Subject: Curbside Waste Diversion Policy

File Number: ACS2023-PWD-SWS-0003

Report to Environment and Climate Change Committee on 5 June 2023

and Council 14 June 2023

Submitted on May 25, 2023 by Shelley McDonald, Director, Solid Waste Services,
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Ward: Citywide

Objet : Politique sur le réacheminement des déchets déposés en bordure de rue

Dossier: ACS2023-PWD-SWS-0003

Rapport au Comité de l'environnement du changement climatique

le 5 juin 2023

et au Conseil le 14 juin 2023

Soumis le 25 mai 2023 par Shelley McDonald, directrice, Services des déchets solides, Direction générale des travaux publics

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Quartier : À l'échelle de la ville

REPORT RECOMMENDATION(S)

That the Environment and Climate Change Committee recommend that Council:

- 1. Approve the following changes to the City's current residential curbside collection policy, as outlined in this report, including:
 - a. A Partial Pay-As-You-Throw program with an annual allotment of 55 garbage items with the option of additional tags to be purchased by residents:
 - b. Expansion to the City's Special Considerations Program to include non-hazardous medical waste:
- 2. Direct staff to include the required amounts for capital and operating expenditures and for user fees, as detailed in the report, as part of the 2024 Budget process;
- 3. Delegate the authority to the General Manager of the Public Works Department to make the related amendments to the Solid Waste Management By-law No. 2012-370 to implement the changes to the curbside collection policy, as outlined in this report; and,
- 4. Direct staff to provide Committee and Council with an Implementation Plan and Readiness Update no later than Q1 2024 (or four months prior to program implementation).

RECOMMANDATION(S) DU RAPPORT

Que le Comité de l'environnement recommande au Conseil municipal :

- d'approuver les changements suivants à apporter à la version actuelle de la Politique de la Ville sur la collecte des déchets résidentiels déposés sur le bord des rues, selon les modalités exposées dans ce rapport, à savoir :
 - a. Programme de péage d'une partie des frais de dépôt des déchets, prévoyant une provision annuelle de 55 articles à jeter et assorti de l'option permettant aux résidents d'acheter des étiquettes supplémentaires;

- b. l'expansion du Programme spécial de collecte des déchets de la Ville, pour l'étendre aux déchets médicaux non dangereux;
- demander au personnel de la Ville d'inclure, dans le cadre du processus de budgétisation de 2024, les sommes nécessaires pour les dépenses en immobilisations et les dépenses d'exploitation, de même que pour les frais d'utilisation, selon les modalités précisées dans le rapport;
- 3. de déléguer au directeur général de la Direction générale des travaux publics le pouvoir d'apporter les modifications correspondantes au Règlement sur la gestion des déchets solides n° 2012-370 afin de mettre en œuvre les changements relatifs à la politique sur la collecte des déchets résidentiels déposés sur le bord des rues, selon les modalités exposées dans le présent rapport;
- 4. de demander au personnel de la Ville de soumettre, au Comité et au Conseil municipal, un plan de mise en œuvre et un compte rendu sur les préparatifs au plus tard durant le premier trimestre de 2024 (ou quatre mois avant la mise en œuvre du Programme).

EXECUTIVE SUMMARY

Assumption and analysis

The purpose of this report is to recommend changes to Ottawa's curbside waste diversion policy to encourage residents to alter their disposal habits to promote continued increased participation in waste reduction and diversion programs, helping position the City to meet provincially mandated targets, which the City is currently falling short of, and to extend the life of the landfill by encouraging more sustainable waste management habits. Establishing a new landfill or implementing alternative technologies could cost the City and taxpayers between \$300 and \$450 million and take up to 15 years to become fully operational. The remaining air space at the landfill is being consumed daily, and every decision made on waste reduction and diversion will have implications on the life of this asset, which is expected to reach capacity in the next 13 years if no changes are made.

Exploring opportunities to optimize and extend the life of the Trail Waste Facility Landfill was identified as a priority by City Council through Phase 1 of the Solid Waste Master Plan (<u>ACS2019-PWE-SWS-0001</u>) (Waste Plan). Extending the life of the Trail Waste Facility Landfill and deferring the need to invest in a new landfill or alternative residuals

management technology requires a multi-pronged approach, including medium and longer-term actions that will be presented to Council through the Waste Plan, as well as a series of shorter-term actions that are being developed alongside the Waste Plan to support its vision, guiding principles, and goals. Together, the shorter-term actions will have a cumulative impact on extending the life of the landfill by reducing unnecessary waste to landfill and increasing diversion. The proposed curbside waste diversion policy is one of those critical short-term actions. Programs like this policy, which encourage changes in resident behaviour, will also have compounding benefits over the long term, as the City is required to manage the waste footprint beyond the life of the existing Trail Waste Facility Landfill. As part of this multi-pronged approach, staff recommend a Partial Pay-As-You-Throw program that would provide each household receiving curbside waste collection services with 55 garbage tags per year as a part of their annual Solid Waste User Fee paid on their tax bill and the flexibility to use them when needed throughout the year. Under this proposed model, garbage would be treated like a utility similar to water, hydro, and gas, where households pay based on their use of the program. Households that need to set out more than the 55 garbage items per year allotted to each household could purchase additional tags on a cost recovery basis. There would continue to be no limit to how much properly sorted recycling, organic and leaf and yard waste households can set out through diversion programs. Staff are also recommending expanding the City's Special Considerations Program to include nonhazardous medical waste, which would not count toward a household's annual allotment of tags.

While the recommended policy would require some level of change for all residents (i.e. tagging waste set out at the curb), only one in four residents would have to change their waste management habits to divert recycling and organic materials from the garbage to the blue, black, or green bin. The majority of curbside garbage set-outs (74 per cent) already had two garbage items or less at the curb for collection.

The policy is intended to reduce unnecessary waste from going to landfill by providing incentive for residents to fully participate in waste diversion programs and practice more sustainable waste management habits. Currently, approximately 58 per cent of what residents are placing at the curb could be diverted through the City's recycling or green bin programs. The set-out study also found that participation in waste diversion programs decreased as households set out more garbage items. The purpose of this policy is to encourage residents to evaluate what they are setting out for garbage collection and increase use of the existing recycling and Green Bin programs.

Based on the experiences of other Ontario municipalities with Partial Pay-As-You-Throw programs and analysis of Ottawa's waste stream, this policy is estimated to:

- Reduce garbage tonnage by up to 19 per cent per capita in year one and up to 28 per cent per capita in year five;
- Increase the curbside waste diversion rate by up to six per cent;
- Capture up to 5,825 additional tonnes of black bin recyclables, 4,395 tonnes of blue bin recyclables, and 7,651 tonnes of organic and leaf and yard waste; and,
- Extend the life of the landfill by an estimated two years, as part of a multipronged approach to have a greater cumulative impact on extending the life of the landfill, deferring the need to implement a costly new landfill or alternative technology in the short-term.

If approved by Council, waste collection would remain status quo and residents would not see this change at the curb until Q2 2024. Work would begin immediately to formalize and launch an internal working group of City service areas impacted by the change to collaborate and provide input to support implementation planning, based on their respective areas of expertise. Staff would provide an Implementation Plan and Readiness Update to Council in Q1 2024, including a communications plan and graduated enforcement strategy.

Pay-As-You-Throw waste collection models are in place in 132 municipalities across Ontario, including Carleton Place, Russell, and North Grenville, with an additional 39 municipalities having a firm garbage limit in place. It should be noted that Ottawa is one of the last major municipalities across Canada to consider and enforce a curbside waste diversion policy. In preparation of the implementation plan, staff will review the best practices in comparator municipalities with longer term experiences with these programs to support proper program planning.

Financial implications

If approved, there would be a one-time capital cost of up to \$3.5 million in 2024, funded from the reserve, for a citywide promotion and education campaign, additional recycling and green bins for residents, and temporary staff to help implement the program. In addition, there would be an estimated increase in the annual operating budget of up to \$1.5 million per year starting in 2024 (to be requested through the 2024 budget process) for increased organics processing, preparation, and distribution of tags to all

households, and two additional Solid Waste Inspectors. Staff estimate that the sale of additional tags could offset operating costs by approximately \$450,000 per year in year one and decrease to approximately \$400,000 by year five, as behaviour changes.

Public consultation

The City undertook extensive public engagement on the policy options explored through this project in 2021. A detailed overview of the feedback shared by residents and stakeholders is contained in the What We Learned Report, appended to this report as Document 2.

Public engagement included a comprehensive online public survey that received more than 20,000 responses, a representative panel survey, online workshops with residents and stakeholders to discuss the options, virtual focus groups with equity-deserving organizations, and conversation kits that enabled groups to deliberate on the options within their communities. The feedback received through this engagement was critical to better understand public opinion, including the unique risks and considerations of how introducing a new policy at the curb could influence residents. Feedback from engagement was used to help inform the recommendations as well as implementation and risk mitigation plans.

Through the City's engagement, respondents were asked to select their preferred option for a curbside waste diversion policy. Partial Pay-As-You-Throw program was the most preferred option with 41 per cent of public and 30 per cent of panel respondents (representative sample). When asked what drove this preference, respondents stated the flexibility offered by the program in allowing households to set-out additional garbage above the limit if needed (versus a firm limit that does not permit additional waste to be set out for collection) was key. When it came to the garbage limit, 79 per cent of public respondents and 80 per cent of panel respondents supported reducing from the current limit.

The public survey also outlined and sought feedback on potential implications and risks that would need to be considered through implementation of a new curbside policy. Respondents identified illegal dumping and impact on low-income households as the top two risks for the City to manage. Staff recognize that significant program planning would be required to prepare residents and staff for a curbside policy change, and respondents were able to provide feedback through the survey to identify barriers and challenges that may occur.

RÉSUMÉ

Hypothèse et analyse

L'objectif de ce rapport consiste à recommander les changements à apporter à la Politique du réacheminement des déchets déposés en bordure de rue à Ottawa afin d'encourager les résidents à modifier leurs habitudes dans l'élimination des déchets pour promouvoir continuellement l'amélioration de la participation aux programmes de réduction et de réacheminement des déchets, en permettant à la Ville d'être en mesure d'atteindre les cibles obligatoires du gouvernement provincial, qu'elle n'atteint pas à l'heure actuelle, et de prolonger la durée utile de la décharge publique en encourageant les résidents à adopter des habitudes plus durables dans la gestion des déchets. L'aménagement d'une nouvelle décharge publique ou le recours à d'autres technologies pourrait coûter, à la Ville et aux contribuables, entre 300 millions et 450 millions de dollars, et il se pourrait que l'on doive compter 15 ans avant que cette décharge soit parfaitement opérationnelle. Le reliquat de la capacité de la décharge publique s'épuise chaque jour, et toutes les décisions adoptées dans la réduction et le réacheminement des déchets auront des répercussions sur la durée utile de cette infrastructure, qui devrait atteindre le maximum de sa capacité dans les 13 prochaines années si aucun changement n'est apporté.

Le Conseil municipal a donné une priorité à l'étude des possibilités permettant d'optimiser et de prolonger la durée utile de la décharge du chemin Trail dans le cadre des approbations délivrées dans la phase 1 du Plan directeur de la gestion des déchets solides (ACS2019-PWE-SWS-0001). Pour prolonger la durée utile de la décharge du chemin Trail et pour reporter la nécessité d'investir dans une nouvelle décharge ou dans une autre technologie de gestion des déchets résiduels, il faut adopter une approche à plusieurs volets, notamment des actions à moyen et à plus long termes, qui seront présentées au Conseil municipal dans le Plan directeur, avec une série d'actions à plus court terme que nous sommes en train d'élaborer de concert avec le Plan directeur afin d'en étayer la vision, les principes cadres et les objectifs. Dans l'ensemble, ces actions à plus court terme auront un impact cumulatif sur la prolongation de la durée utile de la décharge publique, en réduisant les déchets inutilement enfouis dans cette décharge et en augmentant le réacheminement des déchets. La Politique du réacheminement des déchets déposés en bordure de rue est l'une de ces actions essentielles à court terme. Les programmes qui, comme cette politique, encouragent les résidents à changer de comportements viendront aussi multiplier les bienfaits à long terme, à l'heure où la Ville doit gérer son empreinte dans la gestion des déchets audelà de la durée utile de la décharge du chemin Trail existante.

Dans le cadre de cette approche à plusieurs volets, le personnel de la Ville recommande d'adopter un programme de péage d'une partie des frais de dépôt des déchets; dans le cadre de ce programme, chaque ménage qui a droit aux services de collecte des déchets en bordure de rue recevrait 55 étiquettes de sac par an, qui seraient payées à même ses frais annuels d'utilisation des services de gestion des déchets solides, réglés dans sa facture de taxes et aurait la possibilité de se servir toute l'année de ces étiquettes dans les cas nécessaires. Ce programme cadre avec le contingent moyen par ménage de 2,1 articles à ramasser toutes les deux semaines, ainsi qu'avec le nombre d'articles à jeter que trois ménages sur quatre déposent déjà sur le bord de la rue, comme le confirme l'étude sur la collecte des déchets résidentiels menée sur tout le territoire de la Ville à l'automne 2022. En vertu de ce modèle proposé, la collecte des déchets serait considérée comme un service public au même titre que l'aqueduc, l'hydroélectricité et le gaz : les ménages paieraient des frais en fonction de l'utilisation qu'ils font du programme. Les ménages qui doivent déposer sur le bord de la rue plus de 55 articles à jeter par an, selon le contingent fixé pour chaque ménage, pourraient acheter des étiquettes supplémentaires selon le principe de la récupération des coûts. Il n'y aurait toujours pas de limite quant au volume de matières recyclables, de déchets organiques et de feuilles et résidus de jardinage que les ménages peuvent déposer sur le bord de la rue dans le cadre des programmes de réacheminement. Le personnel recommande aussi d'étendre le Programme spécial de collecte de déchets aux déchets médicaux non dangereux, qui ne compteraient pas dans la provision annuelle d'étiquettes des ménages.

Si la politique recommandée oblige tous les résidents à adopter de nouveaux comportements dans une certaine mesure (par exemple en étiquetant les déchets déposés sur le bord de la rue), seulement un résident sur quatre devrait changer ses habitudes dans la gestion des déchets afin de réacheminer les matières recyclables et organiques au lieu de les jeter aux ordures dans les bacs bleus, noirs ou verts. Dans la majorité des cas où les déchets sont déposés en bordure de rue (74 %), on impose déjà une limite de deux articles ou moins à ramasser sur le bord de la rue.

Cette politique vise à réduire les déchets inutilement enfouis dans la décharge publique en incitant les résidents à participer à part entière aux programmes de réacheminement des déchets et à adopter des pratiques plus durables dans la gestion des déchets. À l'heure actuelle, on pourrait réacheminer environ 58 % de ce que les résidents déposent sur le bord de la rue dans le cadre des programmes de recyclage ou de bacs verts de la Ville. L'étude sur la collecte des déchets a aussi permis de constater que la participation aux programmes de réacheminement des déchets a baissé puisque les ménages

déposent plus d'articles à ramasser. L'objectif de cette politique consiste à encourager les résidents à évaluer ce qu'ils déposent sur le bord de la rue pour le faire ramasser et à utiliser davantage les programmes existants de recyclage et de bacs verts.

D'après l'expérience vécue dans d'autres municipalités de l'Ontario dans le cadre des programmes de péage d'une partie des frais de dépôt des déchets et selon l'analyse des courants de gestion des déchets d'Ottawa, on estime que cette politique :

- réduira le tonnage des déchets à hauteur de 19 % par habitant dans la première année et de 28 % par habitant dans la cinquième année;
- augmentera à hauteur de 6 % le taux de réacheminement des déchets déposés en bordure de rue:
- permettra de capter 5 825 tonnes supplémentaires de matières recyclables dans les bacs noirs, 4 395 tonnes de matières recyclables dans les bacs bleus et 7 651 tonnes de déchets organiques et de feuilles et résidus de jardinage;
- augmentera la durée utile de la décharge publique d'environ deux ans, dans le cadre d'une approche à plusieurs volets destinée à produire un impact cumulatif plus important sur le prolongement de la durée utile de la décharge publique, en reportant la nécessité d'aménager une nouvelle décharge publique coûteuse ou de faire appel à une autre technologie à court terme.

Si le Conseil municipal donne son approbation, la collecte des déchets continuerait de se dérouler comme d'habitude (statu quo), et ce changement dans la collecte des ordures déposées sur le bord de la rue ne se produirait pas, pour les résidents, avant le deuxième trimestre de 2024. On lancerait immédiatement les travaux pour mettre officiellement sur pied un groupe de travail interne réunissant les secteurs d'activité de la Ville touchés par ce changement afin de collaborer et d'apporter son concours dans la planification de la mise en œuvre, d'après leurs compétences respectives. Le personnel de la Ville soumettrait au Conseil municipal, au premier trimestre de 2024, un plan de mise en œuvre et un compte rendu des préparatifs, ainsi qu'un plan de communication et une stratégie de mise en application progressive.

Les modèles de collecte des déchets selon le principe du péage des frais de dépôt sont en place dans 132 municipalités partout en Ontario, dont Carleton Place, Russell et North Grenville; 39 autres municipalités ont institué une limite ferme pour le nombre d'articles à jeter. Il convient de signaler qu'Ottawa est l'une des dernières grandes municipalités du Canada à envisager d'appliquer une politique sur le réacheminement

des déchets déposés en bordure de rue. En prévision du plan de mise en œuvre, le personnel de la Ville passera en revue les règles de l'art appliquées dans les municipalités comparables qui ont une expérience plus longue de ces programmes afin de veiller à bien planifier ce programme.

Répercussions financières

Si le Conseil donne son approbation, il faudrait engager en 2024 des dépenses en immobilisations ponctuelles à hauteur de 3,5 millions de dollars, qui seraient financées à même la réserve, pour mener, sur tout le territoire de la Ville, une campagne de promotion et d'information, pour fournir aux résidents des bacs de recyclage et des bacs verts supplémentaires et pour mobiliser le personnel temporaire qui participera à la mise en œuvre du programme. En outre, il faudrait augmenter le budget de fonctionnement annuel de l'ordre de 1,5 million de dollars par an à partir de 2024 (en déposant la demande dans le cadre du processus de budgétisation de 2024) pour accroître le traitement des matières organiques, la préparation des étiquettes et leur distribution parmi tous les ménages, ainsi que pour deux inspecteurs supplémentaires de la gestion des déchets solides. Le personnel de la Ville estime que la vente des étiquettes supplémentaires pourrait compenser les frais d'exploitation pour des sommes d'environ 450 000 \$ par an dans la première année et d'environ 400 000 \$ dans la cinquième année, grâce aux changements de comportement.

Consultation publique

La Ville a mené, en 2021, une vaste consultation publique sur les options étudiées dans la mise au point des politiques. Le lecteur trouvera dans le rapport sur « Ce que nous avons appris », joint à ce rapport dans la pièce 2, une vue d'ensemble détaillée des commentaires exprimés par les résidents et par les intervenants.

La consultation publique a consisté à mener un sondage public en ligne complet, qui a donné lieu à plus de 20 000 réponses, un sondage par panel représentatif, des ateliers en ligne avec les résidents et les intervenants pour discuter des options, des réunions virtuelles de groupes de discussion avec les organisations méritant l'équité, en plus de prévoir des trousses de dialogue grâce auxquelles les groupes pouvaient s'exprimer sur les options dans leur communauté. Les commentaires exprimés dans cette consultation ont été essentiels, puisqu'ils ont permis de mieux connaître l'opinion publique, notamment à propos des risques et des considérations essentielles dans les moyens d'adopter une nouvelle politique qui pourrait influencer les comportements des résidents dans le dépôt des déchets sur le bord de la rue. Nous nous sommes inspirés des

commentaires réunis dans ces consultations pour éclairer les recommandations, ainsi que les plans de mise en œuvre et de maîtrise des risques.

Dans le cadre de cette consultation menée par la Ville, on a demandé aux répondants de sélectionner l'option qu'ils préféraient pour une politique sur le réacheminement des déchets déposés en bordure de rue. Le programme de péage d'une partie des frais de dépôt des déchets a été l'option privilégiée par 41 % du public et 30 % des répondants au sondage par panel (échantillon représentatif). Lorsqu'on leur a demandé ce qui expliquait cette préférence, les répondants ont fait savoir que la souplesse offerte par ce programme en permettant aux ménages de déposer sur le bord de la rue des sacs à ordures en sus de la limite (par rapport à une limite ferme, qui ne permet pas de déposer des sacs à ordures supplémentaires à ramasser) était essentielle. S'agissant de la limite fixée pour le nombre de sacs à ordures, 79 % de ceux et celles qui ont répondu au sondage public et 80 % de ceux et celles qui ont répondu au sondage par panel étaient favorables à l'idée de réduire la limite actuelle.

Dans le sondage public, on a aussi décrit dans leurs grandes lignes les incidences et les risques potentiels dont il faudrait tenir compte dans la mise en œuvre d'une nouvelle politique sur la gestion des déchets déposés en bordure de rue et on a demandé aux résidents d'exprimer leur avis sur ces questions. Les résidents ont fait savoir que le déversement illicite des déchets et l'impact sur les ménages à revenus faibles constituaient les deux grands risques à gérer par la Ville. Le personnel de la Ville reconnaît qu'il faudrait consacrer d'importants efforts à la planification du programme afin de préparer les résidents et le personnel à ce changement de politique sur la gestion des déchets déposés en bordure de rue, et les répondants ont pu, grâce à ce sondage, exprimer leur avis et cerner les obstacles et les difficultés qui pourraient surgir.

BACKGROUND

The City of Ottawa (the City) manages a complex, integrated solid waste management system that maintains public health, supports environmental sustainability, and collects garbage, recycling and organic waste from approximately 306,000 curbside properties and 2,150 multi-residential properties. The City also provides waste collection services to 240 City-owned facilities, 1,950 parks and public spaces, approximately 300 small businesses through the City's Yellow Bag program, and 240 schools with green bin collection through the City's Green Bins in Schools program.

The City's waste management programs are funded through a hybrid funding model

approved by Council in 2005 (ACS2005-CCS-CSE-0014). Waste diversion program costs are funded by all tax classes from the assessment-based tax bill, and costs for managing garbage, including collection and landfill disposal, are funded by residential and multi-residential properties paying a uniform flat fee (the Solid Waste User fee). The City also generates revenue through various sources to help offset part of the costs for managing waste, including tipping fees at the Trail Waste Facility Landfill, sale of recyclables, and royalty revenue from landfill gas electricity generation.

In 2007, the City implemented a garbage item set-out limit of six items bi-weekly (ACS2006-PWS- UTL-0017), and that limit has not changed since. Schedule F of the Solid Waste Management By-law permits a garbage bag, container, or bulky item to be considered a garbage item, so long as it meets the size and weight parameters described within the by-law. The City has focused primarily on educating residents to encourage participation in waste diversion programs and does not actively enforce the current bag limit.

The current curbside collection service levels for curbside households were approved by Council in 2011 and implemented on October 29, 2012. The most significant change implemented through the 2011 service level review was the shift from weekly to biweekly garbage collection. Other service levels approved as part of the Solid Waste Service Level Review report (ACS2011-ICS-ESD-0002) are outlined below:

- Uniform curbside collection service levels across the city, including rural, suburban and urban;
- Weekly Green Bin collection, including leaf and yard waste;
- Bi-weekly collection of Blue and Black Box on alternating weeks;
- Bi-weekly garbage collection; and,
- Bi-weekly Special Considerations Program for diapers and incontinence products, alternating with the garbage collection week.

Part of the 2011 Solid Waste Service Level Review considered lowering the garbage item limit and introducing a curbside waste diversion policy such as a Clear Bag Garbage Program or a Partial Pay-As-You-Throw Program. These options were not carried forward at the time due to strong public opposition, and to allow time for residents to adjust behaviours in light of the newly implemented Green Bin program and the introduction of bi-weekly garbage collection.

The Special Considerations Program was established as a result of feedback received through the 2011 Service Level Review stakeholder review process to accommodate residents requiring collection of diapers and incontinence products on the weeks without scheduled garbage collection. Under the current program, participating households can place one bag of diapers and/or incontinence products out for collection on the alternating week from garbage collection.

Despite industry best practice to regularly monitor and assess waste program performance and make diversion policy recommendations as residents alter their disposal habits to promote continued increased participation in waste reduction and diversion programs, Ottawa has not considered a curbside garbage policy change since 2012. Considering implementation of a new waste diversion policy supports alignment with Provincial legislation and municipal initiatives to increase the City's waste diversion rate, helps reduce greenhouse gas emissions associated with the presence of organics in landfill, and supports turning more waste into new products and resources.

Trail Waste Facility Landfill - Landfill Life

The City owns and operates the Trail Waste Facility Landfill, which is an important City asset. Air space continues to be consumed daily and every decision made on waste reduction and diversion will have implications on the life of the asset. As previously shared in the Phase 2 Solid Waste Master Plan (ACS2021-PWE-SWS-0003) report received by Council in July 2021, if changes aren't made to waste disposal habits, the Trail Waste Facility Landfill could reach capacity between 2036 to 2038. Siting and developing a new landfill or implementing an alternative residual management technology can take up to 15 years and cost the City and taxpayers between an estimated \$300 and \$450 million dollars. These disposal options will continue to require community participation in waste diversion programs to comply with Provincial regulations and reduce the amount of unnecessary waste being processed as garbage.

Exploring opportunities to optimize and extend the life of the Trail Waste Facility Landfill was identified as a priority by City Council through Phase 1 of the Solid Waste Master Plan (ACS2019-PWE-SWS-0001) to defer this substantial investment as long as possible. Extending the life of the Trail Waste Facility Landfill requires a multi-pronged approach, including complimentary short and long-term actions that support the Council-approved goals of the Waste Plan. The shorter-term actions (known as "component projects" of the waste plan, including the subject of this report - a new curbside waste diversion policy) will have a cumulative impact on extending the life by reducing waste to landfill and increasing diversion, positioning the City to meet

provincial requirements, outlined in this report. Exploring and incorporating programs that encourage changes in resident behaviour will also have the potential for compounding benefits over the long term, reducing the waste footprint the City is required to manage beyond the life of the Trail Waste Facility Landfill.

Ottawa's Diversion Rates and Program Participation

Council has adopted several program enhancements over the past 13 years to reduce waste to landfill, increase waste diversion rates and program participation, and encourage more sustainable waste management habits.

Ottawa residents responded to the implementation of the Green Bin program in 2010 which supported a city-wide waste diversion rate increase by seven per cent, and an additional five per cent three years later following the adoption of bi-weekly garbage collection in 2012. As outlined in the Source-Separated Organics Program Update report in May 2021 (ACS2021-PWE-SWS-0001), the city-wide waste diversion rate increased an additional three per cent after the implementation of the Green Bin Program Enhancements in 2019 which allowed plastic bag liners to be used to reduce the "yuck factor" – which was identified by residents as one of the top barriers to participating in the program – and the disposal of dog waste into the green bin. The program changes were also coupled with a comprehensive year-long communications, education, and outreach strategy. The report acknowledged that performance measurement took place during the COVID-19 global pandemic and additional program monitoring would need to take place. The 2022 city-wide diversion rate was 46 per cent (53 per cent for curbside households and 17 per cent for multi-residential properties, based on collected tonnages).

While diversion rates have generally been improving over the past 13 years due to Ottawa residents responding to the implementation of various policies, program changes, education and outreach campaigns, the curbside household diversion rate is well below the rate of comparator municipalities across Canada, as evidenced in the industry scan undertaken as part of Phase 1 of the development of the City's new Solid Waste Master Plan (ACS2020-PWE-SWS-0001).

The City's 2018-2019 Four Season Curbside Waste Audit Study showed that 58 per cent of garbage collected from curbside households could be diverted through diversion programs (13 per cent of waste in the garbage stream was recyclable material and 45 per cent was green bin material, by weight). Furthermore, market research undertaken in 2018 and 2020 identified that not all residents were using diversion programs to their

full potential. Residents identified the main reason for not using the programs more was simply that they "forget or put material in the garbage by mistake". When residents not using the green bin at all were asked why, a quarter of respondents said they "don't have a green bin" while just under one-fifth of respondents (19 per cent) said it is "inconvenient to participate".

Table 1: Top reasons for not using recycling programs (2018 Market Research)

Reason for not using recycling bin	Percentage of Respondents in	
more	Agreement	
Forget / put things in the garbage by mistake	26% (Blue Bin); 28% (Black Bin)	
Others in household don't recycle enough	18% (Blue Bin); 10% (Black Bin)	
Not sure what goes in the bins	16% (Blue Bin); 9% (Black Bin)	
Too lazy sometimes	12% (Blue Bin); 8% (Black Bin)	

Table 2: Top reasons for not using the green bin (2020 Market Research)

Reason for not using green bin at all	Percentage of Respondents in
	Agreement
Don't have a green bin	25%
Inconvenience	19%
Do their own composting	15%
Attracts bugs, vermin or other animals	12%
Reason for not using green bin more	Percentage of Respondents in
	Agreement
Forget or put things in the garbage by	24%
mistake	
It gets smelly, messy or gross	16%

Others in the household don't use it much or at all	15%
Not sure what goes in the green bin	14%

This market research underscores the need to support residents by reducing barriers and influencing behaviour to encourage increased participation in recycling and green bin programs. The City continues to educate residents about waste programs through the annual collection calendar, educational posters on waste collection vehicles, targeted advertising campaigns using a variety of online and in-community tactics, and in-person education at public events. While education and outreach initiatives are essential to inform residents about program changes and how to use recycling and green bin programs, both the City's experience and industry insight indicate that education alone is not enough to motivate behaviour change and reduce the barriers identified in the market research.

In 2022, a city-wide curbside set-out study was undertaken to assess waste set-out and recycling program participation. A total of 2,400 household set-outs were sampled over a four week period. The study was designed based on industry best practice. Streets were chosen to ensure a representative sample of urban, suburban and rural households as well as neighbourhood household incomes to support a sample representative of Ottawa's curbside population.

The study found curbside households set out an average of 2.1 garbage items biweekly, with the median set-out rate being two garbage items bi-weekly. This is well below the City's current six-item garbage limit. Results from the study also show that some households continue to set out large amounts of garbage above the current bag limit. Table 3 below shows the participation rates in curbside diversion programs based on the number of garbage items set at the curb.

Table 3: Participation in Diversion Programs Based on 2022 Garbage Set-Out Study

Garbage Items	Percent of	Blue Box Set	Black Box Set	Green Bin Set
Set Out	Households	Out	Out	Out
One or less	48%	87%	68%	73%
Two	26%	88%	69%	66%

Three	11%	85%	69%	65%
Four	6%	86%	67%	63%
Five	4%	82%	68%	58%
Six	2%	78%	66%	48%
More than 6	4%	47%	45%	36%

The participation levels outlined in the table above suggest that as the number of garbage items increase, participation in diversion programs decreases.

While the set-out study indicates 96 per cent of garbage set-outs are within the current six item limit, the current garbage item limit is not encouraging residents to maximize their participation in recycling and organics programs, as more than half of what is in the curbside garbage stream is recycling and Green Bin material. This data, paired with the City's waste diversion rate and market research insights suggest there is still ample opportunity to increase participation in curbside diversion programs among all residents, whether they currently use diversion programs or not.

Drivers for Increasing Diversion and Waste Reduction

In Canada, all three levels of government play a role in waste management, with the federal and provincial governments establishing waste reduction and diversion policies and programs, and providing regulations, standards, approvals, and monitoring of waste management facilities and operations. Municipal governments are typically responsible for managing the collection, recycling, composting, and disposal of household waste in accordance with the policies and regulations established by the upper levels of government.

Both the federal and provincial governments have been making changes to managing waste which has implications for how the City manages residential waste. At both the federal and provincial levels, the issue of waste and climate change, single-use plastics and the concept of a circular economy (i.e. requiring industry to incorporate recycled content into their products, promote a closed-loop system for their packaging and products, and manufacturing products that are more durable, easily repaired and can be recycled or repurposed at end of life) are driving policy and regulatory changes around waste management. Improvements in reducing waste to landfill and increasing diversion will also be essential in complying with Provincial directives moving forward.

The Resource Recovery and Circular Economy Act, 2016, was introduced by the Province and identifies the provincial interest in having a system of waste reduction and resource recovery in Ontario, and allows the Minister of the Environment and Climate Change to issue policy statements to further the provincial interest.

Food and Organic Waste Policy Statement

In 2018, the Province issued the <u>Food and Organic Waste Policy Statement</u> under section 11 of the *Resource Recovery and Circular Economy Act*, 2016 and provided direction to provincial ministries, municipalities, industrial, commercial and institutional establishments, and the waste management sector to increase waste reduction and resource recovery of food and organic waste. The policy statement includes a 70 per cent reduction and recovery target for food and organic waste from curbside households by 2023. The Provincial Government also announced its priority to move towards phasing out food and organic waste sent to landfill by 2030, requiring all Ontario municipalities to work towards achieving these targets. No further updates on the proposed ban on organics from landfill have been shared by the Province.

Ottawa's organics recovery rate is currently falling short of the target, with an approximate 60 per cent organics capture rate, which is heavily driven by high participation in the curbside Leaf and Yard Waste Program. Only 44 per cent of food and other organic waste is being diverted (based on 2018-2019 Four Season Curbside Waste Audit Study). Further, 45 per cent of material in the garbage going to landfill is organic waste. Increasing food waste diversion through the Green Bin program is the biggest opportunity to support achieving the 70 per cent target.

Provincial Transition of Recycling Programs to Individual Producer Responsibility (IPR)

On June 3, 2021, the Ministry of the Environment, Conservation and Parks released the final *Blue Box regulation* (Ontario Regulation 391/21) for the management of Ontario's current Blue Box Program (which includes the City's Blue and Black Bin Programs), which will shift the responsibility of these programs from municipalities to the producers of products and packaging. Under the Provincial Blue Box IPR Program, the City will no longer be responsible for the collection or processing of recyclable materials and would also no longer generate revenues from the sale of these processed materials, as of July 1, 2023.

Following the transition period, producers will implement a province-wide standardized common collection beginning January 1, 2026 and will have to adhere to management targets stated in the *Blue Box regulation*. This will be an important consideration for the

City to support producers in meeting their Provincially mandated targets and keeping recyclable materials and organics out of the Trail Waste Facility Landfill. Further details on the transition of the Provincial Blue Box Program to IPR will be provided through the Update to Provincial Blue Box Program Transition report (ACS2023-PWD-SWS-0002), coming to the Environment and Climate Change Committee on June 5, 2023 and to City Council on June 14, 2023.

The 2018-2019 Four Season Curbside Waste Audit Study found that 25 per cent of blue bin recyclables and 21 per cent of black bin recyclables were disposed of as garbage by curbside households. Based on the experiences of other municipalities with enforced garbage limits, staff anticipate that a new waste diversion policy and enforced garbage limits will influence residents to properly sort and divert their recyclable materials to appropriate recycle bins.

Alignment with City Projects

Enhancing diversion and program participation rates support the achievement of objectives and targets outlined in several Council-approved projects and initiatives.

Solid Waste Master Plan

The City is in the midst of developing a new Solid Waste Master Plan (Waste Plan) which will provide the overall framework, direction, and goals for solid waste management, diversion and reduction over the next 30 years. The Waste Plan includes a series of actions and component projects that will have a cumulative impact on extending the life of the landfill through a multi-pronged approach. In 2021, Council approved the Solid Waste Master Plan Phase 2 report (ACS2021-PWE-SWS-0003), with the vision of "A zero Waste Ottawa through progressive, collective and innovative action". Approved goals include extending the life of the landfill by reducing the amount of waste going to landfill and maximizing the reuse and recycling of waste generated by residents. Phase 2 of the Waste Plan also provided a high-level long list of 72 options for managing and diverting waste in the City over the next 30 years, including exploring waste diversion policy mechanisms that include reducing and enforcing garbage set-out limits as well as curbside diversion options like a Pay-As-You-Throw or Clear Bag programs. The Waste Plan also seeks to reduce the amount of waste generated and maximize its reuse, recycling and recovery.

When the Waste Plan Roadmap report was approved by Council in 2019 (<u>ACS2019-PWE-GEN-0007</u>), component projects were identified to be worked on concurrent to the Waste Plan's development to supplement the Waste Plan and ensure momentum

on key Solid Waste files continued in the short term, including the recommendation of a curbside waste diversion policy to reduce waste to landfill and increase participation in waste diversion programs for the City's curbside collection program. Increasing waste diversion from landfill in the short-term (five-year horizon) was identified as a priority by Ottawa City Council, residents, and stakeholders. As outlined in the Phase 2 report, the Trail Waste Facility Landfill is a significant asset for the City and its residents. Establishing a new landfill or implementing alternative technologies like Mass Burn Incineration would cost over \$300 million and take up to 15 years to become fully operational. The remaining air space at the Trail Waste Facility Landfill is being consumed daily, and every decision made on waste reduction and diversion will have implications on the life of the asset, whether that be further extending its life or further reducing its life.

Introducing a new policy change can take upwards of two to three years from development to implementation. As such, advancing this project alongside the Waste Plan's development was considered critical to help meet provincial policy directions, work towards municipal climate change targets, incorporate specifications into the next collection contract and support gradual behaviour change to prepare residents for further recommendations that will be considered through the final Waste Plan, which is currently being developed. The draft Waste Plan will be tabled for Council consideration later this year.

Residuals Waste Management Strategy

Recognizing that the landfill is reaching capacity sooner than previously expected, the development of a Residuals Waste Management Strategy was identified as a component project of the Waste Plan. The strategy was approved by Council in October 2021 (ACS2021-PWE-SWS-0005) to optimize the remaining airspace available and reduce the amount of waste going to landfill in the short to medium-term, while longer term actions were explored as part of the Waste Plan.

The Residuals Waste Management Strategy outlines the framework to explore the possibility of implementing a combination of policies, programs, and mechanisms, all which have been previously identified through the Waste Plan's Long-Term Waste Management Needs, to reduce or divert the amount of waste sent to the landfill for disposal. The goal of the Residuals Waste Management Strategy is to identify short-term opportunities to divert waste from the Trail Waste Facility Landfill and continue to make operational improvements at the site in order to preserve, to every extent possible, the remaining capacity of the landfill. Each opportunity identified in the

strategy will be quantified based on the impact, including considering the expected potential for preserving capacity, the environmental impact and the financial implications of implementation.

Climate Change Master Plan

On January 29, 2020, Council approved ambitious targets to reduce the City's corporate greenhouse gas (GHG) emissions by 100 per cent by 2040 and city-wide emissions by 100 per cent by 2050 through the Climate Change Master Plan (ACS2020-PIE-EDP-0053). The Climate Change Master Plan is the framework for how Ottawa will mitigate and adapt to climate change over the next 30 years. Energy Evolution, Ottawa's Community Energy Transition Strategy (ACS2020-PIE-EDP-0036) was approved by Council in October 2020 and sets the framework for how the GHG emission reduction targets can be achieved. The strategy projected that diverting organics from the landfill and using the organic material to make renewable natural gas is one of the top five most impactful actions to achieving the GHG targets. Energy Evolution also identified the "Organics Resource Recovery Strategy" as one of the 20 projects to accelerate action and investment by 2025, of which the Solid Waste Master Plan is a critical component. Energy Evolution calls for 98 per cent diversion of food and organic waste by 2024 and 100 per cent diversion of paper products by 2042 from landfill to support achieving Council's targets. (Of note, the target to divert 98 per cent of organic waste from landfills by 2024 was based on the former provincial government's proposal to ban organics from landfills as early as 2022. Given that this ban has not been put in place to date, emission reductions will need to be found elsewhere in the short-term to stay on track to achieving the GHG targets.) Implementing a new curbside waste diversion policy supports increasing diversion of these materials in alignment with the Councilapproved targets.

New Official Plan

The City's new Official Plan (ACS2021-PIE-EDP-0036) was approved by Council in October 2021 with a vision for Ottawa to be the most livable mid-sized city in North America over the next century. Environmental, climate and health resiliency were embedded into the framework of the Official Plan's policies as cross cutting issues. Diverting waste from landfill and working towards the Waste Plan's vision of a zero-waste Ottawa were promoted as critical to the health and sustainability of the community.

Considering established provincial and municipal targets requiring increased waste diversion and that 58 per cent of the curbside garbage stream could be diverted through recycling and green bin programs, this report is recommending that Council consider a change to the City's current waste diversion policy to increase participation in recycling and green bin programs, reduce waste to landfill, and encourage a shift in community values for Ottawa residents to collectively contribute to achieving the City's Waste Plan goals.

DISCUSSION

The purpose of this report is to recommend changes to Ottawa's curbside waste diversion policy and bag limit. If approved, staff would come back to Council no later than Q1 2024 with a detailed implementation plan, including an overview of the operational readiness plan and extensive citywide communications and outreach strategy prior to program rollout in Q2 2024.

This report recommends a Partial Pay-As-You-Throw program for curbside residents, altering the bi-weekly set-out amount to an annual allotment of 55 garbage items, with all items requiring a tag in order to be picked-up. The annual allotment of tags would be distributed to residents every year as a part of their Solid Waste User Fee, with additional tags available for purchase throughout the city on a cost recovery basis. In keeping with the current collection program, there would be no limit to how much waste residents can divert through the blue and black bin and green bin programs, creating an incentive to fully participate in those programs and practice more sustainable waste management habits.

Further, this report recommends expanding the Special Considerations Program to accept non-hazardous medical waste, which would not count toward a household's annual allotment of tags.

Pay-As-You-Throw waste collection models are in place in 132 municipalities across Ontario, with an additional 39 municipalities having a firm garbage limit in place. These are proven policy mechanisms to encourage more sustainable waste management habits by reducing unnecessary waste going to landfill, increasing waste diversion from curbside households and maximizing participation in the curbside recycling and green bin programs.

Recommendation 1A: Approve a Partial Pay-As-You-Throw program policy for curbside residential properties

Development of the final recommendations outlined in this report were based on an analysis of short-listed policy options identified through the Waste Plan (Partial Pay-As-You-Throw, firm garbage limit, clear bags for garbage and materials bans on recyclable and organic material), a comprehensive modelling exercise, municipal scan, a curbside set-out study and feedback received through public and internal engagement. As a result, implementation of a Partial Pay-As-You-Throw program is being recommended, more colloquially known as a "tag-a-bag" program. More information on the policy options analyzed and considered alongside a Partial Pay-As-You-Throw program are contained in Document 1.

The program would allow households to set out 55 garbage items annually beginning in Q2 2024. The annual allotment of 55 garbage tags would be mailed to households at no additional cost to residents as part of the annual Solid Waste User Fee. All garbage items placed at the curb (including bulky items) would require a tag in order to be picked up by collections staff. Additional tags would be available to purchase at a cost of \$3 per tag should a household exceed their annual allotment of tags before year-end. The cost of additional tags is reflective of the cost of disposing one garbage item and is aligned with comparator Ontario municipalities which also have a pay-as-you-throw model in place for curbside collection. Should Council approve the recommended policy changes, as part of implementation planning, staff would work to have additional tags available for purchase at local retailers/community centres, and/or online through the City's website.

Garbage tags are typically stickers that are wrapped around the neck of a garbage bag, as shown in Figure 1. Garbage can still be set out in a garbage container, so long as the container does not exceed the size limitations outlined in the Solid Waste Management By-law and the top bag in the garbage container has a garbage tag affixed to it. Similarly, bulky items set out at the curb would require the tag to be affixed to the top of the item.

Figure 1: Tags Affixed to Different Garbage Set-outs



Benefits of a Partial Pay-As-You-Throw Program

A Partial Pay-As-You-Throw program encourages equity among users by treating waste as a utility-based system, similar to water, hydro, and gas, allowing residents to have some control over what they pay by reducing how much they consume or produce and by using the City's recycling and green bin programs to their fullest. Industry research suggests that advance payment for service creates little to no connection for residents between the amount paid for garbage service and the quantity and composition of waste they discard

This program is intended to encourage households to maximize their use of recycling, green bin, and other City and community diversion programs to reduce divertible waste being sent to landfill, while still offering flexibility for the variability of waste being generated from week-to-week and for circumstances when residents need to set out more garbage than their annual allotment.

Estimated System Impact

Staff retained the support of Dillon Consulting, a consulting firm specializing in environmental science and management, to build a model to estimate the impact of each policy option on Ottawa's waste system. The model was developed by analyzing available data from other municipalities that have implemented each potential policy option and layering City of Ottawa data to understand the potential for a policy option to move waste from the garbage stream to the recycling and organics streams.

Based on the experiences from these municipalities and analysis of the City of Ottawa's waste stream, Dillon Consulting determined the estimated impact that a Partial Pay-As-You-Throw program could have on the curbside waste stream as follows:

- Garbage tonnage reductions: up to 19 per cent per capita (year one) and up to 28 per cent per capita (year five) over baseline year;
- Up to six per cent increase in the curbside waste diversion rate;
- Between an estimated 1,002 and 5,825 additional tonnes of black bin material captured;
- Between an estimated additional 756 and 4,395 tonnes of glass, metal, and plastic captured through the Blue Bin Program; and,
- Increase of an estimated 2,374 to 7,651 tonnes of organic waste collected through the City's Green Bin program and separate leaf and yard waste collection.

The model estimates suggest that a reduction in garbage tonnages could have a positive impact on landfill life. As one component of the multi-pronged approach to extending landfill life, the implementation of a Partial Pay-As-You-Throw program could extend the life of the current landfill by up to an estimated two years. This policy, along with other actions being considered through the Solid Waste Master Plan and the Residuals Management Strategy are anticipated to have a greater cumulative impact on extending the life of the Trail Waste Facility Landfill. Longer term continued reduction of garbage tonnages and increases to participation in recycling and green bin programs will also have lasting benefits beyond the life of the existing Trail Waste Facility Landfill and will be important in considering future residual waste management options and technologies that will be considered through the Residuals Waste Management Strategy and draft Solid Waste Master Plan.

If Council chooses not to implement a curbside waste diversion policy, the anticipated waste reduction tonnages per capita and increases in diversion will not be achieved and landfill capacity will continue to be used at the current rate as the curbside waste program structure is not encouraging resident behaviour change. If the City implements a policy to support reducing waste to the Trail Waste Facility Landfill, the City can delay using landfill capacity by reducing garbage tonnages and increasing waste diversion. If we continue to landfill the way we did in 2022, high-level estimates suggest the landfill capacity we could delay using with the implementation of this policy is valued at between \$1.1 million and \$3 million. It is important to note that there are many factors that can influence the success of a policy change. Population growth, changes in waste composition and product packaging, the economy, demographic changes, severity of climate events, resident behaviour change and the City's approach to education and

enforcement of curbside policies can all impact household waste generation and disposal rates, making it difficult to speculate with any degree of accuracy exactly what the outcome of a new policy option will be. However, all municipalities that have implemented this type of policy change did realize diversion increases and tonnage to landfill reductions.

Rationale for Recommended Garbage Limit

Based on the 2022 Set-Out Study results outlined in the report's background section, 96 per cent of garbage set-outs were below the current six-item limit. As such, the current, generally unenforced six-item limit policy does not encourage new or increased participation in waste diversion programs to reduce waste to landfill and increase capture rates of divertible material. Industry best practice suggests garbage item limits be set at or below the average household set-out to encourage participation in diversion programs. The recommendation of 55 garbage tags annually aligns with this best practice.

Insights from municipalities that successfully implemented a Partial Pay-As-You-Throw program suggest that a reduced garbage limit paired with the policy led residents to rethink their waste disposal habits and adopt more sustainable waste management behaviour, regardless of their current level of participation in recycling and green bin programs. While nearly three-quarters of garbage set-outs had two garbage items or less placed at the curb for collection, providing an annual allotment of tags to households quantifies the level of service included in their annual Solid Waste User Fee and encourages all households to not only maximize participation in recycling and green bin, but also to seek out reuse options prior to disposal, such as charity donations or local buy-nothing groups.

A Partial Pay-As-You-Throw program with an annual allotment of garbage tags supports:

- Equitable service: The Solid Waste User Fee would permit every household to dispose of the same number of garbage items annually at no additional cost.
- Flexibility for households: Set-out study data suggests that household garbage volumes fluctuate from week to week, with the average bi-weekly set-out being 2.1. Having an annual allotment would allow households to use their garbage tags as needed throughout the year, with the option to purchase additional tags if needed.

Enforcement at point of collection: Experiences within Ottawa and those from
other municipalities suggest that enforcement of proper program participation is
essential to achieve the optimal results. Having a requirement for all garbage
items to be tagged will allow for easier enforcement, as collection operators will
collect only items that have a tag.

Recommendation 1B: Expand the City's Special Considerations Program to include non-hazardous medical waste

As mentioned in the background section of this report, the City currently operates a Special Considerations Program which offers eligible residents the ability to set-out diapers and incontinence products for collection on the off week when garbage is not collected. This program was introduced as a result of concerns raised by residents when transitioning to bi-weekly garbage collection in 2011. Residents were concerned about the potential for increased smell from diapers waiting to be collected every two weeks.

A review of the program was undertaken to consider the feasibility of continuing to offer the program and the most appropriate model for doing so to align with a new curbside garbage collection policy. Based on insights from a municipal scan and to address resident concerns about the impact a reduced set-out limit might have on unavoidable medical waste, it is recommended that the current program be expanded to also include non-hazardous medical waste. Examples of non-avoidable non-hazardous medical waste from home healthcare include casts, catheters, colostomy bags (empty and rinsed), disposable pads, gloves, masks, gowns and aprons, dialysis wastes (i.e. tubing, filters, disposable towels and sheets); gastric and nasal tubes (empty and rinsed); IV bags and tubing (empty and rinsed); soiled dressings. Residents will continue to register annually for the program and waste will be collected on the off week of their garbage collection. Waste collected through this program would not count toward a household's annual allotment of tags.

Stakeholder and Resident Engagement

Throughout the development of this project, staff have engaged the Solid Waste Councillor Sponsor's Group (CSG), which was established in <u>2019</u> to ensure a collaborative approach is taken while developing the Waste Plan and its component projects. The CSG provided critical feedback on the project plan and input based on feedback they hear from constituents on solid waste services daily. Their

participation has helped ensure staff were aware of current thinking and concerns as work progressed on developing the recommendations.

Similarly, the Solid Waste Master Plan's Stakeholder Sounding Board has been briefed and engaged through the different stages of the project to solicit input and perspectives from key stakeholders with an interest and/or expertise in solid waste management and to help ensure resident and stakeholder feedback is incorporated wherever possible.

Over a six-week period in Q3 2021, the City hosted extensive public engagement sessions to gather input from residents on various curbside garbage collection policies being explored through this project. The approach to public engagement included a comprehensive online public survey, a representative panel survey, online workshops with residents and stakeholders to discuss the options, virtual focus groups with equity-deserving organizations, and conversation kits that enabled groups to deliberate on the options within their communities.

Conducting a thorough and robust public engagement series was critical to better understand public opinion, including the unique risks and considerations of how introducing a new policy at the curb could influence residents. Feedback from engagement was used to help inform the recommendations as well as implementation and risk mitigation plans.

Participation Highlights

The engagement series solicited feedback from residents and stakeholders on their preferred curbside garbage collection option as well as the factors that influenced their decision, perceived barriers to each option to support staff in development of mitigation strategies, and various education and enforcement approaches that could be used to support residents through the recommended curbside policy change.

The public survey was open to all residents and generated 20,029 responses. Feedback indicated the importance many residents place on curbside garbage collection as a core municipal service. The primary limitation of open public surveys is that the results are not always representative of the larger population. To offset this, a panel survey was conducted during the same time frame with the same questions being posed to 1,000 residents who were selected based on the area of the city they reside in, age, and gender to ensure a representative sample. The margin of error for the

research was ± 3 per cent. This panel survey was done to compare the results from the public survey with a representative sample of people who live in Ottawa.

In addition to the public and panel surveys, 88 participants attended one of four online dialogue sessions about the project and 25 participants attended one of five focus-group sessions held with City for All Women Initiative, Immigrant Women Services Ottawa, Junior Achievement & Youth Ottawa, Canadian Council for the Blind (CCB) and ABLE2 to better understand the concerns and considerations of equity-deserving groups.

Survey Highlights

Respondents were asked to select their preferred option for a curbside waste diversion policy. There was a stronger preference for a Partial Pay-As-You-Throw program among public survey respondents, captured below in Figure 2. When asked why they supported a Partial Pay-As-You-Throw program, respondents stated the flexibility offered by the program in allowing households to set-out additional garbage above the limit if needed was a driver (versus a firm limit that does not permit additional waste to be set out for collection). Respondents who answered "don't know" to this question primarily justified their response that they either supported a combination of options or none of the options.

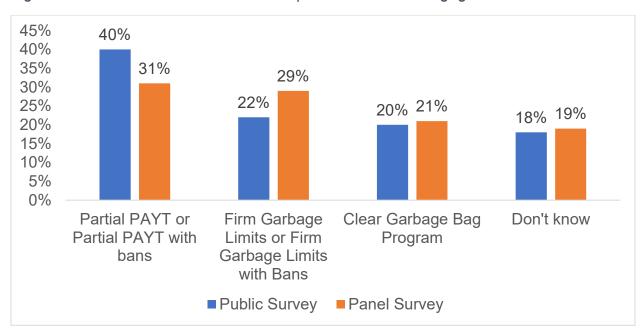


Figure 2 Preferred Curbside Diversion Option from Public Engagement

When it came to the garbage limit, most respondents (79 per cent of public respondents; 80 per cent of panel respondents) supported reducing from what it is currently set at today, supporting the recommendation to align with industry best practice of setting the item limit at or below the average set-out to drive behaviour change and increase participation in green bin and recycling programs.

When participants were asked if people setting out excess garbage items should have to pay, 65 percent of public respondents and 68 per cent of panel respondents agreed.

Implementation Considerations

As with any major policy change, significant program planning would be required to prepare residents and staff. If approved by Council, a detailed implementation plan would be developed and presented to Committee by Q1 2024, which would outline the comprehensive plan to guide residents through the change and adjust to the new policy.

Captured below are some of the implementation considerations which have been identified by members of the public, stakeholders and staff. Despite the proven benefits of a Partial Pay-As-You-Throw program demonstrated by other municipalities (as outlined in Document 1), there are several challenges to consider with the program that may disproportionately impact certain parts of the community (as with any major waste policy change):

- This program may be viewed as unfair to lower income residents and larger households;
- The requirement to purchase tags may receive some negative feedback or resistance from residents during implementation since waste collection may have been considered a "free" service in the past and this could be viewed as an additional tax or fee:
- Some residents may find the cost negligible and purchase tags for easy and convenient participation in garbage set-out, therefore "buying their way out" of participating in waste diversion programs; and,
- Temporary increase in illegal dumping.

Based on the experiences of other municipalities and the City of Ottawa's experience in implementing bi-weekly garbage collection in 2012, many of the items outlined in this section are point in time risks that will taper off as households adjust to the policy change and none are insurmountable with proactive program planning. Discussions

around mitigation strategies and program planning taking place at this point will set the City up for a successful implementation in Q2 2024. These considerations and mitigation strategies will be shared in greater detail as part of the Implementation Plan and Readiness Update to be shared with Committee and Council prior to program rollout.

Financial Considerations

Based on the experiences of other municipalities, when implementing a waste diversion policy and requiring collaboration with service areas to addressing their needs to introduce a program change of this magnitude, the recommendation includes a one-time capital ask of up to \$3.5 million through the 2024 budget to support a robust citywide promotion and education campaign, supply additional diversion bins for residents, and temporary staff to support program implementation. The recommended policy change is also estimated to increase the annual operating budget by up to \$1.5 million per year to account for increased organics processing due to the anticipated increase in organics tonnages diverted from landfill, cost of mailing the annual allotment of tags to all households, and two additional Solid Waste Inspectors to support enhanced proactive education and enforcement, including illegal dumping enforcement. The annual operating cost increase would begin in 2024, albeit 2024 costs are not expected to be the full \$1.5 million given the program implementation is proposed to begin in Q2 2024.

The annual increase to the Solid Waste Services operating budget is expected to be offset by the sale of additional tags, understanding however that the goal of this policy change is to increase waste diversion from landfill. While revenues are expected to fluctuate from year-to-year and are difficult to estimate with any degree of certainty given that they will be heavily influenced by the level of resident behaviour change, staff estimate the potential revenue offset could be approximately \$450,000 per year in year one of the policy change and decrease to approximately \$400,000 per year by year five. As a result of the projected increase in waste reduction of up to 19 per cent per capita in year one and up to 28 per cent per capita in year five, cost offsets are expected to decrease over time as resident behavior changes. If approved, the one-time capital requirement would be funded from the 2024 existing capital envelope, and operating pressures and new FTEs would be included in the draft 2024 budget.

Promotion and Education

Recognizing that, if approved, this would be the first garbage collection policy change since the move to bi-weekly garbage collection in 2012, there will need to be strong communications and community outreach in place to guide residents through the program change and support a successful rollout. Introduction of a Partial Pay-As-You-Throw program would include a robust and ongoing promotion and education campaign and a gradual approach to enforcement. The campaign will focus on raising resident awareness and supporting households in adopting new behaviours and would include a communications toolkit for members of Council to share through their communications channels to share key messages with residents. A detailed overview of the communications and outreach plan, including proposed tactics, will be presented to Council in Q1 2024 as part of the Implementation Plan and Readiness Update. This would be done well in advance of the communications campaign launch in order to adjust as required to incorporate feedback from members of Council.

In line with industry guidelines, a citywide communication campaign would be launched three months ahead of the policy's implementation to ensure residents are aware and prepared for the program change well in advance. Promotion and education will focus not only on how to use a Partial Pay-As-You-Throw program, but also how to properly participate in recycling and green bin programs and remind residents that they can request recycling and green bins from the City by calling 3-1-1 or submitting a service request on Ottawa.ca. The communications and outreach plan will be informed by lessons learned from previous campaigns, including the roll-out of the Green Bin program in 2011, and the Green Bin program changes in 2019. The communications and outreach plan will also heavily rely on a targeted approach, targeting education to communities and households that are not currently participating in waste diversion programs.

Phased-in Approach to Enforcement

The approach taken to enforce the new policy would be critical to the project's success in achieving waste reduction to landfill and increased waste diversion. This is supported by industry research and experiences of other municipalities. Through the implementation plan, staff will be recommending an enhanced, phased-in education and enforcement approach that focuses first on resident education with a graduated transition to enforcement of non-compliance which would include not collecting incorrectly set out garbage. This was the most supported approach according to public engagement. When asked to rate the level of agreement with common enforcement

approaches, 61 percent of public survey responses and 67 per cent of panel responses agreed or felt neutral with the City not collecting incorrectly set out garbage.

Illegal Dumping

Municipalities that have implemented a Partial Pay-As-You-Throw program experienced an initial increase in illegal dumping of household waste that tapered off in the first six months with proactive monitoring, education, and enforcement. If approved by Council, staff will develop an evidence-based comprehensive plan for monitoring areas across the City that regularly experience illegal dumping such as parks, public spaces, rural ditches and receptacles on private property. Educating residents identified as illegally dumping waste and enforcing the City's by-laws for those continuing to illegally dump in high-volume areas was strongly encouraged by other municipalities that have implemented a Partial Pay-As-You-Throw program. Solid Waste Services will work with Roads, Parks Maintenance and By-law Services to minimize the community and social impacts of anticipated temporary increases in illegal dumping activity.

Garbage Tag Distribution and Availability to Purchase

Through public engagement, residents indicated they would prefer to purchase tags at local retailers like grocery and drug stores (74 per cent of public respondents; 77 per cent of panel respondents), followed by ordering online (64 per cent of public respondents; 62 per cent of panel respondents). Staff are exploring several options for residents to purchase additional garbage tags to make it as easy and convenient as possible. A detailed list of locations where additional tags will be available for purchase will be included in the Implementation Plan and Readiness Update if the recommendation is approved by Council.

Equity Considerations

Work to develop options to support specific demographics is underway in order to guide all Ottawa residents through implementation of a Partial Pay-As-You-Throw program.

Lower income households tend to have a slightly higher average garbage set-out (2.5 items compared to 2.1 city-wide). Concerns were raised during public engagement that the requirement to purchase garbage tags may unfairly impact lower-income households. Discussions with the Community and Social Services Department (CSSD) and community partners have been taking place to consider opportunities to provide eligible low-income residents access to additional tags, if required. An update on this

would be included in the Implementation Plan and Readiness Update if the recommendation is approved by Council.

Individuals living in a household with five or more people expressed concerns through public engagement that an item limit could disproportionally impact them. They suggested that the limit be set based on the number of people per home, but this would be too logistically challenging to monitor and implement. A Partial Pay-As-You-Throw program encourages equity among users by charging based on the amount of garbage disposed. Treating garbage like a utility, similar to water and natural gas consumption, distributes costs more fairly among the population in proportion to how much waste is produced, while allowing households to have some control over what they pay by reducing what they put in the garbage. While additional tags will be available for purchase, this program is intended to encourage households to maximize their use of existing diversion programs to limit divertible waste from going to landfill, as the most recent waste audit results indicate that 58 per cent of materials being disposed of in the waste stream could be diverted through recycling and green bin programs.

Neighbourhood Impacts

Public engagement participants identified which region of the city they live in to capture their unique needs and considerations:

- Urban (13 per cent public survey; 24 per cent panel survey);
- Suburban (72 per cent public survey; 69 per cent panel survey); and,
- Rural (15 per cent public; 6 per cent panel).

A Partial Pay-As-You-Throw program was the most preferred option among residents living in rural areas (39 per cent public survey; 27 per cent panel survey), suburban areas (40 percent public survey; 30 per cent panel survey), and urban (38 per cent public survey; 34 per cent panel survey). The top risk identified by all respondents across the city was that a Partial Pay-As-You-Throw program would likely cause an increase in illegal dumping.

When asked to consider a Partial Pay-As-You-Throw program in the online survey, both urban and suburban respondents selected that this option "motivates people to change behaviour" and would have a "positive impact on the environment" as the most impactful elements of this policy option. Rural respondents' ratings were similar, but also rated "easy to use" as being a high consideration with a Partial Pay-As-You-Throw program.

Table 4 below demonstrates garbage item set-outs based on geographic region within the City, and how many households will need to change their waste disposal behaviour. City-wide, 74 per cent of garbage set-outs had two garbage items or less at the curb for collection (meaning 26 per cent of households would need to change their behaviour to comply with a two-garbage item limit), but it ranges from 76 per cent in urban areas to 68 per cent in rural.

Table 4: Bi-weekly Garbage Item Set-out by Geographic Neighbourhood

Garbage	City-Wide	Urban	Suburban	Rural
Items				
Two or less	74%	76%	75%	68%
Three or less	85%	87%	86%	80%
Four or less	91%	91%	91%	88%
Five or less	94%	94%	95%	92%
Six or less	96%	96%	97%	95%

Given the higher garbage set-out rate and lower levels of participation rates in recycling and green bin programs among residents living in rural areas, different approaches are being explored through discussions with members of Council representing Rural communities and internal partners to develop targeted promotion, education and outreach tactics to focus on regions that have lower participation rates in recycling and diversion programs to maximize ability to guide residents through the transition period.

Next Steps

If approved by Council, waste collection would remain status quo and residents would not see this change at the curb until Q2 2024. Staff need this lead time to prepare for the development, implementation and monitoring of a robust promotion and education campaign to ensure residents are properly informed and supported in advance.

Work would begin immediately to formalize and launch an internal working group of City service areas impacted by the change to collaborate and provide input to support implementation planning, based on their respective areas of expertise. As part of the Implementation Plan and Readiness Update, discussions have already begun with the following services:

- Community and Social Services Department to address concerns for socioeconomically disadvantaged households
- By-Law and Regulatory Services to address an expected uptick in illegal dumping and develop an approach to proactive monitoring
- Public Information and Media Relations to prepare a robust and effective promotion and education campaign
- ServiceOttawa and Information Technology Services to ensure printing, distribution and sale of garbage tags is seamless and user friendly for residents and call centre preparedness to answer questions about this report's recommendations and support resident inquiries in the lead up and during the launch of the policy change;
- The Accessibility Office to ensure proper criteria is incorporated with accessible customer service practices and accessible information and communication tactics for widest reach as the plan is being developed; and,
- Financial Services to finalize the capital and operating expenditures associated with the policy change ahead of the 2024 budget season.

Pending approval of the policy recommendation, staff would come back to Committee and Council with an Implementation Plan and Readiness Update in Q1 2024 prior to program rollout. The report will include an overview of the communications campaign and operational readiness for the programs roll-out.

Further, staff recommend conducting a program review and bringing potential amendments and/or further recommendations back to Committee and Council in 2027, following the transition of the provincial Blue Box Program to individual producer responsibility and implementation of the new collection contract, both taking place in 2026. This will allow time for the new policy to roll out and give residents a few years to alter their waste disposal habit to adapt to changes at the curb. Conducting regular program reviews aligns with industry best practice to monitor program success and

make amendments as required to increase diversion efforts as residents continue to adjust their waste disposal behaviours.

FINANCIAL IMPLICATIONS

The City of Ottawa's Solid Waste Services program will face increasing financial pressures due to continuing changes in regulatory requirements over the next several years. The Curbside Waste Diversion policy will have a one-time capital requirement of up to \$3.5M and an estimated annual operating cost of up to \$1.5M. The one-time capital requirement to support program implementation including additional diversion bins, program staff, and a city-wide promotion and education campaign will be funded from the existing capital envelope.

The annual operating cost of up to \$1.5M from the recommended policy change will cover increased organics processing, mailing annual allotment of tags to households, and two additional FTE's to support proactive education and enforcement. The operating costs will be offset from the sale of additional tags, which are forecasted to fluctuate in the first years of the program. Initial estimates of annual revenue from the sale of additional tags ranges from \$450K in year one to \$400K in year five, making the estimated net operating cost approximately \$1.0M. The net operating costs will be funded from the Solid Waste Curbside Service charge. The impact on the average household is estimated to be \$3 annually in addition to the base budget increase that will be required and determined as part of the 2024 budget exercise.

LEGAL IMPLICATIONS

There are no legal impediments associated with the implementation of the recommendations of this report.

COMMENTS BY THE WARD COUNCILLOR(S)

This is a City-wide report.

ADVISORY COMMITTEE(S) COMMENTS

There are no advisory committee comments for this report.

CONSULTATION

Staff carried out an extensive public engagement process to gather input from as many residents as possible surrounding proposed changes to Curbside Garbage Collection

Services. Recognizing the significant interest and impact to residents and stakeholders, both broad and targeted communication tactics were deployed, including:

- Newspaper and bus advertisements;
- Promotional videos on social media and earned media;
- Promotion of the engagement opportunity on a Green Bin and Recycling mailout being distributed to all residents;
- Reaching out to groups identified through the City's Equity and Inclusion lens and workingwith the City's Integrated Neighbourhood Services Team to connect with various communities; and
- Providing a Councillor Toolkit to all Members of Council to enable promotion in their respective wards.

Public Engagement included a deliberative, Choicebook™ survey available via the Engage Ottawa website and open to all residents ("public survey"), a supplemental representative public opinion research sample ("panel survey") of Ottawa residents, four online dialogue sessions, and five focus groups with equity-deserving groups, including persons with disabilities, women, newcomers to Canada and youth. The representative sample was solicited through Leger, a market research firm.

Respondents were selected along region of the city they reside in, age and gender. The margin of error for the research was \pm 3 per cent. This panel survey was done in order to compare and contrast the results from the public survey with a representative sample of people who live in Ottawa.

Residents could also provide additional input through the City's <u>Engage Ottawa</u> website, via e-mail and by telephone. The public survey was open to all residents of Ottawa from August 6 to September 12, 2021 and generated 20,029 responses. A detailed overview of the feedback shared by residents and stakeholders contained in the What We Learned Report, appended to this report as Document 2.

ACCESSIBILITY IMPACTS

Any changes to Ottawa's curbside waste diversion policy, if approved, would be implemented in accordance with the <u>Integrated Accessibility Standards Regulation</u> (IASR) of the <u>Accessibility for Ontarians with Disabilities Act, 2005</u>, (AODA) in addition to the City's <u>Accessibility Design Standards (ADS)</u>, where applicable.

Six per cent of public survey respondents and nine per cent of panel survey respondents self-identified as having a disability, providing insight to the unique barriers that may exist with the implementation of a Partial PAYT program. Public engagement included an open-ended question to have residents identify any unavoidable waste they dispose of at home.

The five focus groups held through public engagement included equity deserving groups that engaged over 25 members of the City for All Women Initiative, Immigrant Women Services Ottawa, Junior Achievement & Youth Ottawa, Canadian Council for the Blind (CCB) and Able2. Participants from the focus group with the CCB noted that any tags should integrate accessible features, such as a Braille or large print in order to make them usable for people who are blind or who have low vision.

The recommendation of an expansion of the Special Considerations program may increase services and benefits for some residents with disabilities as it will expand curbside collection of non-hazardous medical waste.

Pending approval of the recommendations outlined in the report, staff would continue engaging with stakeholders such as the Accessibility Office and the Accessibility Advisory Committee to receive feedback on the implementation, development and promotion for the strategy. Continuing to engage with stakeholders with disabilities would help identify and mitigate barriers and challenges prior to implementation from a cross-disability perspective to understand the unique needs and feedback from residents with disabilities, and support reducing or eliminating barriers and challenges faced by these residents.

ASSET MANAGEMENT IMPLICATIONS

The recommendations documented in this report are consistent with the City's Comprehensive Asset Management Program objectives. The implementation of the Comprehensive Asset Management Program enables the City to effectively manage existing and new infrastructure to maximize benefits, reduce risk, and provide safe and reliable levels of service to community users. This is done in a socially, culturally, environmentally and economically conscious manner. The diversion programs divert recyclable material, food, organic and leaf and yard waste from the Trail Waste Facility landfill, helping extend its life, and reducing greenhouse gas emissions and supporting circular economy solutions by turning waste into useful products.

CLIMATE IMPLICATIONS

The recommended curbside waste diversion policy and associated annual allotment of garbage tags supports achieving Energy Evolution: Ottawa's Community Energy Transition Strategy and Climate Change Master Plan's targets and initiatives. Energy Evolution projected that diverting organics from the landfill and using the organic material to make renewable natural gas is one of the top five most impactful actions to achieving the GHG target to reduce city-wide emissions by 100 per cent by 2050. Energy Evolution also identified the "Organics Resource Recovery Strategy" as one of the 20 projects to accelerate action and investment by 2025, of which the Solid Waste Master Plan is a critical component. To achieve the target to reduce Ottawa's greenhouse gas emissions by 100 per cent by 2050, Energy Evolution calls for 98 per cent of organics diverted from landfill by 2024 and 100 per cent of paper materials diverted by 2042. Of note, the target to divert 98 per cent of organic waste from landfills by 2024 was based on the former provincial government's proposal to ban organics from landfills as early as 2022. Given that this ban was never put in place, emission reductions will need to be found elsewhere in the short-term to stay on track to achieving the GHG targets. The recommendations in this report support reducing greenhouse gas emissions by taking steps to increase diversion of organic and recycling material from landfill and consider Energy Evolution and the Climate Change Mater Plan through the development of the Implementation Plan.

ENVIRONMENTAL IMPLICATIONS

The recommendations outlined in this report, upon implementation of the curbside waste diversion policy will aim to increase participation in waste diversion and recycling programs, supporting municipal and provincial targets to divert organic waste. The recommended policy also helps reduce greenhouse gas emissions and limit waste being sent to the Trail Waste Facility Landfill.

INDIGENOUS, GENDER AND EQUITY IMPLICATIONS

This report seeks Council's approval of a Partial Pay-As-You-Throw program with an annual allocation of 55 garbage tags and expanding the City's current Special Considerations Program to include non-hazardous medical waste. Implementation of this program seeks to increase waste diversion and participation in recycling programs and ultimately limit waste being sent to the Trail Waste Facility Landfill. In developing this recommendation, staff completed extensive public engagement, as well as briefings with Councillors, Solid Waste Services staff and other stakeholders. Public engagement solicited feedback from residents and stakeholders on their preferred option and the factors that influenced their decision,

perceived barriers to each option to support staff in development of mitigation strategies, and various education and enforcement approaches that could be used to support residents through the recommended curbside policy change. The approach to public engagement included a comprehensive online public survey, online workshops with residents and stakeholders that provided an opportunity for participants to deliberate the options via group discussions, virtual focus groups with equity-deserving organizations, and conversation kits that enable groups to deliberate the options within their communities.

The public survey indicated the following participation results:

- 18 per cent of participants identified as being over the age of 65;
- 54 per cent of participant identified as female;
- 1 per cent identified as non-binary;
- 6 per cent identified as being someone with a disability;
- 5 per cent identified as being Indigenous or a Person of Colour;
- 4 per cent identified as a member of LGBTQ2S+ community; and,
- 2 per cent identified as a recent immigrant or new Canadian.

Over the engagement period, five focus groups were also help with equity deserving community organizations, including persons with disabilities, women, newcomers to Canada and youth. Feedback received from residents who identified as a member of an equity-deserving group is captured in Document 2, appended to this report.

RISK MANAGEMENT IMPLICATIONS

This report outlines all risks and mitigation measures.

RURAL IMPLICATIONS

A curbside waste diversion policy would be available to all curbside residents, including those in rural areas. This report outlines all regional impacts.

SUPPORTING DOCUMENTATION

Document 1 – Analysis of Other Options Considered

Document 2 – What we Learned Report (Results from Public Engagement)

DISPOSITION

If approved by Council, waste collection would remain status quo and residents would not see this change at the curb until Q2 2024. Staff need this lead time to prepare for implementation planning. Upon approval of this report, work would begin immediately to formalize and launch the internal working group of City service areas impacted by the change to collaborate and provide input to support implementation planning, based on their respective areas of expertise. This includes working closely with Legal Services to amend the Solid Waste Management By-law, as required prior to program implementation. As outlined in this report, staff would come back to Committee and Council with an Implementation Plan and Readiness Update in Q1 2023 prior to program rollout, which will include an overview of the communications campaign and specifications relating to program details.