

May 1, 2017

Red Deer's cart family program

The City of Red Deer launched a cart pilot program, starting with Green Carts in April 2015, followed by Blue and Black Carts in May 2016. The cart system will be launched city-wide for residents starting April 2018.

1. What is the Green Cart pilot program?

The City of Red Deer's Green Cart program is a two-year pilot that involved approximately 2,000 households. Chosen households were able to deposit their organics, such as yard waste, food scraps, and pet waste in a City-provided Green Cart for year-round, regular pickup and composting.

2. Why did The City introduce a Green Cart pilot program?

Approximately 40 per cent of household waste is organic and can be composted. The Green Cart pilot was developed to be consistent with The City's Environmental Master Plan (EMP) and the Waste Management Master Plan (WMMP) goals to reduce the amount of garbage sent to the landfill.

3. What is the Blue and Black Cart pilot program?

The City of Red Deer's Blue and Black Cart program is a two-year pilot that rounded out the cart system pilot program. The 2,000 households that received Green Carts then received Blue and Black Carts from The City in 2016 for recycling and garbage: Blue Carts for recycling Black Carts are for garbage.

4. Why did the City introduce a Blue and Black Cart pilot program?

Consistent with the EMP and the WMMP, the program helps reduce the amount of waste sent to the landfill by diverting organics and recyclables. Also, the new collection system increases efficiency, and helps to reduce greenhouse gas (GHG) emissions.

5. How does this program help the environment?

Diverting waste from the landfill helps prolong the life of the landfill and reduce associated greenhouse gas emissions. Since every other week Blue and Black Cart collection began in 2016, pilot households have set out an average of 27 kg of garbage per household per month. During the same time period, non-pilot households set out an average of 44 kg per household per month. This represents a 39 per cent reduction in garbage, in line with the pre-pilot estimate that 40 per cent of a household's waste could be diverted through an organics program.

When buried in a landfill, organics decompose to produce methane, which is at least 20 times more potent of a greenhouse gas than carbon dioxide, so diverting these materials from landfill greatly reduces the GHG emissions. In addition, when these materials are composted instead of being landfilled the nutrients within them can be returned to the soil.

6. What is the collection schedule for the pilot project residents?

Collection for the cart system will alternate. Waste and recycling (Blue and Black) will be picked up every other week, while Green Cart collection remains every week. With a larger Blue Cart to maximize recycling efforts and a Green Cart to divert organics which account for approximately 40 per cent of a typical household's waste, every other week garbage collection is achievable and will increase efficiency of the collection system as a whole.

7. How were households chosen for the pilot?

Households were chosen to reflect a range of demographics, as best as possible matching the whole city's demographics. They were further broken down by neighbourhood, home assessment value, back alley or front collection, and the year the home was built. In this way, if the pilot was successful with the households selected, the program would be successful for the city as a whole. The pilot system was created to not only test the system, but to gather feedback from participants on a regular basis, make changes based on their feedback and ensure we launch a system that will work for all Red Deerians.

8. What are people saying about the program?

Pilot participant surveys revealed that between 96 per cent and 98 per cent of participants were satisfied or very satisfied with the carts movement and durability and 89 per cent were satisfied or very satisfied with the size of the cart. The pilot survey also revealed 77 per cent of participants reported being either satisfied or very satisfied with the every other week collection schedule for Blue and Black Carts.

In the 2016 Annual Environmental Services Customer Satisfaction phone survey, 84 per cent of respondents considered adopting a cart system to increase diversion as an important step for Red Deer.

9. When will the city-wide rollout happen?

Green Cart collection will begin in Red Deer in April 2018. The Blue and Black Cart program roll out will follow in the spring of 2019. The implementation of the project will be phased over several years to ensure residents have the time and tools to adjust to the new collection system.

10. Would all homes in Red Deer receive carts with the city-wide roll out?

No, the cart system is replacing hand collection of garbage, yard waste and blue boxes so only homes receiving this type of collection will get the Green, Blue and Black Carts as a part of the city-wide roll out. Multi-family properties, which have their waste collected in larger dumpsters, will not be impacted by this change.

11. Will residents see additional charges as a result of the new cart system?

With the roll out of the project, utility fees will change. Based on current cost estimates, it is anticipated the impact on rates will not be greater than five percent in 2018, or \$1.02 per month. In 2019, the utility fee for the Black Cart will be based on your household's cart size. If your household chooses a larger Black Cart, your utility fee will be higher than a household that chose a smaller Black Cart. This way a resident can choose the level of garbage collection service that matches their needs

12. Will residents have to purchase the carts up front?

No, the cost of providing the carts will be covered by the monthly utility fee, and spread out over the long life span of the carts. There will not be a separate charge for the carts. This provides the added benefit that residents will no longer need to purchase their own garbage cans.

13. How are the carts picked up?

The Green, Blue and Black Cart program launches a new method of pickup – the automated cart system. The contractor will use a different style of truck, equipped with a hydraulic arm that can pick up the cart from a few feet away. Cart placement instructions will be clearly communicated to residents prior to implementation.

14. Will collection need to be moved to the front street?

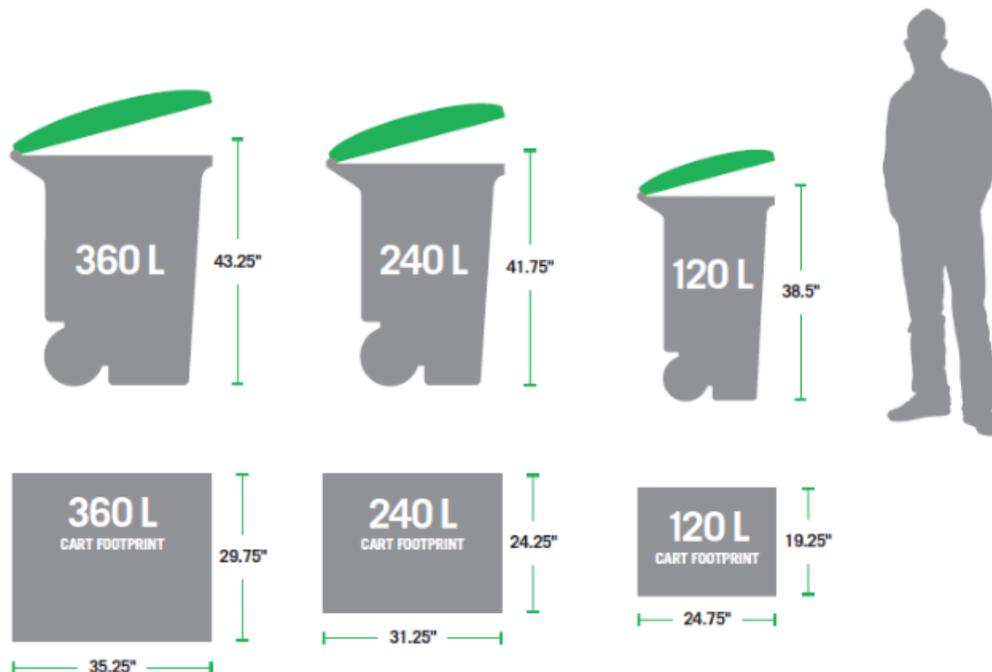
No, one of the aspects we specifically explored in the pilot was how cart collection worked in both back alleys and the front street. Based on the pilot results we will maintain customers' current collection location.

15. What sizes of carts are available for households?

The cart pilot project has clearly shown that when it comes to carts, one size doesn't fit all. It is important to offer a few cart size options, so residents can customize the collection system to their situation. Residents will be able to choose the cart size that meets their needs, which will provide the ability to influence their utility bill.

Carts sizes available to residents will be:

- Green Carts – 120L or 240L
- Blue Carts – 120L, 240L or 360L
- Black Carts – 120L, 240L or 360L



For comparison, blue boxes have a foot print of 22" by 17", so the footprint of the 120L cart is only slightly larger than a blue box. As another example, common round metal garbage cans have a diameter of 19" and are 29" tall.

(Image credit: The City of Surrey, BC)

Due to the variability in yard waste generation throughout the year, residents will be able to set out more yard waste than fits in their Green Carts, following similar requirements as with the current yard waste collection program (i.e. loose in a can labelled with a yard waste sticker, in a compostable paper bag, or bundled small branches). Based on this, the larger 360L cart wouldn't be needed as an option. Additional materials set out beside the Blue and Black Carts will not be collected, so it's important to offer the 360L cart for recycling and garbage collection.

16. What is the cost of implementing this program city-wide?

During the 2017 budget process, implementing the city-wide cart program was identified in the 10 Year Capital Plan. The primary cost of the program relates to the purchase of the Green, Blue and Black Carts of approximately \$7.1 million to come from the Waste Management Capital Reserve, and would have no impact on the taxes. Although there are additional costs in the initial implementation years, it is anticipated the costs will be comparable to the current collection system, once the cart system is fully implemented.

17. Will The City see costs savings as a result of extending the life of the landfill?

When more materials are diverted from the landfill, this slows the rate of filling up the landfill's capacity. This can delay the need to construct additional landfill cells. Additionally, we are currently fortunate to have a landfill sited within city limits. A new landfill site would likely be located much farther away, increasing transportation costs for every vehicle that visits the landfill, including residents' personal vehicles.

18. Is the automated cart program becoming an industry standard and why?

Automated waste collection is evolving from an industry best practice to an industry standard, for a number of reasons. Automated collection is faster and more efficient than manual collection. It also greatly reduces the likelihood of worker injuries, since workers are no longer required to get out of the vehicle and physically lift waste in the collection vehicle. The efficiency and safety benefits of automated collection mean that in the future it will become increasingly difficult if not impossible to hire a contractor to collect waste manually.

The carts are convenient to use and maneuver and the attached lids help contain litter and reduce the attraction of wildlife. As more communities transition to automated collection, more of our customers will expect The City to follow this trend.

19. What other municipalities have similar programs?

Dozens of municipalities across Canada operate similar programs including Calgary, Airdrie, Leduc, Brandon, Yellowknife, Richmond, Hamilton, and Saskatoon. Calgary just recently introduced city-wide green carts, which are being implemented this year, alongside their existing blue and black carts.

For further questions or inquiries, call the Blue Line at 403-340-BLUE (2583) or visit www.reddeer.ca/recycling .