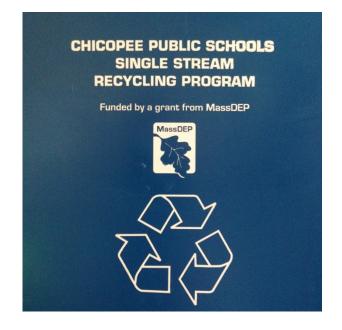
# MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT



## **FINAL REPORT JUNE 2015**

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All Chicopee Public Schools recycle materials that would otherwise become waste, including paper, cardboard, bottles and cans, throughout the school buildings and grounds in support of the Massachusetts Department of Environmental Protection's waste ban. Success of our recycling program is based on the cooperation of all individuals in our school community.

#### Final Report – June 2015

R	Recycling	$\checkmark$
E	Educating	$\checkmark$
С	Classroom Activities	$\checkmark$
Y	YouTube Recycling Videos	$\checkmark$
С	Carts and Baskets	$\checkmark$
L	Lesson Plans and list of resources	$\checkmark$
Ι	Importance of Recycling	$\checkmark$
Ν	Newsletter Information	$\checkmark$
G	Green Clubs	✓

#### **Accomplishments**

New for year three include, Bingo for Books, 41 quart containers and a recycling club at Chicopee Comprehensive High School. These are included in this final report along with all of the activities, books and equipment we continue to utilize across the school district.

<b>RECYCLING</b> activities to promote awareness and list of resources
<b>RECYCLING</b> bins, carts and baskets distributed throughout the district
<b>RECYCLING</b> books for elementary school Bingo for Books
<b>RECYCLING</b> books for elementary school libraries with lesson plans
<b>RECYCLING</b> increased and dumps reduced by 1,268.5 or \$57,627.74 over three years
<b>RECYCLING</b> posters and stickers used throughout the district
<b>RECYCLING</b> four R's - Reduce, Reuse, Recycle, Rethink
<b>RECYCLING</b> Single Stream throughout the district
<b>RECYCLING</b> statement published online and school newsletters
<b>RECYCLING</b> videolab kits in middle schools



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#### **Major Goals**

Goals	Status
Ensure compliance with Recyclable Materials Policy adopted by the Chicopee	Ongoing
School Committee by raising awareness and providing educational materials	
Provide ongoing support to all schools to establish a culture of wise material use	Ongoing
and effective recycling in all schools in the system	
Reduce waste by expanding recycling program	Ongoing
Track monitor and report recycling and waste disposal amounts	Ongoing

#### Deliverables

Deliverables	Status
Inventory of schools recycling equipment and signage	Complete
Report summarizing recycling and waste disposal amounts by school	Complete
Report summarizing the efforts, challenges and accomplishments	Complete
Summary of recycling information for school newsletters and websites	Complete

#### Tasks/Milestones

Tasks/Milestones	Status
Document, track and report recycling amounts	Complete
Ensure recycling dumpsters are full when picked up	Complete
Inspect school buildings to ensure recycling equipment/signage in place	Complete
Monitor recyclable program to ensure compliance	Complete
Provide recycling information for school newsletters and websites	Complete
Provide recycling policy and lesson plans to all staff	
Reduce trash dumpster pickup frequency	
Remind teachers the importance of recycling	Complete
Work with school community to educate the importance of recycling	Complete
Work with Summer programs to ensure recycling policy is being followed, provide	
documentation, lesson plans and assistance	-

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RECYCLING GRANT				
Description		Amount		
<b>Recycling Grant</b>	\$	25,900.00		
Blue Baskets (200) & Carts (63)	\$	(6,154.30)		
Quart Baskets (41)	\$	(1,452.00)		
Posters & Stickers	\$	(728.25)		
Wristbands	\$	(1,980.00)		
Recycling Books	\$	(216.80)		
Videolabs	\$	(390.00)		
Recycling Books for Bingo for Books	\$	(1,403.60)		
Recycling Books for Bingo for Books	\$	(76.56)		
Salary Year 1	\$	(2,337.60)		
Salary Year 2	\$	(5,395.12)		
Salary Year 3	\$	(5,765.77)		

#### Grant

<b>Remaining Balance</b>	\$ 0	

\*Maintenance contributed \$2,520 towards cost of wristbands

### **Dumps Saved**

• Total program dumps saved (based on a school year calendar)

YEAR	DUMPS SAVED	SAVINGS
1	344	\$13,208.74
2	387	\$16,370.53
3	537.5	\$28,048.47
Three Year Savings	1,268.5	\$57,627.74

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#### **Dumps Saved (continued)**

School	Dump	From	То	Saved	Weeks	D Saved	\$ P	er Dump	Т	otal Saved	
Admin	Trash	1	0.5	0.5	43	21.5	\$	37.33	\$	802.60	1 x wk to EOW
Admin	Recycle	1	0.5	0.5	43	21.5	\$	44.55	\$	957.83	1 x wk to EOW
Barry	Trash	3	2	1	43	43	\$	46.80	\$	2,012.40	
Barry	Recycle	1	1	0							
Belcher	Trash	3	2	1	43	43	\$	46.80	\$	2,012.40	
Belcher	Recycle	1	1	0							
Bellamy	Trash	5	4	1	43	43	\$	57.20	\$	2,459.60	
Bellamy	Recycle	1	2	-1	43	-43	\$	31.20	\$	(1,341.60)	recycle plus 1
Bowe	Trash	3	2	1	43	43	\$	46.80	\$	2,012.40	
Bowe	Recycle	1	1	0							
Bowie	Trash	2	2	0							
Bowie	Recycle	1	1	0							
Chic Acad	Trash	1	1	0	43	43	\$	46.80	\$	2,012.40	
Chic Acad	Recycle	1	0.5	0.5	43	21.5	\$	44.55	\$	957.83	1 x wk to EOW
Chic Comp	Trash	5	5	0							
Chic Comp	Recycle	3	3	0							
Chic High	Trash	5	5	0							
Chic High	Recycle	2	1.5	0.5	43	21.5	\$	44.55	\$	957.83	1 x wk to EOW
Fairview	Trash	7	3	4	43	172	\$	57.20	\$	9,838.40	
Fairview	Recycle	1	1	0							
Lambert	Trash	3	2	1	43	43	\$	46.80	\$	2,012.40	
Lambert	Recycle	1	1	0							
Litwin	Trash	2	2	0							
Litwin	Recycle	1	0.5	0.5	43	21.5	\$	31.20	\$	670.80	1 x wk to EOW
Selser	Trash	3	2	1	43	43	\$	46.80	\$	2,012.40	
Selser	Recycle	1	1	0							
Stefanik	Trash	3	2	1	43	43	\$	46.80	\$	2,012.40	trash minus 1
Stefanik	Recycle	1	2	-1	43	-43	\$	31.20	\$	(1,341.60)	recycle plus 1
Streiber	Trash	2	2	0							
Streiber	Recycle	1	1	0							
Szetela	Trash	1	1	0							
Szetela	Recycle	1	1	0							
Totals		68	56.5	11.5		537.5			\$	28,048.47	

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#### The Adventures of a Plastic Bottle and The Adventures of an Aluminum Can books

- Books as prizes for elementary school Bingo for Book events, which were held afterschool and very well attended by parents/guardians, students and siblings. I attended and spoke briefly about our recycling program and distributed wristbands.
- Books used in elementary school libraries with sequencing of events and vocabulary worksheets. Librarians and the science teacher at Lambert-Lavoie have indicated they will continue to use these books and worksheets and make them part of their yearly curriculum. When books are read in a group or individually students receive a wristband.

ADVENTURES OF A	greeneducationfoundation.org/institute/lesson-
THE ADVENTURES OF A	clearinghouse/419-The-Adventures-of-Plastic-
PLASTIC BOTTLE	Bottles-and-Aluminum-Cans.html
A ITORY ABOUT RECYCLING	<ul> <li>Lesson Description:</li> <li>Explain the need to reduce the amount of trash they generate, and describe ways in which they can make changes in their actions to support waste reduction.</li> <li>Identify and describe the life cycle of consumer products.</li> <li>Communicate their ideas in writing and by creating graphic representations to classmates about the life cycle of a plastic bottle or aluminium can.</li> <li>Understand and summarize informational text.</li> </ul>

#### **Posters/Stickers**

• Chicopee Public Schools Single Stream Recycling Program posters are placed throughout the district in classrooms, offices and general areas and all recycling baskets and carts have a Chicopee Public Schools Single Stream Recycling Program sticker.

Massachusetts Correctional Industries – printed our poster	mass.gov/eopss/law-enforce-and-
and recycling stickers	cj/prisons/offices-and-divs/masscor

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#### **Recycling Carts and Baskets**

• Distributed 200 baskets, 63 carts and 41 quart baskets throughout the school district.



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#### **Recycling Policy**

- "All Chicopee Public Schools recycle materials that would otherwise become waste, including paper, cardboard, bottles and cans, throughout the school buildings and grounds in support of the Massachusetts Department of Environmental Protection's waste ban. Success of our recycling program is based on the cooperation of all individuals in our school community." This statement was published in school newsletters, school websites and added to the school rental agreement.
- Discussed at beginning of school year meetings.
- Copies of policy to all building principals, custodians, cooks and afterschool programs.

#### **Recycling Videolabs for Middle Schools**

- Purchased recycling videolab kits for Bellamy Middle School, Fairview Middle School and Chicopee Academy Middle School.
- "My 6<sup>th</sup> grade science teacher and my special education teacher both used the Videolab and truly enjoyed it. The students found it very interesting and relative to our recycling efforts here." John Leonard, Principal, Chicopee Academy
- "All 6<sup>th</sup> grade students participated in four days of lessons. It was very educational. Students and myself, as the teacher, learned a great deal. Students reported having fun doing the hands on activities. I would use it again and recommend it to other classes. Although it was fun for students and very educational, some of the math was a "stretch" for students. There were also some typos in the answer key and on student work sheets. Once the bugs were worked out, it went great. I did not run every one of the labs, as I didn't always have the equipment (like a blender) to do them all. The video was very well done and informative, but one more recent than 1994, would be great. Overall, a fun and informative program." Jen Wysk, teacher, Fairview Middle School

#### **Single Stream Recycling**

• All schools and buildings across the district use single stream recycling.

#### Life after the Grant

• Recycling audits will continue to ensure all schools and buildings across the district use single stream recycling.

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#### **Recycling Activities by School**

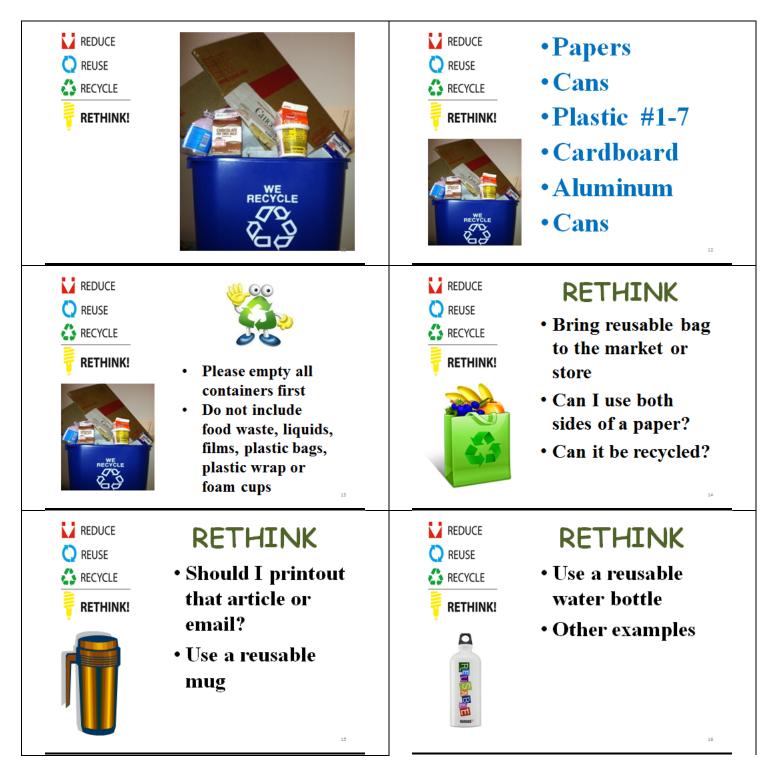
Ketyching Attivi		
Barry	After fun day activities students clean outside, sort trash/recycle and receive	
	a wristband.	
Belcher	Students received EPA Planet Protector workbooks with wristbands.	
Bellamy	Using recycling videolab kit to promote and educate students.	
Bowe	<b>Bowe</b> Meeting with Bowe Garden Club, Chicopee Public Schools Single Stream	
	Recycling Program PowerPoint slideshow, EPA Planet Protector Trash and	
	Climate Change workbooks, certificates and distributed wristbands. Very	
	active green team/garden club.	
Bowie	Science teacher uses as part of a life science unit and discusses the	
	importance of recycling, shows Chicopee Public Schools Single Stream	
	Recycling Program PowerPoint slideshow and distributes wristbands.	
Chicopee	Using recycling videolab kit to promote and educate students.	
Academy		
Chicopee High	Ecology club promotes recycling efforts and recycling link from school	
	webpage.	
Chicopee	A recycling club helps and promotes recycling efforts in the school.	
Comprehensive		
Fairview	Meetings with Fairview Middle School Green Club, discuss importance of	
Middle	single stream recycling, students create signs and recycling posters and	
	receive wristbands.	
Lambert-	Science teacher as part of a life science unit discusses the importance of	
Lavoie	recycling and distributes wristbands.	
Litwin	After field day activities students clean outside, sort trash/recycle and receive	
	a wristband.	
Selser	Science teacher as part of a life science unit discusses the importance of	
	recycling and distributes wristbands. Very active green team.	
Stefanik	Students who recycled during lunch received a wristband. All classroom	
	teachers received wristbands and distribute when they discuss recycling.	
Streiber	Science teacher as part of a life science unit discusses the importance of	
	recycling and distributes wristbands.	
Szetela	All students received an EPA Planet Protector coloring books, certificates,	
	stickers and wristbands.	

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**Chicopee Public Schools Single Stream Recycling Program PowerPoint slideshow** 







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REDUCE	Toss It, Baby: Single-Stream Recycling Video
RETHINK!	<u>http://www.youtube</u> .com/watch?v=exh grxpeQws
	Distribute CPS recycle wristbands

#### **RECYCLING RESOURCES**

<b>Company/Organization</b>	Link	Grade	Material
		Level	
American Chemistry	plastics.americanchemis	All	• Articles
Council Plastics Division	try.com/sustainability-		• Games
	recycling/recycling		Statistics
			• Videos
American Forest &	paperrecycles.org	Elementary	• Actives
Paper Association			• How to make paper
			video
			• Lesson plans
			• Posters
AXION International –	www.youtube.com/watc	All	• Recycled plastic used
in conjunction with	<u>h?v=pGBKwaSX6MM</u>		to make railroad ties
scientists from Rutgers			and bridges
University, developed	www.youtube.com/watc		• Technical information
products that transform	<u>h?v=2srE7muq-Hk</u>		for thermoplastic
recycled consumer and			bridges
industrial plastics into a	www.youtube.com/watc		Videos
myriad of structural	<u>h?v=sygDBmfxoSU</u>		
products that are ideal			
replacements for			

traditional materials made from wood, steel or concrete. From girders, pilings and railroad ties to bridge structures.			
Glass Packaging Institute	www.gpi.org/recycling	Middle/Hig h	<ul> <li>Articles</li> <li>Glass recycling statistics</li> </ul>
Keep America Beautiful	americarecyclesday.org/	All	<ul><li>Contest and tips</li><li>Recycle Day events</li><li>Recycle pledge</li></ul>
National Association for PET (polyethylene terephthalate) Container Resources	<u>napcor.com/PET/landin</u> <u>g_petrecycling.html</u>	All	<ul> <li>Activities</li> <li>Educator resources</li> <li>Kid's Corner</li> <li>Recycling reports and facts</li> <li>Videos</li> </ul>
Northeast Recycling Council	<u>nerc.org/</u>	Middle/Hig h	• Policy and economic information
Santee Cooper (South Carolina's state owned electric and water utility)	<u>vimeo.com/52493067</u>	All	Toss It Baby: Single Stream Recycling Official Music Video produced by the employees Santee Cooper
Springfield, MA Materials Recycling Facility	springfieldmrf.org/site/	All	<ul><li>Lesson plans</li><li>Videos</li></ul>
The Association of Postconsumer Plastic Recyclers	kidsrecyclingzone.com/	Elementary	<ul><li>Games</li><li>Information</li></ul>

The Can Manufacturers Institute	cancentral.com/recyclin g-sustainability	3 – 12	<ul> <li>Can history</li> <li>Cans are cool video</li> <li>Educational curriculum</li> <li>How cans are made</li> </ul>
The Green Team	thegreenteam.org	All	<ul> <li>Activities</li> <li>Free equipment and materials</li> <li>Lesson plans</li> <li>Pledge cards</li> <li>Posters</li> <li>Resources</li> </ul>
United States Environmental Protection Agency	epa.gov/students/	K – 12	<ul> <li>Activities</li> <li>Educational material</li> <li>Games</li> <li>Resources</li> </ul>
United States Environmental Protection Agency	epa.gov/recyclecity/	Elementary	<ul><li>Activities</li><li>Games</li><li>Resources</li></ul>
Waste Management	wm.com/thinkgreen/ind ex.jsp	All	<ul> <li>Activities</li> <li>Discussion ideas</li> <li>Lesson plans</li> <li>Videos</li> <li>Worksheets</li> </ul>