Reduce Your WasteLine
Curbside Program Blueprint 2013-2018

May 2013
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Section 1 – Introduction

1. Rationale and Objective

The City’s diversion rate (i.e. the amount of organics and recyclables not sent to landfill) for its curbside and Eco Centre program has stagnated around 40% since 2008. With the introduction of its seasonal curbside kitchen and yard waste organics program in 2001, Spruce Grove was a leader in waste diversion in Alberta. Since this time, the program has expanded introducing a full-service Eco Centre and curbside blue bag recycling in 2007. The 2007 program changes included a move to a fully automated waste system. Together these changes resulted in a 10-12% increase in diversion rates demonstrating the impact of program decisions. Only minor program changes have been implemented since this time and the last waste strategy was completed in 2006. Education and outreach efforts have slowly declined since 2007. With research indicating approximately 80% of municipal solid waste is suitable for diversion there is clearly room for improvement.

Recognizing this, the Mayor’s Task Force on the Environment, completed in 2011, identified ‘Waste’ as one of five priority areas for the City’s environmental programs going forward. As part of its recommendations, the Task Force identified the need to complete:

- a waste audit and program review to better understand how residents are using existing programs, and;
- a strategic framework to reduce waste sent to landfill moving forward.

Regional trends also reinforce the need to evaluate the existing program. Some Capital Region communities are now achieving residential diversion rates in the 60-65% range, and St. Albert, Stony Plain, and the City of Leduc have recently rolled out an aggressive curbside waste program. Complementing this, several communities in the Capital Region (Spruce Grove included) are currently working on an integrated regional waste strategy to identify areas for collaboration and partnerships in the future. Final results of this work are expected in mid-2013.

The objectives of this program blueprint are:

- to reframe the City’s waste management services as a waste diversion and reduction program;
- to provide a foundation for this program for the next five-years, and;
- to see positive improvement in program indicators.

2. Scope and Process

This program blueprint is focused on the components of the residential curbside service program. As of January 2013, the City’s curbside program serviced 8411 households (single family, semi-detached, and some row housing units). A complementary review of the Eco Centre services and operations is underway with an expected completion date of late 2013. Due to the level of complexity involved, a separate feasibility study to look at expanding the curbside program to multi-family residential is tentatively planned for 2014. Other sectors of the waste stream, industrial, commercial, institutional (ICI), and construction and demolition (C&D) are currently considered primarily through the City’s on-going work with the Capital Regional Waste Minimization Advisory Committee.

The process to develop this blueprint started with the Mayor’s Task Force on the Environment, completed in March 2011, which identified ‘Waste’ as one of five priority areas for environmental
sustainability initiatives and programs. The Task Force process included a number of phases of public consultation and collected input specific to the City’s waste program. An outcome of this process was the completion of a curbside program review and compliance audit by Advanced Environment Ltd. in 2012. Supplementing this audit was a briefing paper on the role of food waste in diversion programs prepared by sonnevera international corp. The findings of these two external reports, included in Section 2, were used go guide the analysis of program options and inform the proposed approach for moving forward.

3. Challenges Facing the Program

The curbside waste program faces a number of challenges. These challenges provide context and direction for the proposed program blueprint.

- Audit results demonstrate that there is room for improvement with some residents in sorting their waste into different streams. The City’s existing diversion programs are not fully utilized.
- Related to this, many people perceive themselves as doing a good job of sorting their waste. A survey conducted as part of the Task Force process found a high level of agreement with statements such as “I’m doing all I can do all or most of the time”. This demonstrates the opportunity for better program compliance with more education.
- Residents appreciate the convenience of large waste carts and frequent service. Implementing a strong waste diversion program, which ‘squeezes’ the garbage stream (e.g. smaller carts, no extra bag tags, bi-weekly service), will require strong political leadership, and an aggressive community-based social marketing campaign to build community norms based on environmental responsibility, rather than status quo service levels.
- Municipalities in the region do not calculate their waste utility rates the same. This makes it challenging to complete an accurate comparison between program costs. As Spruce Grove’s utility is a true utility, its rates appear on the high end of the spectrum, which makes it hard to publicly justify additional program costs for expanded diversion programs.

4. Program Benefits

Despite these challenges, it is important to remember the significant benefits of waste diversion and reduction programs. These include both environmental and economic benefits and include:

- requires individuals to take responsibility for the waste they generate and to consider opportunities to reduce and/or reuse products;
- reclaims valuable materials that can be processed and reused;
- decreases greenhouse gas emissions and other pollutants;
- extends the life of existing landfills, and;
- encourages the development of innovative processing technologies and new markets for end products.

In addition, as landfill space tightens in the Capital Region it is anticipated its relatively cheap waste tipping fees will increase substantially. Proactively implementing an aggressive program to reduce the amount of waste Spruce Grove residents are sending to landfill mitigates this risk and associated costs in the future.
Section 2 – Results of External Program Reviews

1. Spruce Grove Waste Patterns

The Advanced Enviro study (herein referred to as the ‘Waste Review/Audit Report’) methodology included a detailed review of historic program data and a summer and winter audit of the waste collected from 100 homes in ten different neighbourhoods (households were not notified to ensure accurate results). All results reported here are based on weight (opposed to volume) and include findings from both the audit and historical data analysis. Prior to this audit, the City had almost no volume-based data as weight based data is the industry standard for billing.†

Detailed results by both weight and volume are available in the ‘Integrated Waste Management Review and Waste Composition Audit’ final project report found on the City’s website at www.sprucegrove.org/waste.

> Per Capita Trends

Historical data shows no clear per capita trend in garbage sent to landfill. Spruce Grove has a lower per capita rate for residential waste sent to landfill than Alberta as a whole however.

Figure 1: Total Residential Waste Sent to Landfill Per Capita

![Graph showing total residential waste sent to landfill per capita from 2007 to 2012.](image)

Source: City Waste Management Records

> Diversion Rate

The 2012 waste audit sort diversion rate was 42%. This rate is slightly higher than data reported for the past five years (average of 37%). There is a 10-12% jump in the diversion rate after the curbside blue bag program is introduced.

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† For some items, this may seem counterintuitive. While the blue bag items create a lot of waste due to their size they are relatively light. Organics waste is the opposite.
> Materials Sent to Landfill

Fifty-eight percent (58%) of total waste was sent to landfill. Of this, 76% could have been diverted through either existing or new commonly provided programs. Organic waste was by far the largest proportion of divertible waste going to landfill. This is particularly problematic as organic waste generates a strong greenhouse gas (methane) when sent to landfill.

Figure 3: Program Breakdown

Figure 4: What Residents Throw-Out

![Pie chart showing waste composition](image)


> Program Set-Out & Contamination Rates

Set-out rates for waste diversion components were relatively low during the audit period: 60% for the organics program and 57% for the blue bag program compared with 91% for garbage pick-up.

Figure 5: Program Set-Out Rates during Audit Periods

![Bar chart showing set-out rates](image)

Source: Waste Review/Audit Report, Advanced Enviro

The Mayor’s Task Force survey results suggest a willingness by residents to participate to a greater degree in diversion programs than what was reported in the audit, indicating that there is strong potential to increase program participation and effectiveness. Contamination rates for the organics and blue bag programs are relatively low, showing that residents opting to participate are generally taking the care to sort their waste correctly.
Capture Rates

An estimated 75% of total yard waste available in the waste stream is captured through the organics program while 71% of blue bag recyclables are captured. Almost no kitchen waste is currently captured in the City’s organics program even though this stream makes up almost a quarter of the total waste stream over the course of a year. Improvements to capture rates for the organics program have the highest potential to push the City’s diversion rate up. Figure 6 illustrates the potential to increase diversion rates by each waste stream.

Figure 6: Capture Rates & Potential to Increase Diversion

Source: Waste Review/Audit Report, Advanced Enviro

Greenhouse Gas Emissions

Based on 2012 waste audit results, the City’s curbside waste diversion program reduced greenhouse gas emissions by 3723 tonnes per year (equivalent to the emissions from 830 cars). The potential exists however to reduce emissions by a further 3200 tonnes if maximum diversion was achieved.

2. Findings from Other Capital Region Communities

The Waste Review/Audit Report also looked at the levels of service offered by other comparable communities in Alberta. A summary of the curbside programs for select Capital Region communities is included in Table 1. A cross-community utility rates component was not included due to the difficulty in determining how the different utility rates are calculated. The City of Spruce Grove operates a true user-pay utility with all waste program costs covered in the rate; costs include the curbside collection, the Eco Centre, staffing, and all tipping fees/processing costs.
Table 1: Comparison of Residential Curbside Programs in Select Capital Region Communities

<table>
<thead>
<tr>
<th>Community</th>
<th>Garbage</th>
<th>Organics</th>
<th>Blue Bag</th>
<th>Diversion*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weekly</td>
<td>Biweekly</td>
<td>Summer</td>
<td>Winter</td>
</tr>
<tr>
<td>Spruce Grove</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Leduc**</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Strathcona</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Stony Plain</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Edmonton***</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Fort Sask.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Albert****</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Notes:
*For the most part, diversion rate data factors in a community’s curbside and ‘Eco Centre’ data. Not all communities take into account contamination rates. Spruce Grove’s diversion rate is based on its 5-year historical average. The audit estimated the rate at 42%. Of note Spruce Grove’s data includes its large item pick-up. It is unclear whether other communities also include this information in their diversion rates.
**Leduc just rolled out a new program in fall 2012 (including curbside organics for the first time) Its diversion numbers are very preliminary (potential to increase with yard waste collection this summer).
***Edmonton’s program collects organics and waste together in one cart. Edmonton recently moved from a 10-day winter cycle to a weekly one.
****St. Albert has offered a simple ‘Pay as you Throw’ program for several years now. This includes three-different sizes of waste carts (higher cost for larger cart) and two-sizes of organics carts (same rate). Their reported diversion rate is based on the first year of their new diversion program (started June 2011).

3. Waste Review/Audit Report Recommendations

The Waste Review/Audit Report made a number of recommendations to guide the City’s waste program design. While the report goes into extensive detail on these, with a number of complementary components to consider, a high level summary is included below. In addition to informing this curbside program blueprint, these recommendations have been/are being incorporated into other strategic reviews and discussions at both the community and regional level.

- Identify clear program targets and objectives. Monitor these and communicate progress toward program goals clearly with residents.
- Implement a year-round organics program and provide residents with kitchen catchers to encourage the diversion of kitchen waste from landfill. This change alone has the potential to increase the City’s weight-based diversion rate by 31% (22% kitchen waste, 9% yard waste)\(^2\).
- Explore providing weekly blue bag service to increase program participation rates. Additional program participation has the potential to further increase the City’s diversion rate.
- Consider changing the frequency of garbage collection to ‘squeeze’ the waste stream while making diversion options more convenient.
- Increase program visibility and educational components.
- Consider creating separate sections for City operated utilities. This will be more important as the community continues to grow.
- Explore options for multi-family and commercial establishments.
- Conduct a detailed review of the Eco Centre and explore options to secure long-term organics processing capacity.

\(^2\) These numbers are based on full program participation; actual diversion gains are projected to be lower.
- Conduct a cost analysis for proposed program changes and explore different service options and combinations.

4. **Food Organics Briefing Paper Highlights**

Preliminary discussions with Council indicated that additional information would be useful on the impact of food organics collection on diversion rates. The briefing paper completed by Sonnevera International Corp. reviewed the potential for food waste capture based on the audit data and looked at best practices from other communities. Highlights are below.

- Food waste offers the largest total potential diversion increase out of any of the waste streams at 22%.
- A lack of understanding exists on the part of residents regarding the acceptance of the full range of organics in the current program. This is undoubtedly exacerbated by the program being offered only during the summer months, which reinforces the perception that it is a yard waste program.
- It will be very challenging for the City to reach its short-term 50% residential diversion target without a food waste diversion element. To achieve this without food waste the City would need to look at regulation options such as banning the collection of any recyclables or yard waste within the garbage stream and/or a very aggressive social marketing campaign targeting the other diversion streams.
- The 65% medium-term residential diversion target is not possible without food waste diversion combined with increased participation in existing yard waste and recycling programs (typically achieved in combination with bi-weekly garbage collection).
- The Ipsos Reid survey completed as part of the Task Force showed that 88% of Spruce Grove residents support weekly or bi-weekly curbside pick-up of food scraps and yard waste. This suggests a food waste collection program should be met with good success, as long as it is accompanied by strong education and promotion.
- In St. Albert, curbside collection of food waste contributed approximately 10% to its overall waste diversion percentage. In Strathcona County, this value is estimated at 14%.
- Research suggests 2.5 to 3 kg per household per week is likely to be diverted through a food waste collection program (~1100-1300 tonnes/year). This represents an estimated potential diversion increase of 12-15%.
- Successful food waste programs tend to provide kitchen catchers to households to encourage participation, combine elements of pay-as-you-throw (PAYT) incentives, and combined food waste collection with a transition to bi-weekly garbage collection.
- If Spruce Grove opts for a *monthly* pick-up frequency in the winter, a pilot project approach may be warranted. Research suggests this would not be required for bi-weekly frequency however, as this program option is already being implemented successfully by neighbouring communities.
- A strong community-based social marketing campaign is a key element to strong, effective participation. This is particularly important for food waste as inherent perceptions of the public around the desirability of diverting this material are more difficult to address than is the case for yard waste and recyclables. Both actual and perceived barriers must be addressed through this campaign.
- The provision of sufficient resources to provide an effective community-based social marketing campaign cannot be undervalued if the program is to be a success.
Section 3 – Options Analysis Summary

1. Overview

As part of developing this blueprint an analysis of service options was completed to guide the direction of the residential curbside program over the next five-years. There were two components to this analysis:

- financial analysis looking at estimated rate changes, and
- a Strengths, Weaknesses, Threats, and Opportunities analysis (SWOT).

The SWOT-analysis included a discussion on the diversion potential of the different options. The options were selected based on recommendations from the City’s contractor, existing service levels/anticipated resident expectations, waste review/audit findings, and existing service levels in comparable Capital Region communities.

In total seven-core program service options were considered based around different combinations of the following service levels, some with seasonal variations:

- garbage – weekly or bi-weekly;
- organics – weekly (summer) and bi-weekly or monthly (winter), and;
- blue bag – weekly or bi-weekly.

Additional program components were considered which could be added to supplement any of the core program options:

- small kitchen organic collection cart give-a-ways (kitchen-catchers);
- educational program, and;
- voluntary option to downsize to smaller waste cart for a reduced rate (50% smaller).

The detailed analysis results contain privileged financial estimates provided by the City’s waste contractor so are excluded from this report. Key findings from this analysis include:

- limited winter organics service can be introduced at a relatively low rate. This program change will allow for consistent messaging throughout the year and the ability to focus more on capturing kitchen waste;
- supplemental program options are relatively cost-effective to implement and will enhance the City’s overall program and provide a strong foundation for moving forward;
- more can be achieved through the City’s existing diversion programs through increased education and program expansion/refinement, and;
- bi-weekly service should only be introduced after careful consideration and planning and once residents understand/support the City’s existing diversion programs (the City should be workings towards introducing bi-weekly garage service combined with weekly blue bag service within the next five years).

Section 4 – Program Components & Moving Forward

1. Curbside Program Vision and Guiding Principles

The City of Spruce Grove has a strong curbside waste diversion and reduction program supported by residents through high participation and compliance rates. This program works together with the City’s Eco Centre and regional collaboration efforts to further reduce the amount of municipal waste sent to landfill.
Five principles guide this program.
- The waste utility is efficiently run, using best practices and minimizing cost increases.
- Residents required year-round convenient alternatives for organics and recyclable materials.
- The program is reinforced by education and positive reinforcement.
- Residents support and participate in the program.
- Waste reduction and diversion are equally important.

2. Targets & Indicators

Indicators provide a useful tool for measuring meaningful process over time while targets provide the City with something to work towards. Three indicators with targets were selected for this program blueprint. An additional three indicators without targets were identified to assist with program monitoring. It is recommended targets be adopted for these indicators in the future following further baseline data collection and comparable community research. Together these indicators address total waste generated and diverted, diversion program participation rates, and diversion program contamination rates.

Targets were selected based on an analysis of past program patterns, the waste review results, and examples from other communities. The more aggressive 2020 targets assume Council will implement bi-weekly waste collection service in 2018. These targets would be achieved sooner with an earlier switch to bi-weekly collection. The 2016 targets assume winter organics collection will begin in 2014. The three indicators with targets can be monitored annually using readily available data. The additional indicators will require a program audit be completed using the 2012 audit methodology. It is proposed these audits be scheduled on a regular three year cycle.
Table 2: Proposed Residential Curbside Indicators and Targets

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Frequency</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversion Rate</td>
<td>Amount of waste diverted from landfill through the curbside program and at the Eco Centre</td>
<td>Annual Verified through program audit on three-year cycle</td>
<td>50% by 2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>65% by 2020</td>
</tr>
<tr>
<td>Total waste generated per capita</td>
<td>Total waste generated (all streams) through the curbside program and at the Eco Centre</td>
<td>Annual Verified through program audit on three-year cycle</td>
<td>200 kg by 2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>150 kg by 2020</td>
</tr>
<tr>
<td>Organics contamination rate</td>
<td>Per cent of non-organics material sent to the processor through the curbside and Eco Centre</td>
<td>Annual Audit to determine contamination included with organics processing contract</td>
<td>Maintain less than 10% (national average is 15%)</td>
</tr>
<tr>
<td>Blue bag program contamination rate</td>
<td>Per cent of non-recyclable material sent to the processor through the curbside and Eco Centre</td>
<td>Three-year cycle</td>
<td>Under review</td>
</tr>
<tr>
<td>Blue bag program participation rates</td>
<td>Program participation rates demonstrated through external program audit</td>
<td>Three-year cycle</td>
<td>Under review</td>
</tr>
<tr>
<td>Organics program participation rates</td>
<td>Program participation rates demonstrated through external program audit</td>
<td>Three-year cycle</td>
<td>Under review</td>
</tr>
</tbody>
</table>

3. Short-Term Program Components (2013-2014)

> Increased Education

The City’s education program has been very limited for the past several years. Even without any program changes, the Waste Review/Audit Report results clearly indicate that the City could be achieving higher diversion results based on its existing curbside program. The launch of the ‘Trim Your Trash’ online tool in the spring of 2013 and the blue bag household mail-out are both good first steps to re-engaging the public around the City’s Reduce Your Wasteline program. These efforts however need to be continued and built upon going forward. This includes providing new residents with appropriate program information as well as engaging existing residents on an on-going basis with seasonally appropriate messaging through a variety of mediums.

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3 As City residents are almost exclusively using the organics program for yard waste opposed to for yard and food waste, it is anticipated the contamination rate will increase as the City refines its program and education efforts.
To help with these efforts it is recommended the City increase the program promotion budget starting in 2014 to allow for increased homeowner education and program promotion at special events such as Canada Day. Also, as capacity is currently limited in this area, the City should also consider dedicating a 0.25 FTE to waste program promotion as part of 2014 budget deliberations (or future deliberations as required).

> Voluntary 120 L Black Waste Cart Incentive

In addition to bi-weekly garbage service, another way of squeezing the garbage stream is by offering a smaller black waste cart on a voluntary basis to interested residents. These carts, offered at a lower monthly utility rate, represent a simple ‘Pay as You Throw’ approach which sees the amount of waste residents produce reflected in their utility rates (to a degree). This approach has been utilized by St. Albert for a number of years. The discounted rate reflects the lower tipping fees as less garbage is sent to landfill.

Based on discussions with the City’s waste contractor and St. Albert staff, offering a black waste cart approximately half the volume of the existing waste cart (i.e. 120 L instead of 240 L) seems most appropriate to start this program given the City’s existing investment in the larger cart size.

While analysis is preliminary, it is anticipated approximately 20-30% of residents would switch to the smaller cart within the first two-to-three years. To kick-start this program, at a minimum the City should purchase one truck load of smaller 120 L black waste carts (1080 or 13% of units) as a one-time capital investment. The risk exists however that more residents will be interested in this option than anticipated. To reduce this risk a second truck load of the 120 L carts could be purchased up-front thereby providing enough stock for 26% of units in the first year. It is projected that 90% of the 240 L carts switched out would be suitable for reuse. The City’s investment would be recouped over time as new housing units are added to the program (approximately 450 annually). The existing cart purchase budget within the waste utility would be redirected in future years to purchase either 120 L or 240 L carts as required. As the City adds approximately 450 new housing units to its program every year, in essence the purchase of one truck load of 120 L black waste carts means the City is purchasing a 2-3 year supply of carts up front.

An additional caution to implementing small bins in advance of a change to bi-weekly service is that some residents may want to switch back to the 240 L carts if the frequency of their garbage pick-up is reduced. Careful planning and monitoring combined with resident education will be important.

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4 This 0.25 FTE position will take the form of a 1.0 FTE Sustainability Outreach Coordinator position which also includes 0.25 FTE for water conservation program promotion, 0.25 FTE for corporate programs, and 0.25 FTE for other priority areas (i.e. energy, natural areas, and transportation). The total estimates costs of the 0.25 FTE and waste program promotion budget is $35,000 which is half of what was recommended in the Waste Review/Audit Report. Program staff felt this would be an adequate start to re-energizing the waste program. Future program evaluation may lead to further funding requests to bring this budget in-line with the recommended budget however this is not required at this time.

5 The experience of St. Albert suggests that the volume of garbage generated by many residents is small enough for the 120 L cart size even with bi-weekly frequency. Approximately 42% of St. Albert residents use either 120 L or 60 L garbage bins (30% vs. 12%).
> Winter Organics Program

As discussed in Section 2, the proposed 50% and 65% diversion targets will be very difficult to achieve, and in the case of the 65% target, impossible to achieve, without a strong food waste diversion program. While the City’s existing organics program does accommodate food waste, the seasonal nature of this program sends the message to residents that this is a yard waste program, and as such, this is how the vast majority of residents are currently using it. The seasonal nature of the organics program also makes it more challenging for City staff to effectively promote the kitchen waste program to residents as the current program design requires residents to change their behavior twice every year.

Based on feedback from Council and the City’s waste contractor, it is proposed the City initiate winter organics collection on a monthly basis within the next two years. As this frequency is lower than the winter organics frequency of other municipalities in the region (all communities with this program have bi-weekly pick-up) it is recommended the program be closely monitored. While there is limited concern about volume constraints with this level of service, the concern does exist that residents may disregard the program if operated with the lower frequency. An alternative to implementing a full monthly pick-up winter organics program would be to either run the program as a pilot or to run a pilot program that compares monthly versus bi-weekly pick-up.

As program planning continues to increase curbside kitchen waste capture, potential increases to organics processing and hauling charges should be considered. Based on the structure of the City’s existing (and likely future) organics program related contracts, increases in organics capture at the curb will result in additional processing charges on the back-end for the City. In addition, as the City increases promotion of the program for kitchen organics, a risk exists for the City to see contamination charges (although this risk is mitigated if the City does not implement bi-weekly garbage service). To minimize contamination costs and increase diversion potential, it is recommended that any change in the organics program be accompanied by increased educational resources.

When rolling out the revised organics program, it is recommended that small 7 L kitchen bins to collect food waste be offered to residents (i.e. kitchen catchers). While the common approach is to give these out to all households at the same time residents are provided with their large outdoor organic carts, this will be costly for Spruce Grove to undertake as the large carts are already distributed to residents. A couple of options exist to disseminate the bins.

1. Mail a coupon accompanied with educational messaging to each City served household in the community. Depending on how the program was structured the resident would pick-up a City-provided bin at City Hall or the Eco centre, or would receive a discount off of a bin of their choice from a local retailer (discount would be equivalent to the purchase of City bins). The benefit of this approach is it would create greater awareness about the program. The disadvantage is it will be more challenging to accurately determine the required budget (i.e. how many people will actually pick-up a bin). One way to minimize the risk of this approach would be to accompany the coupon with a ‘while supplies/program funds last’ message.

2. An alternative would be for the City to purchase a set number of kitchen catchers to give away to interested existing residents through City Hall, the Eco Centre, and public events (1500 bins which would hit 18% of utility households is proposed). The City should supplement this purchase with additional kitchen catchers that are provided with the 240 L outdoor green organics cart for new households (approximately 450 per year).
The rationale for these two approaches reflects that the City already has a long-established organics program. Factors include:
- some residents may already have a bin they are using for this purpose;
- some may not want a kitchen catcher and will just throw it away or use it for an unintended use, and;
- the cost to manually deliver these to every household will be high6.

The principle behind these approaches is that the City is offering kitchen catchers to residents however it is putting the onus on the resident to make the effort to pick it up. These approaches would be accompanied by educational efforts promoting other common households items that can be re-used as an organics kitchen catcher (e.g. ice cream pails, laundry soap containers). These approaches align better with the City’s larger waste reduction program objectives in general.

> Other Considerations

In addition to the proposed program components discussed above, a number of other elements should be considered within the next two years.
- Complete the review of the Eco Centre currently in process. While this is not technically considered part of the ‘residential curbside program’ (the focus of this program blueprint), it is complementary to it and the two programs reinforce each other.
- Consider implementing a pilot waste program which aligns with the City’s curbside service levels with select schools in Spruce Grove. Additional resources and the support from the local school board and the City’s waste contractor will be essential to make this pilot a success.
- Complete regular curbside program audits going forward on a three-year cycle. This will provide strong data for program design and monitoring.
- Review options to increase diversion options for multi-family dwellings through a separate study (tentative 2014). This will require dialogue with private sector stakeholders, including current providers of multi-family collection service and building managers.
- Review the City’s approach to landfill tipping fees within its garbage collection contract as part of the 2015 contract tender process. Consider the impact of reframing the City’s curbside program as a diversion and reduction program (opposed to a collection program) and review how other municipalities approach tipping fees in their contracts.


> Aggressive Diversion Program Pilot

To achieve a waste diversion target of 65% the City needs to look at taking significant steps to squeeze the garbage stream. To achieve this, the following levels of service are recommended for the City’s curbside program in the medium-term: bi-weekly black waste cart, weekly blue recycle bags, and weekly summer organics and bi-weekly winter organics (although monthly

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6 Most communities give out the 7 L bins at the same time they supply every household with its large outdoor cart. As Spruce Grove households already have the larger carts, a special delivery would need to be organized to give out the small bins. While this delivery could be accompanied with valuable face-to-face discussions about the program, the City does not have adequate resources for this currently.
winter organics could be maintained if proven successful). These service levels will better align Spruce Grove’s diversion program with other comparable communities in the region working towards an aggressive diversion target. The proposed program would continue to be supplemented by a voluntary program for residents to receive a discount for using the 120 L black waste carts.

As this would represent a major program shift and will likely be met with resistance by some people in the community, the option exists to first pilot this program change using a representative household sample. The proposed start of a pilot program is fall 2015 which allows adequate time for pilot program design and provides the opportunity to negotiate relevant costs as part of the next waste contract cycle. This timing also provides selected households the opportunity to adapt to the program change during the cool winter months. Introducing the proposed program changes first as a pilot program reduces the political risk to Council members, provides strong data to base future decisions on, and if the pilot is successful, creates a group of residents experienced with the program who become supporters of the widespread roll-out. It is anticipated the pilot would run for one-year. The results of the pilot would be available with plenty of time to plan for changes as part of the 2018 contract cycle.

> Aggressive Diversion Program Pilot Alternative

An alternative to running a Spruce Grove pilot program is to complete an evaluation of the experience of comparable communities in the Capital Region already running this (or a similar) program. While this was done to an extent as part of the research completed as part of the Program Blueprint development, three of the four programs are new and program data is either preliminary or incomplete. This option would be conducive to a more aggressive implementation timeline for any significant program changes. If strong support exists on Council and in the community to achieve higher diversion rates sooner, relying on the experience of comparable communities would be a more effective use of resources than running a full Spruce Grove specific pilot.

5. Implementation

The focus of the Program Blueprint is to create a strong foundation for the curbside component of the City’s Reduce Your Wasteline program for the years 2013-2018. Included with this blueprint are program targets for 2016 and 2020, notably a waste diversion target of 50% by 2016 and 65% by 2020.

To advance this program, adequate human and financial resources are required. With this in mind, program components need to be linked with the City’s corporate planning process. As noted throughout the report, increased homeowner education supported by additional program promotion resources will be paramount to achieving greater diversion results. In addition,

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7 Another option for squeezing the garbage is to require all households to use the 120L bins. This is not recommended however for a number of reasons: the City’s cart stock will continue to be dominated by 240L bins for many years into the future; weekly pick-up of smaller bins produces greater greenhouse gas emissions through increased pick-up; it will cost residents more; the trend in the region is towards bi-weekly service opposed to more frequent service using smaller bins; and less information exists on the diversion potential for this program design.
proposed program changes need to be considered as part of the City’s competitive bid process for new waste collection contracts scheduled for the spring of 2015 and 2018. To ensure effective use of program resources, this blueprint should be reviewed annually by Administration in the context of waste collection data and on-going monitoring of existing and new programs.