

# Today's Panelists



**Mandy Bydalek**

*Assistant Sustainability  
Coordinator*

Lincoln Public Schools

Nebraska



**Olena Olafson**

*Sustainability Coordinator*

Calgary Board of Education

Alberta



**Amanda Mortl**

*Zero Waste Specialist*

Austin Independent  
School District

Texas



*Let's Recycle Better, Together.*

**AIMING FOR EXTRA CREDIT  
WITH K-12 RECYCLING &  
WASTE REDUCTION**

WEDNESDAY MAY 18TH 1:00 - 2:30 P.M. EDT.

A photograph of a school hallway with blue lockers. Two students, a boy and a girl, are standing near a recycling station. The station consists of a blue bin with a recycling symbol and a black bin labeled "WASTE ONLY".

# Join the Discussion!

From your toolbar:



Share your experience  
& opinions

Look for links  
to resources

Type direct questions  
for panelists

# Sustainability at LPS

**Mandy Bydalek**  
Assistant Sustainability  
Coordinator



Lincoln Public Schools

**SUSTAINABILITY**



Lincoln, Nebraska

42,000+

...  
STUDENTS

8,000+

...  
EMPLOYEES

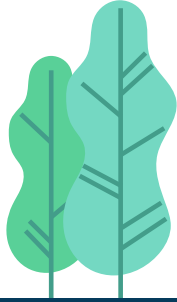
70

...  
BUILDINGS

7,300,000+

...  
SQUARE FEET OF SPACE





# 2021 Waste Diversion Efforts

Recycling	Composting	Reuse
Traditional Recycling milk cartons, metal, electronics, pallets, books, cartridges, lights, and batteries	61 LPS buildings have joined the cafeteria composting program	Auction Program, Surplus Disbursement, books, and oil reuse
1,669,931 lbs.	1,200,915 lbs.	17,200 lbs.

52% district diversion rate



# Construction Waste

3,063

Tons recycled

83%  
Diversion Rate

643

Tons landfilled

 392 tons  
wood

 133 tons  
metal

 2,421 tons  
concrete

 14 tons  
PVC

 62 tons  
drywall

 41 tons  
single stream



# Cafeteria Waste

- Share table
- Empty Liquids
- Carton Recycling
- Bottles & Cans Recycling
- Landfill
- Compost





# Classroom Waste

- Container resets
  - Right-sizing bins
  - Standard location and labels
- Whole School Composting





# POUR LIQUIDS HERE

Completely empty ALL cartons before recycling

## CARTONS

### EMPTY CARTONS ONLY

**\*NO LIQUIDS\***



Cartons must be empty!  
Empty your cartons in the Liquids container

# COMPOST

ALL Food Scraps  
Paper Products  
Compostable Dishes



# LANDFILL

Plastics\*  
Styrofoam  
Wrappers  
Foil



Straws

Plastic Bags

Cutlery

\* Check plastics for a compost label  
\* Plastic bottles can be RECYCLED



# School Engagement

- Green Schools Recognition Program
  - Sustainability Champions
- Curriculum
  - Garbology
- Staff meetings



# Thank you!



**Contact us:**

**Brittney Albin**

[balbin@lps.org](mailto:balbin@lps.org)

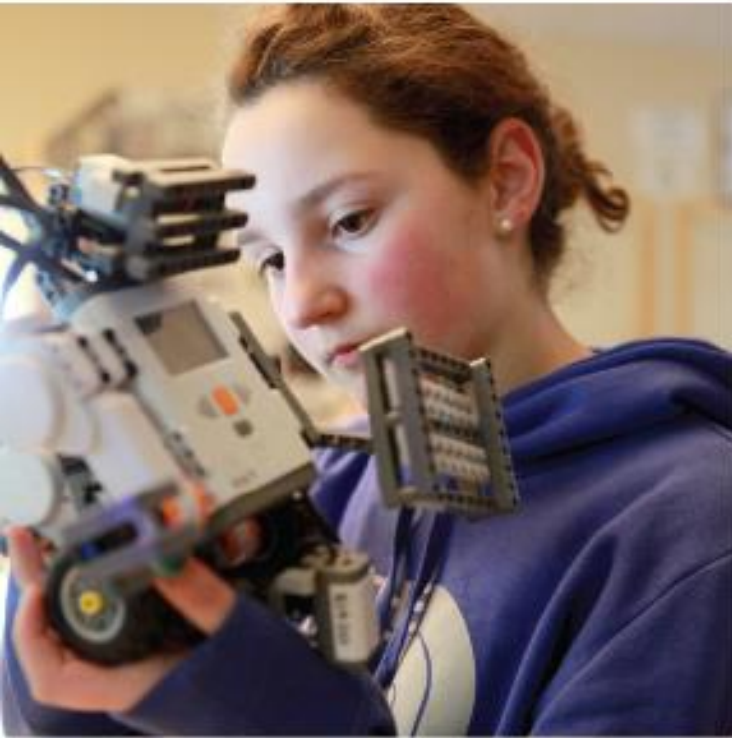
**Mandy Bydalek**

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<https://home.lps.org/sustainability/>







# Webinar: K-12 Recycling and Waste Reduction

May 18, 2022

Olena Olafson  
Sustainability Coordinator  
Calgary Board of Education

learning | **as unique** | as every student



Calgary Board  
of Education



# CBE Quick Facts



- The largest public school board in Western Canada
- 125,000+ students
- 14,000 employees
- 250+ schools and administrative sites





# CBE Environmental Policies

## Operational Expectations 9

9.2 Ensure that facility planning and design decisions appropriately consider environmental impacts, including eco-efficiency and sustainability.

## Results 3 Citizenship

Each student will be a responsible citizen:

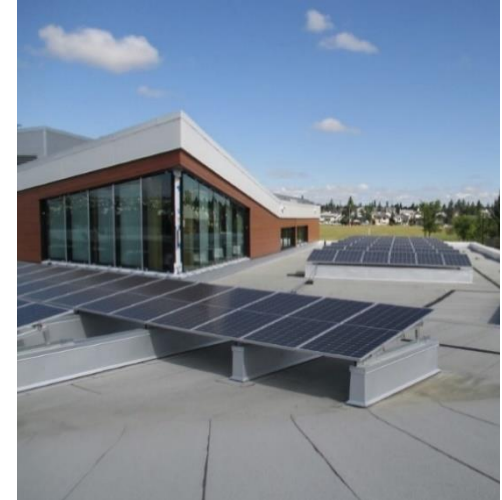
3.4 Be responsible stewards of the environment by contributing to its quality and sustainability.

## Education Plan

Learning Excellence, People Excellence, Collaborative Partnerships, Strategic Resourcing

## Sustainability Framework 2030

- support the development of engaged citizens who understand their responsibility in contributing to a socially, environmentally and economically sustainable society,
- be a leader in sustainable practices and behaviours.





# Why a Waste Reduction Strategy?



- CBE 2030 target: reduce waste going to landfill by 90 per cent (from 2007-08 levels) with a goal of zero waste by 2050
- Reduce carbon footprint
- Comply with City bylaws





Calgary



## Waste Diversion Guide for businesses owners, managers and building operators

In Calgary, businesses and organizations contribute roughly one third of waste that goes into the landfill. By reducing and diverting recyclable and compostable materials, we reduce our dependence on landfills, produce new and useful products, and conserve valuable natural resources.

### Waste Bylaw 4M2020

The Waste Bylaw requires Calgary Businesses and Organizations to:

- Collect and store recyclables and food and yard waste separate from garbage.
- Ensure adequate containers are available for recyclable and food and yard waste materials. "Adequate containers" means having enough containers, of sufficient capacity, in all locations they are needed.
- Post clear signage that shows what materials are deposited in each bin.
- Ensure recycling and food and yard waste containers are emptied as necessary and that collected materials are taken to recycling or composting facilities.
- Provide information to new and existing tenants, and employees on an annual basis including:
  - » List of accepted materials and the collection locations.
  - » How to properly prepare and sort material for diversion.

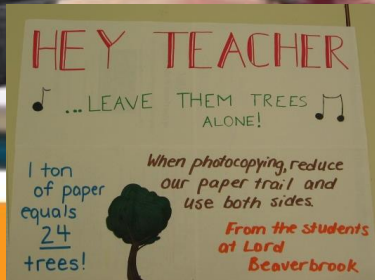
We'll work with your organization to help you become bylaw compliant. However, if there is still no compliance, the business owner(s) will be subject to inspection by a Bylaw Enforcement Officer, who may issue a violation ticket or fine.

### Six steps to set up a waste diversion program

1. Understand your waste needs – page 2
2. Decide who will provide collection service – page 3
3. Make sure you accept the right materials – page 4-5
4. Decide where to store your materials – page 6-7
5. Inform your employees and tenants about your program – page 7
6. Take your waste diversion program one step further – page 8

# How (Strategy Implementation)

- Recycling stations provided to all schools
- School Based Recycling Program Best Practices
- System recycling programs (electronics, books, batteries, metal, fluorescent lights, wood, ink cartridges)





# Equipment

## Centralized Stations



## Washroom Bins



## Classrooms, Conference/ Meeting Rooms, Offices



## Waste Train



## Outdoor Bins





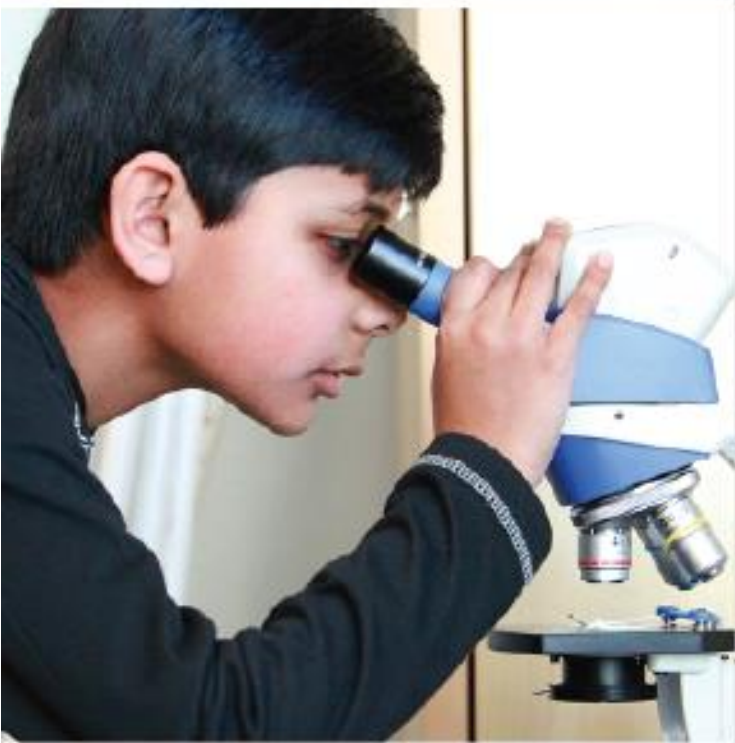
# Process: Waste/Recycling/Organics including Paper Towel Removal

## Steps

- A. Empty waste into the **waste bin** of “train” daily.
- B. Replace black garbage bags weekly.
- C. Remove and dispose bags of **recycling/refundables** into designated **recycling bin** of “train” weekly.
- D. Replace clear bags weekly.
- E. Remove/Empty **organics** and **paper towel** into designated **organics bin** of “train” daily if required.
- F. Replace compostable bags weekly.





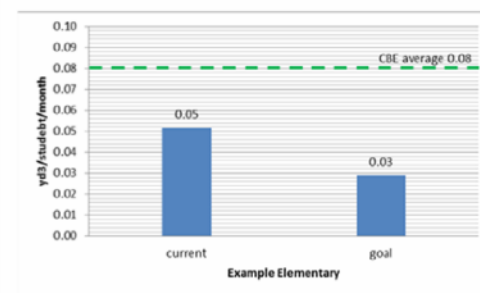


# Where are we now?

March 2019

## School Waste Report

Your school currently generates: 0.05 cubic yards of waste/student/month.



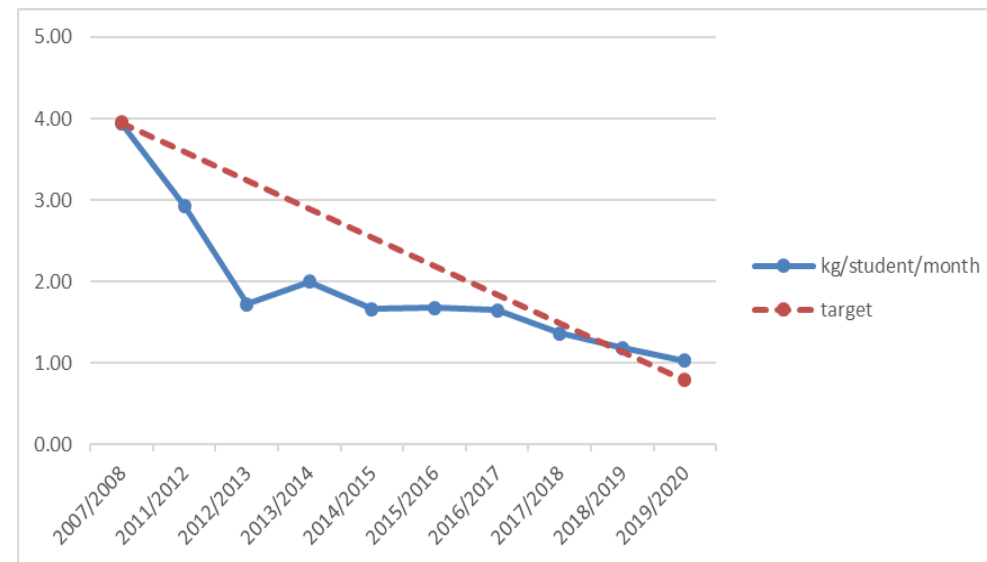
1 CUBIC YARD = 10 BIN BAGS 2 WHEELIE BINS

Waste Management picks up 1 x 6 cubic yard bins, 1x per week from your school at a cost of \$139/month.

Based on your current waste generation, you are below the current CBE average, and will have 75 per cent of your recycling service covered in September 2019.

The waste reduction goal for your school is 0.03 cubic yards/student/month. For more information on how your school can reduce waste, please visit the [waste management](#) pages on staff insite.

If you have any questions about your School Waste Report, please contact Deborah Wehnes, Waste and Recycling Coordinator [dewehnes@cbe.ab.ca](mailto:dewehnes@cbe.ab.ca) (403)817-6324



- Waste report
- Waste/Recycling/Organics pick up at schools
- Support schools to comply with bylaws
- Educational resources for schools



## Next steps: getting to 90%

- Support existing programs
- Service level standardization
- Purchasing practices and policies
- EcoSchools certification







# Thank you!

Olena Olafson

Sustainability Coordinator

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Deborah Wehnes

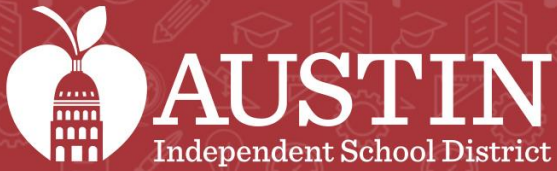
Waste & Recycling Coordinator

[dewehnes@cbe.ab.ca](mailto:dewehnes@cbe.ab.ca)

learning | **as unique** | as every student



**Calgary Board  
of Education**



# Sustainability @ Austin ISD

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Amanda Mortl  
Austin ISD Zero Waste Specialist

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[austinisd.org/sustainability](https://austinisd.org/sustainability)





# Austin ISD District Profile



**EST. 1881**

Austin ISD is the fifth-largest school district in Texas.



**125 SCHOOLS**

Austin ISD consists of elementary, middle, high, early college, academy, magnet, alternative and community schools.

**74,871**

Students

**5,508**

Classroom Teachers

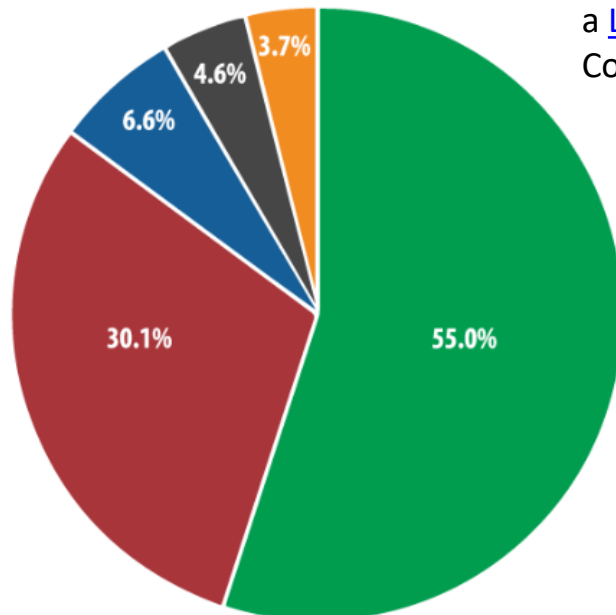
**1,569**

Administrators &  
Professional Staff

**3,866**

Bus Drivers, Custodians, Food  
Service Staff & Educational Aides

## Our Students



### Ethnicity/ Race

- Hispanic: 55.0%
- White: 30.1%
- Black: 6.6%
- Asian: 4.5%
- Other 3.8%

### Inclusive Populations

- Economically Disadvantaged: 51.9%
- Emergent Bilingual: 28.2%
- Special Education: 13.4%

Since the 2004 bond, all new schools and major renovations have adhered to green building standards. To date, AISD has over thirty facilities that have achieved an [Austin Energy® Green Building](#) rating, a [Leadership in Energy and Environmental Design \(LEED\)](#) rating from the United States Green Building Council, or both.

# MEET THE TEAM

## 2021 SUSTAINABILITY

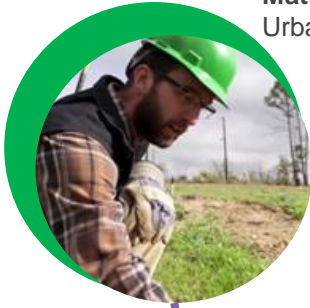


The Sustainability Leadership Team grows as department leaders join to implement sustainability initiatives in their department.

**Darien Clary**  
Sustainability Director



**Matt Mears**  
Urban Forester



**Diane Grodek**  
Executive Chef



**Anne Muller**  
Outdoor Learning Specialist



**Amanda Mortl**  
Zero Waste Specialist



### AISD SUSTAINABILITY LEADERSHIP

**Mike Rios**  
Assistant Director of Transportation & Vehicle Services



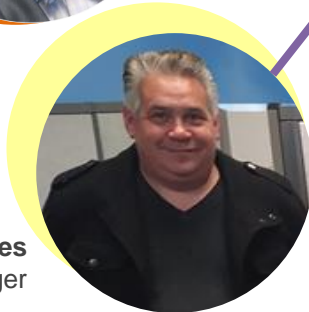
**Mason Crenshaw**  
Assistant Director of Procurement



**Kris Hafezizadeh**  
Executive Director of Transportation & Vehicle Services



**Rey Torres**  
Energy & Water Manager



**Ana Echeverria**  
Energy Conservation Specialist



**Rebecca Cohen**  
Environmental Safety Foreman



# Zero Waste & Procurement

## AISD Sustainability Plan

- Reduce landfill waste by 90% by 2040 (CoA Zero Waste goal)
- Establish sustainable procurement guidelines
- Implement school-to-school materials exchange & reuse platform







### District-wide waste streams:

- Landfill
- Single-stream recycling
- Cafeteria compost

39% volumetric diversion

### Other recycling:

- Construction waste compliance
- Batteries, e-waste, scrap metal
- Surplus sale

Food Procurement: [Good Food Purchasing](#)









# Austin ISD Bin Specifications

## Project Development Manual

for Construction:

### Section IV Energy & Sustainability

#### Table of Contents

- Section I – Design Standards
- Section II – AISD Master Guide Specifications
- Section III – Details
- Section IV – Energy and Sustainability**
- Section V – Land Development Standards



*AISD Project Development Manual* *Revision 44-July 5, 2017*

### **Section IV – Energy and Sustainability**

#### **EWAS Procedures**

1. EWAS LETTER
2. EWAS TASKS & PROCEDURES
3. SUSTAINABILITY SCORECARD & REFERENCE
4. ENERGY STANDARD
5. EWAS TRACKING MATRIX
6. DESIGN REVIEW FORM
7. BASIS OF DESIGN
8. SUBMITTAL COVER SHEET

#### **GREEN BUILDING RESOURCE PACKET**

1. AISD IAQ TESTING MAXIMUM CONTAMINANTS TABLE
2. AISD LIGHT POLLUTION REDUCTION REF. STANDARDS
3. AISD INDOOR WATER USE CALCULATOR
4. IRRIGATION WATER CALCULATOR
5. AISD SUSTAINABLY SOURCED MATERIALS CALCULATOR
6. AISD FTE WORKSHEET
7. AISD PROCESS WATER MATRIX & STANDARDS
8. AISD MATERIALS GREEN SHEET

Indoor and outdoor bin specifications:



# Timeline: Policy & Planning

New schools designed to green building standards

Board passed Sustainability resolution

Environmental committee becomes Environmental Stewardship Advisory Committee (ESAC)

Sustainability Plan created

2004

2006

2008

2010

2012

2014

2016

2018

2020

Present

Environmental committee created

Board adopted Environmental Sustainability policy

Sustainability Plan started

Sustainability Plan update begins





# AISD Zero Waste Resources

## Check out AISD's Zero Waste Tool Kit!

View printable posters and setup instructions for your school's Zero Waste Program

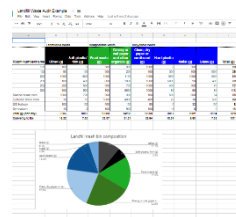
# ZERO WASTE Toolkit



## COMPOST COMPOST

**Food Scraps**  
*Resto de alimentos*

**Soiled paper and cardboard**  
*Cartones y papeles sucios*



## AUSTIN Sustainability

Independent School District

### Easy steps to help the environment

AMANDA MORTL  
AISD ZERO WASTE SPECIALIST

AMANDA.MORTLWALKER@AUSTINISD.ORG

- Home
- Zoom
- Modules
- Announcements
- Discussions
- Quizzes

- Eco-team Intro and Action Plan guidance
- Zero Waste Eco-Audit resources for Campuses and Students
- Teachers: Student Facing Zero Waste Curriculum
- Zero Waste and Public Health



# Thank you!

AISD Zero Waste resources:

<https://www.austinisd.org/sustainability/waste-procurement>

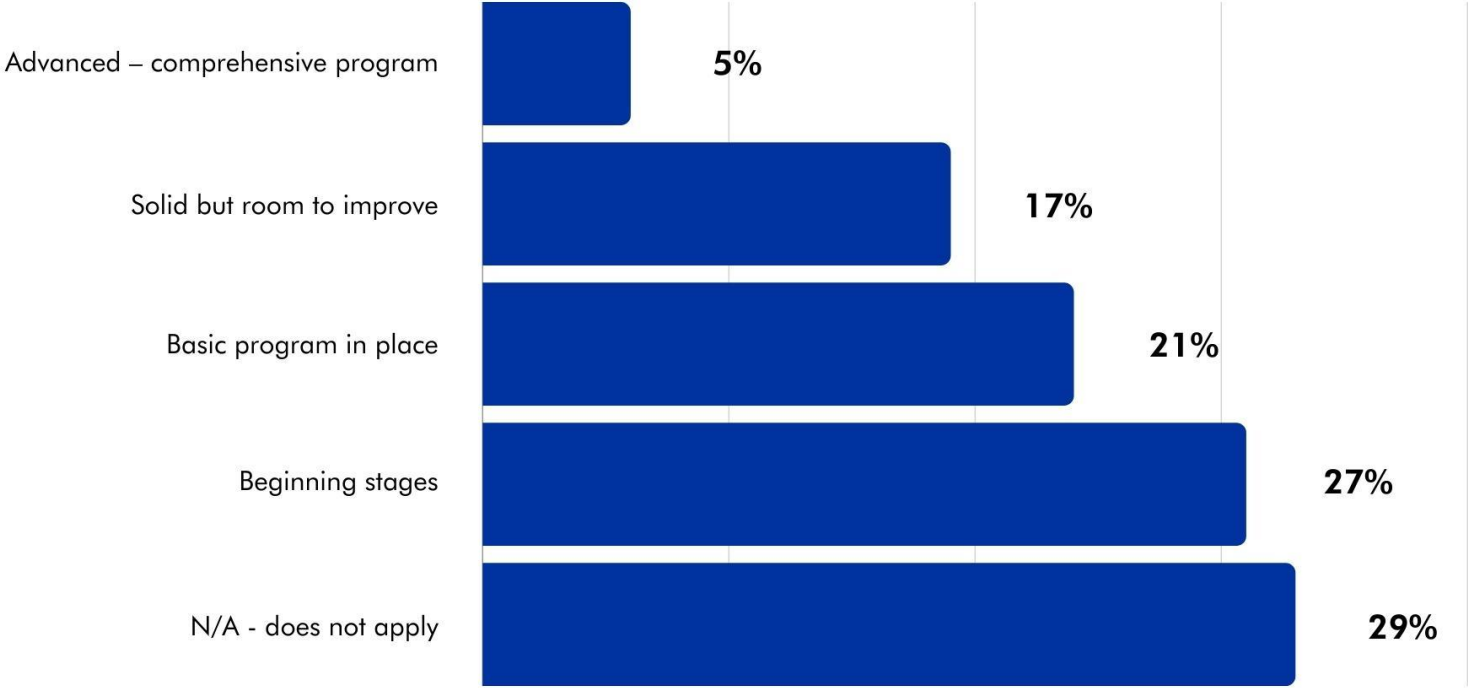
To reach Amanda Mortl  
Amanda.mortl@gmail.com





# Results of Live Poll

How would you rate your recycling/waste reduction program? (check only one)



# Panel Discussion



**Mandy Bydalek**

*Assistant Sustainability  
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Lincoln Public Schools

Nebraska



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Texas



# Thank You to Our Panelists!

***Moderator:***

**Alec Cooley**

Busch Systems

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Austin Independent School District

[amanda.mortlwalker@austinsd.org](mailto:amanda.mortlwalker@austinsd.org)

# Online Resources

## Program Resources

- Presentation slides & recording
- Links to speaker resources
- Aug. 2021 Webinar presentations:
  - Simcoe CO. Dist. Schools, ON*
  - Montgomery CO. Public Schools, MD*
  - Salinas Valley Recycles, CA*

## *Advancing Recycling* Blog Series

### *Recent posts:*

- Ideas for K-12 Education
- Using Words v. Images on Signage

**Visit: [buschsystems.com/blog](https://buschsystems.com/blog)**



# Need Credit for CEU's?

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to request a  
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[marissac@buschsystems.com](mailto:marissac@buschsystems.com)

# Stay Tuned for Product Demonstration











