

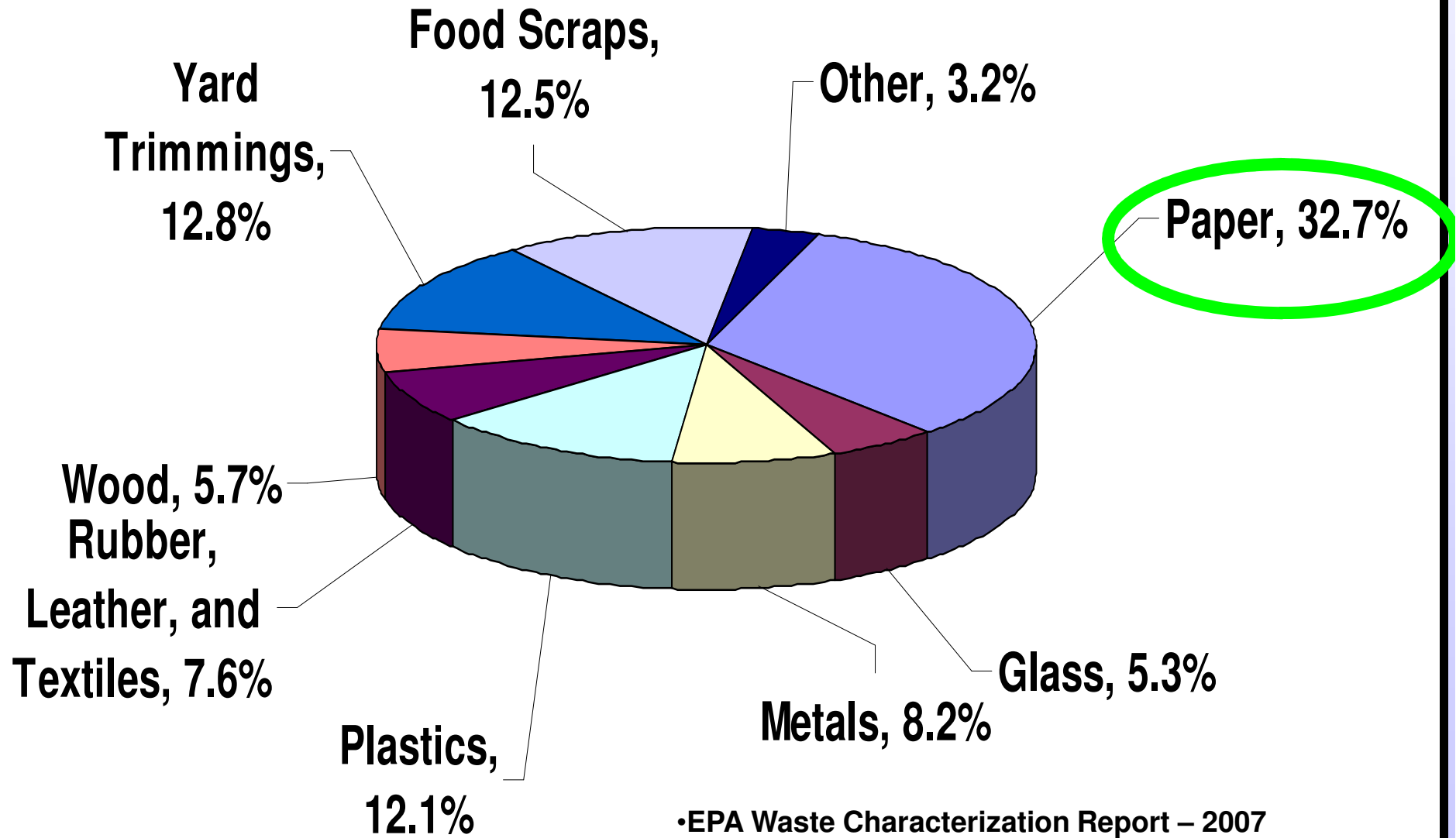
What Do I Do With This?

**The State of Solid Waste in
America and New
Hampshire**

First, The Big Picture



What's in your garbage?



•EPA Waste Characterization Report – 2007

2008 Recycling Data (Municipalities)

	Tons
2008 Residential MSW Tons/Year	440,752
2008 Commercial and Industrial Tons/Year	60,107
2008 Cons/Demo Tons/Year	101,458
2008 Compost Tons/Year	22,068
2008 Recycling	113,852
Recycling Rate	21.1%

2008 Recycling and Disposal

Source	Amount In Tons	Percentage	Change From 2007
Commercial Recycling	297,365	23.51%	0.00%
Residential Recycling	111,858	8.84%	-10.02%
Total Recycling	409,224	32.36%	-2.95%
Commercial Composting	1,225	0.10%	-69.16%
Residential Composting	21,825	1.73%	-19.72%
Total Composting	23,050	1.82%	-26.02%
Waste To Energy In NH	251,903	19.92%	8.40%
Incineration w/o recovery	2,137	0.17%	-51.34%
Landfilling	539,844	42.69%	-11.18%
Disposal Total	793,885	62.77%	-6.00%
Exports	38,558	3.05%	-4.21%
Totals	1,264,716	100.00%	-5.45%

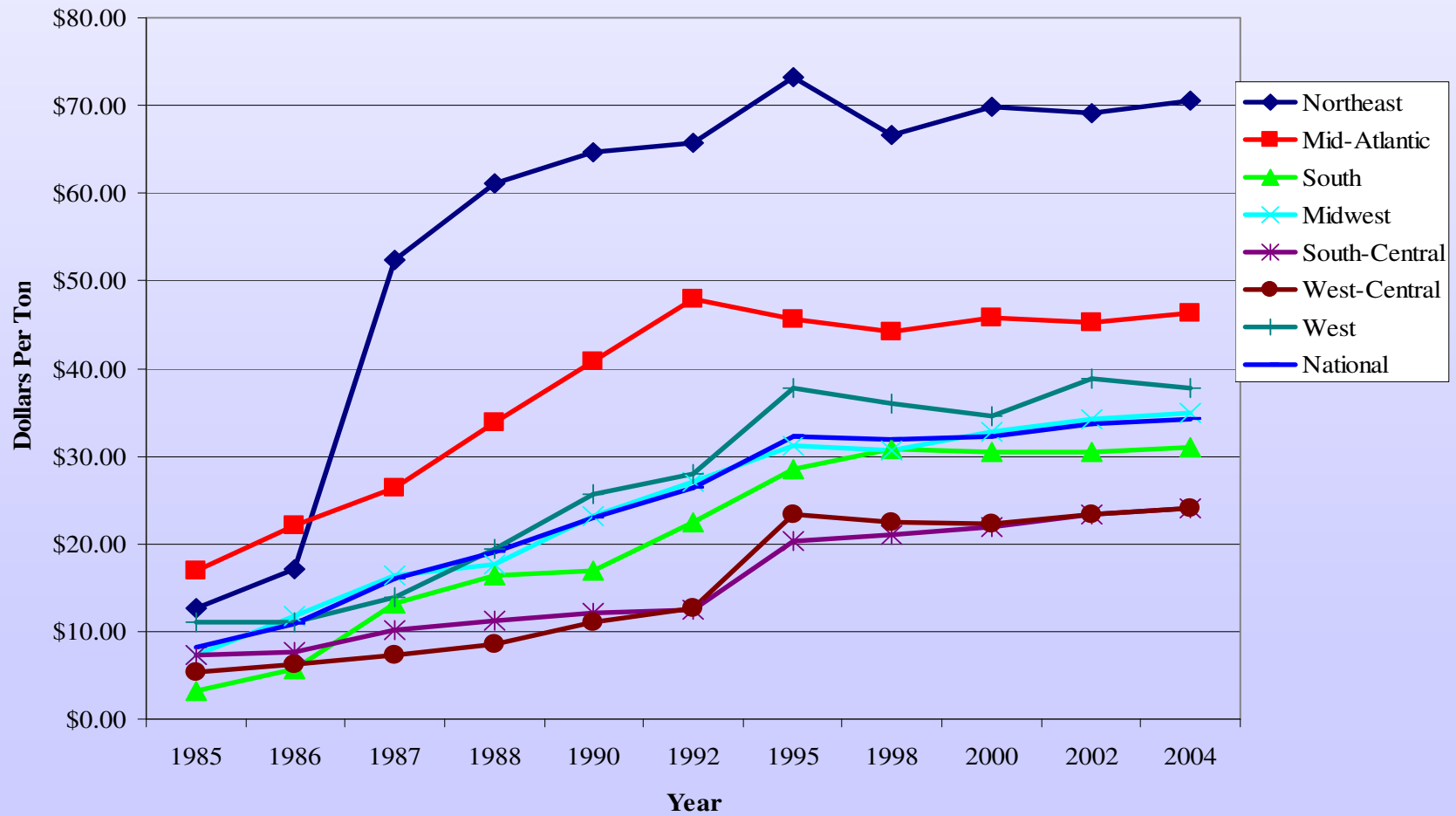
2008 Recycling Data (Twin Mountain)

	Tons
2008 Residential MSW Tons/Year	248
2008 Commercial and Industrial Tons/Year	0
2008 Cons/Demo Tons/Year	50
2008 Compost Tons/Year	1
2008 Recycling	225
Recycling Rate	47.7%
Per capita	\$122.00

NH Per capita

- **NH per capita is 7.6 pounds per day as opposed to 4.5 nationally**
- **Why?**
 - **Because we had 50 million visitor days so our population is effectively 1.8 million, not 1.3 million**
- **Maine shows the same trend**

Figure 6 Tipping Fees



\$\$\$\$ - NH Data - 2007

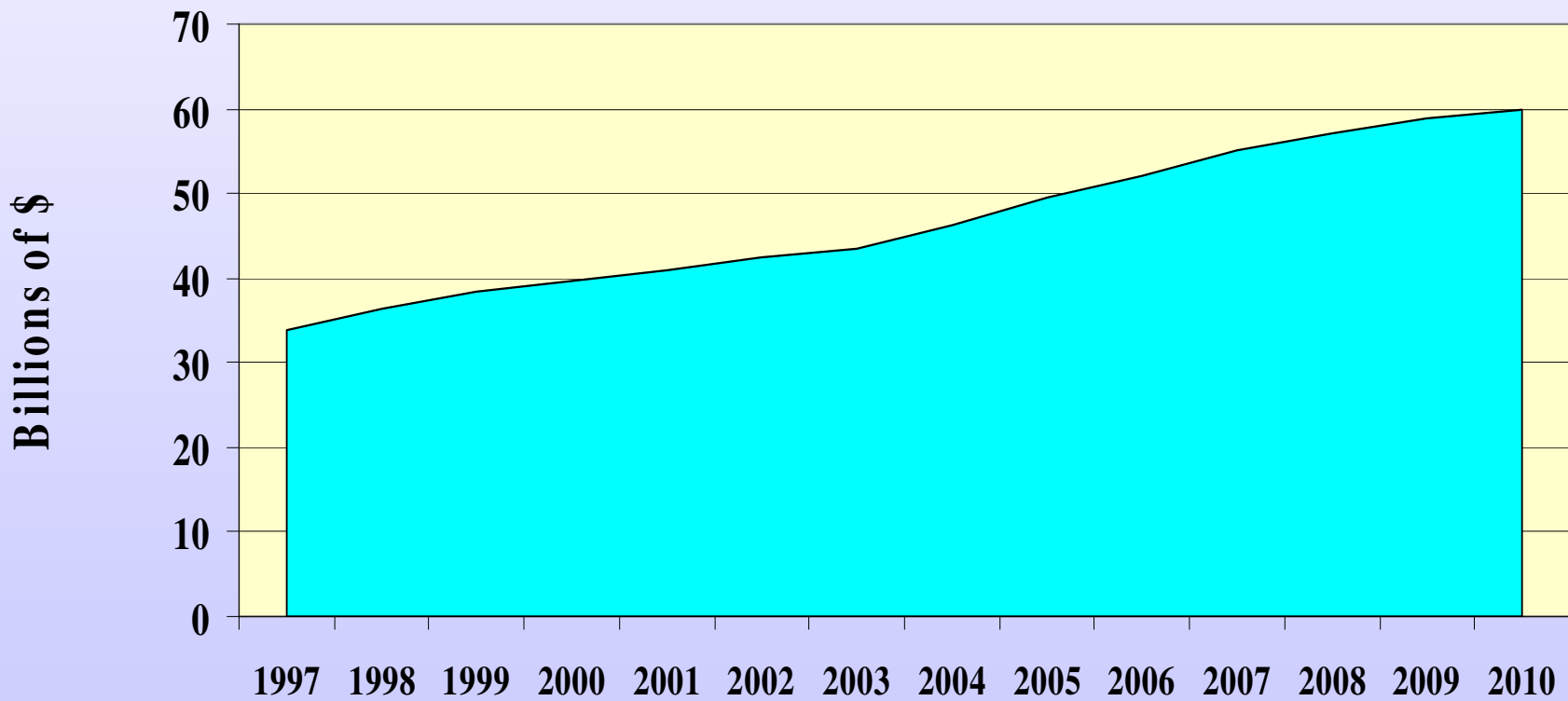
- **NH towns and cities pay a total of \$116,200,098 in budget line item costs to dispose of solid waste**
- **This is \$86.22 per person per year or approximately \$271 per household per year.**

3.14 persons per household average

NH Estimated Industry Size

- **NH Municipal = \$116 Million**
- **NH Commercial = \$116 Million**
- **NH C&D = \$25 Million**
- **NH Imports = \$30 Million**
- **Conservatively about \$290 Million!**
- **This is a big business**

Size of the Waste Management Industry



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
■ Billions of \$	33.8	36.4	38.4	39.7	40.9	42.5	43.5	46.3	49.5	52	55	57	59	60

•Waste Management Journal 2007

Top 5 Waste Management Firms in 2007

Company	Employees	Revenue (millions)	Market Share
Waste Management	51,000	\$13,390	24%
Allied Waste	<i>Merged</i>	\$6,110	11%
Republic Services		12,900	\$3,190
Veolia	10,100	\$2,500	5%
Covanta Energy	3,600	\$1,490	3%
Total of top 5		\$26,680	48%

Source: Waste Business Journal Weekly 6/16/08

Waste Management, Inc

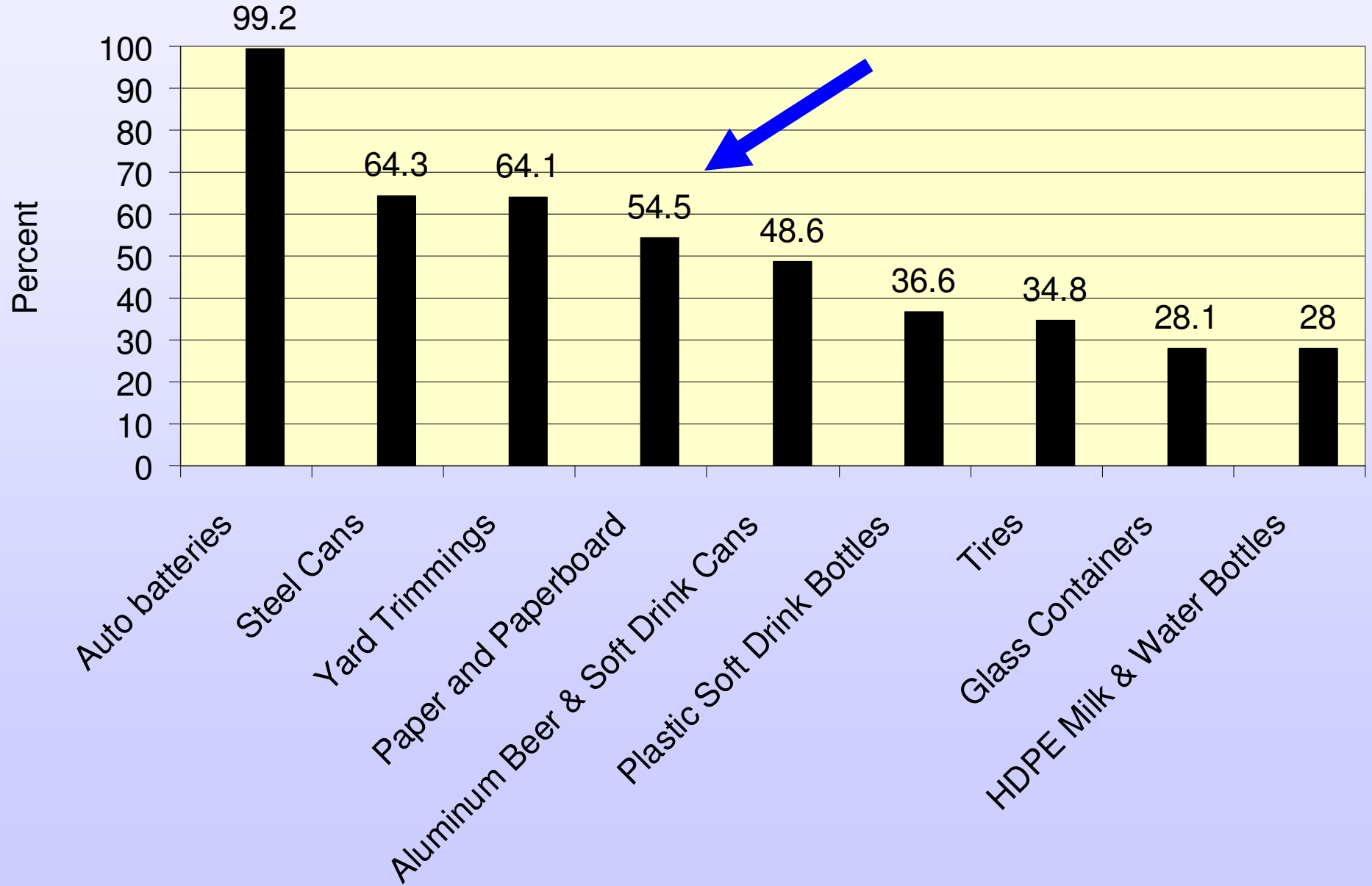
	2006	2005	2004
Total Revenue	\$13,363,000,000	\$13,074,000,000	\$12,516,000,000
Cost of Revenue	\$8,587,000,000	\$8,631,000,000	\$8,228,000,000
Gross Profit	\$4,776,000,000	\$4,443,000,000	\$4,288,000,000
Operating Income or Loss	\$2,029,000,000	\$1,710,000,000	\$1,699,000,000

- Waste Management is the largest U.S. company in the waste industry.

What's Recycling Worth?

- **In New Hampshire, every 1% increase in the recycling rate represents a cost savings of \$1 million!**
- **Every 1% increase is 5,700 tons less of municipal trash being landfilled or incinerated.**

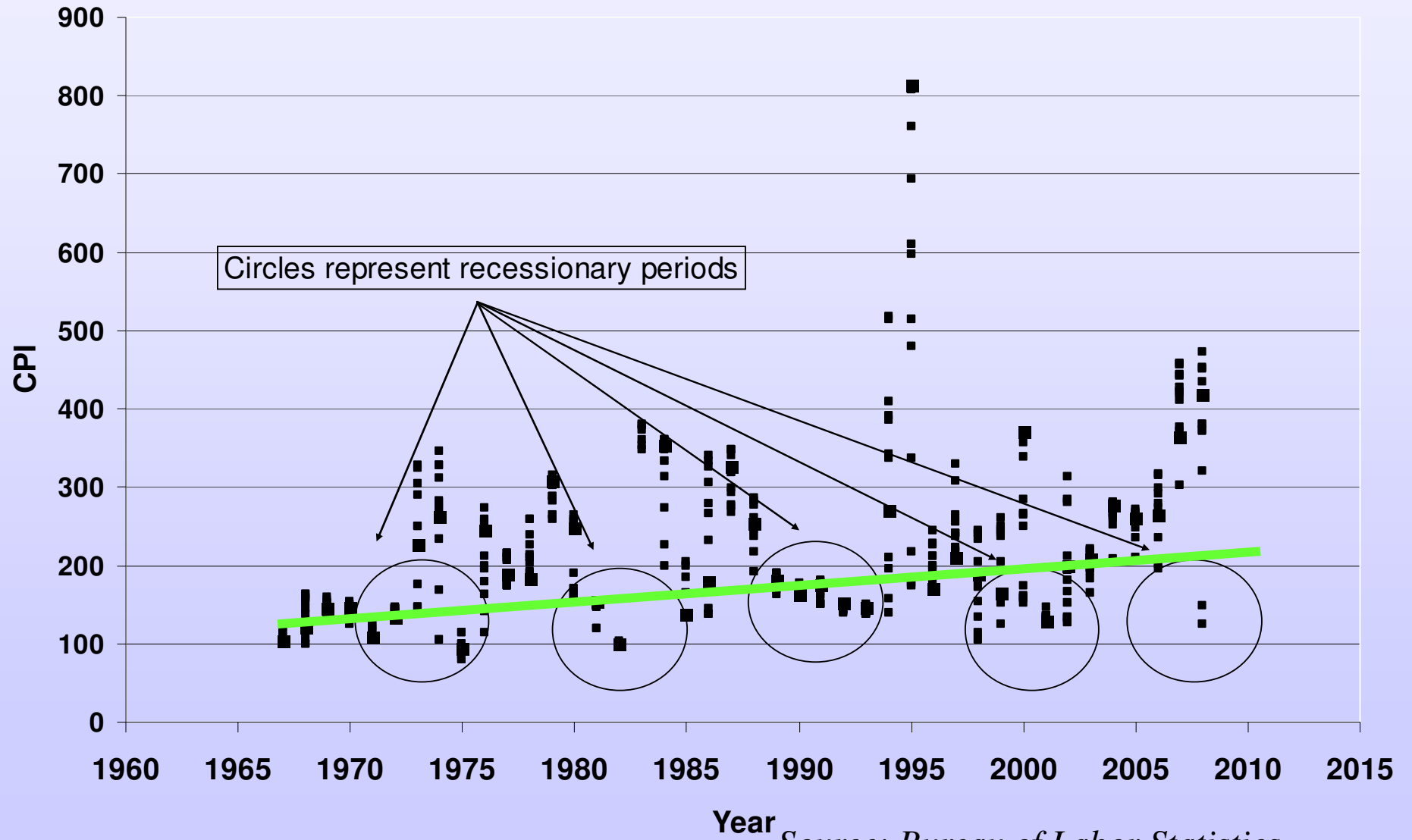
Recycling Rates for Select Materials 2007 (USEPA)



An NH Example

- In 2006, municipal waste was 765,772 tons
- Of that, 264,191 tons was paper
- Nationally, 50% of paper is recovered
- NH should have recovered 132,096 tons
- **In 2006, NH municipalities collected 50,779 tons or 19% of the available paper!**

Consumer Price Index - Corrugated Wastepaper Inflation Adjusted Constant Dollars



Year
Source: Bureau of Labor Statistics

Pay As You Throw or SMART

Saving Money and
Reducing Trash

Introduction

- **Basic rationale**
 - Higher costs of municipal solid waste management are encouraging local governments to look for a new financing source such as user fees.
 - Volume or weight-based fees can provide an incentive for recycling and source reduction.
 - Volume or weight-based fees are perceived as more equitable than flat fees or financing from general tax revenues..

Introduction

- **Common issues**
 - Perception of tax increase – Population segments – low income, elderly.
 - Reliability as funding source – predictability of revenue trend.
 - Multi- housing units.
 - Inappropriate disposal methods

Radical Idea? Not Really

- **Unit-based fees exist all over**
 - Water
 - Electricity
 - Telephone
 - Mail
 - Internet
 - Cable TV
- **Why not trash service?**

Pay As You Throw in Some Form? In New Hampshire

- **45 towns and cities have PAYT**
- **106 charge for E-waste**
- **111 charge for C&D**
- **103 charge for bulky waste**
- **101 charge for white goods**

PAYT Growing in the U.S.



- **More than 7,000 communities in U.S. practice PAYT**
- **Cities large and small, rural and urban**
- **More than 60 cities with populations above 100,000 practice PAYT**

BARRINGTON	GILSUM	ORFORD
BETHLEHEM	GOSHEN	PETERBOROUGH
CANAAN	HANOVER	PIERMONT
CANTERBURY	HINSDALE	PLAINFIELD
CHATHAM	KEENE	RAYMOND
CLAREMONT	KENSINGTON	SANBORNTON
CONCORD	LANCASTER	SHARON
CORNISH	LANDAFF	SHELBURNE
DALTON	LEBANON	SOMERSWORTH
DOVER	LISBON	SOUTH HAMPTON
EATON	LITTLETON	SUGAR HILL
EPPING	LYMAN	TROY
EXETER	LYME	WALPOLE
FARMINGTON	NEWMARKET	WARREN
FRANCONIA	NEWPORT	WHITEFIELD
LONDONDERRY		

Concerns: Special Populations

Elderly

- Seniors tend to generate less waste.
- Under our current system, seniors subsidize the costs for households that generate more trash.
- Elderly homeowners are likely to save money on an annual basis.

Low Income

- Low income residents can be eligible for subsidies on bag purchases
- The simple act of recycling will reduce expenses.

Other Concerns

Myth:

I'll be paying for something that used to be free.

Myth:

This amounts to double taxation.

Fact:

There's no such thing as *free* trash disposal.

Currently, the cost of waste disposal goes unnoticed as it is paid for through property taxes.

Fact:

Bag revenues will help fund transfer station costs, excluding the landfill closure bonds and the C&D tipping fees.

The town's budget will be reduced accordingly.

LIVE FREE OR DIE

NEW
HAMPSHIRE

NEW HAMPSHIRE

Department of Environmental Services

PAYT Economics



TOWN OF CANTERBURY

March 2006 Canterbury Warrant

To see if the town will vote to authorize the Selectmen to establish and implement a mandatory "pay by bag" program and further to adopt the provisions of RSA 31:95-c for the purpose of accounting for the sale of solid waste bags and tags or other receipts as budgeted annually, to be used to pay the cost of collection and disposal of residential solid waste and such other direct and indirect costs as budgeted annually. Such revenues and expenditures shall be accounted for in a special revenue fund to be known as the Pay by Bag fund, separate from the general fund. Any surplus in said fund shall not be deemed part of the general fund accumulated surplus and shall be expended only after a vote by legislative body to appropriate a specific amount from said fund for a specific purpose related to the purpose of the fund or source of revenue.

Voters passed the article by a ballot vote of 265 to 113

Income 1/1/2007 – 7/9/2007

Bestway Reimbursement	\$5,225.40
PAYT Bags	\$21,929.00
Transfer Station Fees	\$4,363.00
Recycled Waste	\$6,269.53
Transfer Station Stickers	\$10.00
Total Income from Departments	\$37,796.93

Expense 1/1/07 – 7/9/07

Solid Waste Collection

Wages	\$18,888.14
Recycling Services	\$5,823.33
Telephone	\$197.90
Supplies	\$350.00
Electricity	\$1,626.60
Seminars	\$50.00
Health Insurance	\$4,154.71
Truck Repairs	\$188.37
Solid Waste Collection	\$31,279.05
Co-op Fee Ash Disposal	\$10,624.98
Total	\$41,904.03

Summary

Income	\$37,796.93
Expense	\$41,904.03
Net Income	(\$4107.10)

2007 Solid Waste Budget Line Item	\$112,000.00
Prorated Budget Jan 1 through July 9, 2007	\$57,994.52
Savings to Town For Disposal Jan 1 through July 9,2007	\$53,887.42
Residual Budget Line Item Not Covered by PAYT and Other Income	\$4,107.10
Cost to Taxpayers Jan 1 through July 9, 2007	\$30,409.10
Savings to Taxpayers Jan 1 through July 9, 2007	\$23,478.32

Other Results

- **Lancaster SW Budget (pop. 3200)**
 - Year 1998 before PAYT - \$178,000
 - Year 2006 net cost including line item and bags - \$83,000
- **Lyme (pop. 1730)**
 - Before PAYT 2005 - \$110,000
 - After PAYT 2006 - \$10,000
- **Concord –**
 - July 1, 2009 showed immediate increase in recycling and decrease in trash.

Other Results (cont'd)

- **In the tri-town facility of Franconia, Easton and Sugar Hill (pop. 1,920), trash tonnage dropped by 59% in the first year of PAYT, saving taxpayers \$65,000.**

PAYT Overview

- **Disclaimer – Each town is different but both in-state and nationally, PAYT results in lower overall cost to the municipality and increases recycling rates!**
- **PAYT is a good tool to use for cost containment**

The Four Step Process

- **Set up Advisory Committee**
- **Sell the Program to Key Decision Makers**
- **Gather Public Input**
- **Educate the Public**

Other Ways to Increase Recycling

- **Mandatory? Not really. 112 towns have it and unless you enforce, it doesn't work**
- **"Recycle-bank" Coupon advertising incentive to recycle**
- **Education and outreach – absolutely.**

Intertown Cooperation

- **Full tractor trailer loads are worth more than small loads. Up to 2x**
- **Balers are costly to maintain and operate**
- **Concept**
 - **One town with a baler and scale acts as a consolidation point for the surrounding towns**
 - **All towns bring their recyclables to the consolidation point for baling and warehousing until a full load is made**
 - **All towns profit share based on contribution to the full load**

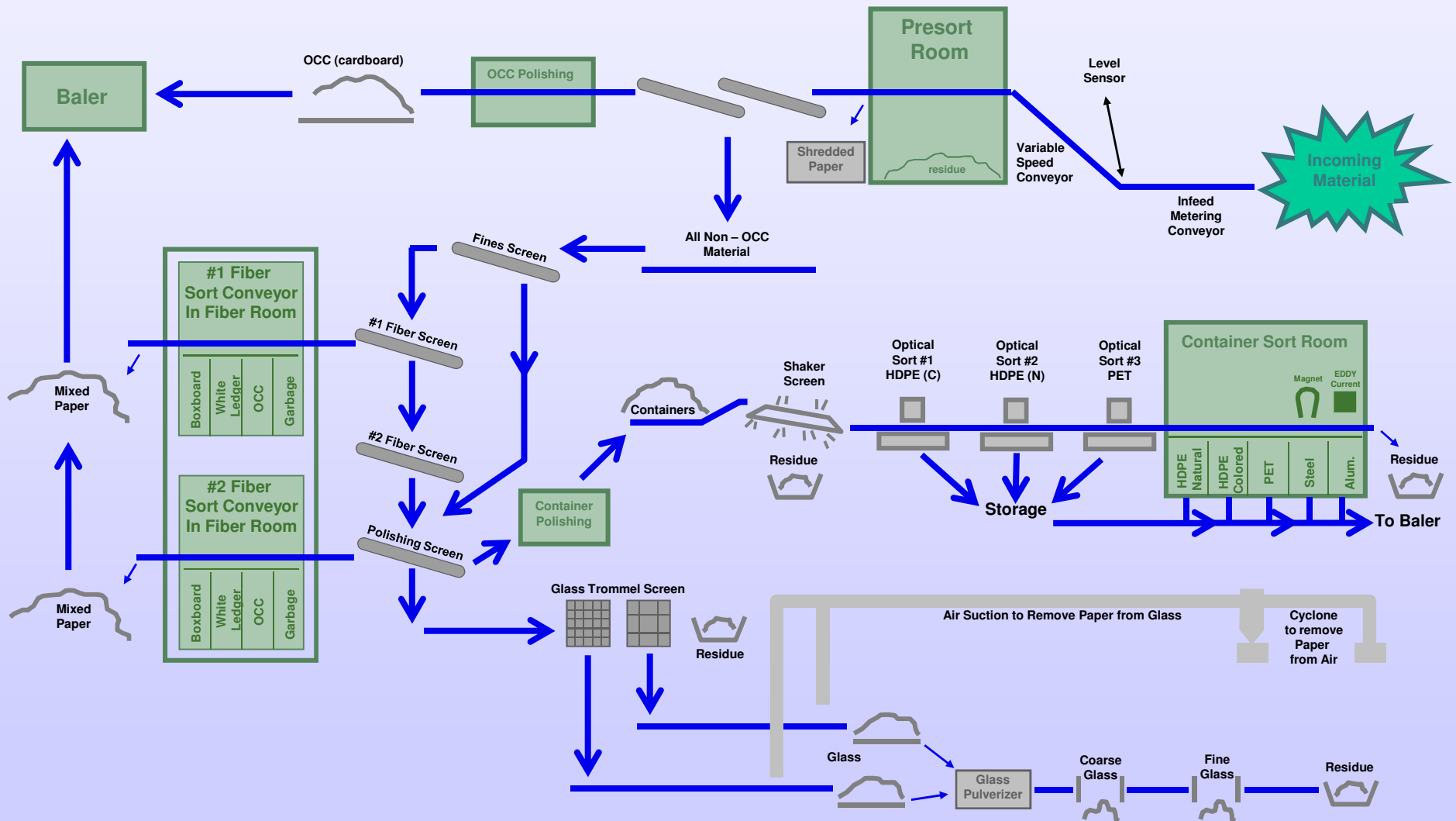
Town – Business Partnership

- **Small businesses have a problem recycling – not enough material**
- **Towns can increase recycling by allowing the businesses to use the transfer station**
- **How about a special time or day to make it easy for them.**
- **What's in it for them – cost avoidance!**
- **What's in it for you – more revenue!**

What is Single Stream Recycling?

- Single Stream recycling allows ***all*** recyclable material to go into a single container.
- You will no longer need to separate containers and paper.
- It is more efficient, easier in the home and for businesses, less costly to collect and includes more materials (#1 through #7 plastics).
- Single Stream results in disposal cost savings, greater quantities of recyclables, and savings on operating and collection costs.

Single Stream Materials Recovery Facility (typical)



LIVE FREE OR DIE

New
HAMPSHIRE

NEW HAMPSHIRE

Department of Environmental Services

Questions?