



NEW HAMPSHIRE MUNICIPAL ASSOCIATION



Cutting Trash in Half: Pay-as-You-Throw in New Hampshire

Stephen Lisauskas, Vice President, WasteZero
&
Adam Clark, Solid Waste Manager, City of
Concord

How to Participate Today

- Open and close your Panel
- Submit text questions
- Q&A addressed at the end of today's session

The screenshot displays the GoToWebinar interface with two panels highlighted by red boxes and arrows. The top panel, titled 'Audio', shows 'Audio Mode' with 'Use Telephone' selected and 'Use Mic & Speakers' selected. Below this, a 'MUTED' status is shown with a speaker icon and a volume level indicator. A red arrow points to the 'Audio' panel title bar, and another red arrow points to the 'MUTED' status. The bottom panel, titled 'Questions', is a text input area with a 'Send' button. A red box highlights the entire 'Questions' panel. Below the panels, a banner reads 'Start Holding your Own Web Events with GoToWebinar' and 'Webinar ID: 977-124-241'. The GoToWebinar logo is at the bottom.



Agenda

- Who is WasteZero?
- Overview of Trash Problem
- Trash Metering Models
- Why PAYT?
- PAYT in New Hampshire, New England, Tilton & Concord, Maine
- Financial & Environmental Impacts
- Messaging & Public Engagement



About WasteZero

- In business since 1991, we are a national leader in municipal waste reduction
- Helps towns and cities reduce waste, increase recycling, and save money
- Has a 100% success rate with WasteZero-designed waste reduction programs
- Offers consulting, as well as program design & management
- Is a certified B Corp, meeting rigorous social & environmental standards

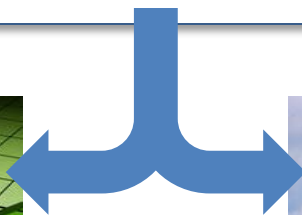


The Trash Problem

- Cities are struggling financially, and solid waste is a big contributor.
- The cost of trash has risen 2.4 times faster than inflation over the last 30 years.
- Even financially healthy communities spend more than they need to on trash.
- Pay-as-you-throw helps communities...



- Generate revenue
- Reduce costs
- Create fairness
- Free up people and other resources

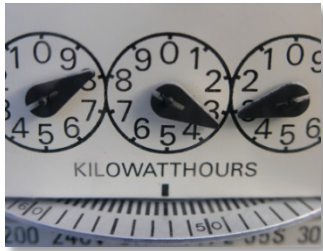


- Reduce waste
- Increase recycling
- Save energy
- Reduce greenhouse gases

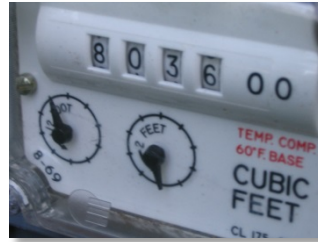
Today: Trash Is Incentivized

Solid waste is the last unmetered utility, which encourages waste and is unfair.

Metered



Electricity



Gas



Water

Unmetered



Trash

Communities should be metering their trash just like other utilities.



The Trash Metering Model

1. Cut Fees

2. Pay per Bag

3. Incentivize What's Right



CITY OF ANYTOWN
PO BOX 2234
ANYTOWN, USA

Account Number: 1 2 3 4 5 6 7 8 9 0
Customer Name: DOE JOHN
Bill Date: 11/02/2012
Previous Balance: \$32.42
Payments: -\$32.42
Current Balance: \$0.00
Due Date: 12/15/2012

Water/Water Usage

Water Rate: Tier 1 5.04 CCF Tier 2 9.50 CCF Tier 3 11.14 CCF 1 CCF = 7.48 Gallons

Service	UNIT	RALEIGH INC 27617	CONTRACT READ	PREVIOUS READ	USAGE	AMOUNT
Water Administration	28.9	10/22/2012 to 11/02/2012	222	201		\$1.21
Water Usage Tier 1					1 CCF @ \$2.28	\$2.28
Wastewater Production	1.000 CCF @ \$0.0748					\$0.07
Waste Water Administration					1 CCF @ \$1.35	\$1.35
Waste Water Usage						\$1.35
Balance Total						\$17.23

Additional Charges

Penalty	\$2.00
Card Holder	\$1.71
Stormwater	1 SFU @ \$4.00
Non-payment Total	\$15.50
Current Balance	\$32.42

Solid Waste \$1,000

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

Account Number	Bill Date	Pay (with amount)	Account Fee
1 2 3 4 5 6 7 8 9 0	12/15/2012	\$32.42	

REVERSE ADDRESS: 12345 W ST. RALEIGH NC 27617

City of Anytown
PO BOX 2234
ANYTOWN, USA



Provides incentives to reduce, reuse, recycle, and compost; equitable

Why Pay-as-You-Throw?

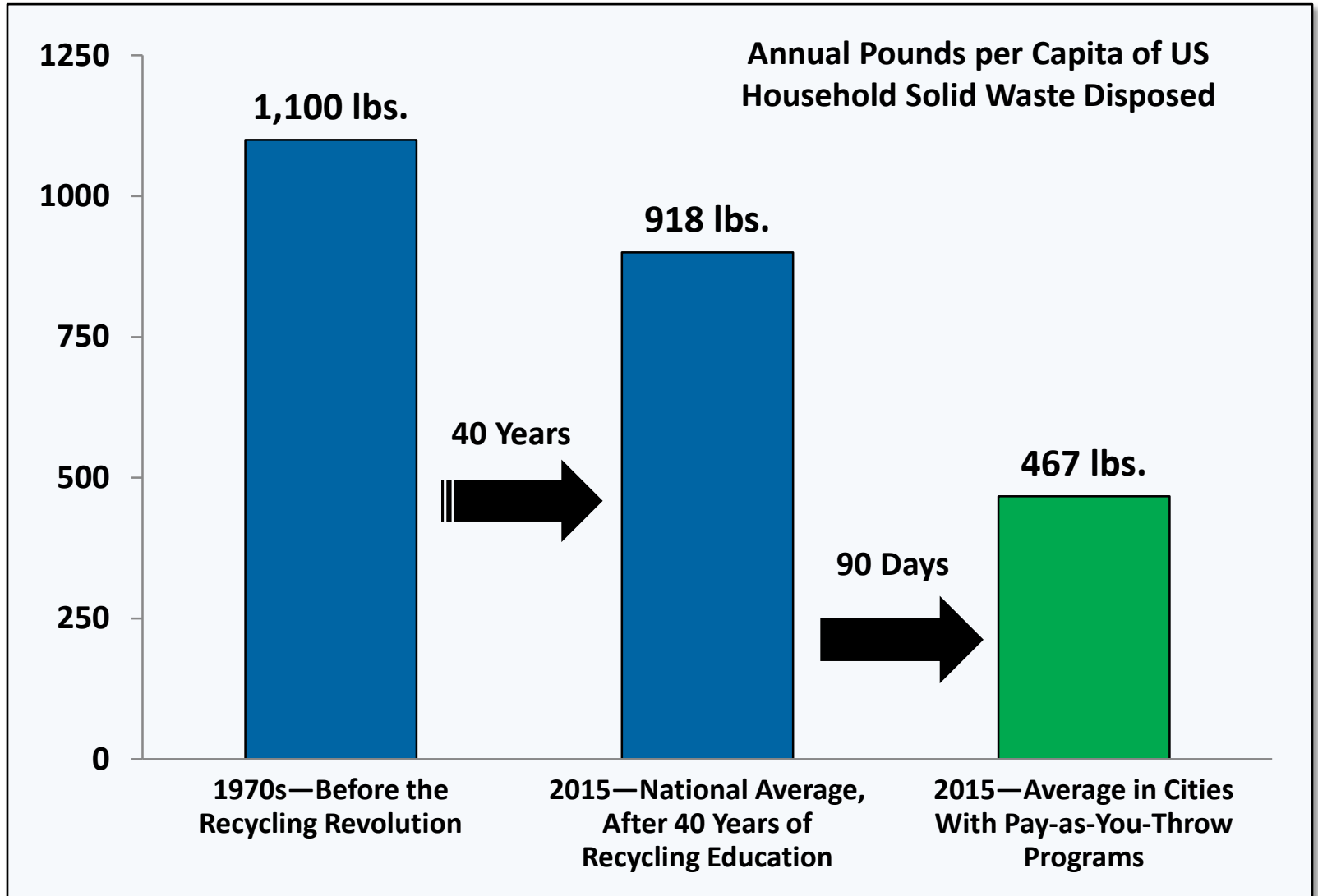
Pay-as-you-throw (PAYT) systems are an alternative to the traditional MSW payment model. These systems *allow customers who put out less trash pay to less than those who put out a lot.*

There are several benefits to PAYT policies:

- ✓ Economic incentives for residents to reduce waste and increase diversion
- ✓ Reduced solid waste collection and disposal costs
- ✓ Positive environmental impact from decreased waste and increased recycling
- ✓ Landfill life significantly extended

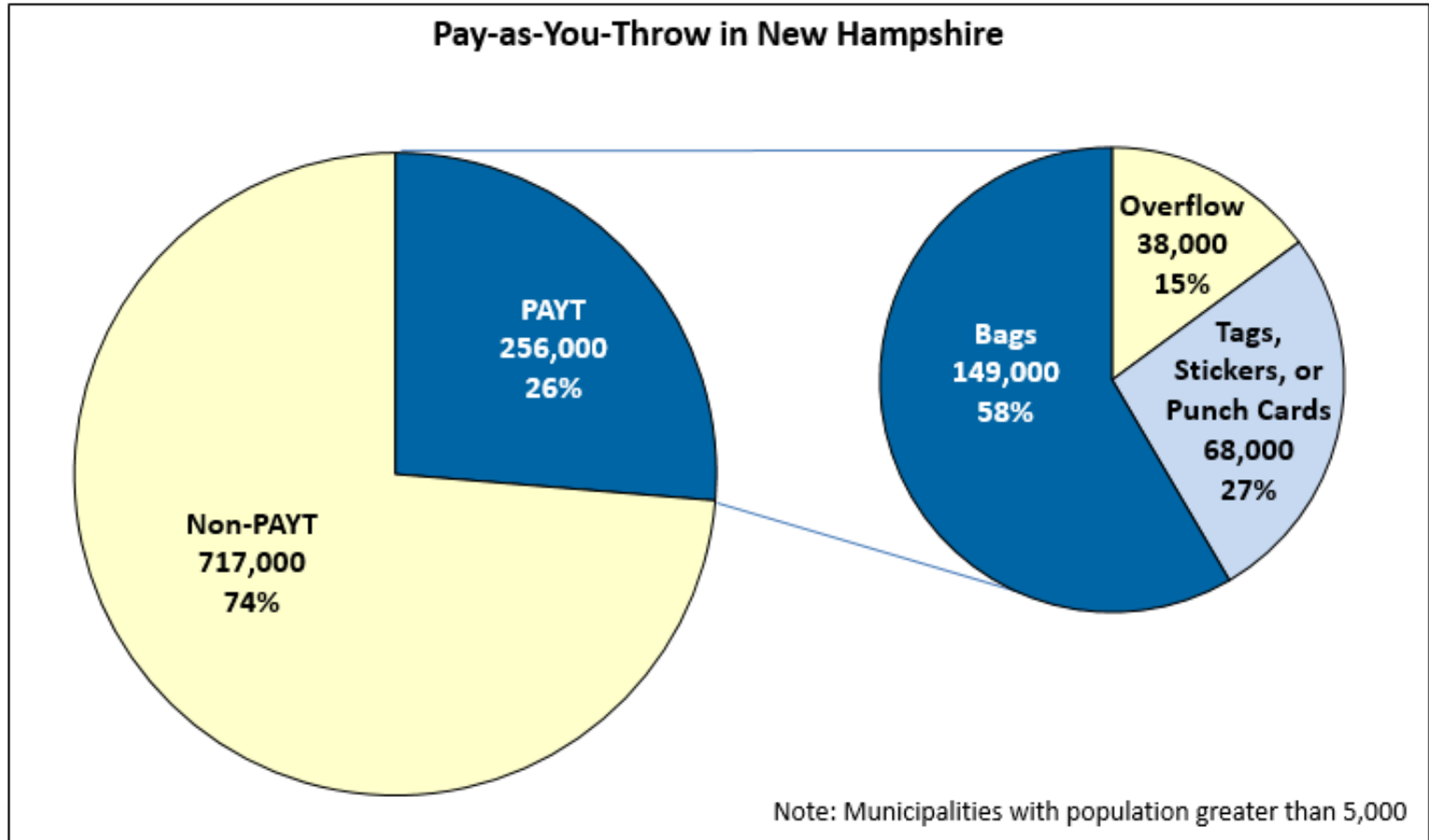


The Most Effective Intervention



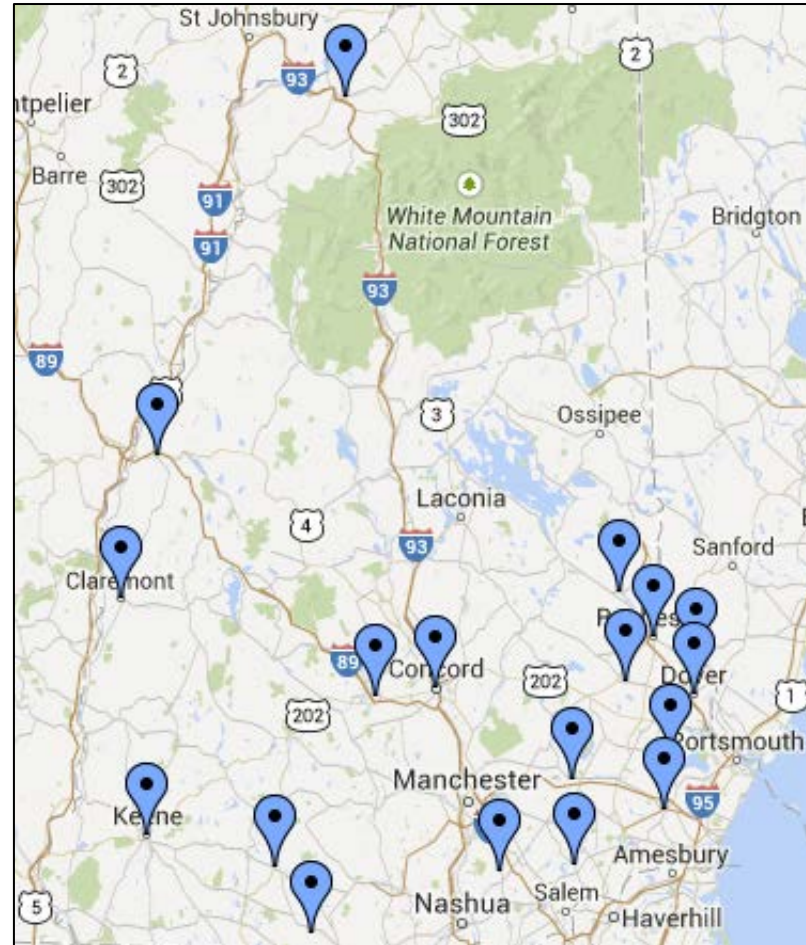
PAYT in New Hampshire—26% of Residents

Pay-as-you-throw is a familiar concept throughout New Hampshire.



PAYT in New Hampshire—A Familiar Concept

The 18 pay-as-you-throw communities in New Hampshire are spread throughout the state.



PAYT in New England

Pay-as-You-Throw in New England

New Hampshire: Widespread PAYT Adoption

- 26% of residents
- 256,000 individuals

Maine: Widespread PAYT Adoption

- 32% of residents
- 131 municipalities

Vermont: PAYT Legally Required

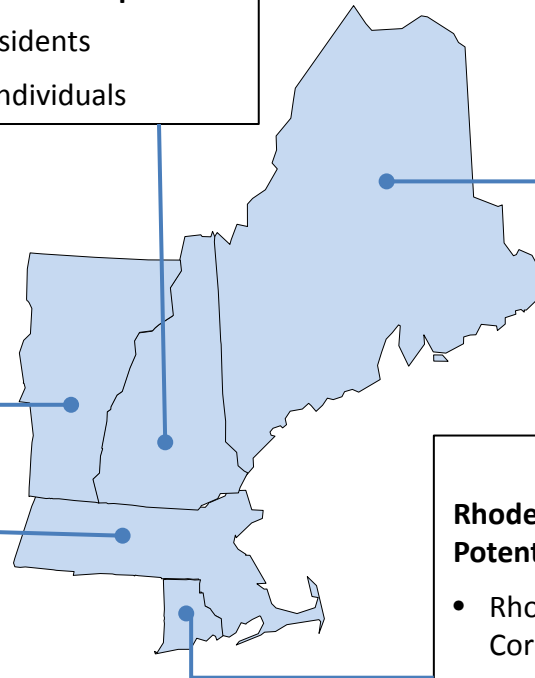
- Act 148 requires mandatory PAYT starting July 1, 2015

Massachusetts: Widespread PAYT Adoption

- 41% of cities and towns
- 143 municipalities

Rhode Island: Potential Statewide PAYT Program

- Rhode Island Resource Recovery Corporation studying statewide PAYT



PAYT Results—Consistent Performance

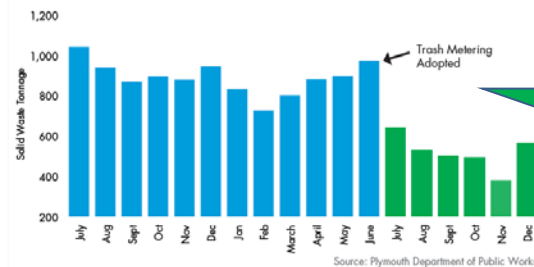
- Average 44% reduction in MSW and disposal costs
- Substantial increases in recycling
- Significant results within 30-90 days
- Permanent impact
- Effective in cities and towns, regardless of
 - Population size
 - Average income level
 - Numerous demographic factors
 - Method of trash collection

WORCESTER, MASS., SOLID WASTE VOLUME, 1990 - 2012



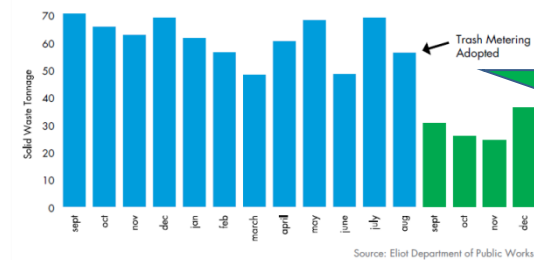
47%

PLYMOUTH, MA, SOLID WASTE TONNAGE, JULY 2012 - DEC. 2013



39%

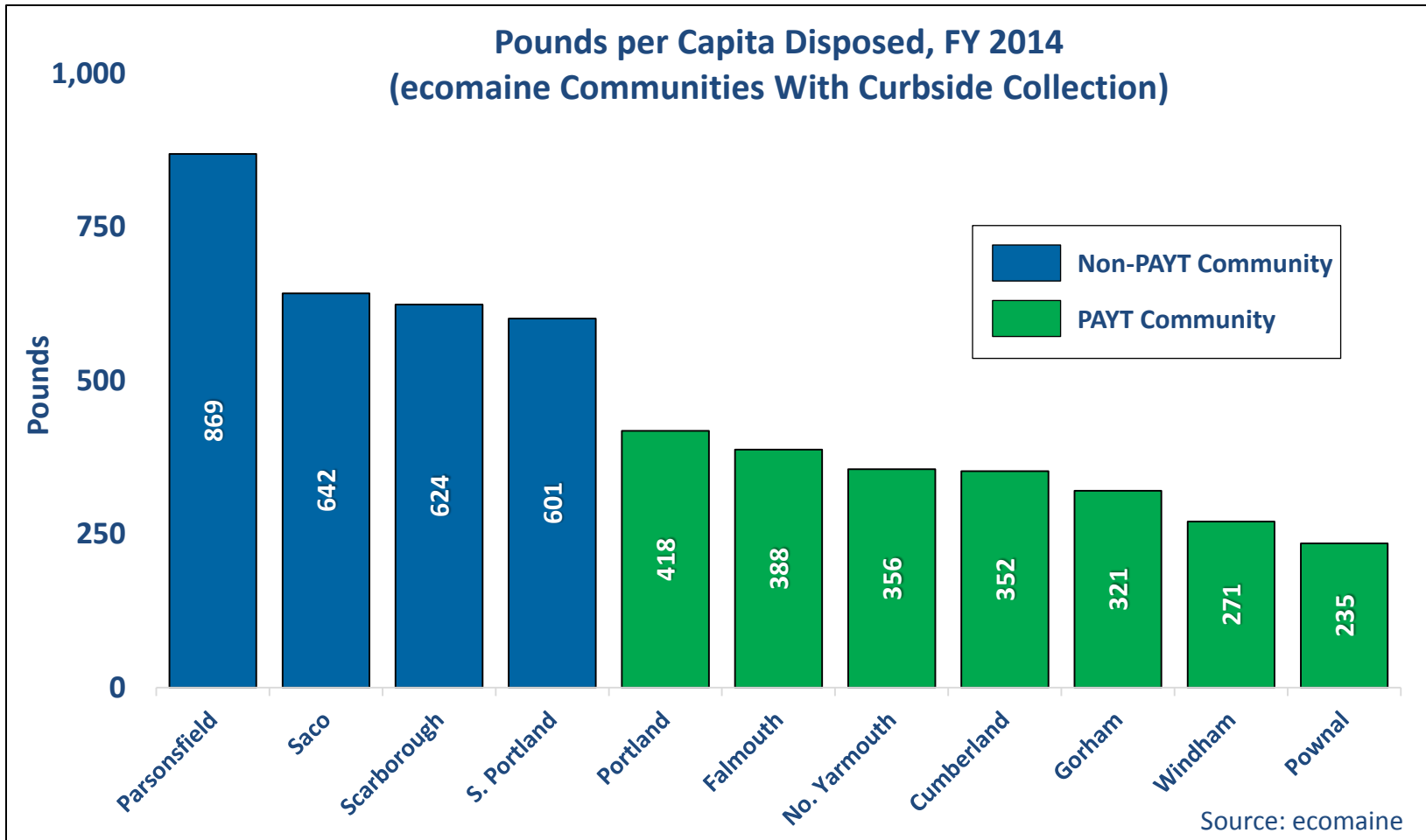
ELIOT, ME. SOLID WASTE TONNAGE, Sept. 2012 - Dec. 2013



57%



PAYT Results—Unrivalled Waste Reduction

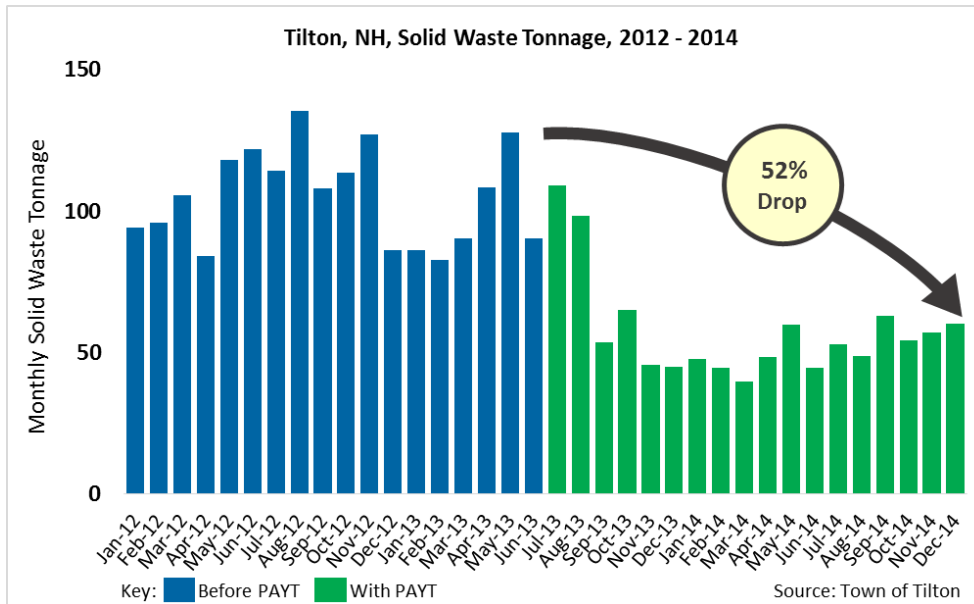


PAYT Results—Tilton NH

Tilton adopted a pay-as-you-throw program in July 2014. Residential solid waste tonnage has decreased by more than half, saving \$35,872 in disposal costs.

Tilton had no curbside recycling collection before PAYT, and now has a 38% recycling rate.

Tilton voters soundly rejected an effort to repeal the program, voting 79-22 in town meeting to keep PAYT.



Bag-based PAYT with weekly curbside trash and biweekly single-stream recycling collection

3,500 population

\$42,000 household median income

City of Concord – Our PAYT Experience

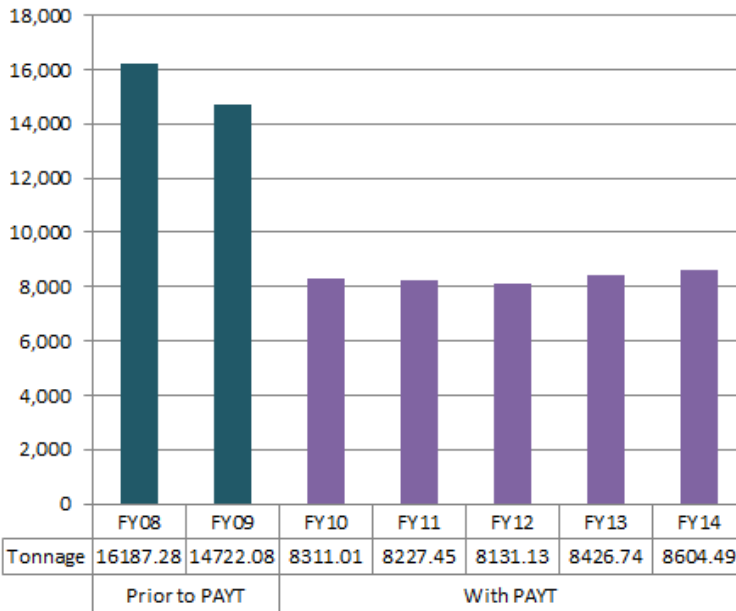
- Traditionally low tip fees were coming to an end, Concord Cooperative
- Options were PAYT or a significant increase on the tax rate
- SWAC -> City Council
- Implementation



City of Concord – Immediate PAYT Results



Residential MSW FY08 - FY14

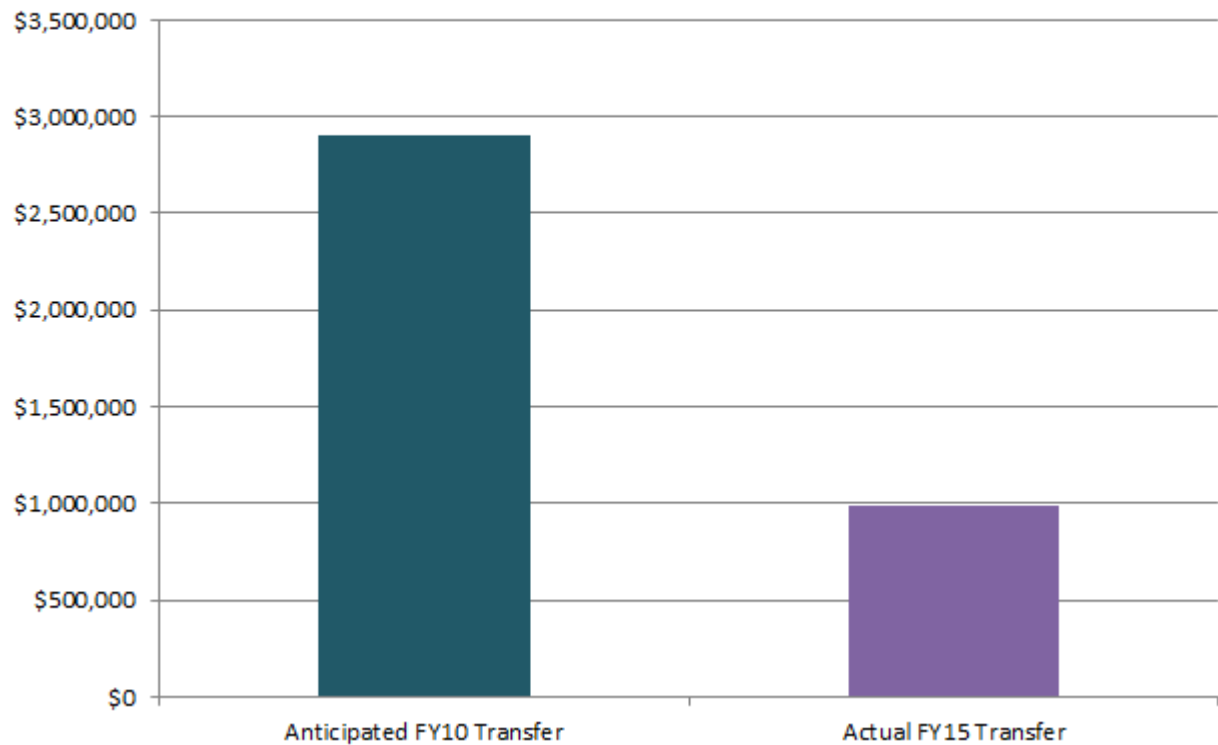


Residential Recycling FY08 - FY14



City of Concord – Longer Term PAYT Results

General Fund Transfers to the Solid Waste Fund



City of Concord – PAYT Considerations

- Communication with outlets is key
- Bag quality must be superior
- Illegal dumping concerns



PAYT Results—Waterville ME

Using Pay-as-You-Throw to Bring Curbside Recycling

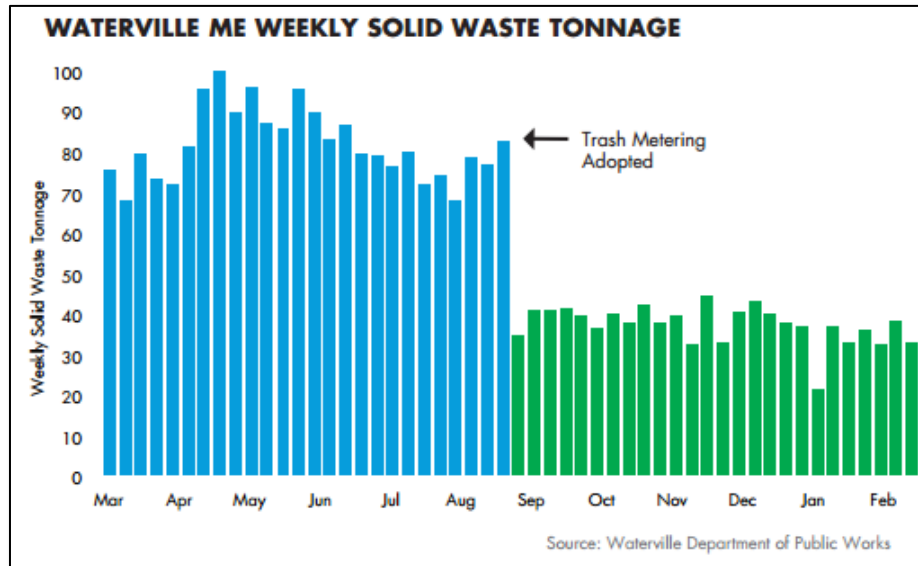
Waterville, Maine—population 16,000—uses its PAYT program, which began in 2014, to help finance curbside single-stream recycling. The program was exceeding all targets at the six-month mark.

In June 2015, Waterville residents soundly rejected an effort to repeal the program, voting 2:1 in favor of keeping their program.

Bag-based PAYT with weekly curbside trash and biweekly single-stream recycling collection
16,000 population

In the program's first 6 months:

- 53% decrease in solid waste tonnage
- \$78,000 in disposal savings
- 1,075 tons of solid waste diverted



PAYT Results—Sanford ME

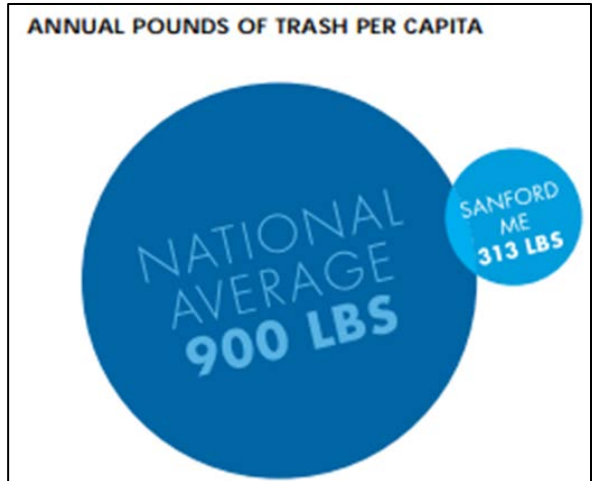
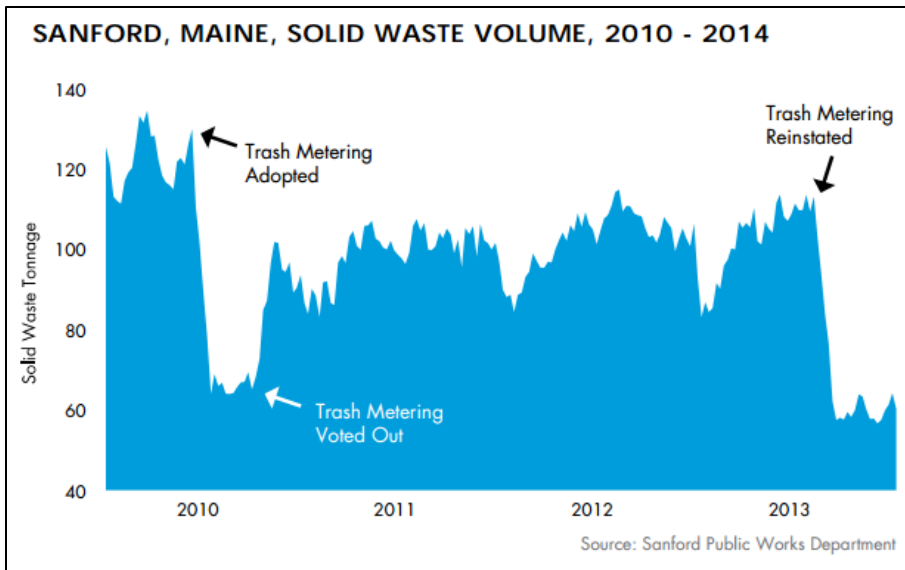
The Power of Pay-as-You-Throw

In July 2010, the City of Sanford instituted a bag-based PAYT program. Trash volume dropped by nearly half. Four months later, the town repealed the program, and trash tonnage shot up. In September 2013, Sanford reinstated PAYT, with impressive results.

Bag-based PAYT with both curbside and drop-off trash and single-stream recycling disposal
21,000 population

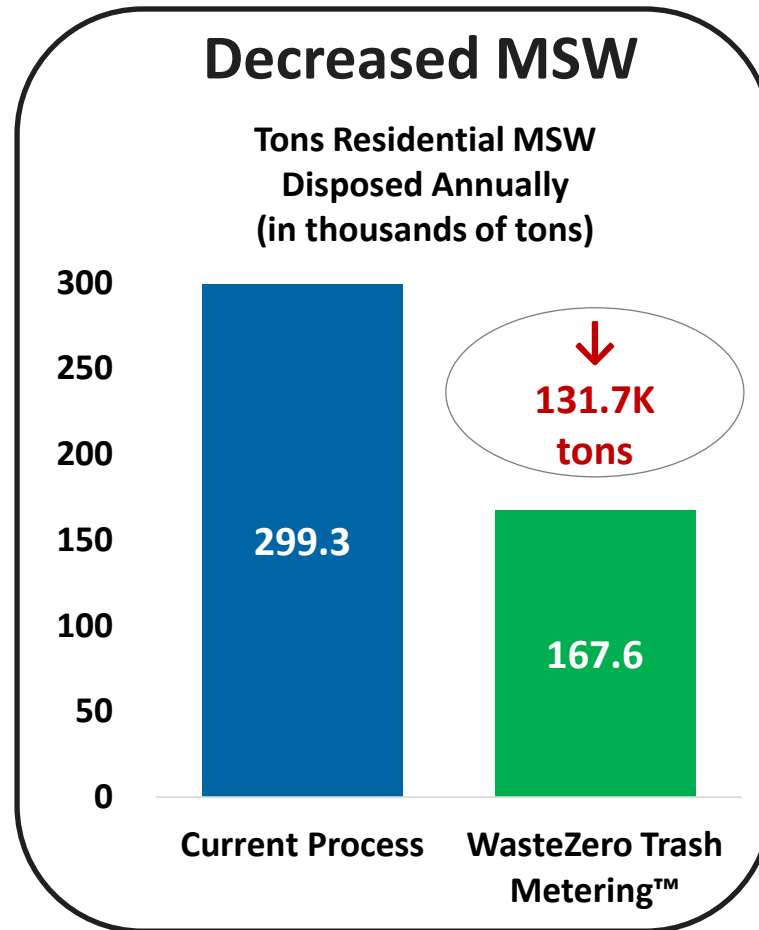
The program's results:

- > 40% decrease in solid waste
- \$24,000/mo in disposal savings
- Recycling rate nearly doubled



PAYT in New Hampshire—MSW Decrease

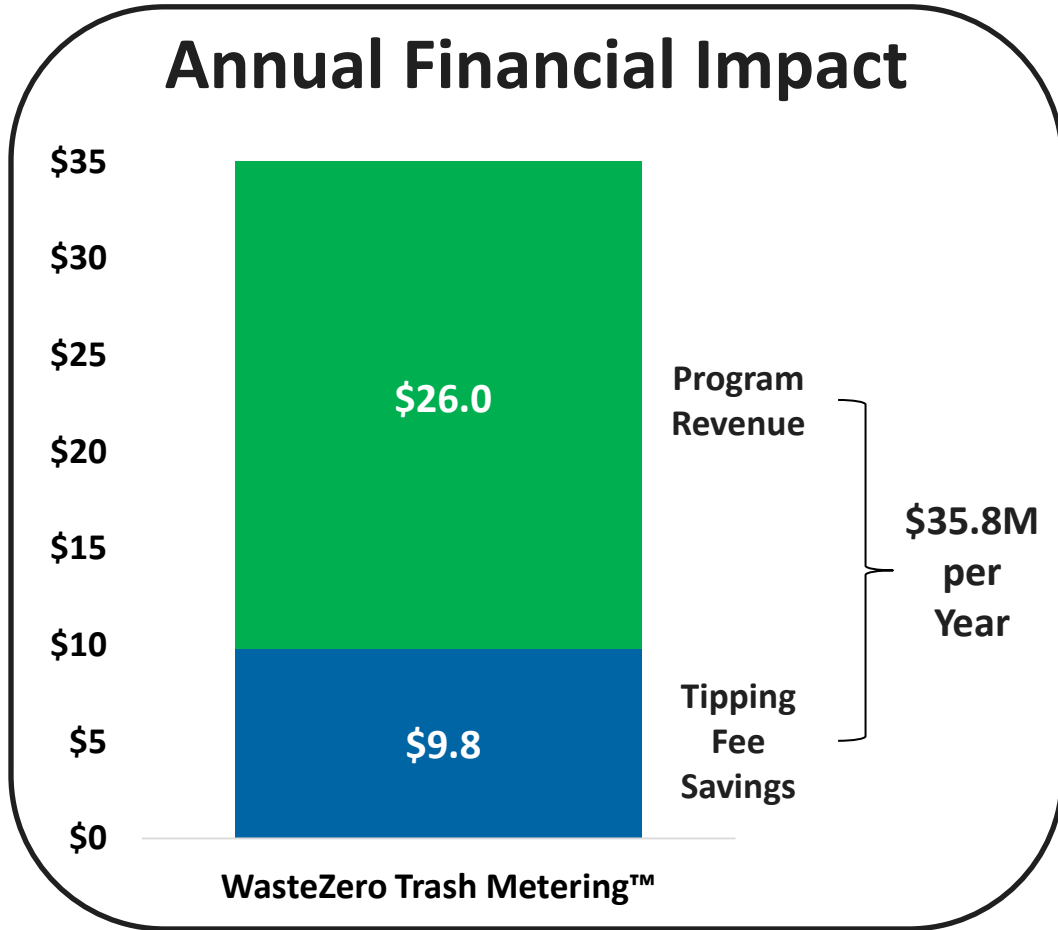
If New Hampshire's remaining non-PAYT communities implemented Trash Metering—and tag and overflow towns were also to convert—trash tonnage would be cut by a projected 132,000 tons per year.



PAYT in New Hampshire—Financial Impact

The financial benefits: a projected \$9.8 million in annual tipping fee savings, as well as \$26 million in revenue.

Annual Financial Impact



PAYT in New Hampshire—Environmental Impact

CO₂e (Greenhouse Gas)

Annual
Reduction

248,000
Metric Tons

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



BTUs (Energy Used)

Annual
Reduction

2,067,000
Million Units

- Reduced costs
- Reduced carbon footprint
- Increased energy security



Equivalent to:



Removing
49,000
passenger vehicles from the road

or

Reducing gasoline consumption by
27,800,000
gallons



Equivalent to:



Powering
18,000
residential homes

or

Installing
256,000
rooftop solar panel arrays



Source: EPA WARM Model



Best Practices—Messaging and Public Engagement

Community Education & Engagement

Message/
Talking Point
Development



Community
Outreach Meetings



Resident Education Materials



Resident-Facing Web Site

Pre-Implementation Support

Ongoing Support

Public & Media Relations



Coordination With Local Media



"Success Stories" at
Program Milestones

Thank You to our Presenters!



Stephen Lisauskas

Vice President

slisauskas@wastezero.com

617-821-5933

Adam Clark

Solid Waste Manager

City of Concord

603-230-3912

aclark@concordnh.gov

www.wastezero.com





PROD.

COMING ATTRACTIONS



August 12

**Power Lines, Pipelines and Power Plants:
Siting New Hampshire's Energy Future**

VENUE

www.nhmunicipal.org



*for attending
our webinar
presentation
today!*

Mission Statement

The New Hampshire Municipal Association is a non-profit, non-partisan association working to strengthen New Hampshire cities and towns and their ability to serve the public as a member-funded, member-governed and member-driven association since 1941. We serve as a resource for information, education and legal services. NHMA is a strong, clear voice advocating for New Hampshire municipal interests.

