

Essex-Windsor Solid Waste Authority

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Final Report: CIF Project 624.3 Supply & distribution of 22 Gallon Blue Boxes

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Table 1: Project Summary

Municipality				
Amount of CIF Grant	\$ 386,000			
Number of 22 Gallon Blue Boxes	134,000 to be delivered			
Approved	2,960 to be picked up by residents			
Number of Blue Boxes Distributed	136,960			
Dates Delivered (start and end)	Start Date: May 2012			
Dates Delivered (start and end)	End Date: June 2012			
Increased annual tonnage				
attributed to new Blue Boxes	177 tonnes of additional mixed plastics marketed 144 %*			
*Based on a comparison of tonnes of mixed				
plastics marketed 4 months prior to the new blues boxes and 4 months after the deliveries.				

Background

Essex Windsor consists of the City of Windsor and 7 County municipalities. There are approximately 130,000 single unit households involved in the curbside recycling program. We used the Ministry of the Environment definition of a multi unit residence as the cut-off point for our box distribution (6 or more units). This means that we delivered boxes to duplexes, triplexes, etc. The recycling program in Essex Windsor is 2 stream, every other week collection, with each resident being provided with a 17 gallon red box for paper and a larger 22 gallon blue box for containers. At the time of distribution, Essex Windsor also added mixed plastics to the program. As part of our background analysis, we determined that the current participation rate is 73%.

In Windsor, new homeowners and first time homeowners are eligible to receive one free red box and one free blue box. They must go to the Environmental Services yard in Windsor to pick it up. In the County, new homeowners and first time homeowners are eligible for one free red box and one free blue box and they are delivered directly to the home.

Promotion

Promotion and advertising were carried out under CIF No. 624.4 and will be the subject of a separate report in 2013. For the purpose of the box launch, each resident received a flyer in the mail and a newsletter advertising the new plastics and the new box. An advertising campaign was carried out during the latter part of 2012 and the first half of 2013. This will culminate with additional follow-up surveying being completed in May and June of 2013.

Method of Distribution

A Request for Proposals was issued for the curbside delivery of the new larger blue boxes in both Windsor and the County. The contract was awarded to Windsor Disposal Services (WDS) Inc (current recycling service provider for County municipalities) for \$0.40 per household. WDS was given 2 months to complete all deliveries in Windsor and the County. Deliveries were completed on schedule.

The original concept was for the boxes to be delivered on the same day as recycling collection. We thought that this would give the delivery a high profile and minimize theft. Theft however was still a problem with residents complaining that they did not receive a box, or reporting that they saw someone steal boxes in their area. However the larger problem was that the contractor quickly fell off their delivery schedule and were forced to deliver boxes on the following day or even the following week. This caused a great deal of confusion and made it extremely difficult to track what areas had been completed and what remained outstanding. There was also a problem with many corner houses being missed because they got caught in the cross-fire between two delivery routes. Also the duplexes, triplexes, and other multi-unit residences caused substantial problems. We anticipated that this was going to happen and had allocated internal staff time to "clean-up" in many areas where we knew multi units were going to be problematic. We had substantial discussion prior to launch on how to address the problems with multi units but did not come up with what we considered a sound plan. If we were to do it again we would have been more regimented with the contractor on what areas were completed each day (including start and end addresses). You also need a solid cut-off date, at which time you will cease to deliver any more "so called missed boxes". In our case we eventually made residents come and pick up their boxes if they still swore they were missed.

Tonnage Results

Tonnage data for the 8 month period(July 2012 to February 2013) after the delivery of the Blue Boxes is presented below. To allow for an annual post project evaluation, additional tonnage data covering the remainder of the 12 month period from March 2013 to June 2013 will be included the final report for 624.4.

Table 2: Tonnes collected before & after delivery of Blue Boxes

	8 month period before Blue Boxes were delivered	8 month period after Blue Boxes were delivered	
Tonnes	18 954	19 269	
Kg/household/year	146	148	
Volume (if available)	2, 64 litres/box/hhld	2, 64 litre/box/hhld 1, 83 litre box/hhld	
Litres/household	129	212	

Table 3: Tonnes collected before & after delivery of Blue Boxes

	Jan	Feb	Mar	Apr	May	June	July	Sept	Aug	Oct	Nov	Dec	Total
2011	2,171	1,869	2,406	2,281	2,478	2,470	2,227	2,452	2,655	2,215	2,510	2,762	28,496
2012	2,377	2,099	2,255	2,081	2,615	2,386	2,425	2,619	2,332	2,352	2,524	2,423	28,488
2013	2617	1977											
%Diff	10%	-6%			6%	-3%	9%	7%	-12%	6%	1%	-12%	

Indicates months that Blue Boxes were delivered

AVG % Diff 0.44%

Analysis

Based on 8 months of data, there is a 0.44% overall in tonnage. Tonnage will continue to be tracked on the project and more analysis is required on solely container tonnage to see if the positive trend since the introduction of the larger blue box continues.

Tonnes Marketed

A more telling comparison of the impact the larger blue box and the addition of mixed plastics had on the program can be found in examining tonnes marketed of mixed plastic material. From January to April 2012, prior to the delivery of the new boxes, 123 tonnes of mixed plastics were marketed. From July 2012 to October 2012, after the boxes were delivered the tonnage rose to 300 tonnes, more than double.

Project Budget

Table 4: Project Budget

	Per unit cost	Quantity	Total (cost x quantity)
Blue Box	\$5.05	136,960	\$703,821.00
Distribution	\$.40	126,445	\$54,041.58
In-House Distribution			\$6,551.60
			\$764,414.18