear that making changes would negatively impact the program without further investigation. There were also respondents that noted the current funding model does not see garbage collection and disposal covered by program revenue, and that it should be self funded. There were less comments regarding the Blue Box program funding, only that companies should have to pay for their product processing. Under the *Waste Free Ontario Act* producers will be responsible for 100% of the Blue Box program, both collection and processing, once the municipality has transferred to that system (2023-2025). This will also mean that there will no longer be any revenue from the processing of Blue Box recyclables for the municipality.

4.4. Promotion & Education:

The municipality has several methods of promoting programs and educating property owners as follows:

- In kind advertising (local newspaper ads);
- Annual Garbage and Recycling Calendar;
- Municipal Office;
- Municipal Website;
- Municipal Facebook Page;
- The Township of Malahide Informer (local newspaper ads); and
- An Exhibit at the Annual Springfield Fun Day.

There are only direct costs associated with the printing of the annual calendar and placing ads in the Informer. The In Kind advertising is an annual allotment of advertisement lines in local newspapers that are provided to municipalities in lieu of direct compensation from newsprint producers under the *Waste Diversion Transition Act*. It is not clear at this time as to how much longer this in-lieu advertising will be available. The other methods can be accomplished within current staff resources.

The content of the current promotions has been as follows:

- Blue Box Program (Sort it Right, Flatten Cardboard, Holiday Tips, Cartons & Cups, Plastic Bags, etc.);
- Composting Program (how to compost, sale of composters and green bins);
- St. Thomas Community Recycling Centre (CRC operations and acceptable materials);
- Spring and Fall Yard Waste Collection
- Annual Bag Tag Pickup

There is an opportunity to increase awareness within the current diversion programs. By targeting the capture rate of Blue Box recyclables and the capture rate of other recyclables at the CRC.

5. Recommendations:

With improved promotion and education, existing programs may be optimized to achieve a higher diversion rate which will mitigate decreasing revenues. Increasing the capture rate of recyclables, decreasing the convenience of waste disposal, and making current programs more cost efficient will help the municipality achieve its goals.

It is recommended that the goal of a 40% waste diversion rate be set by 2025 in accordance with the Provincial goal of 50% by 2030.

It is recommended that additional promotion and education funds be allocated to increasing the capture rate of recyclables.

It is recommended that an optional provision for bi-weekly winter garbage collection should be included in the next Request for Proposal for garbage collection services for consideration.

It is recommended that the focus of any changes to the funding model be on the collection and disposal of garbage, such as implementing garbage-reduction incentives programs, which will remain under municipal control.

6. Implementation Timelines:

The following implementation timeline is recommended:

- Council approval of this Plan in June 2020;
- Circulate waste collection RFP in 2020;
- Adopt new P&E strategies in 2021;
- Adopt new Bag Tag System strategies in 2021;
- Achieve minimum 35% waste diversion rate by 2023, and 40% diversion by 2025;
- Undertake annual review of waste disposal and diversion, and identification of necessary improvements.

7. Plan Review:

The plan should be reviewed and updated in 2025, at the end of the scope of this Plan, or when there are significant changes in legislation, demographics or local opportunities to manage waste.

8. Conclusion:

This Plan revision set out a strategy for waste management over the next 5 years. The focus of this Revision has been to reduce the amount of waste directed to landfill and increase the amount of waste diverted. It is recommended that a diversion rate target of 40% be set within the next 5 years, recognizing that significant changes are not being recommended at this time.

This Plan revision investigated ways to improve waste diversion in the short-term. A waste diversion strategy for increasing the capture rate of Blue Box recyclables as well as other non-Blue Box diversion such scrap metal, hazardous waste, etc. is recommended. Investigating a garbage collection strategy that includes bi-weekly winter garbage collection is also recommended for finding cost savings and for decreasing total waste sent to landfill.

The goal of the recommendations made in the Township of Malahide 2020 Waste Management Master Plan is to optimize well-established waste diversion programs, in an effort to encourage residents to continue to divert materials from landfill as this ultimately helps to reduce the cost of the waste program and is good for the environment.



TOWNSHIP OF MALAHIDE WASTE MANAGEMENT MASTER PLAN 2020 REVISION

Appendix 1 2016-2017 Curbside Audit

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1. Introduction:

In 2016, AET Group Inc. was contracted by Waste Diversion Ontario to complete audits of residential waste in the Township of Malahide, Municipality of Bayham, and the Municipality of Central Elgin, with funding backed by the Continuous Improvement Fund.

A total of 100 homes were audited in the 3 area municipalities. Given the diverse makeup of the types of homes in the 3 areas, each municipality chose three main residential groups which would best represent this diversity. In Malahide, the representative sample areas chosen were a seasonal/tourist area, a rural area, and a hamlet/urban area. All the areas were sampled 4 times (each season) over a one year period.

The purpose of the audit was to obtain raw data in order to continue to make knowledge based decisions regarding improvements to the waste management program. In this report, the Township of Malahide audit information is compared to the most recent Waste Management Results, and to the audit information from the other participating municipalities. These comparisons are being drawn to identify program strengths and opportunities to improve the program through future initiatives.

2. Definitions:

Residue Rate: The amount of contamination in the Recycling Stream after being processed in the Material Recovery Facility (MRF).

Diversion Rate: The total quantity of waste that is recycled as a percentage of the total quantity of all waste generated.

Capture Rate: The quantity of recoverable recyclables that are diverted into the Recycling Stream as a percentage of the total quantity of the recoverable recyclables generated.

3. Blue Box Collection:

The audited municipalities averaged 3.7 kg per week of materials in the Recycling Stream per household. The average Residue Rate (contamination) of the Recycling Stream, attributed to Non-Recyclable Materials per our current Blue Box Program, was 10%.

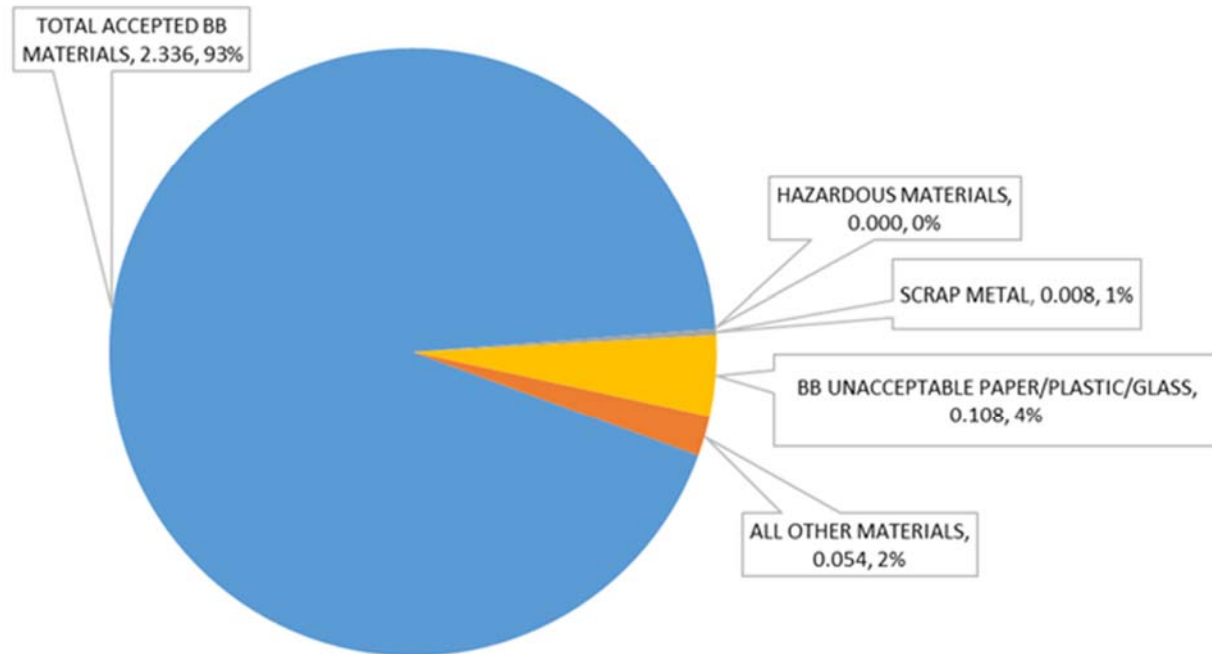
Recycling - Malahide Results

Recycling – Malahide Results:

The Curbside Waste Audit found that the average amount of materials in the Recycling Stream per household, amounted to 2.5 kg per week. Compared to the 2016 Waste Management Program results of 2.6 kg per week per household (5% difference). It would appear that the recycling portion of the audit could be interpreted as representative of the whole Township.

Figure 3.1 depicts the proportions of the Recycling Stream, as identified in the Audit, averaged over all three Township of Malahide locations. Quantities were measured in kilograms per household per week.

**Figure 3.1 Blue Box Recycling Collection Stream
KG/HH/WK**



The majority, 93% or 2.3 kg of the materials found in the Recycling Stream during the Audit are currently accepted as part of the Blue Box Program.

There was a 5% proportion or 0.1 kg of the Recycling Stream per week attributed to unacceptable papers/plastics/glass and scrap metal that are not currently part of the Blue Box Program. There was also a small amount of “All Other Materials”, approximately 2% or 0.5 kg per week. The “All Other Materials” category may include waste materials such as organic, compostable materials. There was no further break down of this category during the Audit.

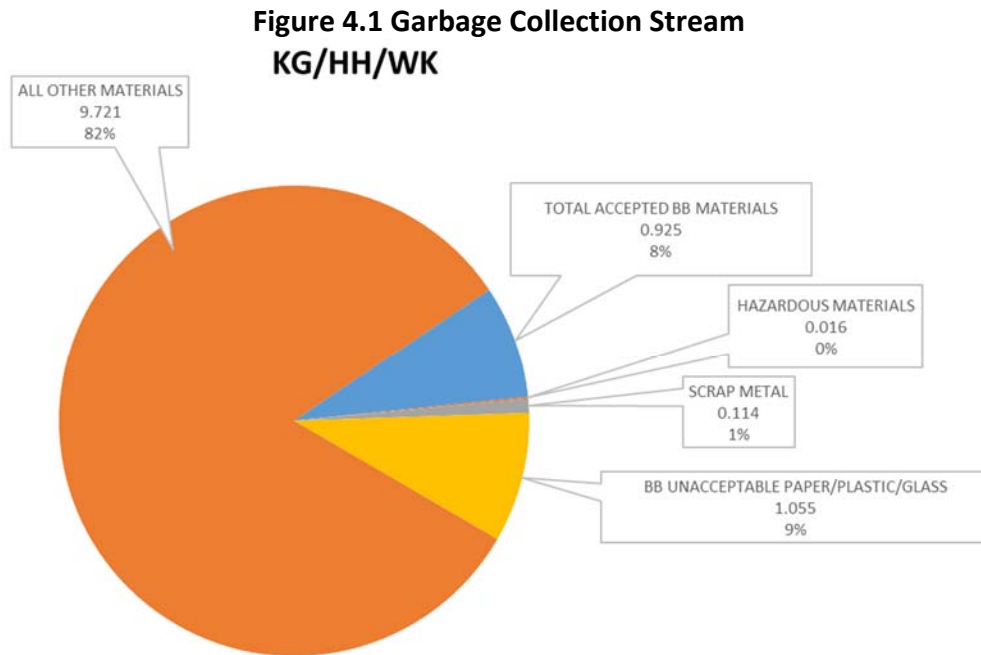
Overall, only 7% of the Recycling Stream was composed of non-recyclable materials per the current Blue Box Program. This Residue Rate (contamination) is representative of the Township as a whole, and is consistent with the findings of the 2016 annual MRF Audit. This value was slightly lower than the other municipalities audited, and was within the average Residue Rate (contamination) of neighbouring municipalities as identified in the MRF Audit.

4. Garbage Collection:

Collectively, the audited municipalities averaged 9.1 kg per week of materials in the Garbage Stream per household. The average Capture Rate of the total amount of Blue Box Accepted materials was 79%. The average Diversion rate for the group was 29% of total materials diverted from the Garbage Stream. The Ministry of the Environment and Climate Change has identified an interim diversion goal of 30% by 2020 as part of the Strategy to Achieve a Circular Economy.

The Curbside Waste Audit found that the average amount of materials in the Garbage Stream per household, amounted to 11.83 kg per week, which is not similar to the 2016 Waste Management Program results reporting of an average of 9.22 kg per week, per household. This represents a 22% difference and thus, the 2017 Curbside Audit results may not be representative of the Township as a whole.

Figure 4.1 depicts the proportions of the Garbage Collection Stream, as identified in the Audit, averaged over all three Township of Malahide audited locations. Quantities were measured in kilograms per household per week.



The majority (9.7kg) of the materials found in the Garbage Stream during the Audit were items that belonged to the “Other Materials” category. There was also a 1 kg portion of the Garbage Stream composed of papers/plastics/glass that are not currently part of the Blue Box Program. These items belong in the Garbage Stream until such as time as the Blue Box Program is amended to include them.

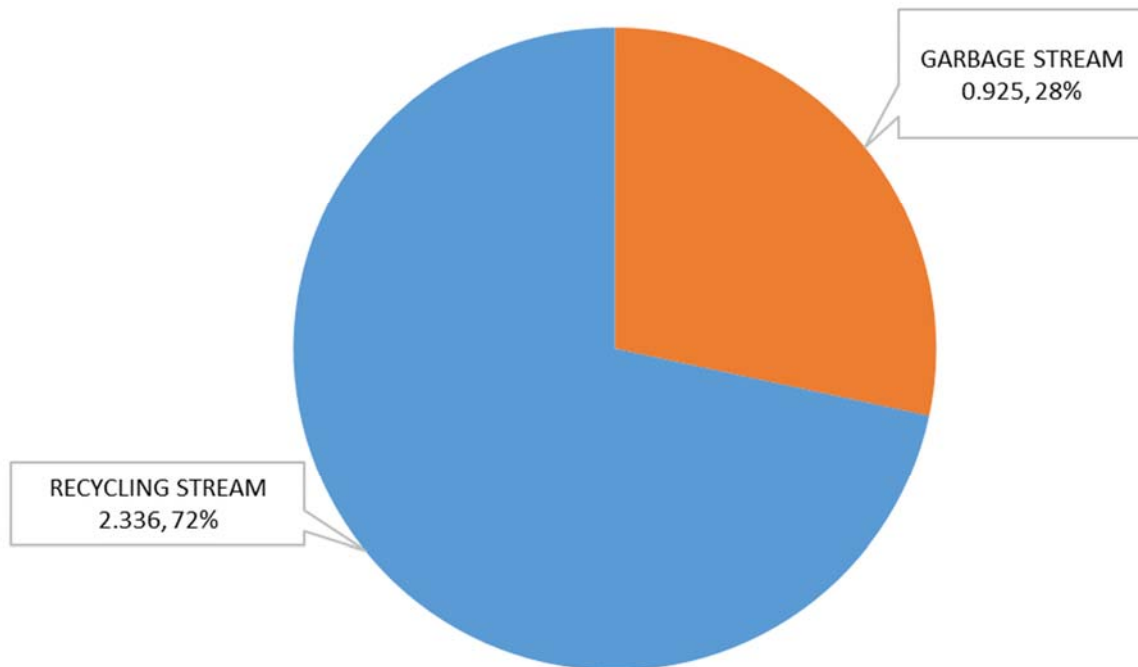
There was also a 0.1 kg portion of the Garbage Stream attributed to Scrap Metal, and Hazardous Materials. These materials have disposal alternatives such as being dropped off at the Community Recycling Centre in St. Thomas.

Notably, there was a 0.93 kg portion of the Garbage Stream attributed to Blue Box Accepted Materials. These materials are part of the Blue Box Program and are advertised as such. This proportion was about the same across all audited locations in the Township.

5. Capture Rate:

It is important to have information regarding un-captured recyclables as they directly relate to the Township's overall Diversion Rate. Figure 5.1 depicts of the Township's Capture Rate of Blue Box Accepted Materials shown as a percentage. Quantities were measured in kilograms per household per week.

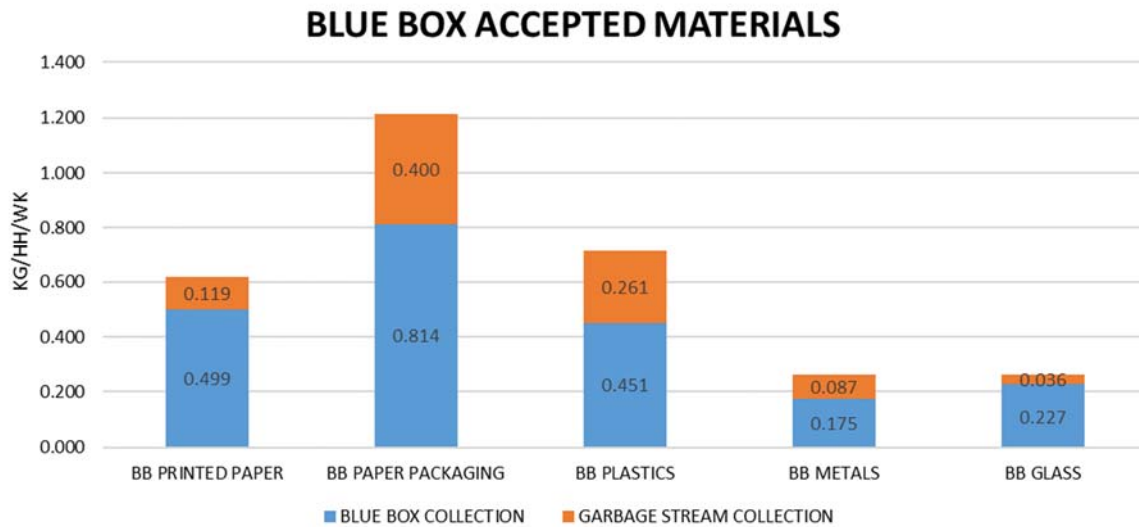
**Figure 5.1 Capture Rate of Blue Box Accepted Materials
KG/HH/WK**



The Audit identifies that the Township only captures 72% of recyclable materials into the Recycling Stream. The Township of Malahide Waste Management Master Plan identified a Capture Rate of 53% in 2009. Although the Capture Rate has increased from 2009, the remaining 0.93 kg per household, per week equates to 151.76 tonnes of uncaptured recyclables per year, across the entire Township. The cost of disposing this quantity of recyclables in the Garbage Stream is be \$10,465.37 based on current pricing.

The recyclables were further broken down into the individual types of recyclable materials to better understand why these materials were not being captured in the Recycling Stream. Figure 5.2 depicts a comparison of the individual amounts of Blue Box Accepted Materials, as identified in the Audit, remaining in the Garbage Stream vs. captured in the Recycling Stream. Quantities were measured in kilograms per household per week.

Figure 5.2 Blue Box Accepted Materials: Garbage Stream vs. Blue Box Recycling Stream.



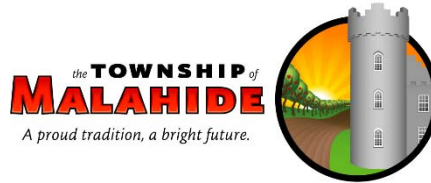
Recyclable Paper Packaging, Plastics, and Metals had about 1/3 of their total quantity remaining in the Garbage Stream. When the audited locations in the Township were compared, it was identified during the summer audit that seasonal/tourist area had the most recyclables going into the Garbage Stream. Staff suspect that this may be a result of the seasonality of the area and inconsistent Blue Box Program across the province as some of these residents reside in other Municipalities.

Overall, the audit found that the quantity of the Township of Malahide Garbage Stream was much higher than that of the other municipalities. The overall Diversion Rate based on the Audit information was only 17% as compared with the 26% identified Diversion Rate in the 2016 Waste Management Results. The Staff suspect that the Diversion Rate of the 2016 Waste Management Results is more representative of the Township as a whole. Factors that may contribute to a lower diversion may be purchasing attitudes and demographics, which were not accounted for in the Audit. When compared to the other audited municipalities, the Township is capturing 10% fewer materials out of the total potentially recyclable materials.

6. Summary:

The Curbside Audit information identified strengths and areas to improve the current Township of Malahide waste management program. The Audit data confirms that the Recycling Stream

Residue Rate is average for the Township of Malahide when compared to neighbouring municipalities. The Audit information also identifies an opportunity to increase the Township's Diversion Rate as it is below average when compared to neighbouring municipalities. Increasing the Capture Rate of recyclable materials will help to increase the Township's total Diversion Rate and decrease Waste Disposal Costs.



TOWNSHIP OF MALAHIDE WASTE MANAGEMENT MASTER PLAN 2020 REVISION

Appendix 2 2019 Waste Management Survey

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Appendix 2-A	2019 Waste Management Survey
Appendix 2-B	2019 Survey Comments

1. Introduction:

As directed by the Waste Management Master Plan Revision Committee, a survey was developed in order to establish the current waste management behaviours of the community and gauge community opinion on possible future waste management options. This survey was conducted in November and December of 2019, and was made available by hard copy at the municipal office and digitally on the municipal website.

A copy of the survey is attached in Appendix 2-A.

2. Survey Summary:

A total of 11 questions were posed to residents. The questions were divided into 3 categories including Demographics; Current Habits; and Future Waste Management. There were a total of 220 respondents who provided answers to the survey questions, representing about 200 complete surveys and about 20 partial survey responses (skipped questions).

A summary of the survey responses is included in this Section.

2.1 Demographics:

There were two questions regarding demographics that were posed to the residents of the Township of Malahide; the total number of occupants in their household; and the age range of the respondent.

Figure 1 depicts respondent age ranges. The majority of respondents, at about 52%, reported being between the ages of 60-79, 32% were between the ages of 40-59, 11% were between the ages of 20-39, and 4% were over 80 years of age.

Figure 1 Respondent Age Range

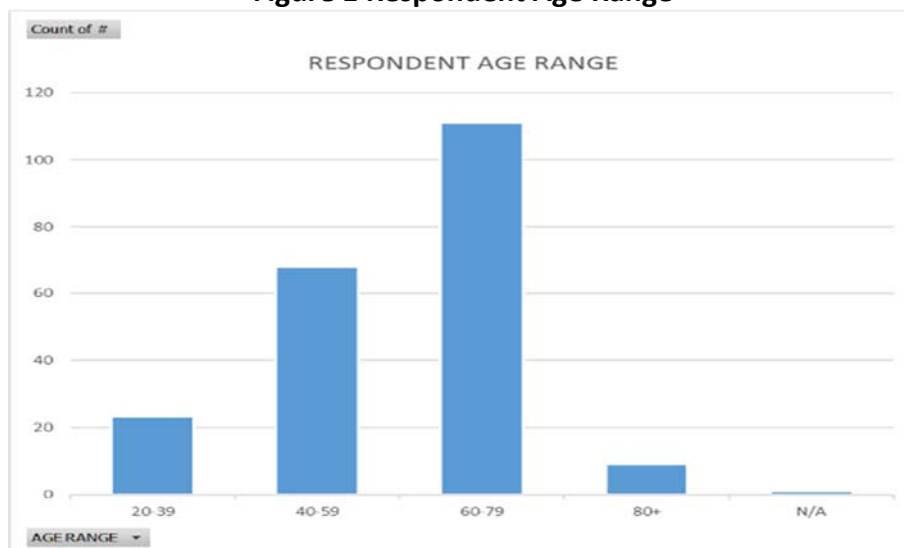
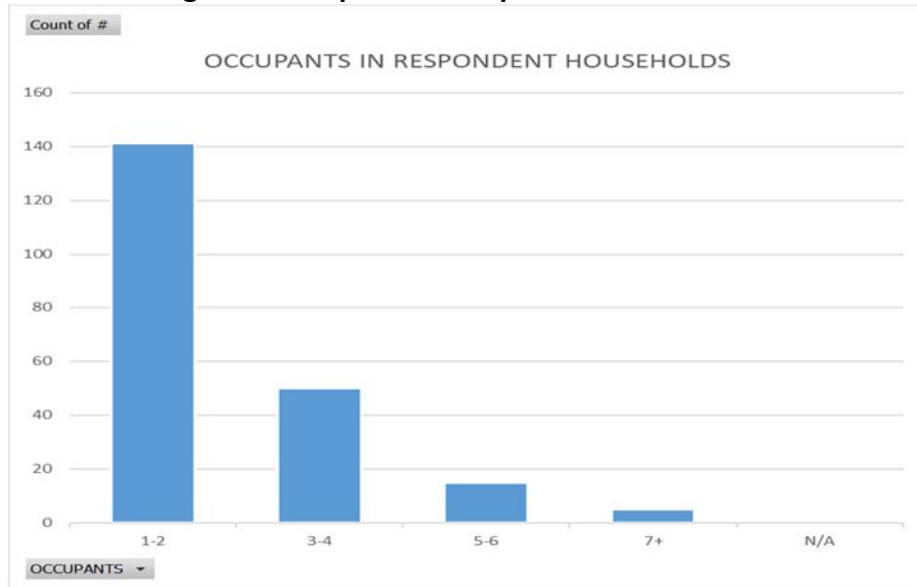


Figure 2 depicts the number of occupants reported per household. About 67% of respondents reported having 1-2 occupants in their households, 24% had between 3-4 occupants, 7% had 5-6 occupants, and 2% had more than 7 occupants in their households. About 1% of respondents chose not to answer either of the demographic questions.

Figure 2 Occupants in Respondent Households



2.2 Current Habits:

Respondents were asked a number of questions about their current waste management habits. Current curbside set out rates and other waste disposal behaviours were examined. Respondents were also questioned on where they receive information regarding waste management. The majority of respondents reported receiving information from the annual waste management calendar, and secondary sources were reported to be the Township website and the local newspaper.

2.2.1 Current Curbside Set Out Rates:

Figure 3 depicts the average weekly garbage bag set-out. The majority of respondents, about 73%, reported that they set out one garbage bag or less per week, while 26% reported putting out 2 garbage bags or more per week. About 1% of respondents chose not to answer any of the set out questions.

Figure 3 Average Weekly Garbage Bag Set-out

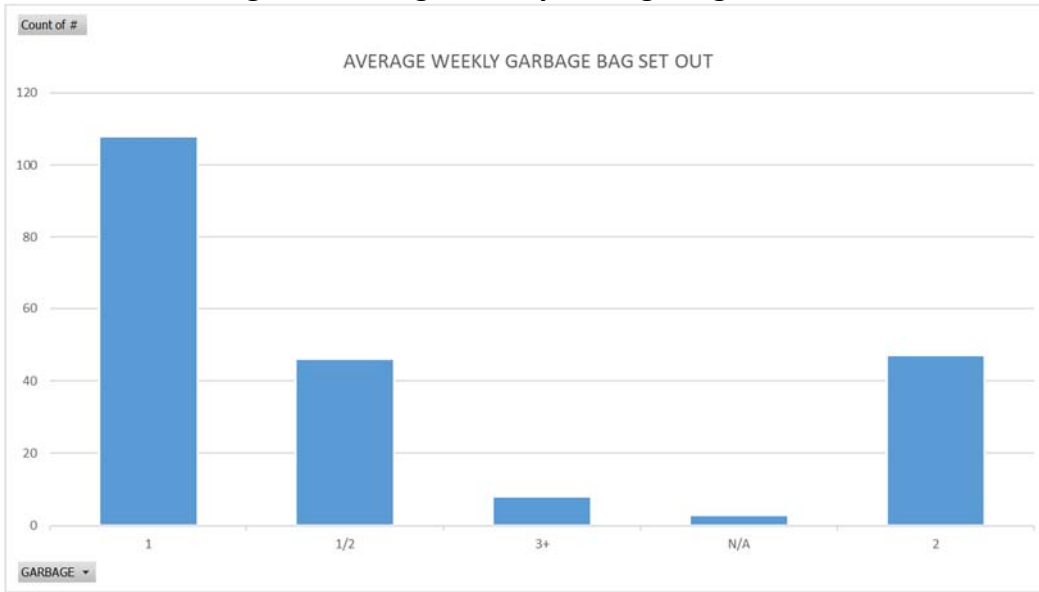


Figure 4 depicts the average weekly container Blue Box set out. The majority of respondents, about 81%, reported that they set out one full container Blue Box or less per week, while 18% reported setting out two or more container Blue Boxes.

Figure 4 Average Weekly Container Blue Box Set Out

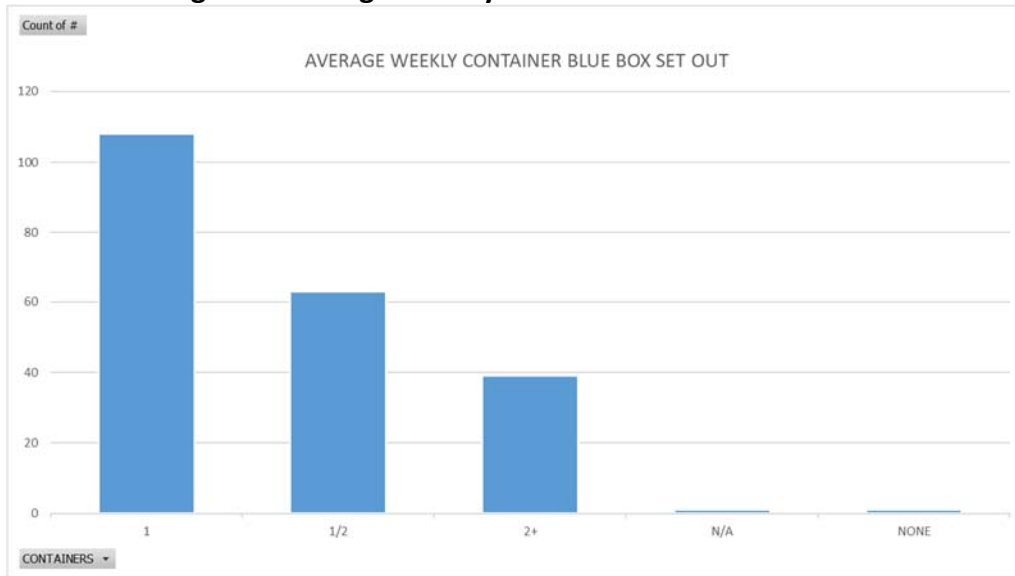
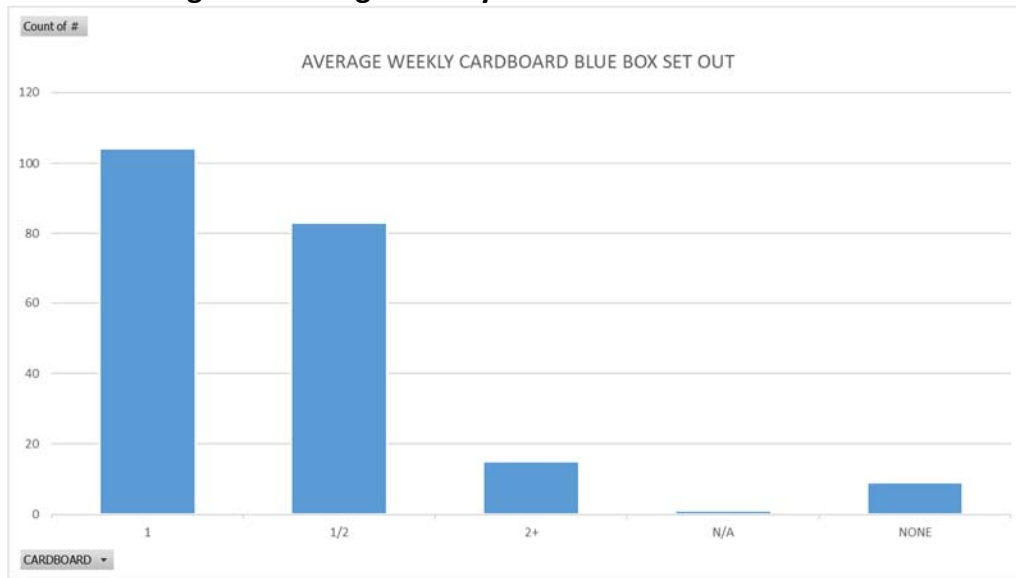


Figure 5 depicts the average weekly cardboard Blue Box set out. The majority of respondents, about 92%, reported that they set out one full cardboard Blue Box or less per week, while only 7% reported setting out two or more cardboard Blue Boxes.

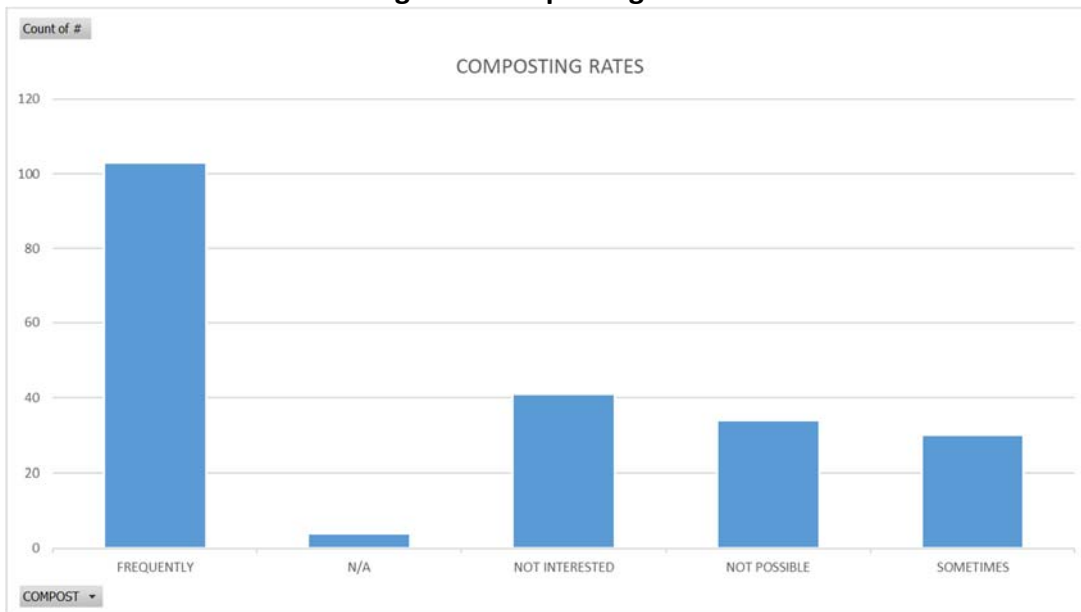
Figure 5 Average Weekly Cardboard Blue Box Set Out



2.2.2 Other Current Habits:

Figure 6 depicts the rate at which a household participates in composting. The majority of respondents, about 49%, reported composting frequently, whenever possible. About 14% of respondents reported composting sometimes, when convenient, and 35% reported never composting, either because it wasn't possible for their household or they were not interested.

Figure 6 Composting Rates

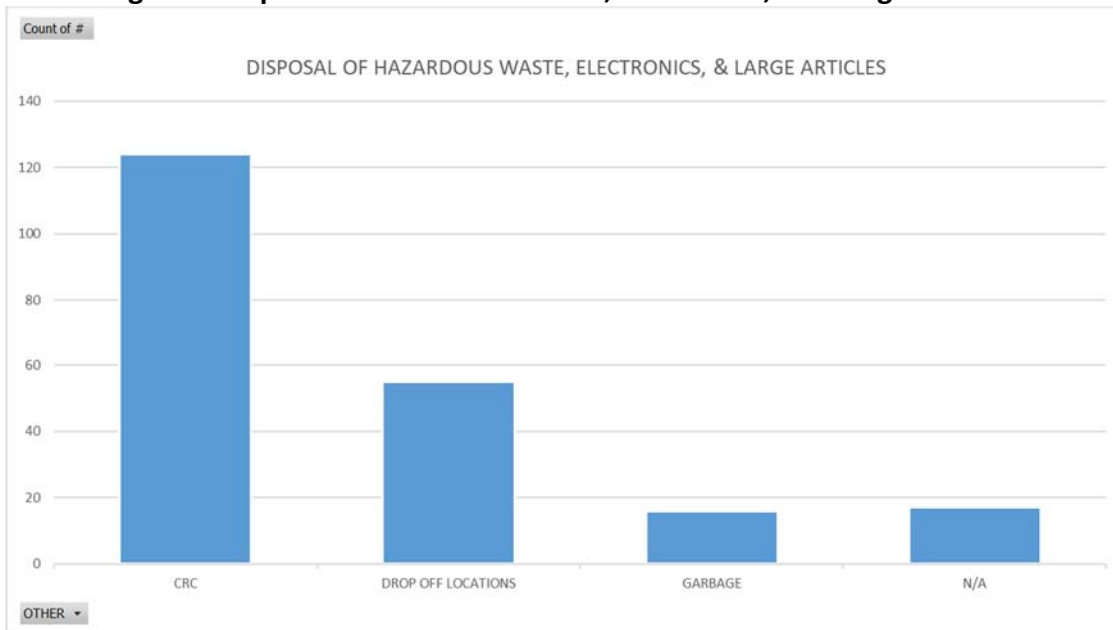


About 2% of respondents chose not to answer the Composting Rate question. There were comments regarding an inability to compost by the household due to a fear of attracting animals

in a rural setting. There was one respondent who provided a brochure on composting, and a request that the municipality provide composters free of charge to reduce waste sent to landfill.

Figure 7 depicts the disposal of hazardous waste, electronics, and large articles. The majority of respondents, about 58%, reported disposing of other waste at the St. Thomas Community Recycling Centre. About 26% of respondents reported using approved drop off locations for other waste, including returning products to retailers. About 8% reported putting other waste in with their curbside garbage, and about 8% did not respond to the question.

Figure 7 Disposal of Hazardous Waste, Electronics, and Large Articles.



There were requests for an annual large article collection, and requests for a weekly organics collection.

2.3 Future Waste Management:

Respondents were asked three questions about future garbage collection and waste diversion, and were asked to provide any comments relevant to this category.

Figure 8 depicts the interest in a bi-weekly winter garbage collection. The majority of respondents were split between being interested (31%) and not interested (37%) in a bi-weekly winter garbage collection. About 18% of respondents reported that it did not matter whether a bi-weekly winter garbage collection occurred and about 10% requested more information before making a decision. About 4% of respondents did not answer the question.

Figure 8 Bi-Weekly Winter Garbage Collection

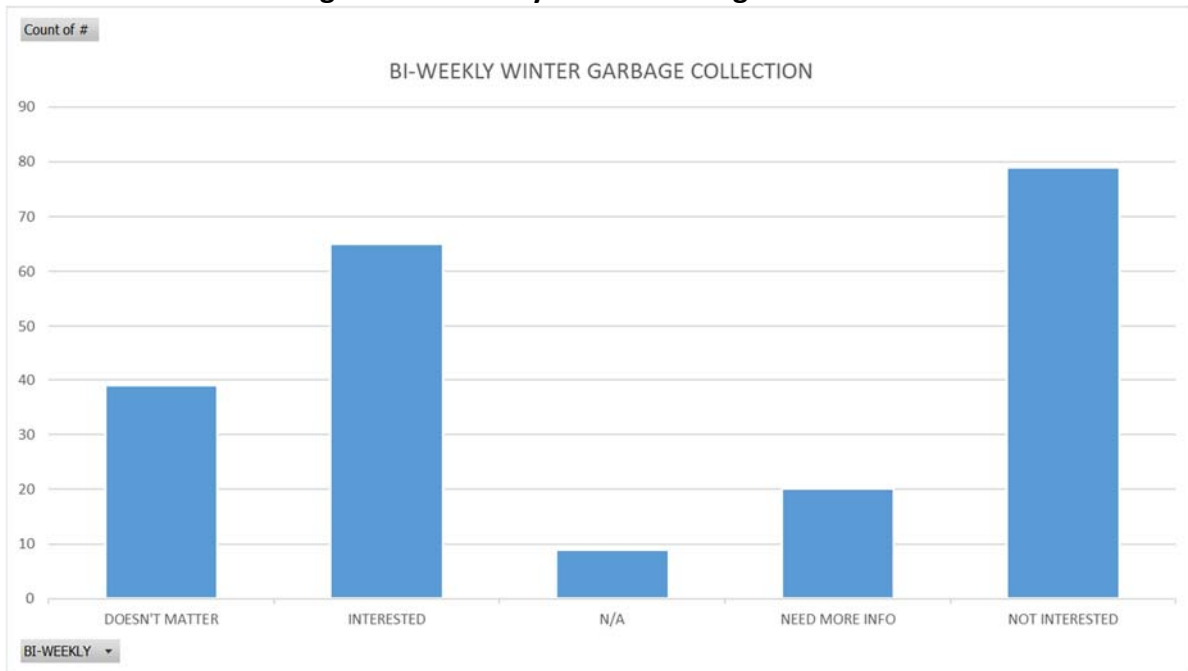
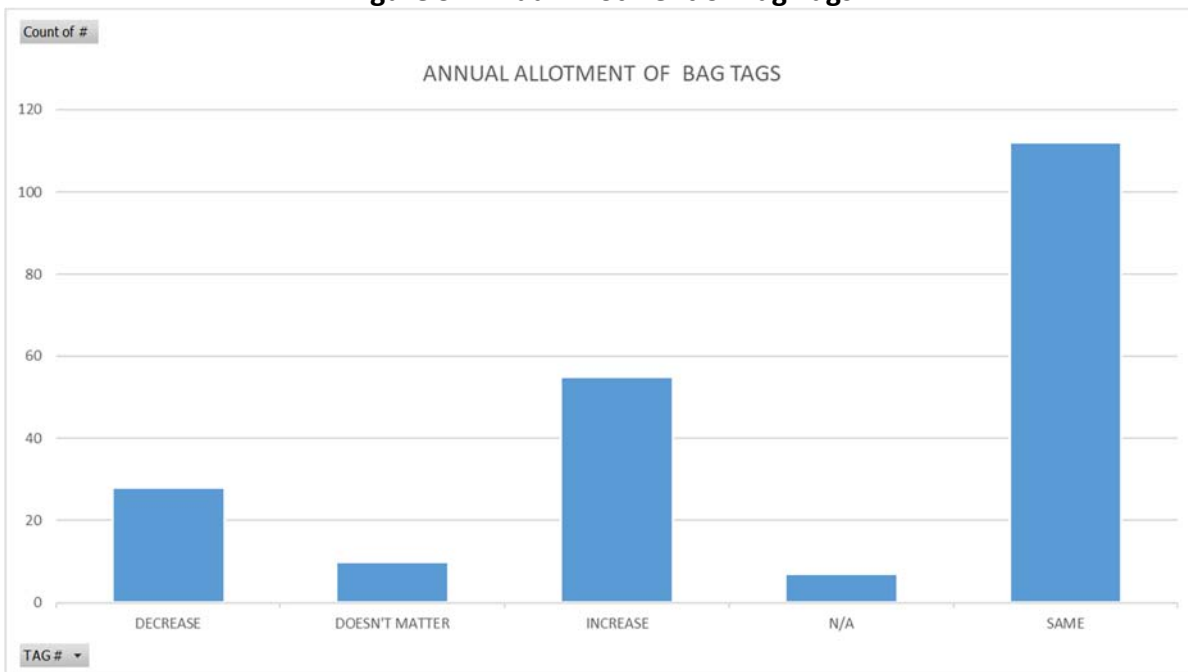


Figure 9 depicts the desire to change the annual allotment of bag tags. The majority of respondents, about 53%, would like the annual allotment of bag tags to remain the same. About 26% requested an increase in the number of tags, while about 13% requested a decrease in the annual number of bag tags. About 5% did not care if the annual allotment of bag tags changed, and 3% did not answer the question.

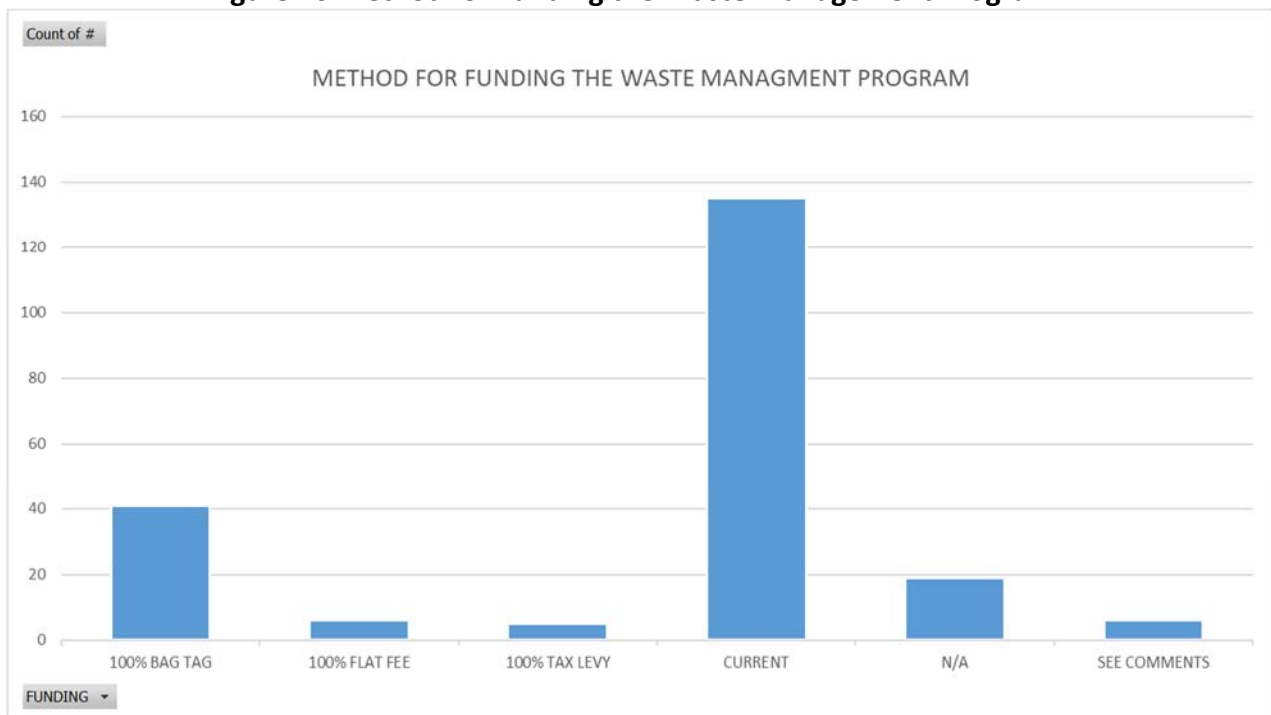
Figure 9 Annual Allotment of Bag Tags



Respondents noted that they were businesses and requested that more tags be provided to them. Other respondents reported that seniors, large families, and households with indoor cats required more tags. There were requests by respondents to return to the mailing out of the annual allotment of bag tags.

Figure 10 depicts the requested method for funding the waste management program. The majority of respondents, about 64%, requested that the current funding model for the waste management program remain in place. About 19% of respondents reported they would like to move to a 100% Bag Tag – User Fee funding model, and about 5% would like to move to either a 100% Flat Fee or 100% Tax Levy model. About 12% did not answer this question and/or reported requiring additional information to answer this question.

Figure 10 Method for Funding the Waste Management Program



Over 70 comments were received regarding the method for funding the waste management program. There were comments regarding respondent fear of illegal dumping that could result from adopting a 100% Bag Tag – User Fee model. There were also comments requesting that garbage collection be fully funded by users – respondents did not want to subsidize the garbage disposal of others. Comments were received from respondents indicating that they would like their taxes to cover all costs and that disposal of garbage was considered by them to be a basic right. ‘Thank you’ comments were also received to commend the collection contractor on their services, and to thank the St. Thomas Community Recycling Centre staff for their services. The most frequent comment was a request for more information.

A copy of the survey comments are attached in Appendix 2-B.

3. Conclusion:

There were 220 surveys submitted. In general, respondents participate in the current waste collection programs offered by the municipality. Respondents were most likely to be between the ages of 60-79 and live in a 1-2 person household. Respondent were most likely to set out 1 garbage bag, 1 container Blue Box, and 1 cardboard Blue Box, on average per week. The majority of respondents also compost on a frequent basis, and use the services at the St. Thomas Community Recycling Centre for hazardous waste, electronics, and large articles.

Based on survey results, respondents are almost evenly split regarding bi-weekly winter garbage collection. About 37% were not interested, 31% were interested, and 32% either needed more information, did not care, or did not answer the question.

The majority of respondents did not want the number of the annual allotment of bag tags to change moving forward. Respondents also requested that the current funding model for the waste management program remain the same.

These result should be viewed as a “snap-shot” of resident opinion and function as part of the overall public consultation process.

Appendix 2-A
2019 Waste Management Survey



WASTE MANAGEMENT SURVEY

We are currently reviewing our Waste Management Program and would like your input. Please return a completed survey by **December 31st, 2019**. Submission instructions are at the bottom of the page. This survey is anonymous.

Please select the **best possible** answer to the following:

1. Total Number of **Occupants** in My Household:

- 1-2 3-4 5-6 7+

2. My **Age Range** is:

- 0-19 20-39 40-59 60-79 80+

3. Average Weekly Number of **Garbage Bags** we put out:

- ½ 1 2 3+

4. Average Weekly Number of **Blue Boxes with Containers** we put out:

- ½ 1 2+ Do Not Recycle Containers

5. Average Weekly Number of **Blue Boxes with Cardboard & Paper** we put out:

- ½ 1 2+ Do Not Recycle Cardboard/Paper

6. My Household **Composts**:

- Frequently, When Possible Sometimes, When Convenient
 Never, Not Possible Never, Not Interested Right Now

7. My Household Disposes **Hazardous Waste, Electronics, & Large Articles**:

- With my Garbage At the St. Thomas Community Recycling Centre
 Other: _____

Please select **all possible** answers to the following:

8. My Household gets **Information** about Waste Management from:

- Township Website Collection Calendar Local Newspaper
 Word of Mouth World Wide Web Watch My Neighbours
 Council Meetings Other: _____

9. To Reduce Costs & Waste, My Household is interested in **Bi-Weekly Winter Garbage Collection**:

- Interested Doesn't Matter Not Interested Need to Know More

10. My Household would like the **Number of Bag Tags** in the Annual Package to:

- Increase Decrease Stay the Same Doesn't Matter

11. Currently, the Waste Management Program Revenue only covers 40% of Total Program Costs, the remaining 60% of Costs are funded by all Township of Malahide Tax Payers.

In your Opinion, What would be the Best Method for Funding the Waste Management Program in the Future?

- CURRENT METHOD **Majority of Costs in Tax Levy**
Flat Fee for Eligible Properties*
60 Bag Tags Per Year / Bag Tags Expire Yearly
- 100% FLAT FEE No Costs in Tax Levy
Increase Flat Fee for Eligible Properties to Cover All Costs
60 Bag Tags Per Year / Bag Tags Expire Yearly
- 100% BAG TAG No Costs in Tax Levy
No Flat Fee for Eligible Properties
Residents Must Buy a Tag for Every Bag / Bag Tags Do Not Expire

* Eligible Properties have either a Residence, Church, Community Hall, or School.

12. COMMENTS:

Appendix 2-B
2019 Survey Comments

2019 Waste Management Survey: Comments

Respondent Comment #1

“Create a system similar to Oxford County. Consider having all garbage & recycling for the Township picked up on one day (multiple trucks out).”

Respondent Comment #2

“We are paying taxes for a few main reasons. Garbage collection being one of the main ones. A surcharge to pay for tags is wrong, besides you are already paying a company to recycle and giving them a free product to sell, something wrong with that.”

Respondent Comment #3

“If you choose 100% bag tag – the municipality should offer Green Boxes for compost and big garbage day – like other areas.”

Respondent Comment #4

“If you reduce our tags to 45/year, it would be good to reduce the fee as well. If we can buy only as many tags as we need and pay their 100% cost, people might be more responsible when recycling.”

Respondent Comment #5

“System is unfair to families with babies, multiple children, home businesses, in-law residences etc. A local drop area would encourage meaningful disposal – bins for compost, more recycle opportunities – bins for cardboard @ a municipal property.”

Respondent Comment #6

“Does our recycled items, containers & cardboard all go to be recycled? Does it end up in the landfill? How do we improve the waste program revenue? Current service provider is excellent! Large item annual pick-up is of great interest.”

Respondent Comment #7

“Currently if no one in our congregation (country church) contributes tags, we have to buy them or send garbage home with a church member who lives in Aylmer because they don't have to buy tags. What is this? Everyone in the municipality should be on the same program. Either everyone buys tags or everyone gets a certain allotment fee. Living in the country, we often find dumped garbage.”

Respondent Comment #8

“Number tags we currently get especially with yearly decrease in number is not enough for house that have cats and no other means of disposal of litter. Malahide should go back to yearly pickup of things people no longer use – reason you have a lot of illegal dumping plus some people can't afford or have means to take to recycling places.”

Respondent Comment #9

“Thank you to Antonissen for the good job they do.”

Respondent Comment #10

“Increase the number of tags. More waste is being found in our roadsides and fields. Allow pickup of larger items instead of making us deal with the junk or have to drive to St. Thomas or London. Have the garbage collectors clean out the entire receptacle when put out.”

Respondent Comment #11

“We are a business, 1 tag allowed per week is not practical. This needs to be addressed.”

Respondent Comment #12

“There is a range in how people live – I prefer to pay directly for services. I don’t need a prize to help improve services and the environment – I give away my extra tags to those in need.”

Respondent Comment #13

“I would be interested to know who paid for it before you went to the current method of funding.”

Respondent Comment #14

“Would appreciate the ability to recycle compostable material ‘green box’.”

Respondent Comment #15

“My concern as a farm land owner would be the return of dumping garbage on our roadsides and in our gullies if residents were to be required to buy a tag for every bag. As a taxpayer, once again this year extremely annoyed that the township office has been closed for such an extended time over Christmas. As a taxpayer, I would expect the office be available during regular business hours (excepting statutory holidays).

Respondent Comment #16

“40% cost from program to remain, 60% cost from recycling companies who receive revenue from our recycled material.”

Respondent Comment #17

“Municipality should provide composters for free or reduced cost to ratepayers as the former village of Springfield did years ago to their residents. It would pay off in the long run.”

Respondent Comment #18

“Slowly change the percent of costs from tax levy and flat fee. Next year 40% in levy and 60\$ in flat fee, then in 2 years 30% in tax levy and 70% in the flat fee.”

Respondent Comment #19

“We are please with the current method of funding, we live on a farm so composting is no problem.”

Respondent Comment #20

“Consideration also needs to be taken by the recycling truck. I wash my Blue Box each week and wash all containers. I don’t like it just ‘tossed’ onto the ground.”

Respondent Comment #21

“I would support 100% bag tag. Unfortunately I do not have faith that the community as a whole would respect this and can foresee garbage abandoned. I pick up a lot of cans, cups, and other items on Imperial Road between Copenhagen and Port Bruce. It is ridiculous.”

Respondent Comment #22

“We’re happy with how the waste is manage; the garbage collectors are punctual, we have no complaints.”

Respondent Comment #23

“Yard waste should not require bag tags!”

Respondent Comment #24

“I’m afraid if you went to 100% bag tag, too many people would be throwing their garbage bags out in the ditches etc. in deserted areas.”

Respondent Comment #25

“Hard to choose alternative funding method until I know if there will be a reduction in my taxes, what the flat rate would be in 100% flat fee, or what the costs of individual tags would be in 100% bag tags. I also think the Township should do all it can to introduce technology to recycle basic household plastic – wrappers, grocery bags, etc.”

Respondent Comment #26

“We do not approve of supplementing seasonal residence such as the cottages & trailer parks or marinas in our municipal taxes. Waste management should be user fee oriented.”

Respondent Comment #27

“Need more info. What is does 100% flat fee mean? 100% bag tag may cause careless disposal of garbage cut also advantage to responsible residents.”

Respondent Comment #28

“It would be nice if we could have an annual ‘junk’ pickup like a lot of other communities limited to household waste, e.g. furniture, electronics (no renovation materials).”

Respondent Comment #29

“Print same tags annually to save design costs for tags. Households with larger number of inhabitants should get more tags. There is more incentive to manage waste if we pay more for tags and can use them the next year too, will reduce our taxes. A true pay per use.”

Respondent Comment #30

“Garbage should be 100% covered”

Respondent Comment #31

“Very interested in Green Bin collection, if introduced we would only need bi-weekly garbage and only 1 bag per pick-up. 30 tags per year at the most.”

Respondent Comment #32

“Would like bag tags that do not expire for extra garbage bags beyond our yearly allotment.”

Respondent Comment #33

“Why was option of including all in general levy not an option? Same as fire protection.”

Respondent Comment #34

“I also put out my garbage at the neighbours to decrease stop/start for truck.”

Respondent Comment #35

“Would be interested in Township having compost pickup like St. Thomas. Give tags for all properties owned – we do not have a building but we have garbage from ditch!”

Respondent Comment #36

“More information is required for an informed answer to the funding method question. What will tags cost? What is flat fee for waste management program? What do I pay for waste management in my current tax levy? With that knowledge I can make an informed choice.”

Respondent Comment #37

“Need to increase # of tags. Need to look into needs of churches, daycares etc. Some people need access to Blue Boxes.”

Respondent Comment #38

“Sometimes unable to remove labels off recyclable articles, how does that work?”

Respondent Comment #39

“If you go to 100% bag tag then more people will dump bags of garbage on roadside. Summer time – one needs to have garbage sent weekly as odour builds up. Are you really recycling everything that comes in the Blue Box – I suspect you are not – unable to get some labels off – so do those items go to landfill?”

Respondent Comment #40

“I like to see increase from 60 stickers per year to 100 stickers. We are in a farming community with offshore workers. In the summer we have double the garbage. 60 stickers won't do. I like the current method. Otherwise we will find more garbage in our ditches in the country, which is happening already!!”

Respondent Comment #41

“Garbage collection should be covered out of the taxes paid to the various levels of government. Should not have to cart garbage to another city and in some cases pay a minimum of \$20 to leave it. Could establish a local drop-off for batteries, oils and chemicals.”

Respondent Comment #42

“Maybe even increase the amount in the tax levy. If people have to take the initiative to take money out of their wallets to pay on an ongoing basis, you’ll always have the people who won’t pay and they’ll put their garbage in the ditches. If they’ve already paid for it in taxes, perhaps they’ll be more likely to make use of the services. In spite of the fact that we don’t generate a lot of garbage, and we would be paying more than our usage would warrant, we’d rather do that than have others throw their garbage in ditches and ravines.”

Respondent Comment #43

“Garbage collection is a basic service, so supply the service. That’s what we pay taxes for. Too much administration – cut that – not garbage. Don’t dare charge extra for a basic service that everybody needs and is very visible as opposed to policing, education, and construction. Have the snow plows pick up the garbage, most of the time they are just driving by.”

Respondent Comment #44

“Have bag tags not expire, the draw is a nice bonus.”

Respondent Comment #45

“My neighbour has eight kids and they run out of tags in a few months and burn their garbage the rest of the year because they are poor. A couple other neighbours too do the same which is gross and stinks. The garbage tag system inadvertently pollutes my fresh country air.”

Respondent Comment #46

“Merry Christmas to all garbage pickup crews.”

Respondent Comment #47

“Good reliable service, answer any of my questions.”

Respondent Comment #48

“100% bag tag will increase bags of garbage found along the sides of the roads.”

Respondent Comment #49

“We also take our yard waste paper bags to St. Thomas recycle, and it is a well run facility we feel. When 2 driveways are close we put garbage/recycle together for one stop pickup by trucks.”

Respondent Comment #50

“60 tags a year is not enough, I always have to buy extra, I don’t agree with raising taxes for garbage costs as the taxes are too high already for the limited services we receive.”

Respondent Comment #51

“Bi-weekly recycle would work for us weekly garbage collection in hot months.”

Respondent Comment #52

“Hard to choose option when no costs are given – how much would bag tags be for 100% bag tag funding? What is cost now added to taxes??”

Respondent Comment #53

“A taxpayer should get garbage collection/education/roads and maintenance and police protection. Don’t get too cute with garbage rules it’s a basic service. Period!”

Respondent Comment #54

“I want weekly pickup cause I don’t want maggots in the summer, did this in Barrie and it was so hard to control maggots in the summer heat, also you don’t recycle meat trays and plastic, I wasn’t to pay per tag, I recycle and compost. You need to recycle plastic bags, ¾ of my garbage is bags.”

Respondent Comment #55

“Why not use large roadside dump bins? It only requires one truck to do both waste and recycle, one driver, no heavy bags to lift. No animals ripping open bags.”

Respondent Comment #56

“Port Bruce Manor house up to 36 vulnerable adults – we desperately need an increase bag allowance.”

Respondent Comment #57

“Bi-weekly garbage for the fall & winter months is a great idea. May through October weekly still good idea for warm months.”

Respondent Comment #58

“We like the 100% bag tag solution but how would it work as a landlord? Would a tenant now pay for their garbage or would we set a rule of 1 per week included with rent?”

Respondent Comment #59

“Bag tags I see as a waste of money to print, distribute (pickup) and control.”

Respondent Comment #60

“I don’t think it’s our job to figure out how to fund the program. Isn’t that what we elected you to do? I do not like that bag tags expire – we paid for them through our taxes, they’re ours, we should be able to use them until gone. Why does the town of Aylmer have a big junk pick-up but the country properties do not? We have to drive to St. Thomas while theirs is picked up. Not fair.”

Respondent Comment #61

“Bi-weekly winter garbage collection is not a wise idea = increase wild animal issues and/or rodents in storage areas! Not enough tags given in 2019. Why change the funding system when working? Not wise to move to 100% bag tag because one would see increase in garbage tossed into ditches, farmland/woods areas by others. The current system is working so why alter it! Stick with the current program and keep a lid on wages & increases for all public employees yearly!!”

Respondent Comment #62

“I am overall very satisfied with the present system but maybe this does not fit for all households. System should be based on more garbage = more expensive. The goal should be less waste creation everybody.”

Respondent Comment #63

“For us, when we live on a property where we can compost, we do not need a lot of garbage collection. For some in apartments, etc., a program would have to be put in place for their compost.”

Respondent Comment #64

“If everyone had to take household items to St. Thomas the gas cost plus pollution. Need a local area drop-off or pick-up once or twice a year. Plus need the right kind of vehicle to transport if now you have to tag it with garbage.”

Respondent Comment #65

“Springfield and area should also have large/bulk item pickup available like Aylmer.”

Respondent Comment #66

“Please don’t start double dipping on garbage. Our taxes are already outrageous. Why is the snow plow out for a ‘skiff’ of snow? Why do we still have gravel roads? I also know the garbage bags are not ‘sorted’ other dumped in London.”

Respondent Comment #67

“Recycle in a more efficient manner and educate the public on the numbers on plastics. Use plastics more for reused, by the numbers 0-7 being the numbers. For example, enough of plastic car bodies or plastic house building components.”

Respondent Comment #68

“100% flat fee and 100% bag tag, us farmers will see more garbage along our farms, ditches and fields. If we were just a home (no farm) 60 tags is enough for us.”

Respondent Comment #69

“Taxes go up every year! Tag numbers go down! Go back to # of tags a few years ago. There are time we have company and have more garbage – make company take their garbage home. Ridiculous!”

Respondent Comment #70

“Tag system needed for farmers to stop excessive burning. Need large item pickup etc. 2x year.”

Respondent Comment #71

“Since we pay high taxed and we are on septic and well water, I think that the least the township can do is support garbage pickup. If you move to less tags or paying for all garbage tags, my taxed must be lowered. I refuse to pay \$6000 plus for snow removal. Every year we must buy additional garbage tags.”

Respondent Comment #72

“Please read attached info on household waste we have been using it for ears and turns household waste into soil it should be offered by Malahide at a reduced cost as Oxford does.”

Respondent Comment #73

“I would prefer pay by the tag but I’m sure people will throw their garbage into business bins or the ditch. Too bad there wasn’t a way to collect garbage and recyclables with just once vehicle. Yes I know they have different destinations but the majority of kms is on pickup.”

Respondent Comment #74

“For our household we could do with 80 tags. We are stay at home people – seniors.”

Respondent Comment #75

“We like the idea of a bag tag to make everyone more conscientious of waste. However, we only like it if it means the tax levy does not increase as rapidly.”

Respondent Comment #76

“The garbage pickup has delays including breakdowns and holidays to reduce pickup date may cause backup especially during winter house that include 3 holidays. Please continue with current structure with this method down time has occurred only once.”

Respondent Comment #77

“Why should only tax payers have to pay? You’re penalized for owning instead of renting.”