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SMART Waste Management



**Changing
the way
Americans value
trash**



S-M-A-R-T



Save
Money
And
Reduce
Trash



Residents can save when they reduce the amount of trash they produce

Environmental and Economic Value of Waste Reduction



Clear message about the environmental value



No message about the economic value



The Economic Value of Waste Reduction



- Immediate benefit to municipality
avoided disposal costs at the municipal level
- Long- term benefit to the region though extended life at the landfill or WTE
- Immediate benefit to municipality and state
 - * Recycling creates jobs 2.5 Billion
 - * ‘The most important economic benefit occurs when recovered materials are manufactured products in the local community’
Robin Murray, Waste to Wealth
 - * Recycling creates revenue of \$400 billion

Unit-based Pricing Sends a Clear Message

Worcester, MA

Population 173,000



San Francisco, CA

Population 775,000



Unit based pricing is just a different way of paying for waste

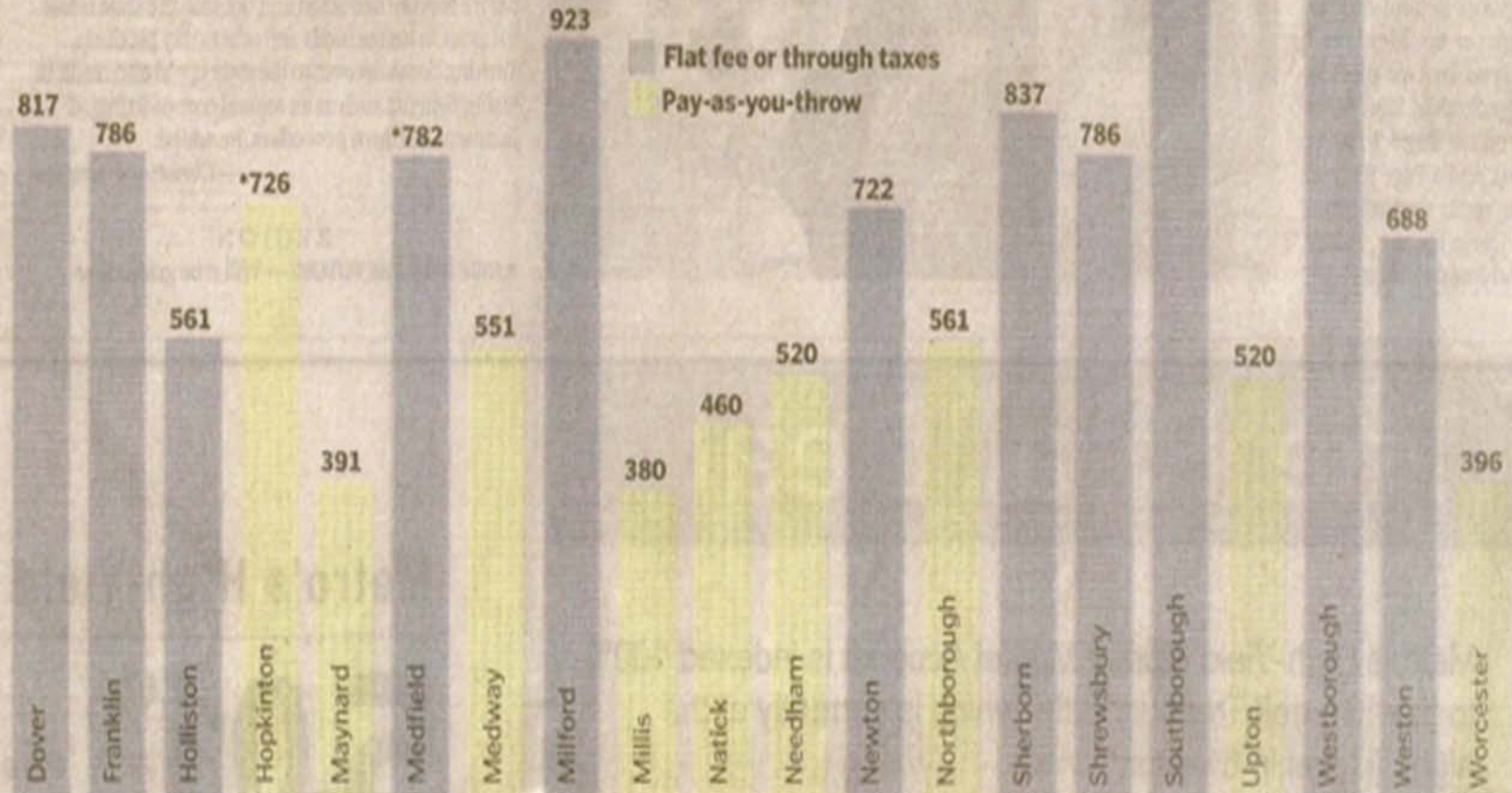
Boston Globe

February 2007



Up in smoke

Per-capita figures in 2005 reflect a wide range in the pounds of trash thrown away by residents of the 20 area communities that are clients of the Wheelabrator incinerator; nearly half of the cities and towns use a pay-as-you-throw system to reduce disposal costs and encourage recycling.



US Residential per capita Disposal

source Resource Recycling April 2008



City	Population	Per capita Residential Waste Disposal	Tip Fee	PAYT Savings Based on National per capita disposal Average
Portland OR	537,081	448	71	\$13,098,600
Portland ME	64,249	357	88	\$2,199,372
Binghamton NY	45,217	551	40	\$528,135
Worcester MA	175,454	390	68	\$4,444,250
*San Francisco CA	744,041	513	117	\$27,073,420
Grand Rapids MI	193,083	529	79	\$4,621,828
Bath ME	9,184	325	90	\$344,757
Fayetteville AK	67,158	544	25	\$496,130
Middletown RI	16,431	359	32	\$204,007
United States	293,000,000	1,135	37	\$3,076,133,750

Numbers represent 2005,2006,2007 estimates of tonnages sent to lands or waste to energy facilities

**San Francisco has local tip fee of \$117 per ton*

Seoul Korea VGCF System - Before / After

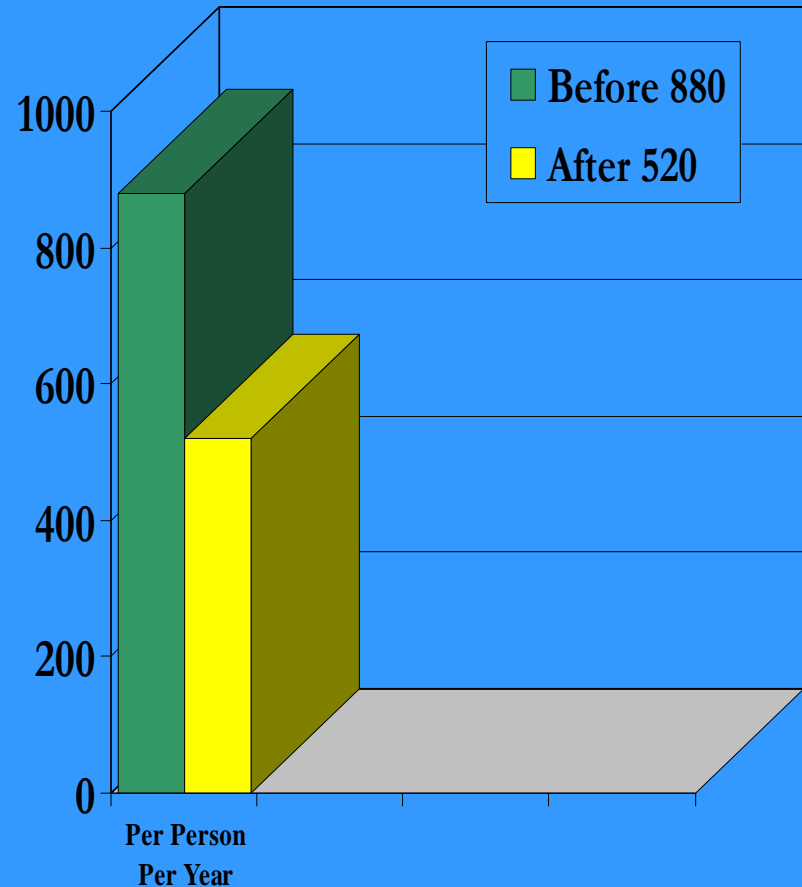


- Municipal Solid Waste Disposal

Before VGCF was 12,238 ton/day

- Municipal Solid Waste Disposal After VGCF

was 7,013 ton/day

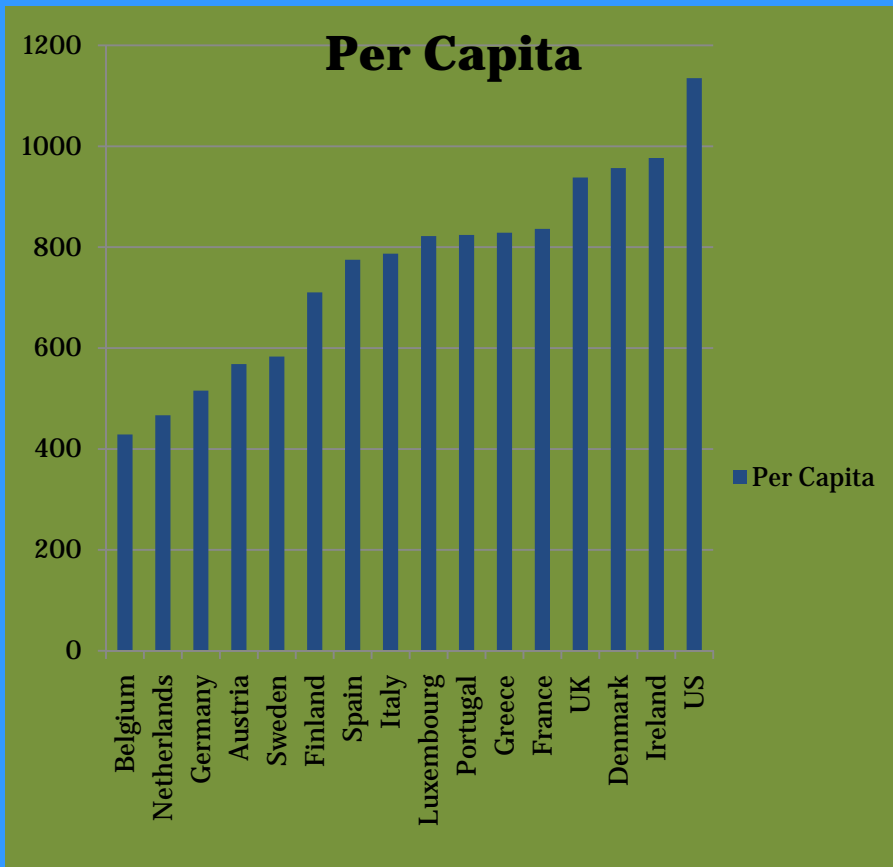


Zurich Switzerland reduced waste 41%



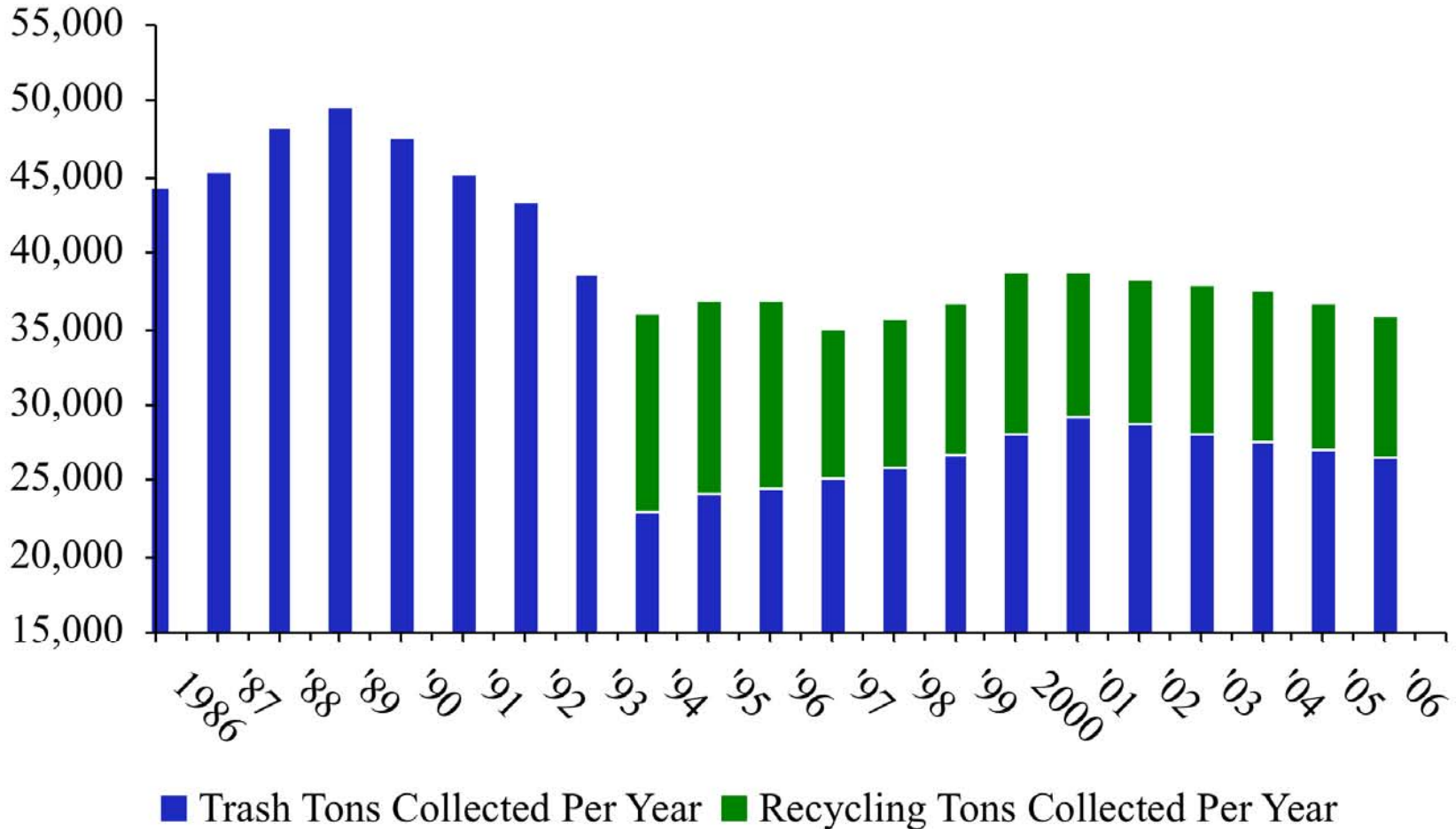
Europe per capita disposal

Polluter Pays Principle

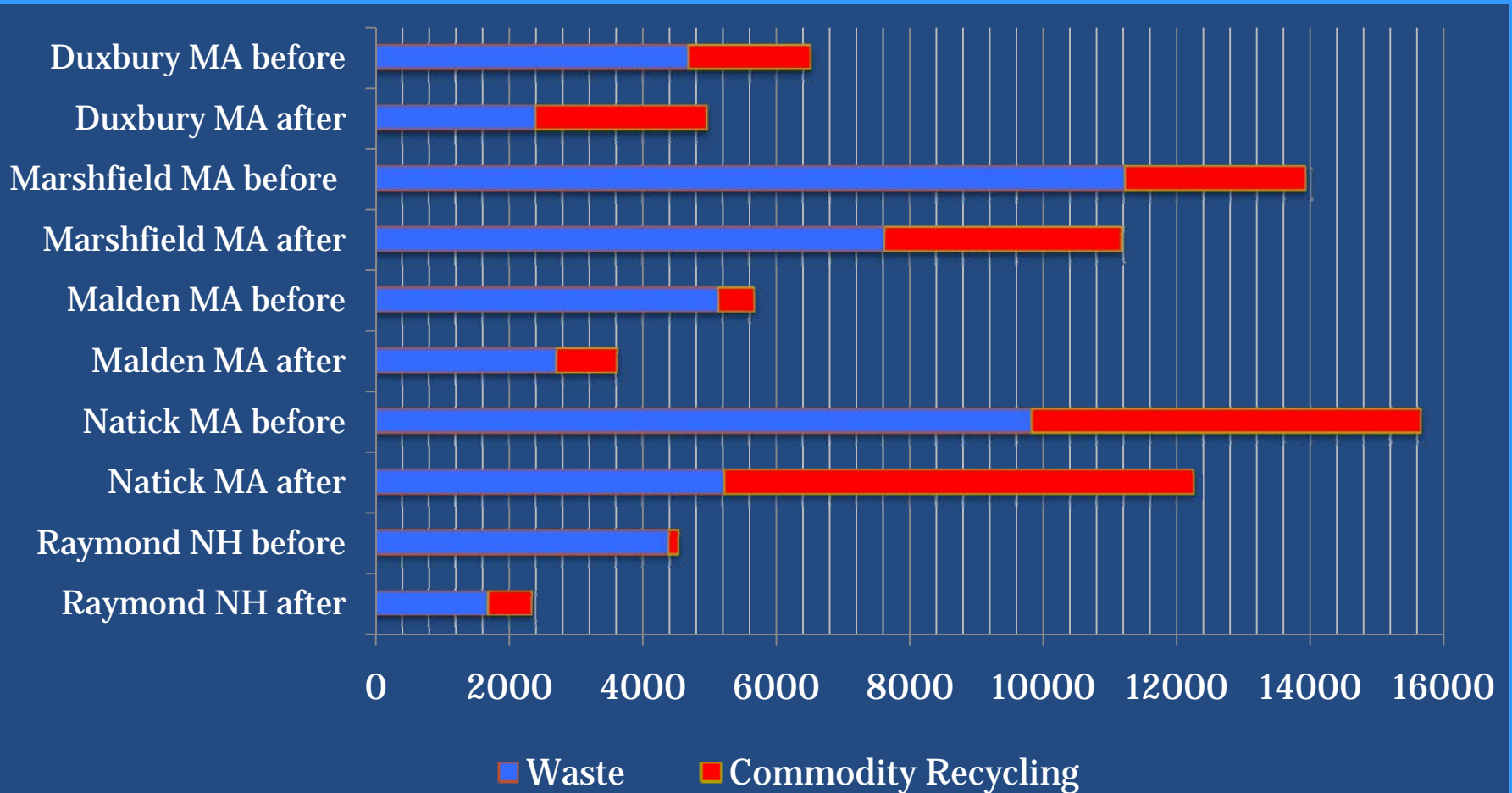


Source: Institute for Public Policy Research 2007

Worcester, MA: Reduce – Reuse – Recycle

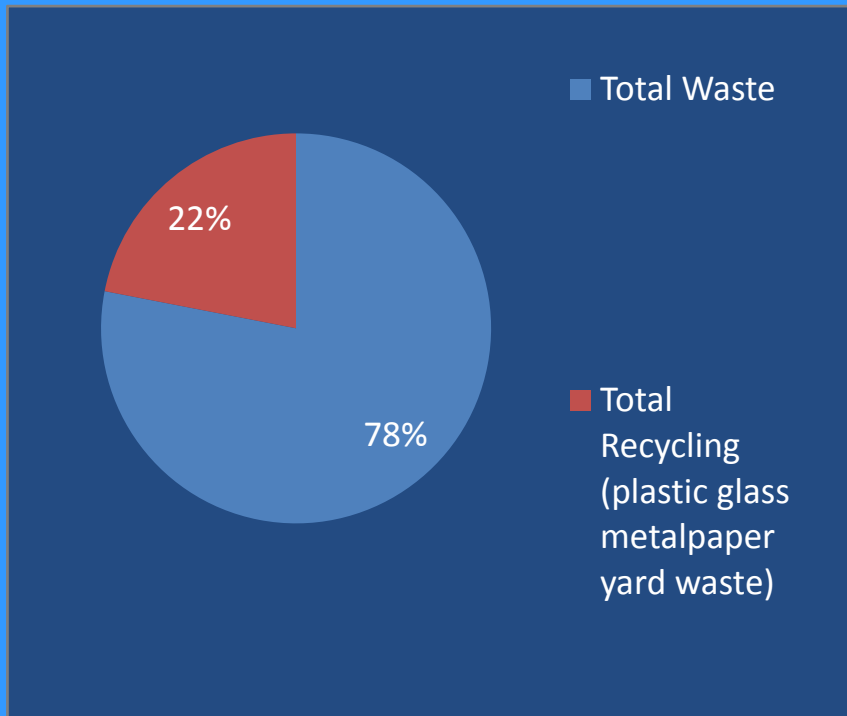


Overall Waste Generation Decrease **20+%**

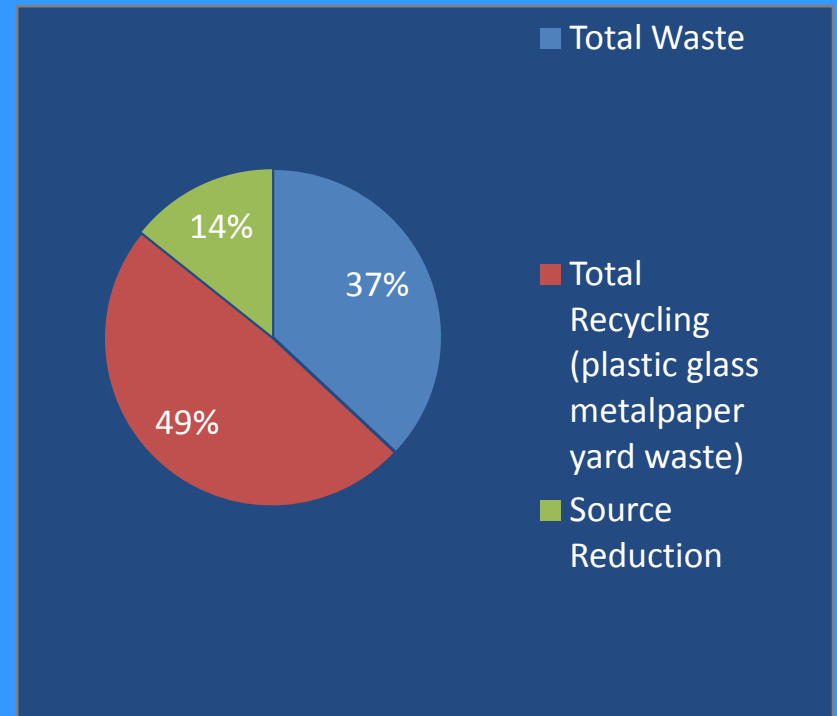


PAYT – a SMART BET

Malden Waste Before SMART

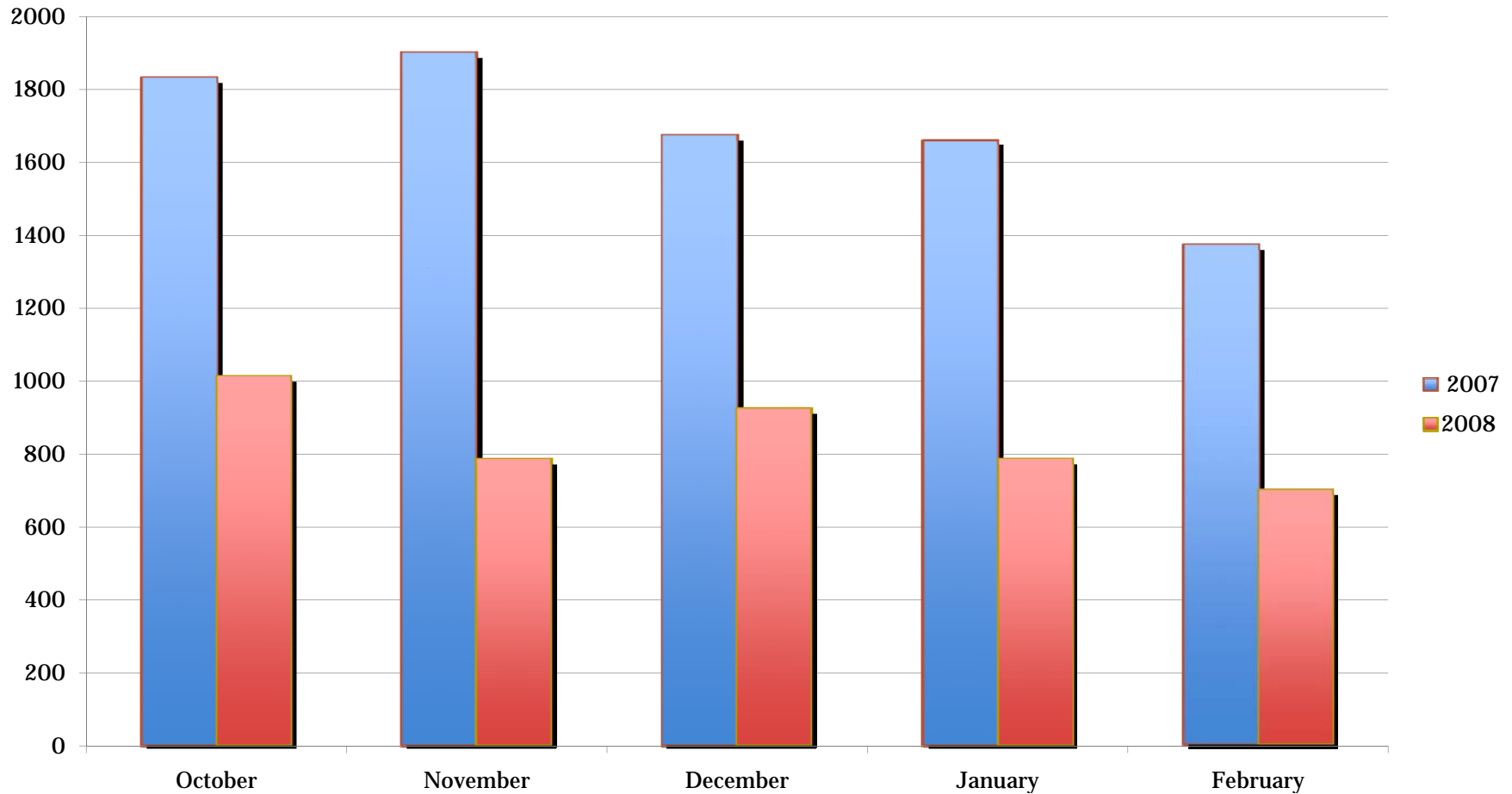


Projection After SMART



The City of Malden would save \$817,000 annually in avoided disposal

Malden MA before and after



SMART vs. Recycle Bank



City	Annual Household Savings	Annual Pounds of Diversion Per Household
Malden	\$41.93	1,089
Everett	\$11.08	287
Revere	\$13.38	347

'North Shore Massachusetts Communities Implement Waste Diversion Programs: PAYT Results Clearly Stand Out' *EPA SPRING 2009 Bulletin*

The Economic Value of Waste Reduction



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- Immediate benefit to municipality and state
 - * Recycling creates US jobs 2.5 million
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How Can You Get SMART?



- Go to EPA **SMART BET** and assess the cities potential for Cost and GHG reductions
- Find a **Coach** to help you through the Politics
- Start an **Advisory Committee** to officially investigate SMART and carry out Implementation
- Create an easy, cost-effective **Implementation Strategy** to fit w/your current Collection Structure

Residents Want – Right to Choose



THE WALL STREET JOURNAL

‘Kicking the Cans ‘July 29, 2008

**Should people who throw out more trash
pay higher disposal bills?**

84% - YES 16% - NO

SMART Waste Management



**“Changing the Way
Americans Value Trash”**

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