City of Calgary

Green Cart Composting Pilot

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Calgary, Alberta, Canada
Calgary’s Context

- Population > 1.2 Million
- 3.6 % population growth
- Impacts of our economy
- Challenging climate
Waste & Recycling Services

- Blue & Black Cart to all single-family residences
- Collection frequencies
- Education team!
Waste Composition

- Most of our garbage could be composted
- Waste Comp study every 3 years
- Need for Green Cart Program
Purpose of Green Cart Pilot

• Gauge citizen satisfaction
• Measure collection tonnages and diversion
• Test collection frequency and understand operational costs
• Refine education and communication tools
• Information for implementing a city-wide program, including processing facility
Pilot Outline

- March 2012 – February 2013
- 4 communities = 7500 households
- Participation was free
- Weekly collection of blue & green carts
- Collected all food and yard waste
- Materials composted at private outdoor facility
Tools for Citizens

- Starter Kit Included:
  - 120L Green Cart
  - Kitchen Catcher
  - 100 Compostable Bags
  - Paper Yard Waste Bags
Pilot Measurements

- Green, black and blue cart tonnages
- Green Cart participation
- Material quality
- Excess garbage
- Waste Composition
- Customer experience (research)
Green Cart Material Collected

Week (March 2012 to February 2013)
Garbage drops 40 per cent

Non-pilot communities

Pilot communities
Engagement and Communications

- 12 open houses
- Information brochure and calendar
- 2 media events
- 4 direct mailouts
- Bold signs
- 4 councillor updates
- Household visits
- Calgary City news blog
- Website, email, 311, social media
- Too Good To Waste Video
- Research (Ipsos Reid)
Ipsos Reid Research

Quantitative Research

• 3 Surveys: February, June, December 2012

Qualitative Research

• 2 Focus Groups
• 10 In-home interviews
• 1 ideation session
Overall Satisfaction with Program

- Very satisfied: 57% (Total n=391)
- Somewhat satisfied: 29%
- Somewhat dissatisfied: 7%
- Very dissatisfied: 7%
- Total: 85%

- Very satisfied: 63% (n=415)
- Somewhat satisfied: 26%
- Somewhat dissatisfied: 6%
- Very dissatisfied: 5%
Support for a City-Wide Program

<table>
<thead>
<tr>
<th></th>
<th>Strongly support</th>
<th>Somewhat support</th>
<th>Somewhat oppose</th>
<th>Strongly oppose</th>
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<tbody>
<tr>
<td><strong>Total (n=362)</strong></td>
<td>56%</td>
<td>28%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>(n=391)</strong></td>
<td>66%</td>
<td>25%</td>
<td>2%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>(n=415)</strong></td>
<td>73%</td>
<td>18%</td>
<td>3%</td>
<td>5%</td>
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Satisfaction with Revised Collections Schedule

<table>
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<th>Very satisfied</th>
<th>Somewhat satisfied</th>
<th>Not very satisfied</th>
<th>Not at all satisfied</th>
<th>Don't know</th>
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<tbody>
<tr>
<td>Total (n=362)</td>
<td>33%</td>
<td>33%</td>
<td>17%</td>
<td>13%</td>
<td>3%</td>
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<tr>
<td>(n=391) JUNE</td>
<td>45%</td>
<td>26%</td>
<td>13%</td>
<td>16%</td>
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<tr>
<td>(n=415) DEC</td>
<td>46%</td>
<td>26%</td>
<td>12%</td>
<td>17%</td>
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</table>
Satisfaction with Size of Cart

- **Total (n=362) FEB**
  - Very satisfied: 28%
  - Somewhat satisfied: 41%
  - Not very satisfied: 14%
  - Not at all satisfied: 12%
  - Don't know: 5%

- **(n=391) JUNE**
  - Very satisfied: 55%
  - Somewhat satisfied: 27%
  - Not very satisfied: 10%
  - Not at all satisfied: 7%

- **(n=415) DEC**
  - Very satisfied: 59%
  - Somewhat satisfied: 24%
  - Not very satisfied: 10%
  - Not at all satisfied: 6%
Key Qualitative Findings

• Once participants started using the cart, support for the program grew

• Most residents said they would purchase compostable bags or use an alternative method

• Those with back-alley pick-up are less concerned about cart storage rather than those with front set-out.

• Most participants welcome city-wide implementation of the program for its environmental benefits and ease of use.
What Worked Well

- Starter kit
- Collection schedules
- Communications and engagement with citizens
- Black cart excess audits
- Low contamination rate – average 6%
- High participation rate
City-Wide Program

- Roll-out in 2017
- Public is eager to participate
- Cart size not yet determined
- Excess will be collected
- No plastic bags allowed
Calgary’s Composting Facility

• Commissioning and operations of facility to begin in 2017
• P3 Model – Public Private Partnership
• Largest indoor composting facility in Canada
• Facility capacity shared between bio-solids and source separated organics
Questions?

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