



Reduce, Reuse, Recycle Can We Do Better?



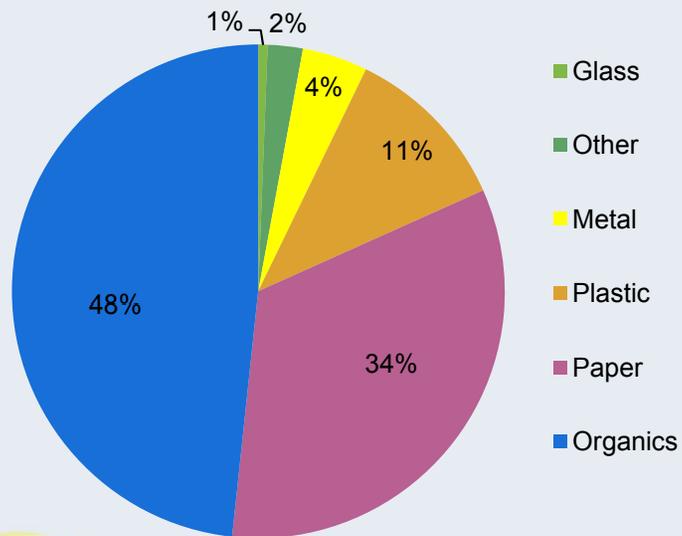
*Presented by:
Meghan Theriault
Goffstown Town Engineer*

August 3, 2016

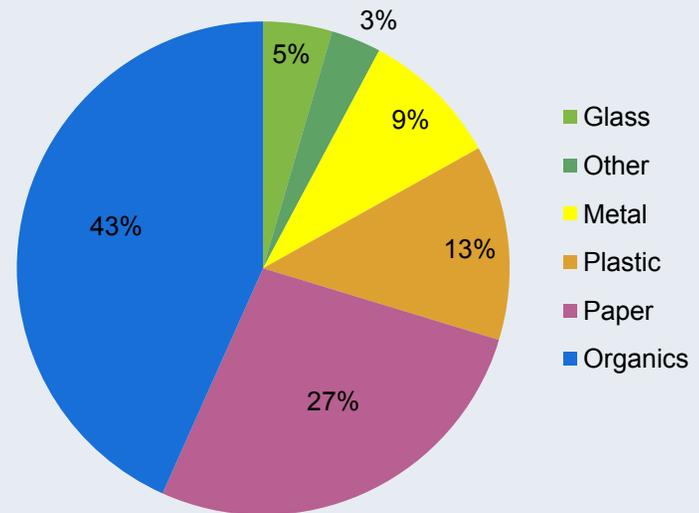


Typical Waste Streams

SCHOOL WASTE STREAM



RESIDENTIAL WASTE STREAM



Options for Waste



WASTE BIN

- Landfill or Incinerator
- Casella Landfill
- Bethlehem NH



RECYCLE BIN

- Material Recovery Facility (MRF)
- Waste Mgmt
- N. Billerica, MA

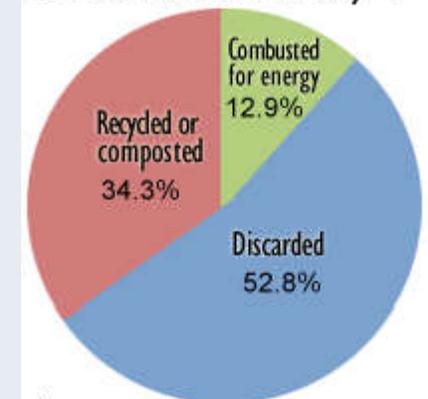


COMPOST BIN

- Compost On-Site
- Compost Facility
- Local Pig Farmers



What Happens To Stuff We Throw Away* ?



* based on 2013 MSW Characterization Report



Recycle – Convert Waste Into Reusable Material



What Can/Cannot Be Recycled

- ✓ All paper & cardboard products –
No excessive food waste or oil



- ✓ Glass – no ceramics



- ✓ Plastic products – MUST be marked #1-7
No unmarked plastic



- ✓ Metal – no pressurized spray cans



Trash Produced By Students

- 2,756 students in Goffstown
- 5lbs of trash/student/week
- 36 weeks school ~ 500,000 lbs = 250 TONS



10 orca whales



58 ½ ton trucks



*38 African Bush
Elephants*



What Impact Can Our Schools Have?



25%
Recycle Rate
125,000 lbs



35%
Recycle Rate
175,000 lbs



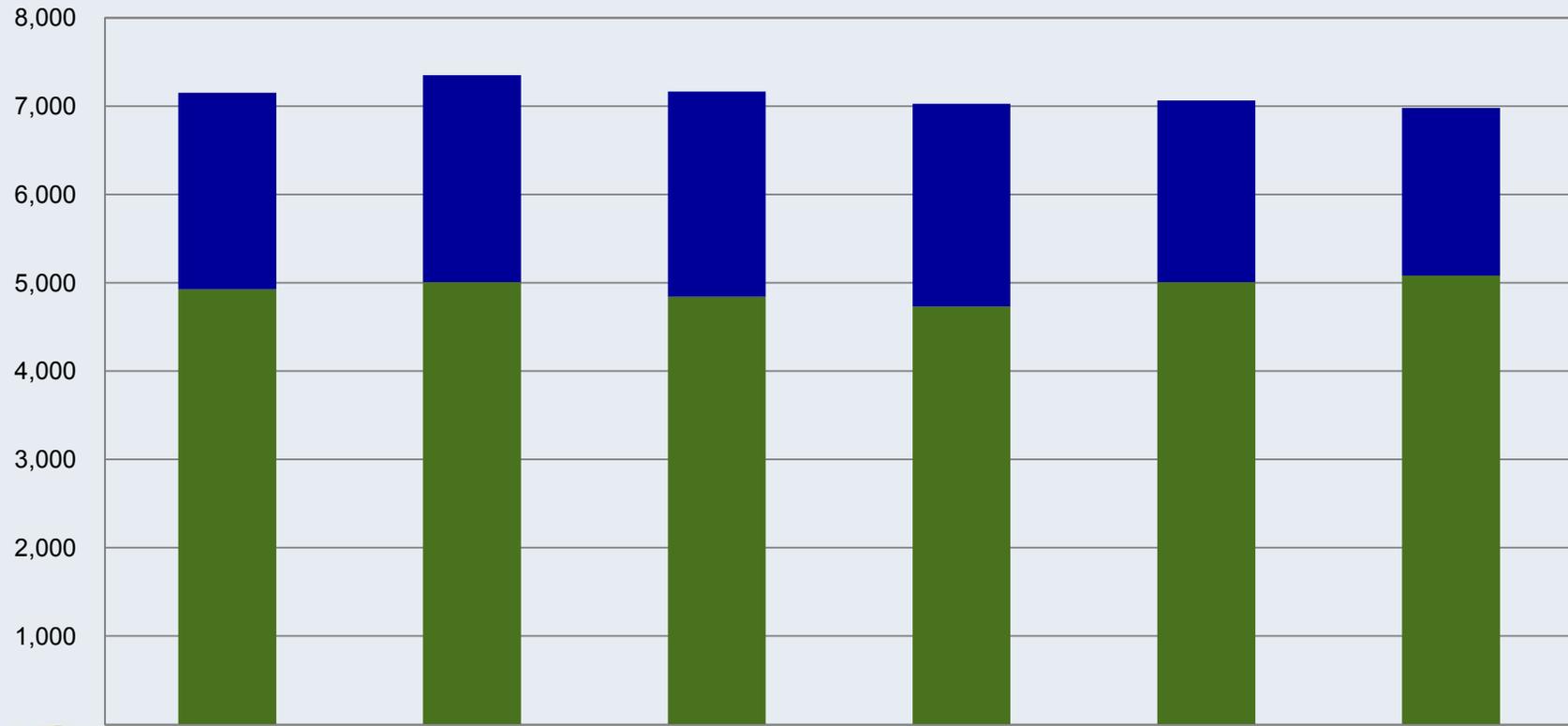
45%
Recycle Rate
225,000 lbs



A Look At Goffstown Statistics



Trash vs. Recycle (Tonnages)



2010

2011

2012

2013

2014

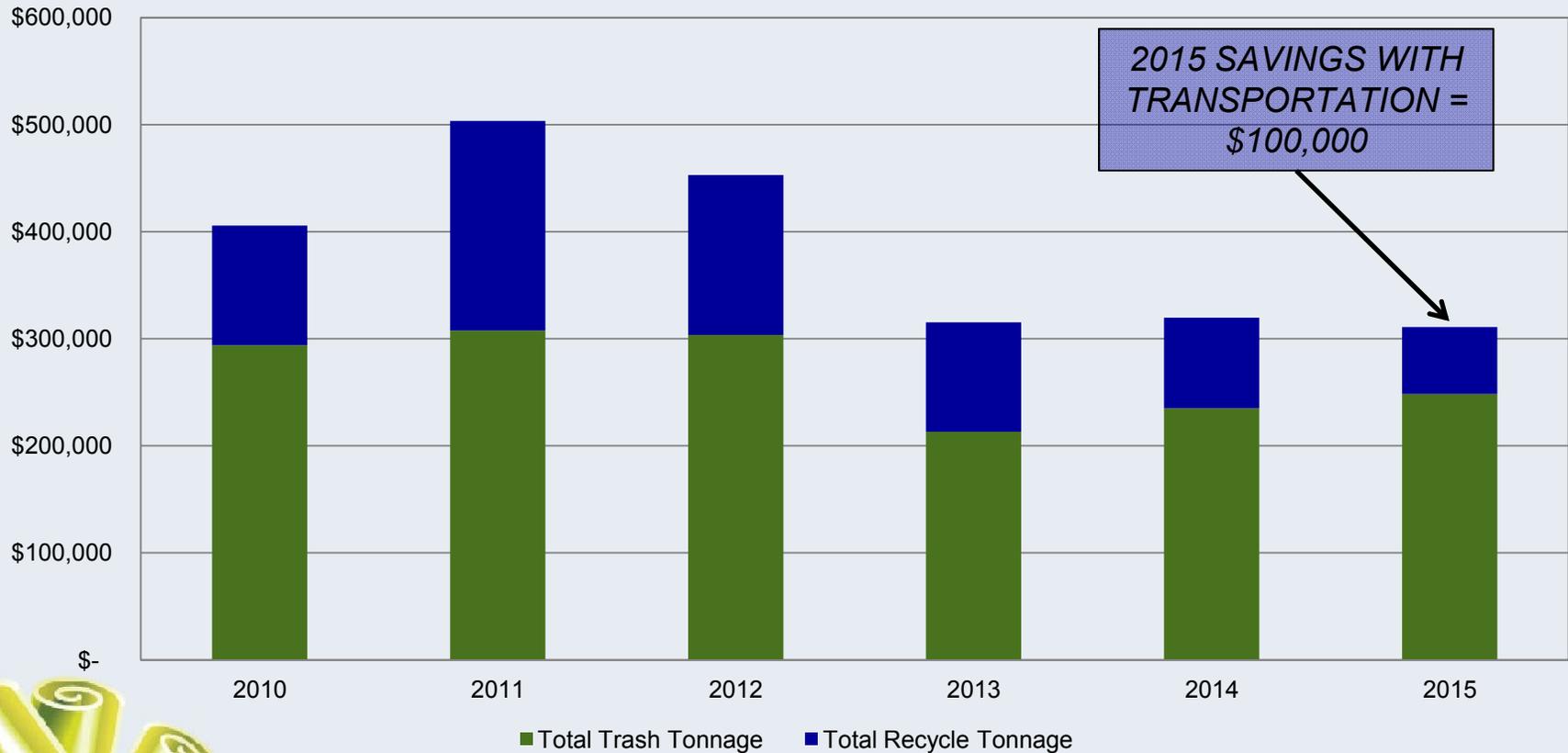
2015

■ Total Trash Tonnage

■ Total Recycle Tonnage



Cost of Disposal (Dollars Spent vs. Saved)



**\$66.53/TON
TRASH**

**\$13.47/TON
RECYCLE**

← Almost 5 X COST!!!

What Impact Can Our Schools Have?



25%
Recycle Rate
125,000 lbs

\$3,316.25



35%
Recycle Rate
175,000 lbs

\$4,642.75

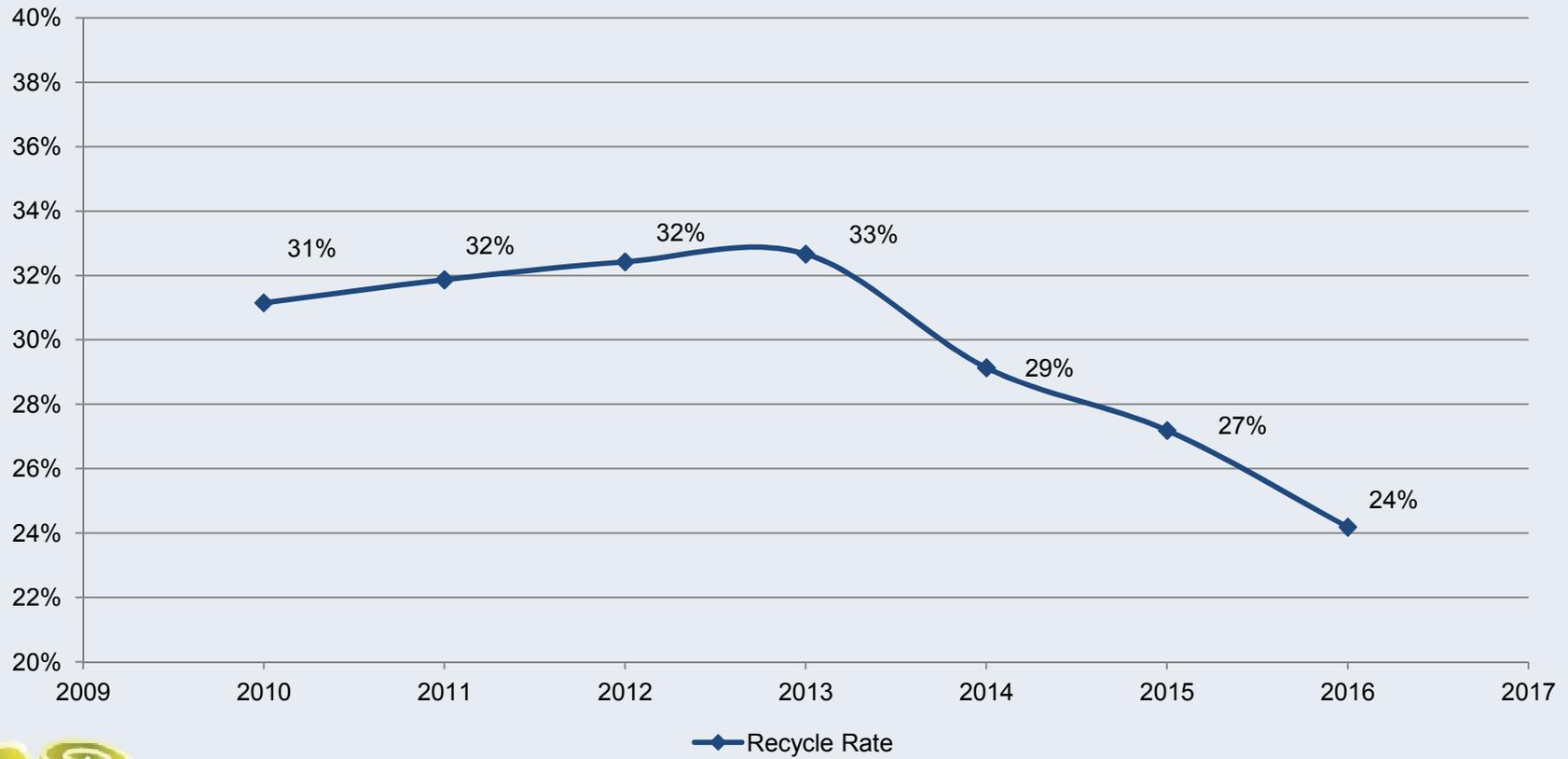


45%
Recycle Rate
225,000 lbs

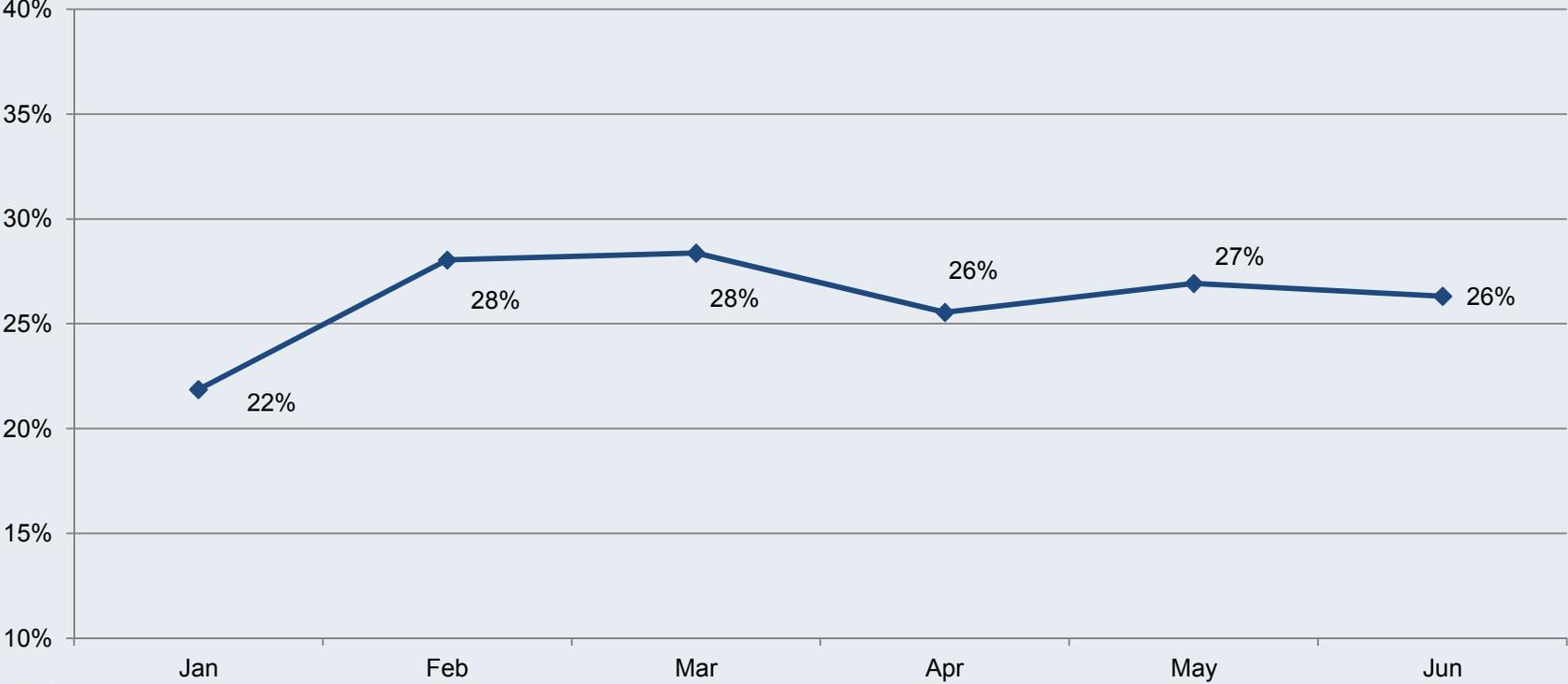
\$5,969.25



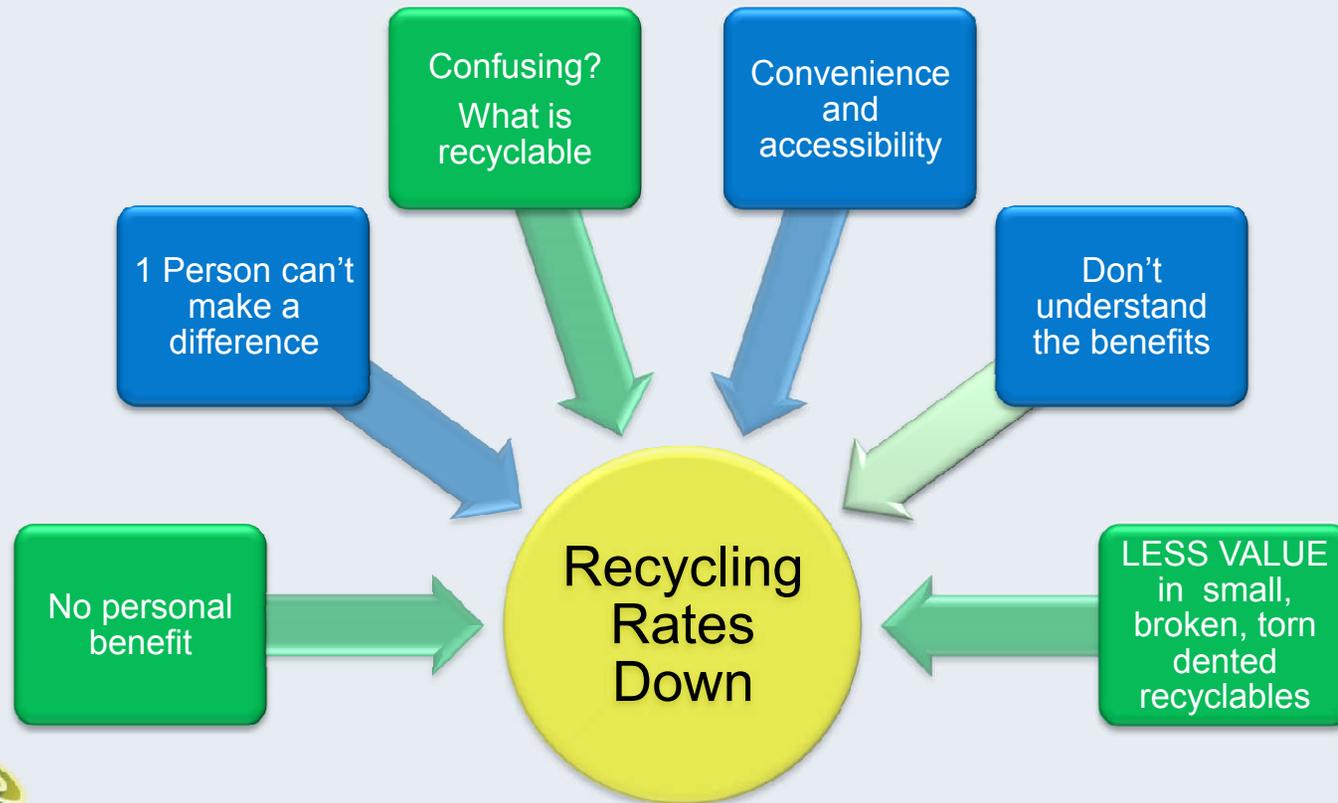
Recycle Rates



Recycle Rate - 2016



Why are Recycling Rates Declining?



Benefits of Recycling



Examples From Other NH Schools



Allenstown Elementary



BEST EARTH DAY EVENT

- Each student had a section of soil to plant seedlings
- Started a “Waste-Free Wednesday” and “Think-before-you throw Thursday”



Milford Middle School

**Best Recycling School
of the Year**



- “Trash on the Lawn Day”
- Students sort trash on tarps with gloves and aprons
- Shows how much waste can be diverted from landfill
- Students weigh and compare results



Milford Middle School

- Performed a Star Assessment with the NRRA (free with any workshop)
- Thorough analysis of current recycling & waste reduction efforts in five key areas
- Provides clear, unbiased suggestions for areas of improvement as well as base-line data for future examination of the recycling program



**Best Recycling Club
of the Year**



Candia School District

Funding Factory

- Recycling ink cartridges and used cell phones
- Raises money for non-profit causes



ORPHAN ANIMAL RESCUE
& SANCTUARY

Terracycle

- Program that recycles hard-to-recycle items for FREE!
- Free packages and boxes, prepaid shipping labels.
- Program rewards, \$ incentives



Pembroke Elementary



“Feed the Pigs” program

Giving food waste from the cafeteria to a local pig farm

An alternative to composting on-site if limited space



New Boston Green Machine Program

- Grant to start recycle program
- Students designed and named recycle truck
- Huge student involvement
- High level of pride & ownership
- Weighed each week
- 50% Recycle rate
- Cash back at year end for yearly recycle efforts



[Click for VIDEO](#)

Make Recycling Fun & Exciting

Student Ownership

Pride in Recycle Program

“Green” Recycling Team

Feeling of Success

Reward/Recognition Program

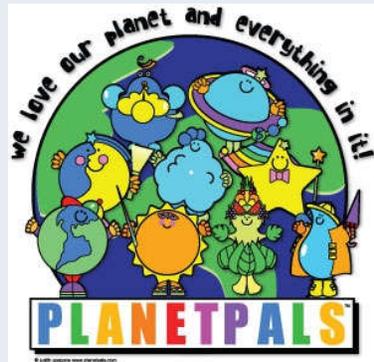


Start Early...How?

Planet Pals

“Be A Friend To The Earth”

- *Music/Songs*
- *Earth Science*
- *Activities*
- *Environment*
- *Lesson Plans*
- *Nutrition*
- *Puzzles*
- *World Peace*



Meet ^{all} the **PLANETPALS™**

Hi my name is Earthman
Hi my name is Saturday
Hi my name is Moonbeam
Hi my name is Greenbean
Hi my name is Breeze
Hi my name is Planet Tern
Hi my name is Starlight
Hi my name is H2O
Hi my name is Happy
Hi my name is Kites Don't
Hi my name is Crush
Hi my name is Dusty
Hi my name is Litterbug
Hi my name is Big Ben
Hi my name is Peacepal
Hi my name is Clean Sarah
Hi my name is Recycle Machine

About Planetpals Characters:
Not just another group of green characters! Planetpals is the only character set of its kind. Planetpals Characters are a unique and innovative way to encourage kids to learn about their world. They inspire and enlighten kids with delightful slogans, fun facts and innovative activities. Each character has a specialty and comes with its own educational rhyme. Their motto "Healthy Planet, Healthy Kids" encourages kids to "Be healthy inside and out" and "Be a friend to earth". Their theme song is "You can be a Planetpal, too".
Planetpals can be found at Planetpals.com.

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Make Recycling Convenient...How?

- Locate recycle barrels NEXT to trash
- Provide recycle barrels in many locations
- Provide proper openings.
- Talk to staff – what's NOT working currently
- Adjust to a system that works



Get Their Game On...How?

- Art contest with recyclable materials
- One (1) bin challenge
- Paper/can drive
- Other recycle challenges between grade levels or homerooms



Encourage Creativity...How?

- Decorate recycle bins or boxes for use in classroom
- Create recycle mascot



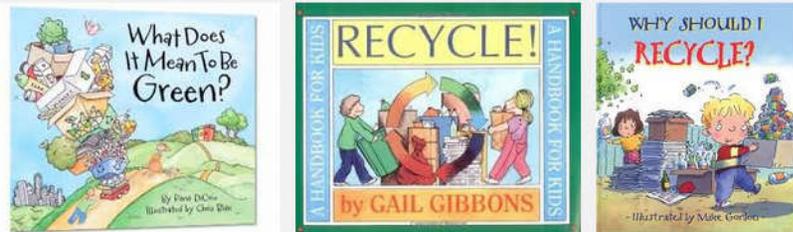
Encourage Creativity...How?

- Recycle Art
 - Paper quilling
 - Bottle cap lockets
 - Recycle animals/scenes with reusable materials
 - Bottle/can creatures



Entertain & Educate...How?

- Books
- Recycle Day Parade



Entertain & Educate...How?

*Videos – What can be Recycled
to How Items are Recycled*



Reading Rainbow VIDEO



WELCOME TO THE RECOMMUNITY VIRTUAL MRF

To get started, choose a tour experience below:



GUIDED TOUR **NEW**

Sit back and enjoy! Our Tour Guide takes you on a journey through the entire Virtual MRF from start to finish.

[Standard Version ▶](#)

[Subtítulos En Español ▶](#)



SELF-GUIDED TOUR

Feel free to explore the entire Virtual MRF. Each stop has a description and video clip to help explain the process.

[Let's Get Started! ▶](#)

Click for VIDEO

Take a Field Trip...Where?

Transfer Station – Goffstown or Auburn

- *Load and transport municipal waste & recycling to off-site locations*

Waste Management MRF – N.Billerica, MA

- *Materials Recovery Facility – Receives & separates recyclables*



Take a Field Trip...Where?

Turnkey Landfill – Rochester, NH

- *Location for waste disposal via bury & cover with soil*

Wheelabrator Concord

- *Converts waste to energy*



The Key To Recycling Success...



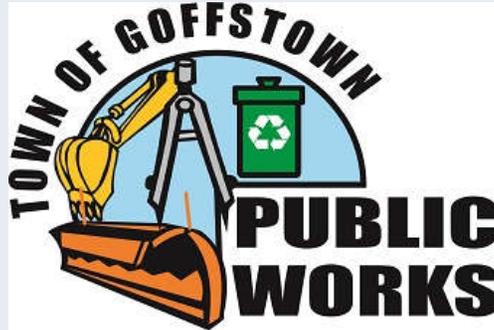
What Next....

- Surveys
 - *Complete/Compile/Share results with SAU*
- Sign up to become an NRRA Member – FREE
- Meet with all staff (teachers, janitorial, food services) – Get Input +/-
- Teach good recycling habits to students early on in school year (September).
- Schedule TOLD & Star Assessment (if interested)
 - *DPW to assist with obtaining grant from “NH the Beautiful” and facilitating event w/NRRA*



*Keep the energy going!
Maintain student & staff involvement
throughout year!*

Contact Information



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