



Benefits Analysis for The Town of Rye, NH

December, 2014

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Executive Summary

WasteZero has developed an analysis that illustrates the benefits of a Trash Metering™ program for the Town of Rye and has identified significant opportunity to:



Realize immediate and long-term revenue and cost savings



Stimulate positive environmental impact



Build a platform for additional waste reduction programs

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Background

Households Served (Est.)	1,728	Annual MSW	1,217 tons 612 PPC	Tip Fee (per ton)	\$61.85
Population Served (Est.)	3,974	Annual Recycling	547 tons 275 PPC 31% Rate	Recycling Revenue (per ton)	\$80.00

- Rye's environmental and sustainability initiatives **exceed** those of most communities in New Hampshire.
- The town wants to look into additional programs that will:
 - Increase recycling
 - Reduce solid waste and
 - Reduce the town's carbon footprint
 - Be fiscally advantageous to the town

WasteZero Trash Metering™

Next-Generation Pay-As-You-Throw



WasteZero Trash Metering™

*"WasteZero's next-generation PAYT programs, known as WasteZero Trash Metering™, are the simplest and most easily adopted by your residents. The concept is amazingly straightforward: **rather than pay a fixed fee, residents purchase and use official municipality-approved trash bags stocked at local retailers. Since recycling is free, this naturally encourages overall waste reduction.**"*

- WasteZero Trash Metering™ programs are **more robust and effective** than any PAYT program out there.
- While traditional PAYT programs reduce a town's residential trash by an average of only 10% - 20%, our **results are consistently higher**, averaging 44% or more.
- Not only do we commit to a multi-year partnership with your community, but we also **provide all supplies and services to launch and manage your program.**



WasteZero Trash Metering™

Resident Perspective

Current Approach



Town charges solid waste fees or uses General Fund dollars



Residents may purchase any trash bags (typically \$0.30/bag)



All trash bags are allowed at the transfer station



Recycling is optional, and not all types of material are incentivized

With WasteZero Trash Metering™



Town may reduce fees or reallocate General Fund dollars for disposal/collection



Residents purchase WasteZero Trash Metering™ bags at local retail stores (typically \$1-\$2/bag)



Only Trash Metering™ bags are allowed at the transfer station.



Behavior changes: waste is reduced and recycling increases

Convenient

Easy

Effective

WasteZero Trash Metering™

Following Launch, Residents Will

1

Understand why solid waste fees now include a variable (per bag) component



Fair

2

Purchase City / Town Bags at local retail stores



Convenient

3

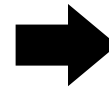
Continue to follow existing collection guidelines—e.g. automated carts, barrels, or bags – using City / Town Bags



or



or



Easy

4

Recycle much more, send far less waste to the landfill – and they will feel really good about the change!



44%+



Up to 200%

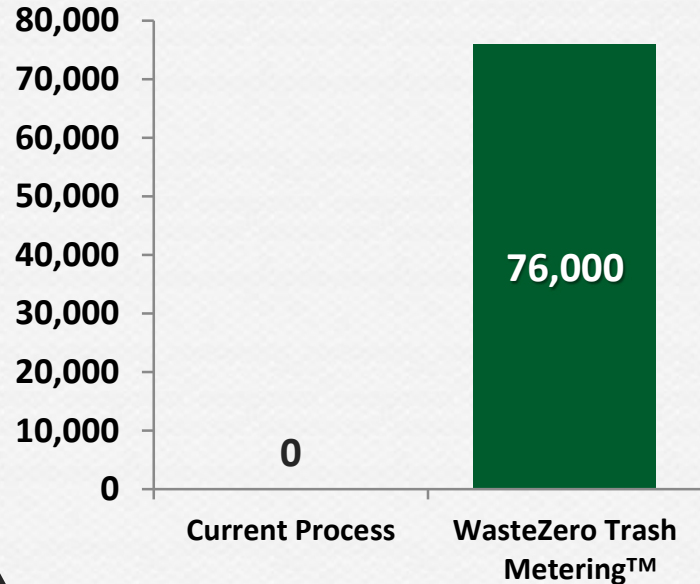
Effective

Program Results

Projected Program Benefits and Savings

Bag Sales

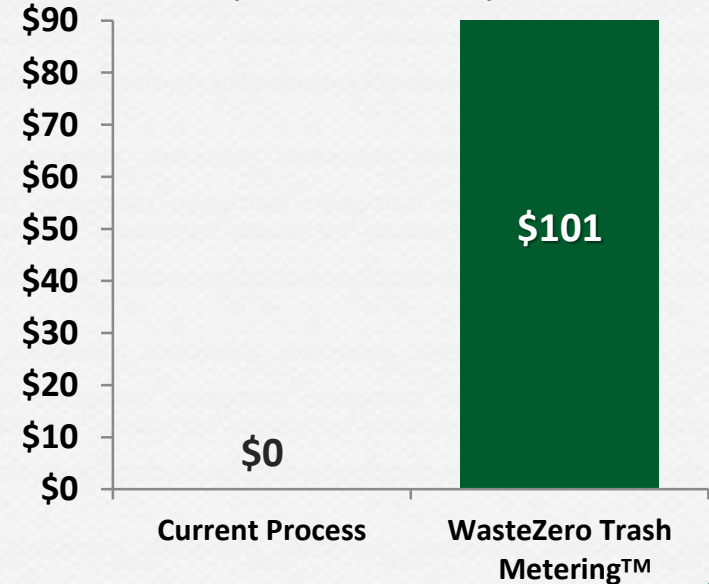
Estimated Annual Bag Sales
(in thousands of bags)



=

Bag Revenue¹

Estimated Annual Income From
Bag Sales
(in thousands of USD)



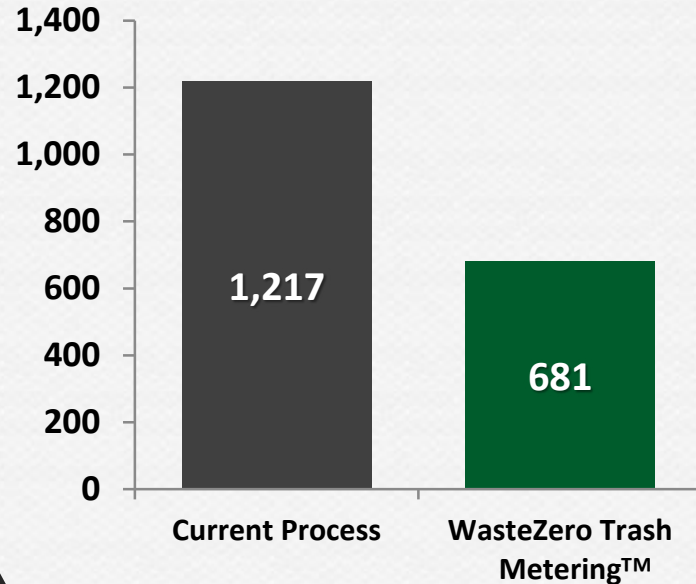
¹Net of program services and supplies

Program Results

Projected Program Benefits and Savings

Less Trash

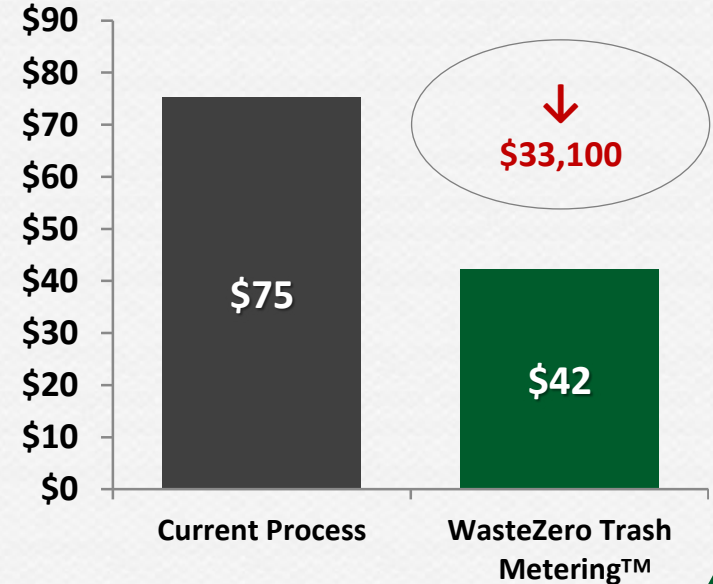
Tons of Residential MSW
Disposed Annually



=

Lower Tipping Costs

Annual Spend on Tipping Fees

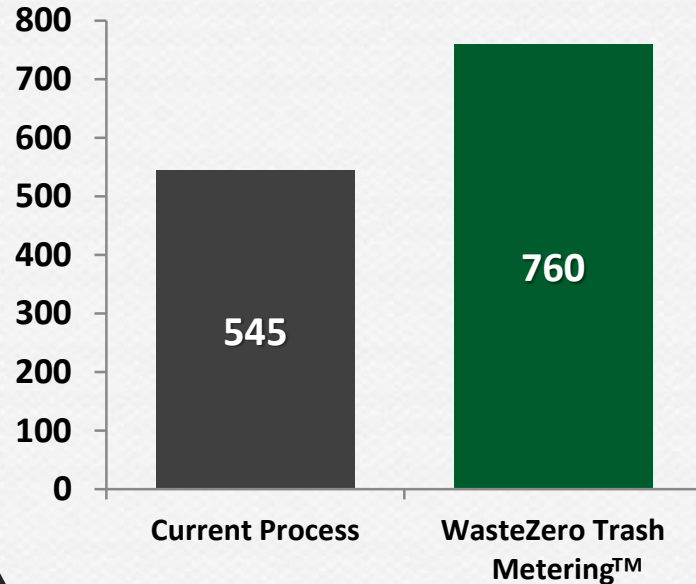


Program Results

Projected Program Benefits and Savings

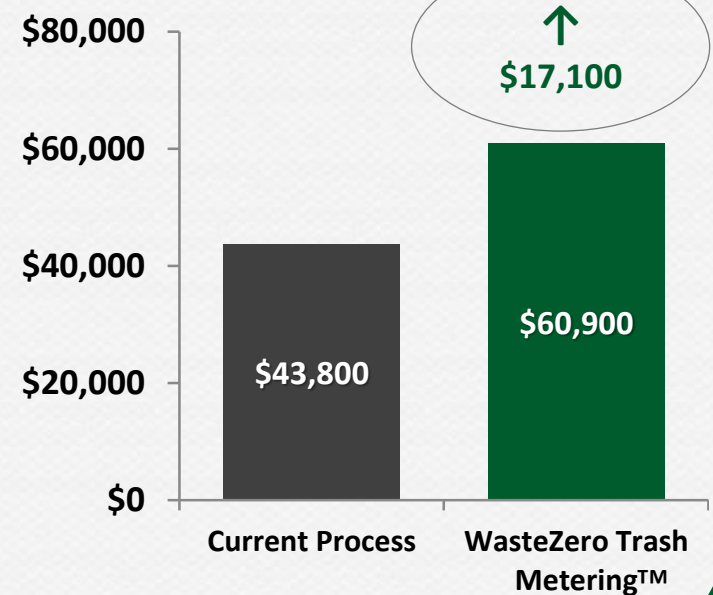
More Recycling

Tons of Residential Recycling
Collected Annually



More Recycling Revenue

Annual Revenue
From Recycling



Program Results

Projected Program Benefits and Savings*

	1 Year	3 Years	5 Years	10 Years
Revenue Bag Sales ¹	\$100,900	\$303,000	\$505,500	\$1,016,600
Savings Tipping Fees	\$33,100	\$99,000	\$165,100	\$331,800
Additional Revenue Increased Recycling	\$17,100	\$51,700	\$86,400	\$173,900
Savings Hauling Fees	\$7,000	\$21,000	\$35,000	\$70,000
Net Program Impact	\$158,100	\$474,700	\$792,000	\$1,592,300

*With the WasteZero Trash Metering™ program, Rye could realize over **\$1.59 million** in benefits and savings over the next ten years.*

* Cumulative Benefits and Savings for Years 3,5, and 10

¹Net of program services and supplies

Program Results

Projected Annual Environmental Impact

CO2e (Greenhouse Gas)

Annual
Reduction

1,000
Metric Tons

- Reduced carbon footprint
- Less pollution
- Healthier environment for residents



Equivalent to:



Removing

200

passenger vehicles from the road

or

Reducing gasoline consumption by

67,000

gallons



BTUs (Energy Used)

Annual
Reduction

8,400
Million Units

- Reduced costs
- Reduced carbon footprint
- Increased energy security



Equivalent to:



Powering

75

residential homes

or

Installing

1,000

rooftop solar panel arrays



Next Steps

Together, we can make a big difference in your community.

- Answer any additional questions that you may have about WasteZero or our WasteZero Trash Metering™ programs
- Understand your process for moving an initiative like this forward
 - Identify who else we should connect with, and begin appropriate outreach
 - Review the Benefits Analysis and sign an initial agreement to work with WasteZero as a partner (subject to a vote)
 - Working with your team, customize the program design, and educate all key stakeholders, including the public
 - Develop a corresponding proposal/term sheet for a Board vote

Case Study—Sandwich, MA

PAYT Works—With Seasonably Variable Populations

In July 2011, the town of Sandwich recognized that by 2014, it would be facing a doubling of waste costs. To address impending price increases proactively, the town voted unanimously to adopt a WasteZero Trash Metering™ program, taking advantage of WasteZero custom printed bags and the WasteZero Retail Store Distribution™ services.

In the program's first two years, Sandwich experienced

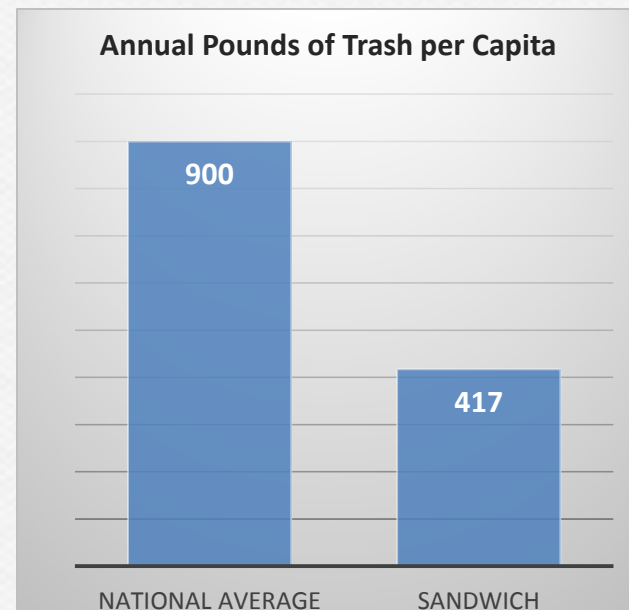
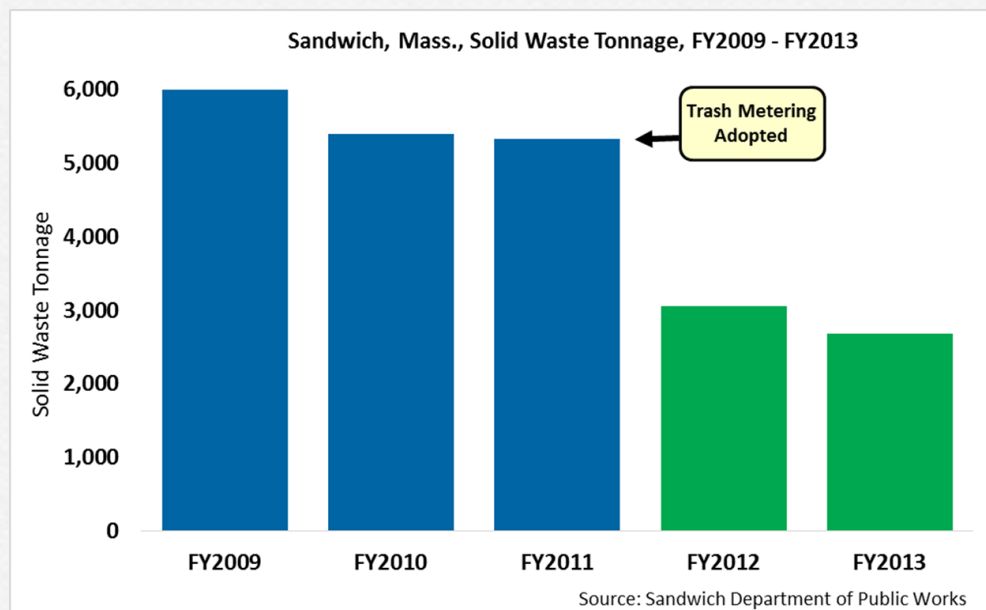
- 42% reduction in solid waste tonnage (yr. 1), and 50% reduction (yr. 2)
- 74% increase in plastics, metals, and glass recycling
- 20% decrease in transfer station traffic
- \$280,000 in savings, applied toward capital improvements

20,675 population
(~5000 transfer station users)

\$82,900 median income/HH

Bag-based PAYT at the drop-off center

http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml



Case Study—Eliot, ME

57% Trash Reduction—in Just Four Short Months!

The small town of Eliot, ME decided to find a way to reduce the tax burden on residents. To address these efforts, in early September 2013, the Town kicked off its WasteZero PAYT program.

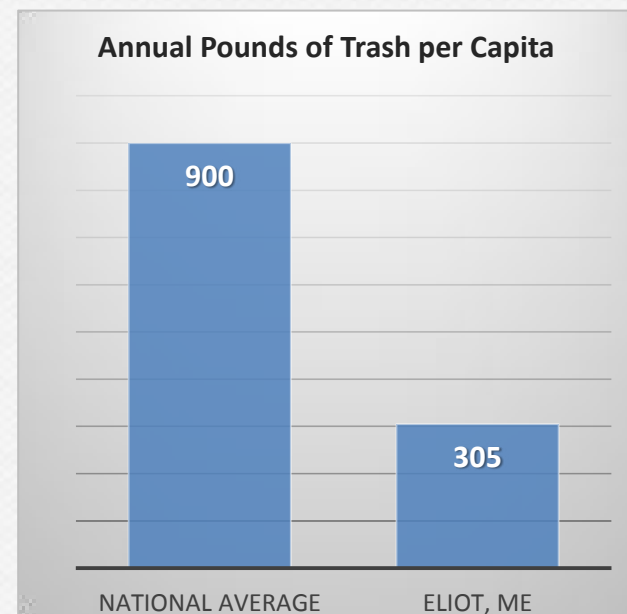
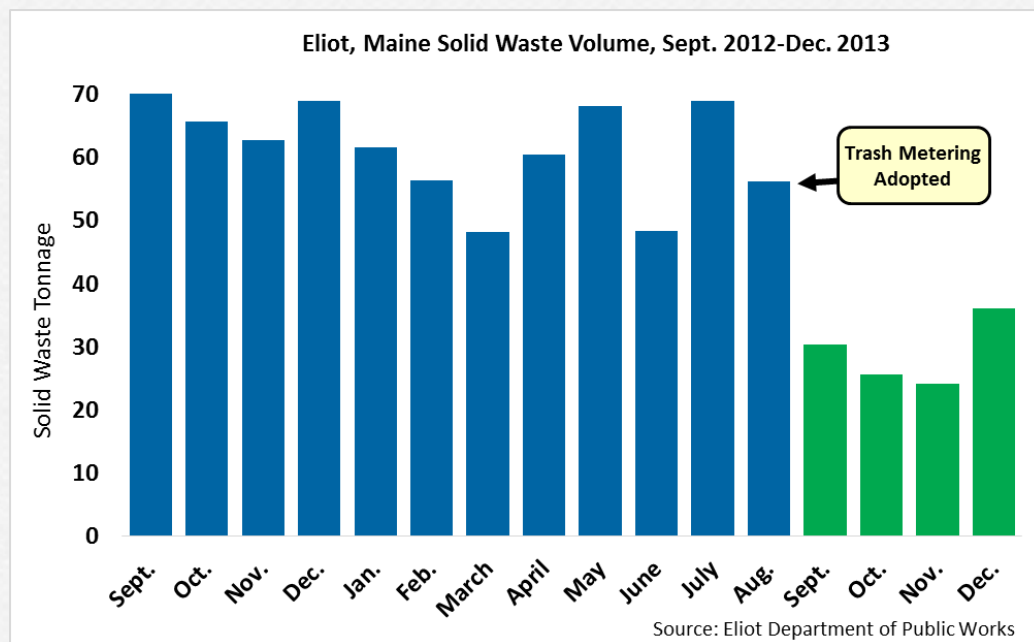
In four short months, the amount of trash generated dropped by more than half, and the Town saved close to \$9,000, putting them on a path to exceed their projected first-year savings.

In the program's first four months, Eliot experienced

- 57% reduction in solid waste tonnage
- \$8,589 in savings

6,200 population
\$75,000 median income/HH
Bag-based PAYT at the drop-off center

<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>



Frequently Asked Questions

“Why wouldn’t illegal dumping increase?”

Overwhelmingly, studies show and communities report that increased illegal dumping is more of a perceived, rather than actual barrier, based in fear more than in reality.

- PAYT is not the culprit.
 - Pre-existent “illegal dumps” rarely increase with PAYT.
 - Bulky waste and non-residential materials comprise most illegal dumping and are not in response to PAYT.
- Any increases are temporary.
 - Communities that report increased illegal dumping after implementing PAYT also report that it returns to pre-PAYT levels within 30 to 90 days.
 - Modest enforcement at the program’s outset tends to make incidents a non-issue.
- Combatting illegal dumping is straightforward—regardless of the cause.
 - A bulky waste program
 - Local management
 - Public education
 - Fair enforcement
 - Partnering with the right program provider

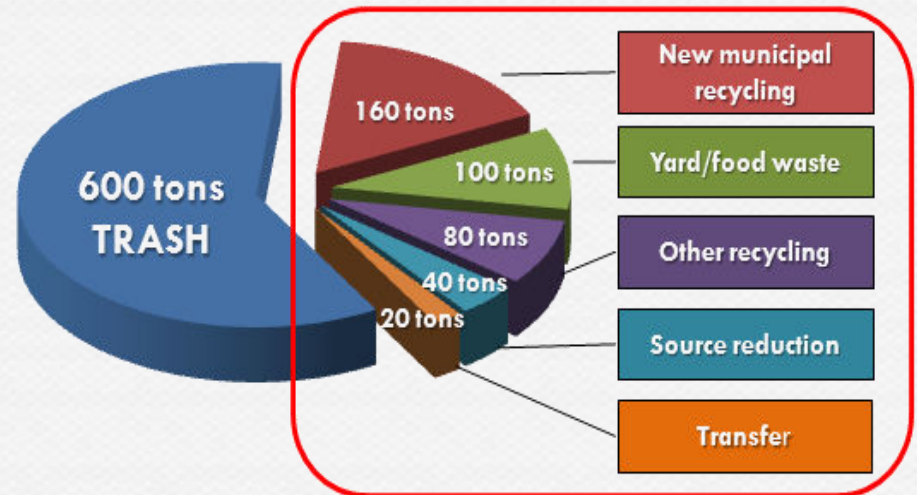
Frequently Asked Questions

“Why wouldn’t illegal dumping increase?” (Cont.)

“If our trash is reduced 40%, then that means that 40% is illegally dumped. Right?”

Wrong.

- Once WasteZero Trash Metering™ is in place, residents begin composting and no longer throw out yard waste—that accounts for 100 tons right there!
- They get savvier about recycling electronics, taking used items to the Goodwill, and reusing—another 80 tons!
- They even get smarter about reducing the amount of trash they throw out from the start—the “reduce” part of the “Reduce/Reuse/Recycle” equation.



Thank You!



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