

**Town of The Blue Mountains – Waste Collection Box Indicator Pilot Project  
Continuous Improvement Fund Project #338  
Summary Report – August 2012**

**Executive Summary**

The Town of The Blue Mountains (Town) conducted a field test to investigate the benefits of implementing a stationary waste box indicator system. The field test was conducted from July 2011 to July 2012 with 254 residences participating in the project. An indicator system was developed and installed on participant's waste collection box. The system is simple to use - place the signs (one for recyclables another for waste) outside of the box on collection day to notify the drivers for pick-up. The drivers flip the signs back into the box after collection.

The collection contractors were in support of the initiative and feel collection efficiency will improve upon full implementation. Participant feedback on the program demonstrated overwhelmingly support for the program. Survey respondents indicated the following:

- 94% are satisfied with the program and will continue to use the indicators
- 83% feel that the program should be made available to everyone in the Town
- 37% are more inclined to place recyclables in the waste collection box due to the indicator program
- Thirty-five participants experienced a decrease in missed collection events during the pilot program compared the previous 6 months of collection service.

The field test demonstrates that a waste collection box indicator program:

- Reduces missed collection events
- Improves participation in curbside recycling
- Reduces collection vehicle stops and starts
- Improves convenience for part-time residents

A universal indicator system is a relatively affordable method to optimize waste and recyclables collection service. Staff plan to phase in a Town wide program moving forward.

**Background**

The Blue Mountains is located on the shores of Georgian Bay and is bisected by the Niagara escarpment. There is a mix of urban and rural communities within the Town. Half of the residences are occupied on a 'part-time' basis typically for vacationing and recreational purposes. The characteristics of the population present unique challenges in providing waste collections services. Many residents utilize a stationary waste box to place their garbage and recyclables in for collection. This practice requires the collection contractor to check every box for pick-up. Frequently the box is

empty, reducing the collection efficiency. In some cases, the collection agent will skip over a box that has not been used in months which can result in missed pick-up and resident dissatisfaction. Additionally, weekend residents are often reluctant to leave recycling at the curb. Some of these residents drive their recyclables back to their full-time home to recycle.

Staff felt that a universal indicator system for waste collection boxes will help to address some of these issues and improve recycling capture and waste collection efficiency.

## **Project Overview**

Staff applied under the Continuous Improvement Fund (CIF) and received a grant under the 'Best Practices' category to improve recycling collection from stationary waste boxes by implementing a collection notification system. The Town conducted a field test from July 2011 to July 2012.

The project involved the following components:

- Establish baseline data
- Design and fabricate a standard service indicator (simple, durable, user friendly, recyclable)
- Develop a standard operating procedure for collection staff
- Develop an education piece for the public regarding the field test
- Select a test area
- Install indicator and deliver educational material to selected participants
- Assess and report on the effectiveness of the field test

A variety of locations within the Town were selected to be included in the pilot program. Differing areas were selected to capture a variety of resident types - seasonal, part-time, full-time - to assess the effectiveness of the indicator program based on the differing needs of these residents.

Staff audited each of these streets within the pilot area and identified 334 residences that have a waste box on their property. Consent forms, requesting permission for Staff to install the indicators on the resident's waste boxes, were mailed to all identified residents.

In total, 254 residents returned the completed consent forms volunteering to participate in the pilot program. Staff installed the indicators at each residence. The indicators were affixed to the inside of the waste box by a screw, connected to a chain. Residents were instructed to place the sign(s) outside of the waste box when leaving recycling and/or garbage for collection. The collection agent flips the sign(s) back into the waste box after picking up the waste. Two indicator signs, one for recycling and one for garbage, were utilized.

## Costs

The signage fabrication cost \$4.85 per unit, with the additional materials, chain and screws adding another \$1.00. In total, the material cost per resident was approximately \$10.00. It is anticipated that with full-implementation the unit cost per residence will decrease due to bulk material purchasing.



Indicator Signage

## Challenges

Participation in the field test was voluntary for selected participants. This presented a challenge in collecting quantifiable data when assessing the impact of the pilot program. As some residents choose not to participate in the test, the collection agent was still required to check all collection boxes. Therefore, Staff was unable to establish before and after baseline data on collection time, number of stops and other variables that impact collection efficiency. Ideally, participation in the pilot areas would have been mandatory allowing the collection agents to stop only when the indicator was being used. In the absence of this data, Staff utilized the survey results to assess the impact of the pilot on collection efficiency.

Some participants were confused when placing recyclables in the waste collection box. Residents were instructed to place their recyclables in a clear bag if they were to have it collected from the waste box. However, a small number of residents placed their blue / grey box into the collection box as opposed to using a clear bag. These participants recommended improvements to the program by allowing the use of recycling bins in the waste collection box.

## Participant Feedback

Staff mailed a follow-up survey to participants notifying them that the pilot project has concluded and requesting feedback on the indicator system. One hundred-eight participants completed the survey. The survey results provide direct feedback on participants' experience with the program. Furthermore, a comparison of participants that completed both the initial and follow-up survey can be used to help assess if there was any improvement to collection efficiencies and service. The survey included a comment section allowing residents to provide specific remarks and observation on the program.

The following summarizes the results of the 108 respondents that completed the follow-up survey:

- 69% identify themselves as part time residents
- 97% utilize curbside garbage collection services
- 95% utilize curbside recycling collection services
- 88% use the indicators every collection date
- 37% are more inclined to place recyclables in the waste collection box due to the indicator program
- **94% are satisfied with the program and will continue to use the indicators**
- **83% feel that the program should be made available to everyone in the Town**

Thirty-five participants experienced a decrease in missed collection events during the pilot program compared the previous 6 months of collection service.

Sixty-one respondents provided feedback using the comment section of the survey. Overall, 23 of the comments are identified as positive in support of the program with three identified as unsupportive. Other comments focused on overall service, not necessarily confined to the indicator program. Overall, Staff received positive feedback on the program from participants and in some cases residents excluded from the pilot program requested the indicator signage.

### **Waste Collection Contractor Feedback**

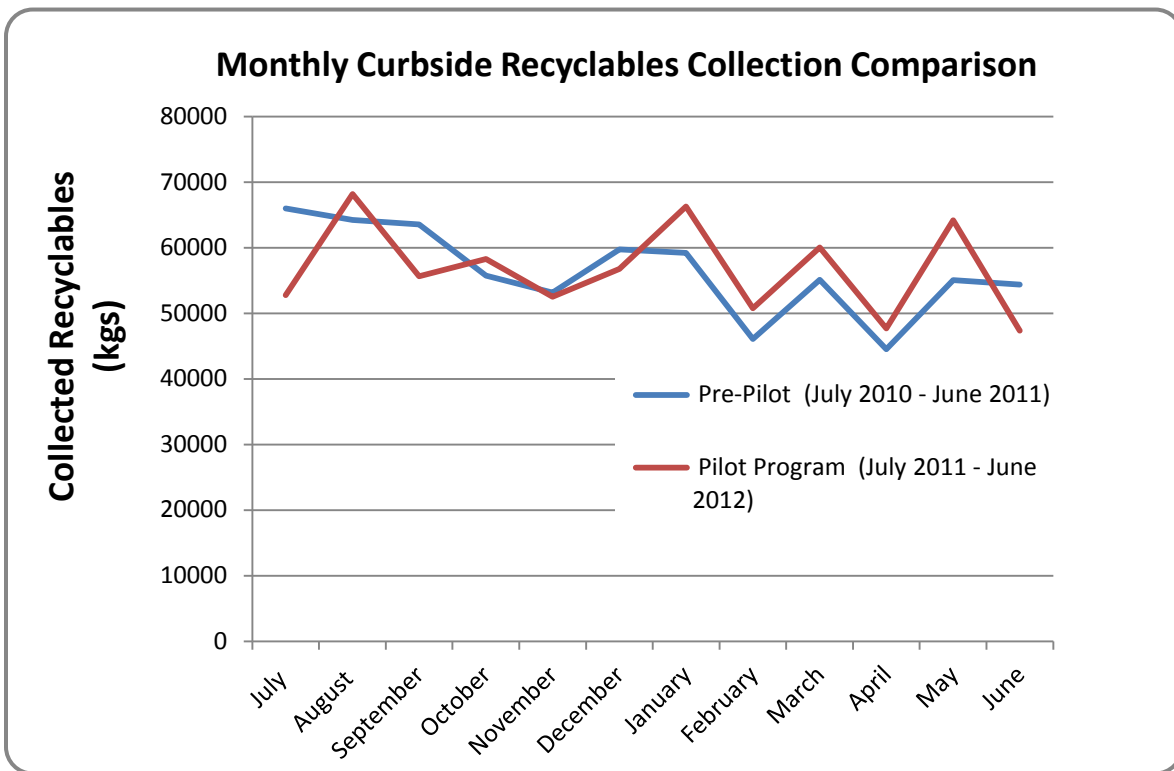
The collection contractor is supportive of the initiative. The collection agents were notified about the pilot and provided a listing of the residences participating in the program. Staff circulated a questionnaire to the two collection agents at the conclusion of the pilot to assess the effectiveness of the program. The following summarizes their responses:

- Approximately 90% of residents utilize the indicators
- The indicators are visible from the road and easy to handle
- A fully implemented program will improve collection efficiency
- The program will allow residents to lock their box when they are not using them, cutting down on illegal dumping of garbage in unused waste boxes

### **Curbside Collection Comparison**

An additional 3.6 tonnes of recyclables were collected during the field test compared to the same period one year earlier. The pilot program was very small relative to the total number of households serviced within the Town. Thus, any increase in the recyclables capture rate during the pilot program could be obscured due to normal variation of collected recyclables. There is significant variation in

the monthly collection tonnages when comparing to two time periods. The following table illustrates these variations:



### Conclusion & Next Steps

The waste collection box indicator program was well received by participants and supported by the wastes collection services contractor. Full implementation of the indicator system Town wide will improve waste collection efficiency, reduce missed collection events, improve convenience for part-time residents and capture more recyclables at the curbside.

Staff would recommend a phased in implementation of the indicator system throughout the Town in conjunction with the introduction of a curbside organics collections program. To fully benefit from the program, use of the indicators will be mandatory and residents must be responsible for installing and maintaining the signage.