



*Let's Recycle Better, Together.*

# Lessons Learned for Parks & Streetscape Recycling

*April 20, 2021*

# Today's Panelists



**Alec Cooley**

*Senior Advisor*  
Busch Systems  
Charleston, SC



**Christa Rust**

*Senior Program  
Director*  
Recycle Everywhere  
Winnipeg, MB



**Emily Willobee**

*Policy & Programs  
Planner*  
Dist. of West Vancouver  
Vancouver, BC



**Blair Pollock**

*Planner*  
Orange County Solid  
Waste Management  
Chapel Hill, NC



**Amy Lego**

*Executive Director*  
Operation Downtown  
Des Moines, IA

# Agenda

## Pt 1: Case Study Presentations

- Recycle Everywhere, MB
- Des Moines, IA
- Orange County, NC
- West Vancouver, BC

## Pt 2: Group Discussion

- Bin design features
- Operational issues
- Education / awareness
- How / where to place bins
- Budgeting

# Use Your Dashboard

## Step 1:

Expand dashboard



## Step 2:

Click button to expand

Type direct questions for panelists

Look for links to resources

A screenshot of a webinar dashboard. The dashboard is a vertical list of items: Audience view (100%), Sharing, Webcam, Audio, Dashboard, Attendees: 2 of 501 (max), Polls (0/4), Questions, Handouts: 1 of 5, and Chat. Below this list is a section titled "Lessons Learned for Parks &amp; Streetscape Re..." with "Webinar ID: 477-758-627" and the GoToWebinar logo. Two red circles are drawn around the "Questions" and "Chat" items, with red arrows pointing from the text "Type direct questions for panelists" and "Look for links to resources" to these circles respectively. The "Audience view" item has a green progress bar.

# Share Your Pro Tips!

Attendee Input for Parks & Streetscape Recycling

File Edit View Insert Format Data Tools Add-ons Help [Last edit was seconds ago](#)

100% \$ % .0 .00 123 Default (Ari... 10 B I S A

	A	B	C	D	E
1	<b>What are the most important considerations or design features for choosing outdoor bins?</b>				
2	<b>Name</b>	<b>Email</b> (if interested to network w/ others)	<b>Details</b>		
3	Alec Cooley	alecc@buschsystems.com	Stainless steel hinges / hardware are worth additional expense to avoid rust in marine environments		
4	Alec Cooley	alecc@buschsystems.com	Beware powder coating in locations where bins likely to get dinged up (e.g. shopping carts bang into them).		
5					
6					
7					
8					
9					
10					
11					

*Find link to Google sheet in Chat box*

# Participate in Survey - Outdoor Recycling Trends

## Early Results:

- 68% have uniform style guidelines
- 70% have uniform color standard
  - 82%: Recycling = Blue
- 30% have trash & recycling paired at all locations
  - 29% have paired at less than half of locations



**Look for email after the webinar with link to the survey**

# Recycling in Parks & Streetscapes





# CBCRA

# Recycle Everywhere

**Christa Rust, M.N.R.M.**  
**Senior Program Director**

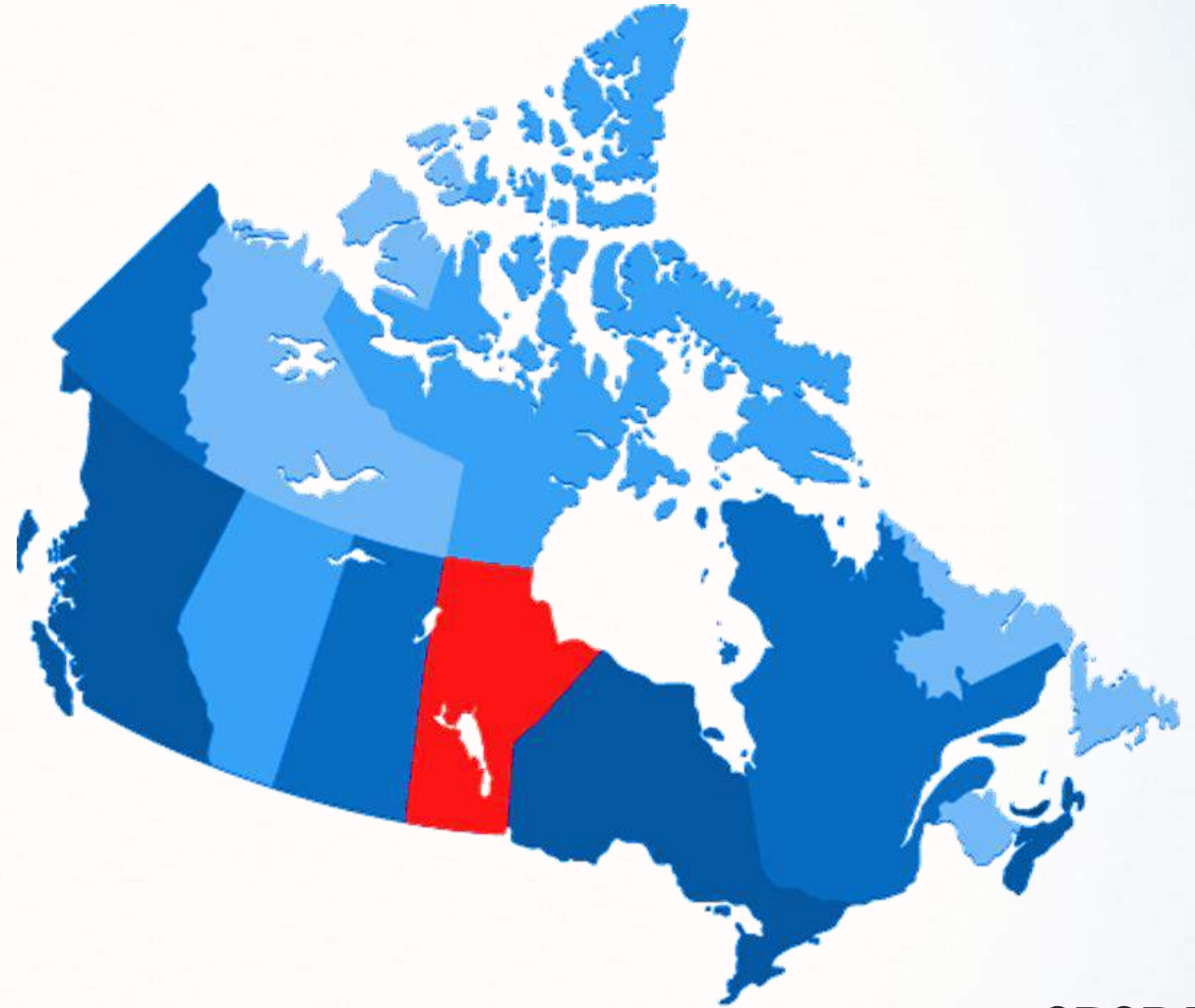






# About Us

- Canadian Beverage Container Recycling Association (CBCRA)
- Operates the Recycle Everywhere program
- Away-from-home beverage container recycling



# How It Works

- Flow of CBCRA funds
- Flow of MMSM funds
- Collected Materials
- Flow of Material Revenue



# Public Space Recycling



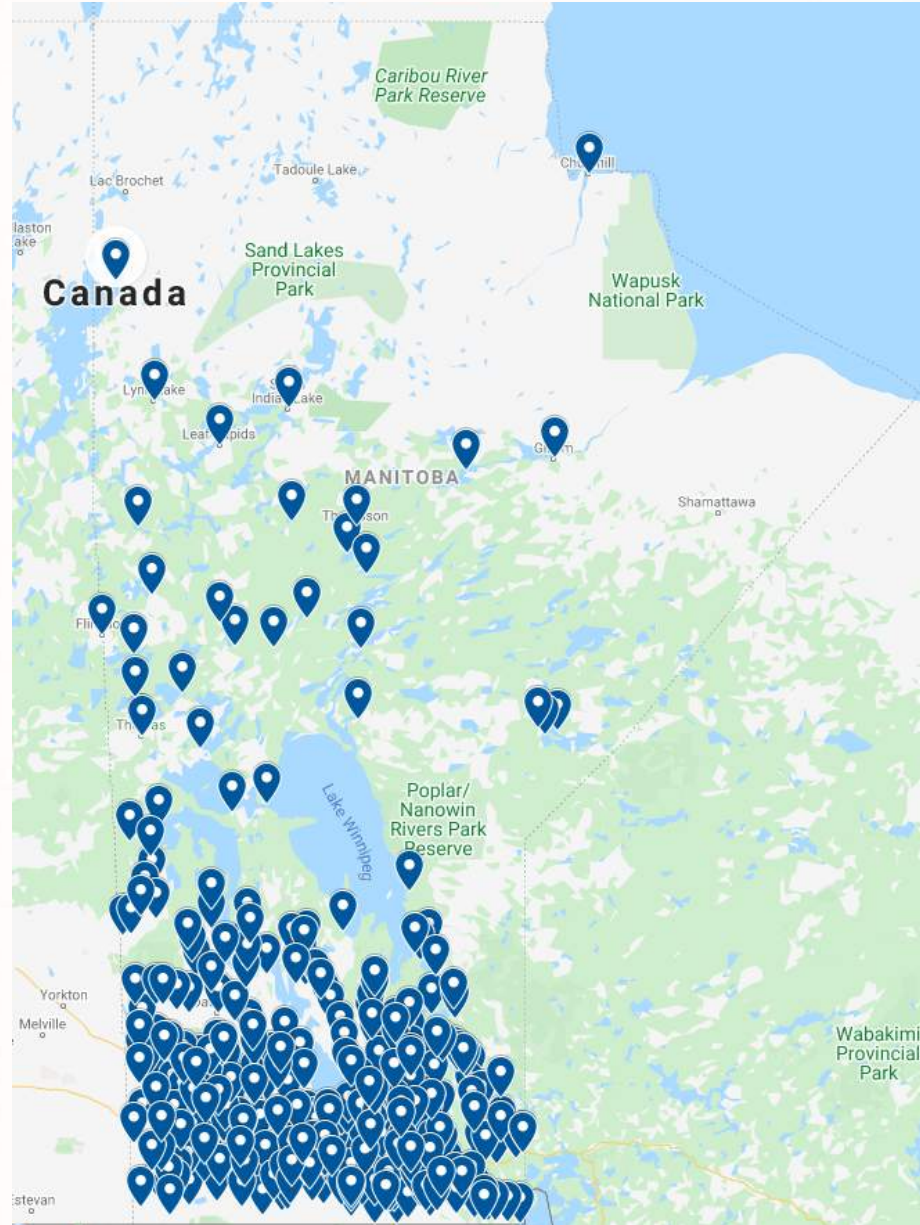
- Up to 30% of beverages consumed away from home
- Convenience is key
- Recycle Everywhere bins for public spaces and events free of charge
- Education is more important than ever

# Bins In Action





# Public space recycling bins throughout Manitoba Municipalities!



# Bin Results

## PUBLIC SPACE RECYCLING BINS



# 71,752

DISTRIBUTED SINCE 2010

CBCRA also provides three other types of bins that help make it convenient for Manitobans to collect their empty beverage containers. These include:

At Home Bin:

## 244,387



Mini Bin:

## 130,754



Bin Bags:

## 97,503



# Recovery Stats

- Recovery rate from 42% in 2010 to 68% in 2019
- PET beverage bottle recovery rate was 77% in 2019

WOULD FILL  **1,057** RAIL CARS

OR



**72**  
OLYMPIC-SIZED SWIMMING POOLS

SAVING

**27,714**  
TONNES OF **eCO<sub>2</sub>**

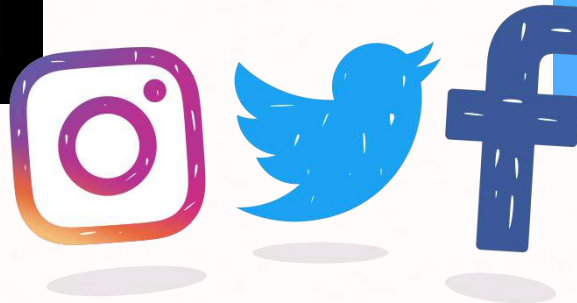
EQUAL TO REMOVING

**6,159 PASSENGER CARS**

FROM THE ROAD EACH YEAR.

# Tools & Resources

[www.recycleeverywhere.ca](http://www.recycleeverywhere.ca)



[www.youtube.com/user/RecycleEverywhere](http://www.youtube.com/user/RecycleEverywhere)





# Contact



**Christa Rust M.N.R.M**  
Senior Program Director  
CBCRA Recycle Everywhere

Email:

[crust@cbcra-acrcb.org](mailto:crust@cbcra-acrcb.org)



# Recycle DSM Amy Lego

Executive Director, Operation Downtown

April 20, 2021

**DOWNTOWN  
DSM USA**

DES MOINES, IOWA

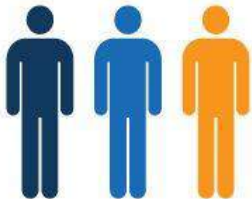


**RecycleDSM**



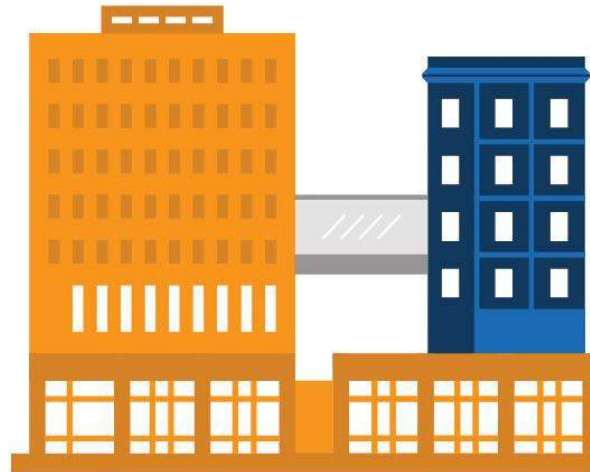
[downtownDSMUSA.com](http://downtownDSMUSA.com)

# ABOUT DOWNTOWN DES MOINES

80,000+  people work Downtown.



12,000+ people live Downtown.



More than four miles of connected skywalks.

\$3B  
INVESTED 

\$3 billion of capital invested in past 10 years.

800+ 

miles of recreational trails for walking, running and biking.

# PUBLIC SPACE RECYCLING PILOT PROGRAM



**87%**

of the material collected was recyclable\*

**98%**

was “perceived” recyclable\*

\* Audited by the Iowa Waste Exchange, Dept. of Natural Resources during the pilot program



# DISTRICTS & PUBLIC SPACE RECYCLING

DOWNTOWN DES MOINES, IOWA



- Boutique Retail District
- Sculpture Park
- Event Center
- Nightlife District
- Central Business Core



HISTORIC EAST VILLAGE



# RecycleDSM

Establishing a cleaner and greener Downtown Des Moines (DSM).

### ITEMS ACCEPTED



ALUMINUM CANS



PLASTIC BOTTLES



PAPER



### ITEMS NOT ACCEPTED



FOOD



COFFEE CUPS

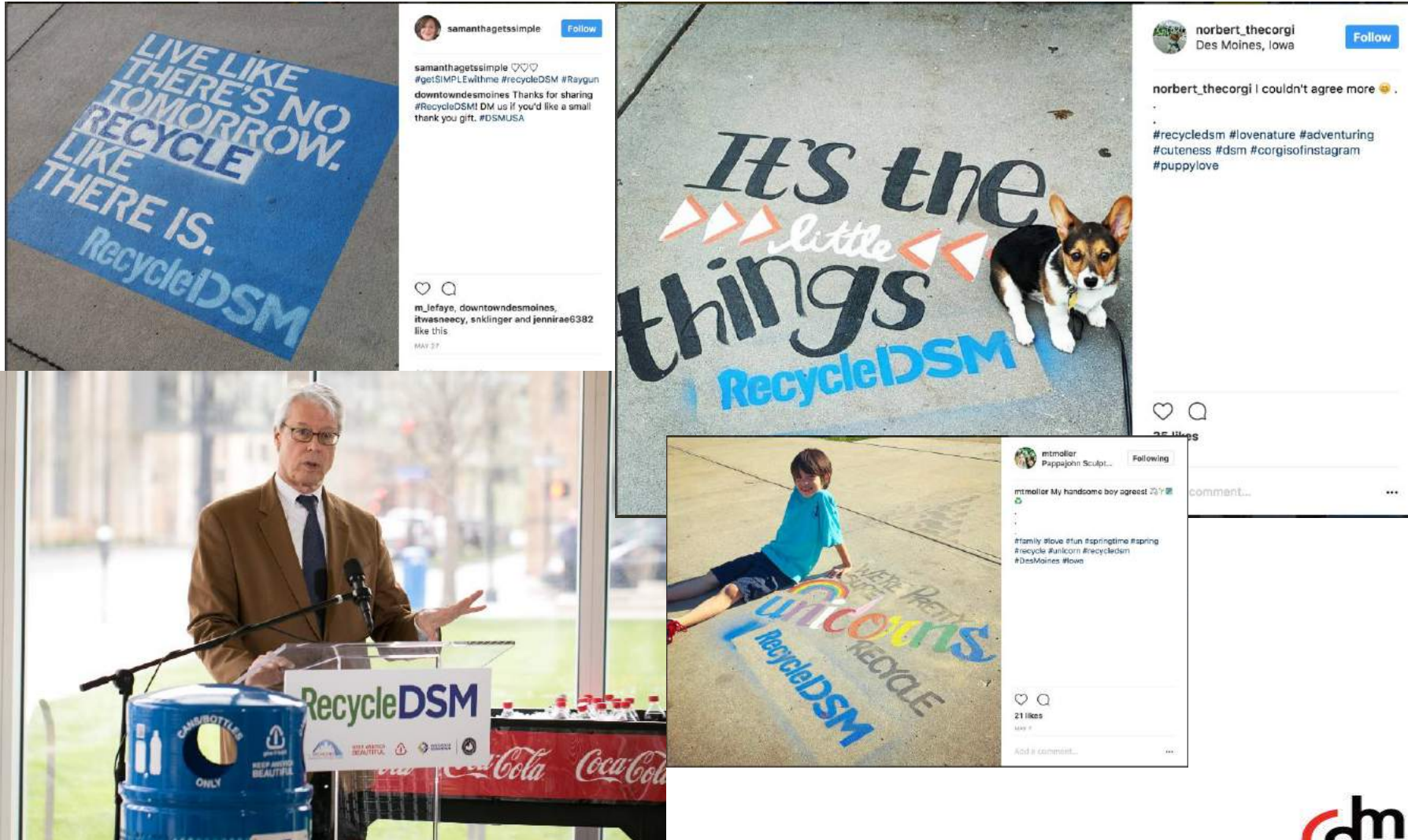


PLASTIC BAGS

(515) 286-4950  
[operationdowntown.com/recycle](http://operationdowntown.com/recycle)



# EDUCATION & MARKETING

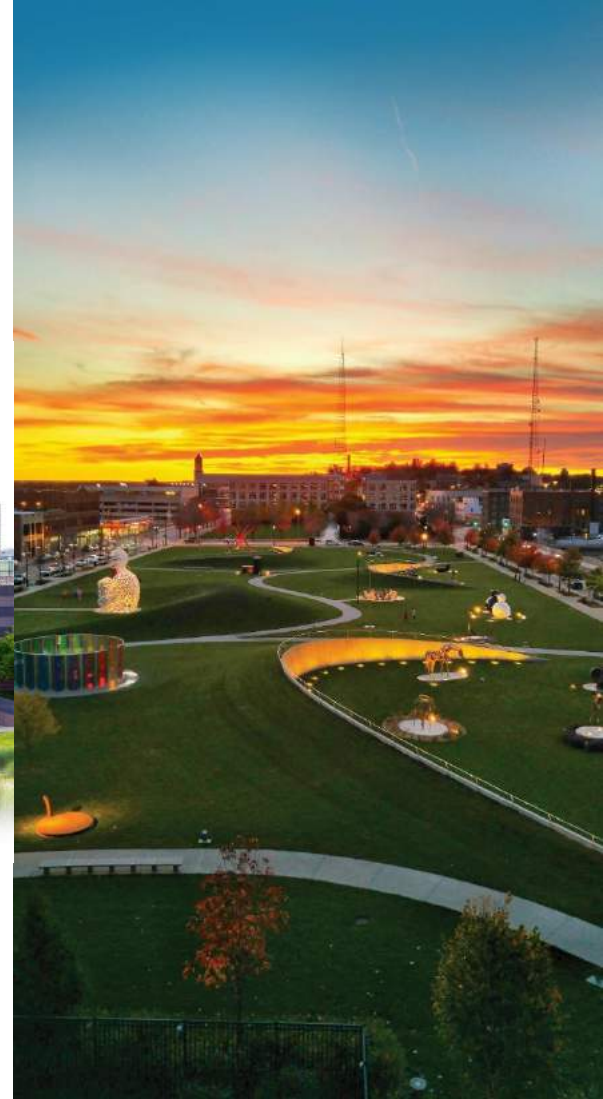


# PARTNERSHIPS & OPERATIONS





# QUESTIONS?



# Live Poll #1

## What is the #1 challenge your recycling program faces?

- Vandalism / wear & tear
- Low recycling participation
- Contamination
- Costs / poor economics
- Other

# Away from Home Recycling

Blair L. Pollock, Solid Waste Planner  
Orange County NC

4/20/21 Busch Seminar

[bpollock@orangecountync.gov](mailto:bpollock@orangecountync.gov)

# Orange County, NC (founded 1752)

148,000 total pop.

400 sq. miles

3 incorporated towns

- Carrboro 21,000 (former mill town, now “very hip”)
- Chapel Hill 64,000 (home of UNC – Tar Heels)
- Hillsborough 7,000 (County seat, dates to 1754)
- Overall Population is 62% ‘urban’

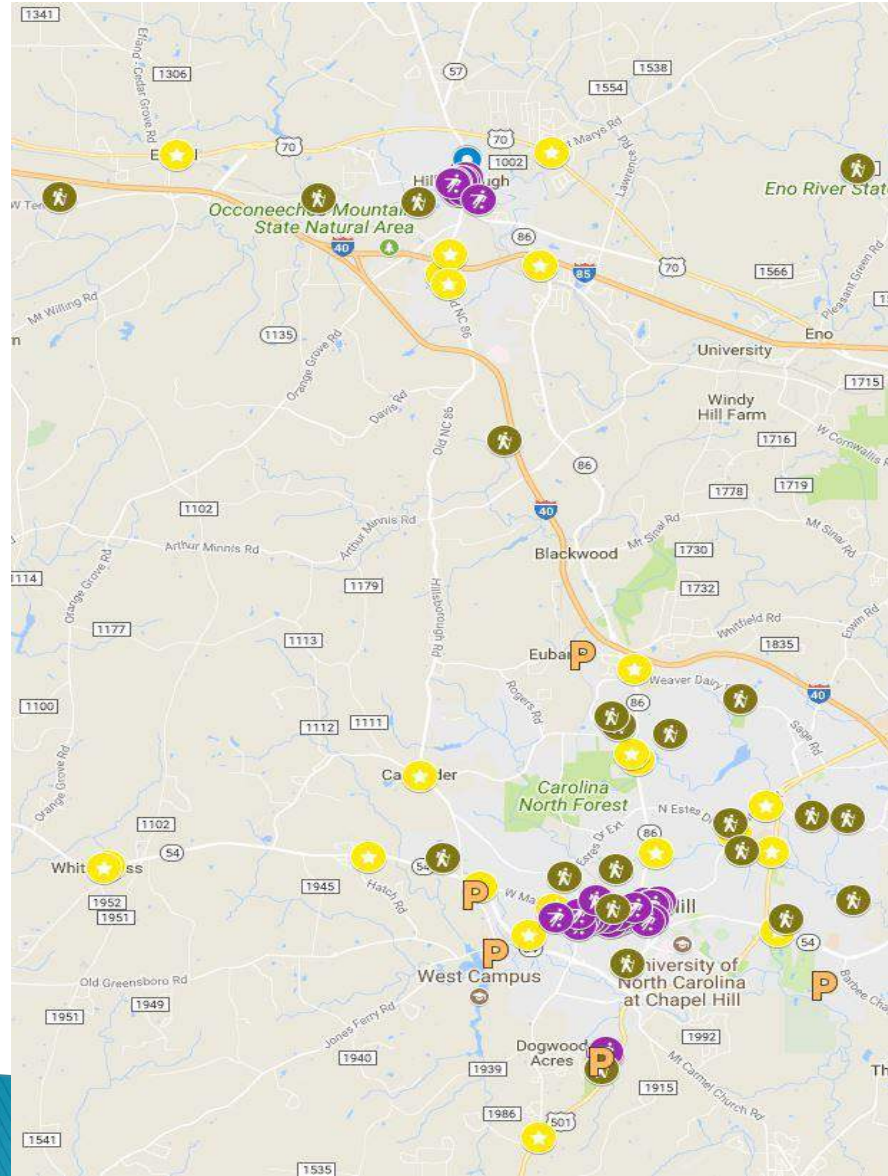


Orange County, North Carolina

# Orange County AFH Overview

Type	Number	Comments
Park & Ride Lots	5	Includes one UNC “Big Belly” with remote communication. Reduced from daily to once a week collection trip
Convenience Stores (etc.)	23	Using mostly 35 gal carts surplus from govt. bldg. program. Custom bins at NCDOT. One car wash. (Others said ‘no’)
Parks	24	Throughout County not including UNC, Duke or TLC natural areas. Carrboro collects its own & consolidates at Public Works for \$ savings from County SWP Fee
Pedestrian Bins	53	In downtown areas of all 3 Towns. County full cost fee= \$10/month/bin. Towns got DEACS grants for all bins. Varying styles in each Town.
Total	105	Opportunities abound for recycling

Map of  
**AFH**  
World-  
Orange  
County



Conv. Store



Ped Bins



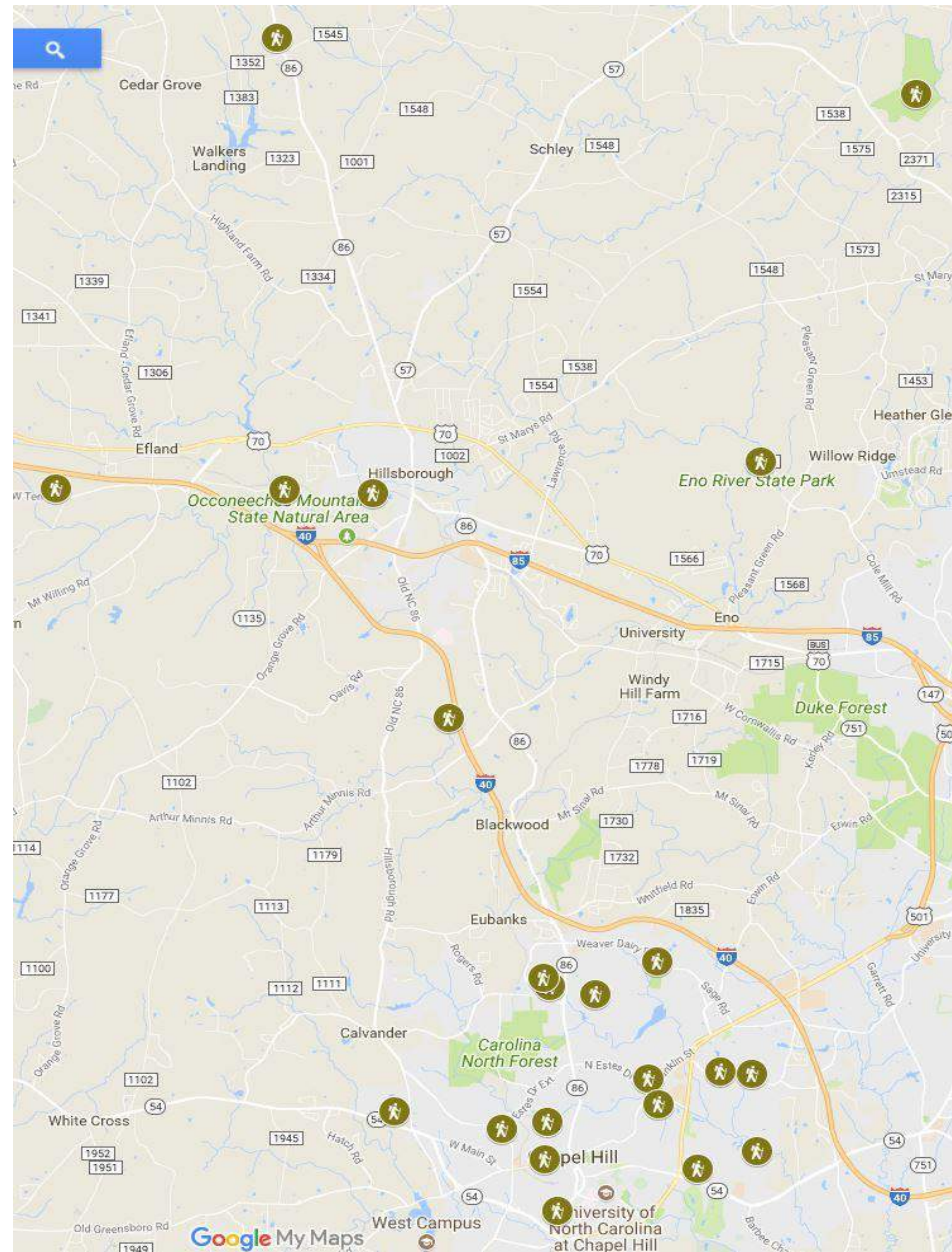
Parks



Park & Ride



# Town or County Parks with Recycling (24) – not including UNC, Duke or other private, NGO-held reserves



# Parks

- ▶ A wide variety of parks served – Town, County, Regional, State – 24 total
- ▶ Cooperative relations with Towns to site & service containers





# Pedestrian Bins

- ▶ Each of 3 towns made its own bins choices.
- ▶ Each received NC DEQ 80% grants for all bins.
- ▶ All contract with Orange County for service at \$10/bin/month = full cost recovery (c. 2015).
- ▶ Total bins in service:

Town	Bins
Carrboro	10
Chapel Hill	30
Hillsborough	13
Total	53

# Bin Costs (no installation labor)

- ▶ Carrboro est. \$1,400/ea. Victor Stanley (steel)  
DEQ grant (est.) ~ \$11,200
- ▶ Chapel Hill \$917/ea. Nex-Terra (HDPE)  
DEQ 2 grants) ~Total \$23,400
- ▶ Hillsborough Victor Stanley \$1,318/ea.  
DEQ grant ~\$13,750 (recycling cans only,  
not the paired trash cans)

# Carrboro Bins (~ \$1,400/ea.)



# Chapel Hill Bins

(\$917/each. 1,200 milk jugs/bin)



# Chapel Hill bins in action

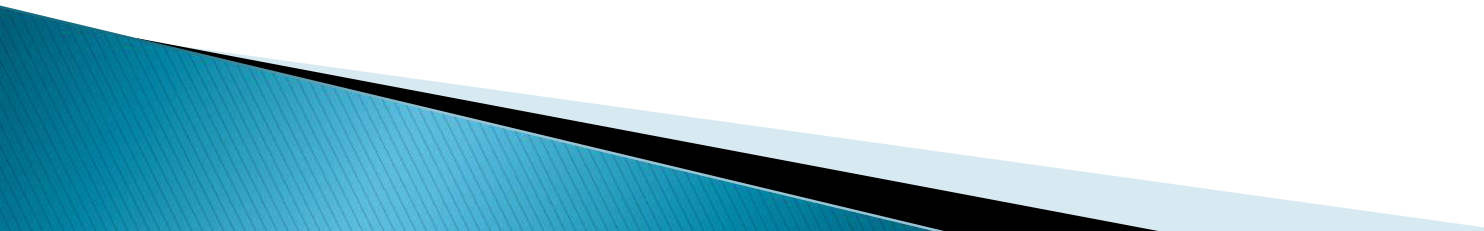


Wait, where did you come from?

# Hillsborough Downtown Combo \$2,200/each (not installed cost)



# What's in the Pedestrian Bins?

- ▶ Sampled: 48 bins in 3 towns March 2018.
  - ▶ By Weight: 79% recyclable (includes paper).
  - ▶ By Unit (no paper): 52% recyclable cans & bottles
  - ▶ Of 1,541 'units' counted: 804 bottles or cans.
  - ▶ Of the 737 'non-bottles or cans': 499 cups 68%
- 

# What's in the bins by Town.

(Excruciating detail - Does the different bin type matter?)

	<u>Carrboro</u>	Sample Size	Chapel Hill	Sample Size	Hillsborough	Sample Size	TOTAL		
collection date and # bins	3/8/2018	10 bins	3/8/2018	26 bins	3/2/2018	12 bins	48	bins	
% recyclables by weight w/ paper	70%	41.1 lbs	88%	71.9 lbs	76%	33 lbs	<b>79%</b>	146	<u>lbs</u>
% NON recyclables by weight	30%	17.5 lbs	12%	9.5 lbs	24%	11.4 lbs	<b>21%</b>	38.4	<u>lbs</u>
% recyclables by unit NO PAPER	50%	<b>203 bottles &amp; cans</b>	61%	<b>396 bottles &amp; cans</b>	39%	<b>205 bottles &amp; cans</b>	<b>52%</b>	<b>804</b>	<u>units</u>
% NON recyclables by unit	50%	<b>202 = (109 cups + 93 other)</b>	39%	<b>250 = (152 cups + 98 other)</b>	61%	<b>285 = (140 cups + 145 other)</b>	<b>48%</b>	<b>737</b>	<u>units</u>



# Streetside Recycling Program

## District of West Vancouver, BC, Canada



Emily Willobee, Policy & Programs Planner, Engineering Services

prepared for Parks & Streetscape Recycling Webinar

hosted by Busch Systems, April 20, 2021

# Presentation Outline

1. Program summary
2. Service areas: pilot & full expansion
3. Finance: capital and operating
4. Collection processes
5. Bins don't recycle, people do
6. Monitoring diversion

# Program summary

- Designed based on successful residential collection program
  - High participation
  - Low contamination
  - Multi-stream: Paper, Containers, Glass, Garbage, Food Scraps & Yard Trimmings
- **Three stream stations:** Garbage, Paper, Mixed Containers
- **Bin choice:** Envirozone Hazelton 3
- Commercial streetsides only (not parks)
- Prioritize resident & business engagement to maximize program impact



Recycling at home...

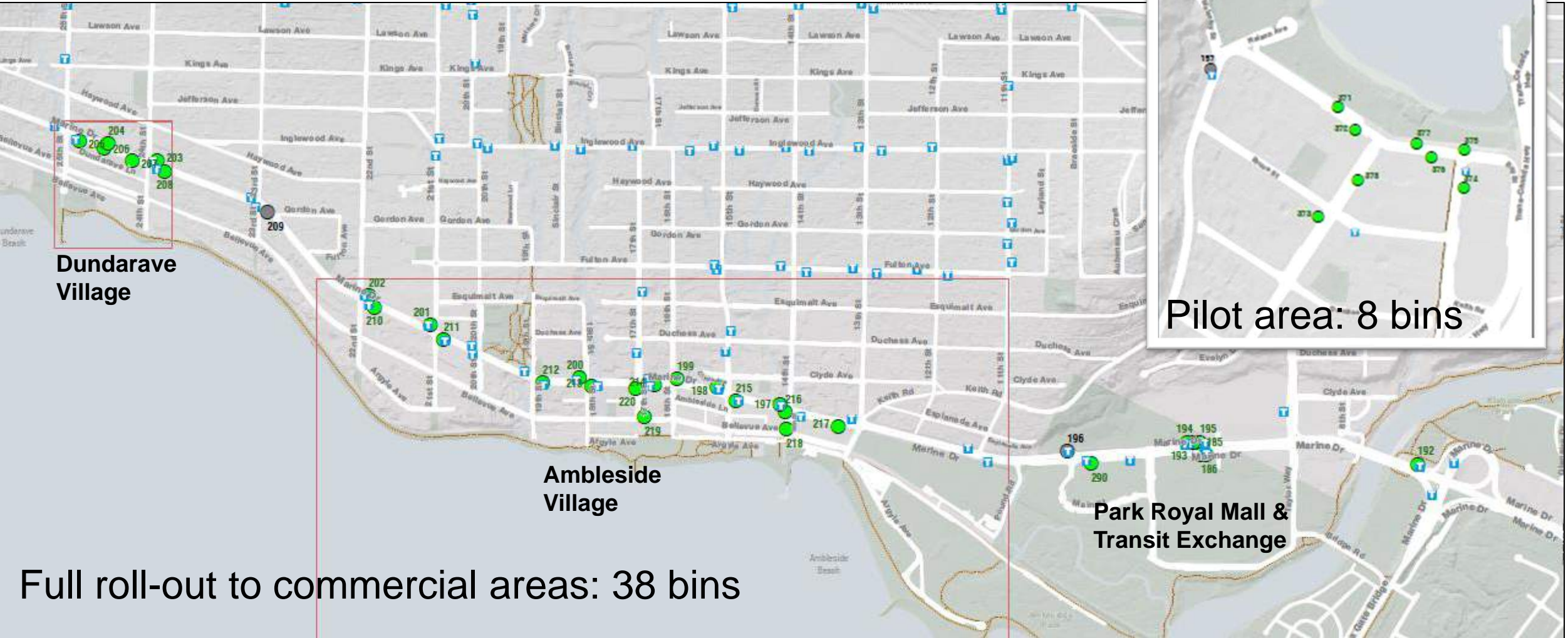


...in public buildings...



...and in commercial areas.

# Service areas: pilot & full expansion



Full roll-out to commercial areas: 38 bins

# Finance: capital and operations

## **Solid Waste Utility**

- Entirely separate from municipal General Revenue funds
- Assumed financial responsibility for public realm waste collection in 2016
- Resulted in stronger collaboration between municipal departments

## **Capital costs**

- Bins: Approx \$100,000 over two years
- Bin wraps: Approx \$30,000

## **Operating costs** (servicing, data, education)

- Pilot: \$70,000
- On-going annual: \$220,000
- Education materials: <\$5000

# Collection processes

## Pilot: In-house

- Parks Dept staff
- Clear liner bags
- Converted leased pick-up truck
- 4yrd dumpsters at Operations Centre
- 5 consultant waste audits



Bin replacements were staged over several weeks, completed using a crane truck

## On-going: Contracted out

- Growing City
- Clear liner bags, rigid plastic interior bins
- Isuzu box truck with mega bags
- Delivery direct to processor(s)
- Well-trained staff and “gamification” equates to excellent data collection
- Servicing frequency fluctuates seasonally

# Bins don't recycle, people do!

- Council & staff FAQ
- Letter to businesses
- Transit shelter ads
- Utility bill insert
- Web page and social media
- Student video contest
- “Waste Evaders” game
- On-going...



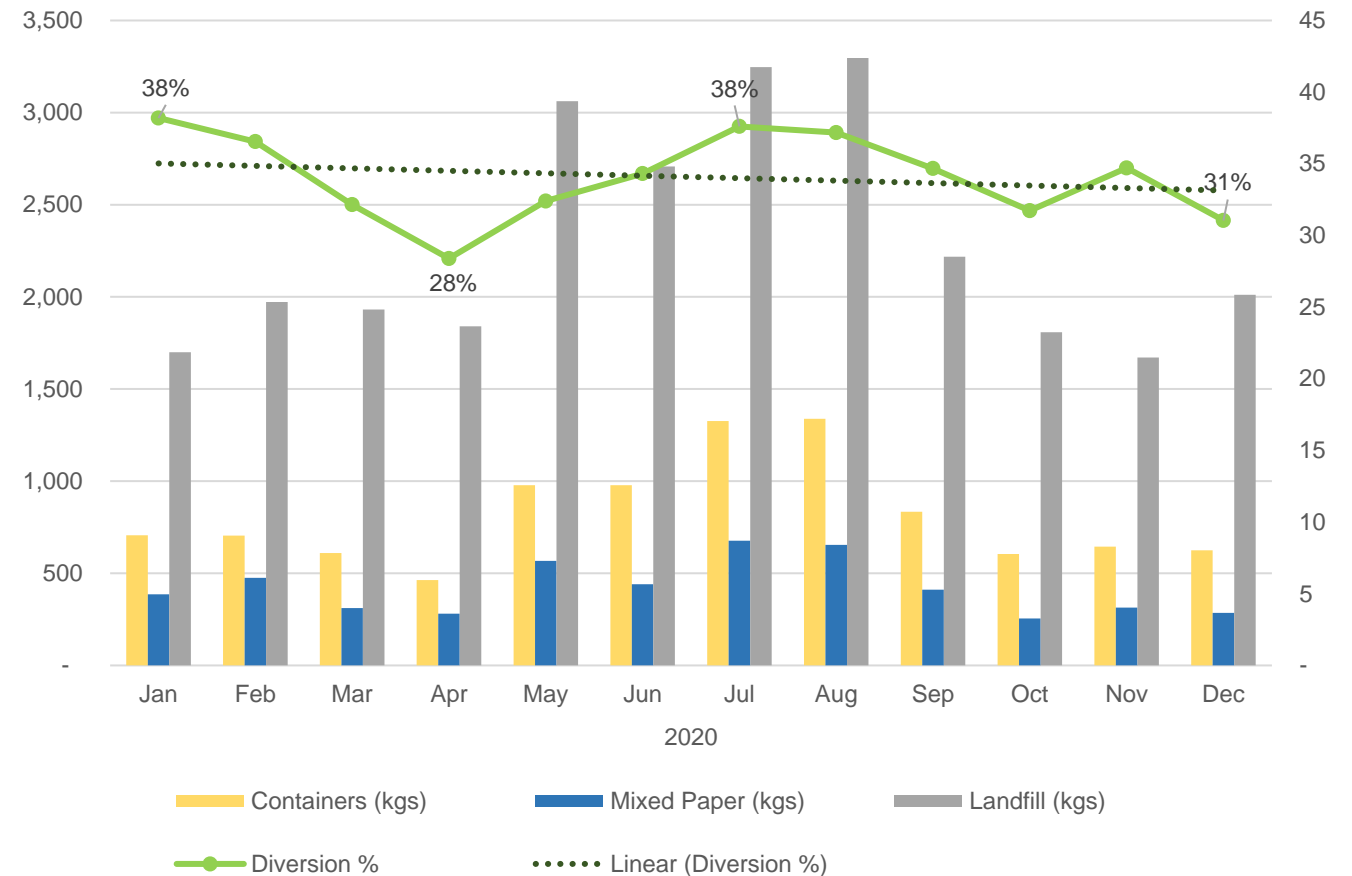
# Monitoring waste diversion

## Pilot targets

- 50% garbage diversion
- less than 25% contamination (especially containers stream)

## Full roll-out results to date

- Recovery: 75 tonnes since Q2 2019
- Diversion/capture: 35% average\*  
\*Across all contractor-collected sites:  
38 multi-stream units, 22 garbage-only units
- Contamination rate: variable
- Seasonal volumes: highly variable





# Bins don't recycle—people do!

Please sort your waste to help make this program a success. [westvancouver.ca/streetsiderecycling](http://westvancouver.ca/streetsiderecycling)



**Thank you.**

Emily Willobee, Policy &  
Programs Planner

[ewillobee@westvancouver.ca](mailto:ewillobee@westvancouver.ca)

Colette Scott-Sibley, Solid Waste  
Contract Administrator

[cscottsibley@westvancouver.ca](mailto:cscottsibley@westvancouver.ca)

**[westvancouver.ca/collection](http://westvancouver.ca/collection)**

# Live Poll #2

**What are your priorities for discussion topics? (*pick 2*)**

- Bin design features
- Operational issues
- Education / awareness
- How / where to place bins
- Budgeting



# Best Practices to Address Contamination



# Labels & Signage



# Labels & Signage

## Garbage ✓



Coffee Cups



Food Stained Containers



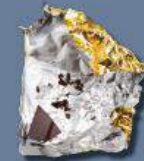
Fountain Drink Cups



Animal Waste



Plastic Cutlery



Wrappers



Food Waste



## Recycling ✓

### Empty Beverage Containers



Plastic Bottles



Aluminum Can



Juice Box



Carton



Glass Bottles



Empty #1,#2 Containers



Empty #1,#7,#5 Plastic Containers



Paper



# Labels & Signage



# Bin Features





# Bin Features



# Bin Features



# Bin Features



# Live Poll #3

## What is the #1 motivation for recycling in parks/ streetscapes?

- Increase recycling / diversion
- Save on trash disposal costs
- Project community's values
- “Marketing” for recycling
- Demand from the community

# Placement



# Placement



# Operational Issues



# Operational Issues: Cleaning





# Operational Issues: Maintenance



# Education: Address Contamination



# Education / Awareness



# Education / Awareness

A photograph of a young boy in a blue shirt and black pants performing a stunt on a recycling bin. He is jumping over the bin, which is labeled "CONTAINERS". The background shows a city street with buildings.

**STUDENT VIDEO CONTEST**

**BINS DON'T RECYCLE. PEOPLE DO!**

**Film a 60 to 90-second video for a chance to win \$750.**

Use your creativity to show the importance of recycling properly.

Open to students from Kindergarten to Grade 12 in West Vancouver. Contest details and how to enter: [westvancouver.ca/student-video-contest-2019](http://westvancouver.ca/student-video-contest-2019).

**Deadline for submissions is April 15, 2019.**

A photograph of a recycling advertisement mounted on a wall. The ad features the text "RECYCLE for a bright future" and "Participate in the shared vision of the National Park Service in partnership with Coca-Cola for a sustainable National Mall." It also includes a graphic of a recycling bin and a classical building. The ad encourages recycling, volunteering, and donating, and provides the website "www.nationalmall.org/recycle". Logos for the National Mall and Coca-Cola are visible at the bottom.

**RECYCLE**  
for a bright future

Participate in the shared vision of the National Park Service in partnership with Coca-Cola for a sustainable National Mall.

For every 20 oz. plastic bottle you dispose of in the Blue Recycling Bins, the energy saved could light a 40-watt equivalent compact fluorescent light bulb for almost 10 hours.

recycle, volunteer, donate.

for more information visit:  
[www.nationalmall.org/recycle](http://www.nationalmall.org/recycle)

Special thanks to the National Mall recycling partners.

# Thank You to Our Panelists

## **Christa Rust**

*Senior Program Director*

Recycle Everywhere

Winnipeg, MB

[crust@cbcra-acrcb.org](mailto:crust@cbcra-acrcb.org)

## **Blair Pollock**

*Planner*

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## **Emily Willobee**

*Policy & Programs Planner*

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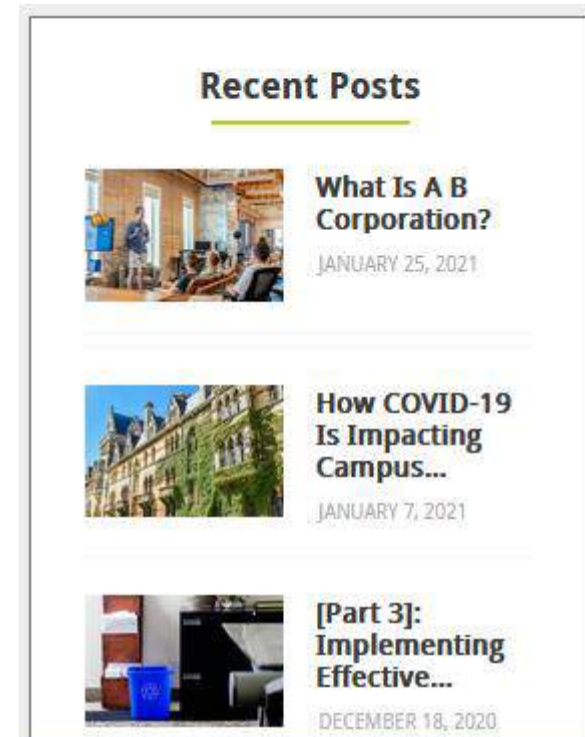
# Busch Systems Resources

## Consulting Services

- Designing collection systems
- Planning bin infrastructure
- Waste composition studies
- Employee engagement
- TRUE advising



## *Advancing Recycling* Blog Series



# Participate in Survey - Outdoor Recycling Trends

- Look for an email with link
- 15 questions/ Less than 10 minutes
- Results shared w/ Participants once survey closes



# Stay Tuned for Product Demonstration



# Live Poll #4

**Would you like to receive emails about Busch System's bin products?**

- Yes, you can email me
- No, I do not want to be emailed

# Back up Photos

# Bin Features



# Bin Features

