

# The Town of Easton Connecticut SMART Waste Management



Issued by:  
Green Waste Solutions  
For the Connecticut Department of Environmental Protection

**The Easton Connecticut  
Feasibility and Implementation Strategies for Unit Based Pricing**

# Town of Easton SMART' Unit Based Pricing Project

## 1. Introduction

### 1.1 Summary of Project

A SMART (Save Money and Reduce Trash) residential waste reduction program means incentivizing residents to reduce and recycle by charging per unit for trash disposal. A community is SMART, if the residents can answer 'YES' to the question - Do residents save money the more trash they recycle? Currently Town of Easton residents are not able to save money by recycling more. The SMART strategy empowers residents to take control of the amount they spend on trash. Generally speaking SMART communities treat waste like a utility. Approximately 7,000 towns and towns in the U.S, along with many more worldwide, have implemented basic economic principles to address solid waste. When citizens have to pay by the unit they become more aware of the waste being produced, which triggers a long term sustainable behavioral change. SMART communities create a proportional unit based pricing structure that includes all costs associated with waste and recycling. For waste residents pay as they go, while unlimited recycling is available to all households with no additional cost.

It is the objective of a SMART waste management program to create a successful, sustainable, user-friendly, cost effective residential recycling program while working within the current collection infrastructure. We define **successful** as a "significant measurable increase in recycling", **sustainable** as a "recycling rate that continues on its own without a great deal of re-education effort", **user-friendly** as "easy to understand and participate", and **cost effective** in that "overall costs are less than alternative recycling programs".

The mission of this study is to:

1. Determine the feasibility of implementing a SMART Unit Based Pricing (UBP) solid waste management program. Compare a SMART UBP program with the current voluntary Town recycling program, as well as with a mandatory curbside Town managed recycling program.
2. Determine a cost effective approach (or series of approaches) which best provide sustainable waste reduction, increased recycling volume, and significant cost reductions.
3. Provide the Town with options for implementing UBP that work within the existing collection framework and MSW infrastructure in order to limit expenditures and changes.
4. Provide rate structure design options that create a steady revenue stream to fund all or part of the solid waste and recycling collection costs

Key characteristics of a SMART waste management strategy:

**Environment**—a significant positive environmental impact occurs as a direct result of waste reduction, increased recycling and composting, and reusing or repairing items when possible. UBP helps decrease the towns' Carbon Footprint by reducing overall Green House Gas emissions between 3 and 5%. As recycled materials are manufactured into new products, environmental degradation caused by extracting raw materials from the earth is reduced.

**Equity** — Residents generating smaller amounts of trash because of better waste management or household size do not subsidize the costs of residents that generate larger quantities of trash.

**Economics** — Similar to a public utility, individual costs are based on each customer's usage of the service. The opportunity for cost control is now available to residents by improved waste management.

**Education** — UBP also encourages consumers to understand local recycling guidelines by prompting them to read, listen, and learn enough to make changes that provide monetary rewards. Inaction costs them more.

Education about the new program through various media should begin as early as possible to aid in transitioning. Types of media include public meetings, public service announcements, articles published in the local

newspapers, and mailings or flyers to each customer.

**Enforcement** — An effective plan includes funding and a plan for enforcement of all provisions in the program, including illegal dumping.

## 1.2 Methodology

The information and suggestions proposed in Easton's SMART Guidebook were determined using the EPA's 6 step planning process:

1. Gather community solid waste and population characteristics.
2. Identify and compile existing municipal solid waste program costs.
3. Identify and compile MSW program revenue sources.
4. Develop alternative rate structures.
5. Project MSW revenues based on alternative rate structures.
6. Evaluate the sustainability of the alternative rate structures based on revenue requirements.

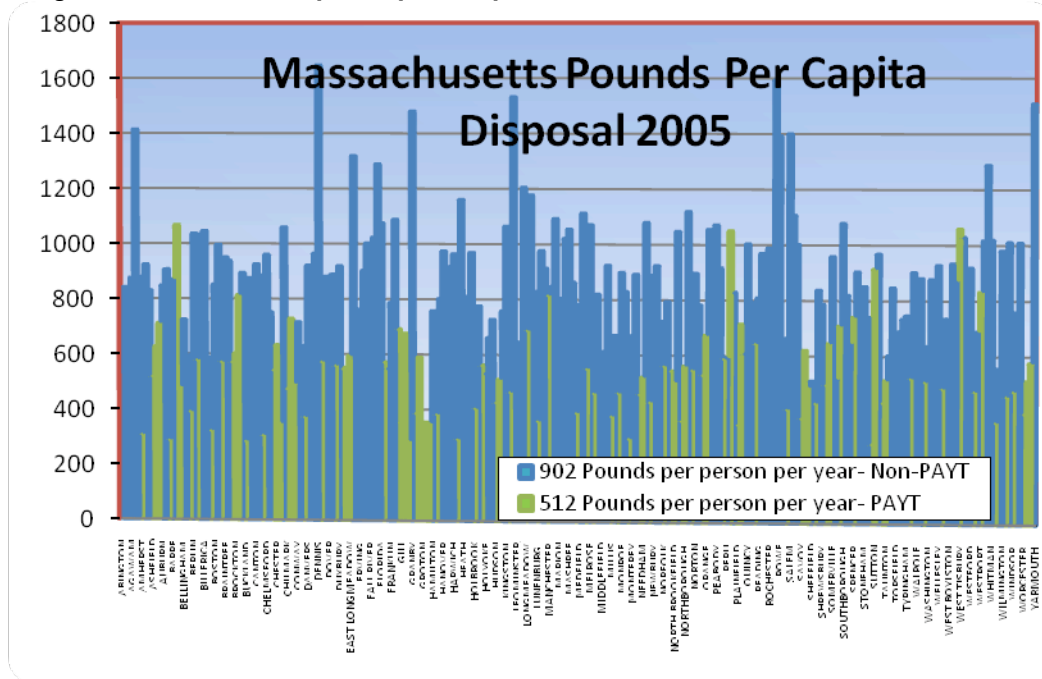
## 2. Rate Structure and Program Options

### 2.1 Per Capita Disposal Measurement

The methodology for determining expected disposal reductions from the implementation of a SMART Unit Based Pricing (UBP) waste management program is per capita disposal. Per capita disposal is the total tons disposed divided by the number of individuals participating in the program, then divided by 2000 (pounds per ton). Using per capita residential disposal as the benchmark number allows for an apples to apples comparison, which can be examined state to state or even internationally. The EPA hierarchy for waste minimization prioritizes reduction, reuse, and recycling as the first three options. Measuring only diversion or only recycling can be misleading. Comparing recycling numbers from region to region is like comparing Eastons and apples. Per capita disposal is a fair and simple measurement approach. For the purpose of this guidebook, waste disposal for the Town refers to the total residential tonnage brought to the Transfer Station.

The per capita residential disposal information from the Massachusetts Department of the Environment (including 89 communities that have strict unit based pricing for trash) indicates an average of 512 lbs per person per year disposal in UBP communities. A further review of disposal tonnages from a variety of unit based residential programs across the country indicates similar per capita numbers between 400 and 600 pounds per person per year. The Massachusetts case study is commonly used by the EPA as a baseline for expected results in UBP programs.

**Image 1. Massachusetts per Capita Disposal**



The average resident in a UBP community within the state of Massachusetts disposes of 44% less waste than residents in communities without a unit based structure for garbage. Source MA DEP 2005.

## 2.2 Unit Based Pricing

In this section the Rate Structure Systems are presented in terms of benefits/advantages and risks/disadvantages. The use of a table format allows for clearer understanding and easier comparison among systems.

**Image 2. Implementation of a Unit Based Pricing Program**

Benefits/Advantages	Risks/Disadvantages
Customers gain a true understanding of the cost of MSW.	Some confusion during start up of program is likely to occur.
Customers have the ability to reduce their own cost of waste collection and disposal through improved waste management.	Perceived fear about the possible proliferation of more fees for other Town services in addition to property tax.

## 2.3 Rate Structure Systems

Within the unit based pricing programs, three specific rate structure systems are currently in use in similar communities: proportional; two tiered (proportional); and variable. A SMART waste management strategy builds all the costs associated with trash, recycling, and management into the pricing structure.

**Proportional Rate** - Proportional systems create the most direct relationship between trash volume and price. Residents are charged the same amount of money for each unit of trash they set out for collection. A proportional rate can be achieved either through a special Town trash bag or a container, depending on the desired method of collection.

Trash bags are a very effective unit base. Customers pay a fee by purchasing “official” distinctively marked, standard-sized trash bags. Bags can be purchased from municipal offices or retail stores. Only official bags are collected. Trash services require bags to be purchased for all disposal of trash. Thus a fee is paid at the time of service through the cost of the bag. Fairness is assured. Revenues can be uncertain until the program is established and a history of town specific disposal rates can be used to project future costs and revenues. Funding for the entire program is dependent on bag sales. The cost of the program is reduced because billing and opting out is eliminated. However this program carries the highest financial risk. Success actually reduces revenue and program costs may not be met. It is important to price the bags correctly from the start. Leaving a financial cushion is important, especially during the first year.

**Image 3. Proportional Rate Bag System**

Benefits/Advantages	Risks/Disadvantages
Easiest system to understand and comply with because the bag causes the volume and weight limits to be more apparent.	Revenue uncertainty and cash flow when program first begins.
The size of the official bag will clarify the volume limit. The strength of the bag will clarify the weight limit by bursting when the weight limit is grossly exceeded.	The more the community decreases the waste the less revenue is generated from bags sales.
Customers purchase only bags, which are needed for disposal anyway.	
Increased flexibility by offering more than one bag size. A smaller size bag could be offered to customers who generate small amounts of rubbish.	
Any future changes to unit weight or volume can be easily implemented by changing the size of the bag(s).	
Fastest and most efficient means of collection. Official bags are easily identified and conform to size and weight limits.	
Official bags are more difficult to counterfeit than stickers or tags.	
Illegal waste containers are more easily identified.	
Details of the entire MSW program could be printed on each bag, or bag packaging for customers to easily reference.	

**Two-Tiered Proportional** - Two-tiered systems help communities achieve revenue stability. Residents receive a base level of service, for which they pay a flat fee. The ‘first-tier’ fee can be assessed through the tax base or through a base monthly fee. The base charge can be used to cover specific costs of the solid waste program (e.g. personnel, transportation, executive oversight etc.) Residents then pay a ‘second-tier’ based on the amount of waste they put out for collection. The second-tier is unit based and generally covers disposal costs. The two-tiered program is also widely used through out the United States. The base fee assures funding of all fixed costs.

**Image 4. Two-Tiered Proportional**

Benefits/Advantages	Risks/Disadvantages
Revenue will cover fixed costs.	The requirement of paying an additional fee for second (or multi) tier may be difficult to understand.
Revenue stability is ensured. Program funding is not entirely dependent on bag sales. Success of program does not under fund program.	Collection of fees may require administration expense.
Waste reduction, reuse and recycling are encouraged. Residents use the goal of reducing trash to one bag to avoid buying additional bags, thus reducing waste.	
Can be implemented more quickly and inexpensively than other types	
Allows for maximum flexibility to implement changes	

### 3. The Climate and Waste Connection

The Earth's surface temperature has risen by about 1 degree Fahrenheit in the past century, with an accelerated rate of warming during the past two decades. Current evidence strongly suggests that it is likely that human activities have contributed to this warming. Human activities have altered the chemical composition of the atmosphere by increasing emissions of greenhouse gases (GHG) - primarily carbon dioxide, methane, and nitrous oxide.

Every stage of a product's life cycle—extraction, manufacturing, distribution, use, and disposal—indirectly or directly contributes to the concentration of GHGs in the atmosphere and potentially affects the global climate. For instance, product manufacturing releases GHGs both directly, from the manufacturing process, and indirectly, from the energy produced to run the plant. Extraction and distribution require gasoline-powered vehicles that

release CO<sub>2</sub>. Discarded products typically end up in a landfill, which releases methane as products decompose.

Waste prevention and recycling—jointly referred to as waste reduction—offer significant potential for decreasing GHG emissions. *Source <http://www.epa.gov/wastewise/climate/change.htm>* A formal analysis of a data set including 305 municipalities from the state of Massachusetts indicates that a per capita reduction of (.17) MTCE is expected in SMART UBP residential waste reduction programs. *Source ICF International... June 2008.* This factor represents the latest available methodology for estimating the potential effect of implementing a SMART waste management strategy on climate change. This Guidebook will use this factor to determine potential waste reduction benefits.

## **Town of Easton Overview**

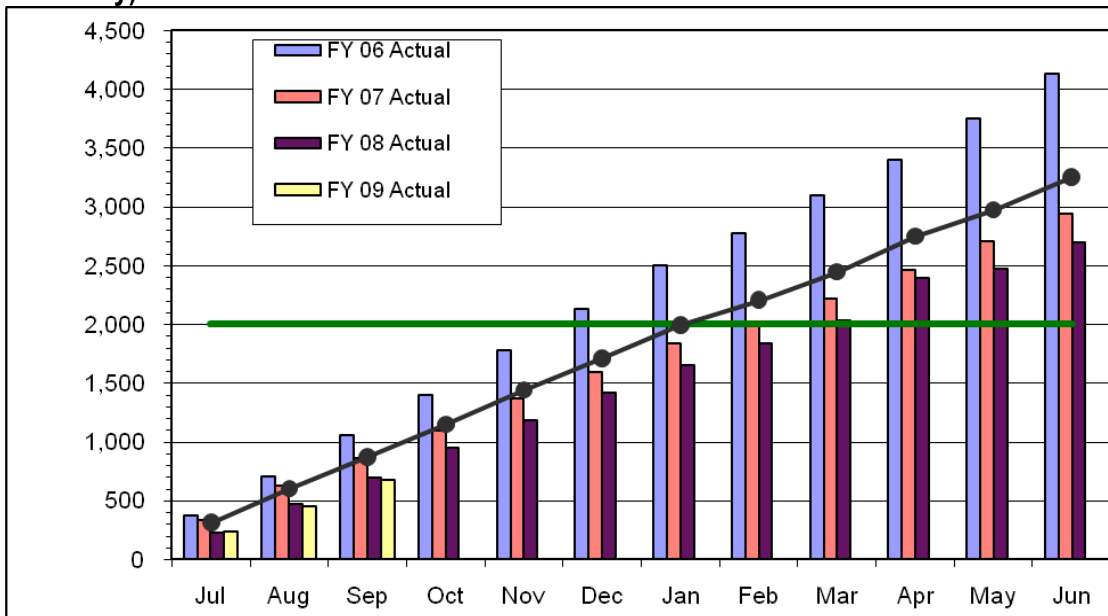
### **4.1 Existing Waste Collection System**

The Town of Easton offers no municipal service for trash collection. Trash is picked up by approximately 4 local haulers individually contracted by Town residents. The haulers charge a monthly or quarterly fee for collection ranging from \$30.00 to \$50.00 per month (regional average). Trash is collected once per week from the curbside or back yard of each household. Multi-family residences and businesses contract with local haulers as well. There was 2,800 tons of trash collected in 07/08 calendar year. In fiscal year 07/08 the annual residential per capita disposal for the Town of Easton was 760. This number is significantly lower than peer communities in Connecticut and Long Island with similar income demographics and current recycling rates. The Town of Trumbull has a slightly higher per capita disposal number relative to their recycling rate. It is possible that a portion of Easton's waste is included in Trumbull's numbers. The residents who drop off waste and bulky items could be counted under Trumbull numbers. There is no way to be sure of this assumption. But this is possibly why Easton's per capita rate appears low. Either way Easton has a very low disposal rate for Connecticut.

The residents of Easton may use the Trumbull Transfer Station to drop off trash and bulky items. Residents are required to pay for a sticker for their vehicle in order to dispose of trash in Trumbull. There is also a charge for bulky waste. Some haulers will pick up Bulky waste for a fee.

The haulers are responsible for collection of single family waste, which they bring to the Transfer Station. There is a tip fee at the transfer station to haulers of \$99.00 per ton. The cost of the trash tipping is not covered in the tax base; it is built into the haulers collection costs. The trash that is collected at the Transfer Station is currently brought to the Bridgeport WTE facility through a contract with the Connecticut Resource Recovery Authority. The tip cost is currently estimated at \$97.00 per ton. The Connecticut Resource Recovery Authority contract is ending Jan 2008 and the new tip free will be approximately \$75.00 per ton. For the purpose of this guidebook a tip fee of \$85.00 per ton is used as an average estimate for the next 5 years. The new disposal contract, will not include the previous 'put or pay' penalty for decreased disposal.

**Image 5. Historical Cumulative Tonnage Chart for Residential and Commercial waste (Haulers and drop off facility)**



## 4.2 Existing Recycling Collection System

Recycling in the Town of Easton is handled by one single hauler contracted by the town. The overall tonnage of residential trash collected in 07/08 at the transfer station was 2,800 tons. The total recycling tonnage was 963 equaling a total overall generation of residential material of 3,776 and yielding an overall commodity recycling percentage of 26%. The residential breakdown indicates no recycling of leaves or yard waste. Residents are able to drop off yard waste at a local facility. The leaf and yard waste portion of the recycling stream is not tracked. The residents compost in their yards and may bring a portion of the material to various facilities. Therefore the town recycling rate appears misleadingly low. Theoretically if yard waste was included the recycling rate would be in the 30's. There is no way to get an accurate number.

The Town of Easton currently recycles 963 tons through the residential dual stream curbside program and the transfer station. The Town's current recycling contract is through Latella's Rubbish. The Town currently collects commodity recyclable materials, including plastic #1 and #2, paper, newspaper, magazines, chipboard and cardboard, metal, aluminum, and glass. There are opportunities for the collection of additional items and this should be considered with any new contract.



### Image 6. Recycling Tonnage chart

Recycling Rates

Waste Total / tons	2,800
Commodity Recycling / tons	963
Metal / tons	
Yard Waste / tons	0
Total Generation	3,763
Recycling Commodity Percent	26%
Yard Waste percent	0
Total Recycling / tons	963
Total percent	26%

### 4.3 Overall Solid Waste Budget

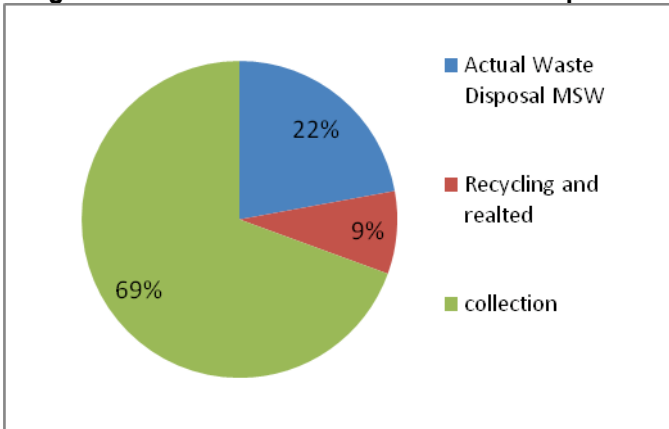
There are a total of 2, 617 households serviced by haulers or through the Trumbull Transfer Station in the Town of Easton. The town residents pay for both tipping and collection through the hauler based system. The average household subscribing to this service pays approximately \$ 480 per year. The total tipping cost based on the residential tonnage at the transfer station is \$277,000 annually. Based on the projected average tip fee of \$99.00 per ton, residential waste disposal is approximately \$100 per household annually. The average cost of collection and tipping through haulers to the household is approximately \$480 per year. The exact number would need to be obtained from each hauler in order to get an accurate amount but for the purpose of this guidebook the average annual hauler charge will be used. It is assumed that each household pays approximately \$360 for collection and \$100 to \$120 for actual disposal annually. These numbers were adjusted to meet regional averages since the Easton tonnage is lower than average.

### Overall Recycling Costs

Currently the Town of Easton is not paying a tip fee for recyclable materials nor are they receiving a rebate or a profit share for materials. In future contracts, it would be in the best interest for the Town of Easton to negotiate a rebate or profit share based on the fact that commodity values are continuing to rise. Waste paper is in great demand. There are many municipalities who make deals directly with local paper manufactures. Manufactures are so desperate for material they will provide towns with a spot trailer and bailer. They will pay towns directly \$50 to \$150 per ton.

The town residents are currently paying \$114,000 for town wide curbside recycling through their taxes. This cost is approximately \$44 per household annually.

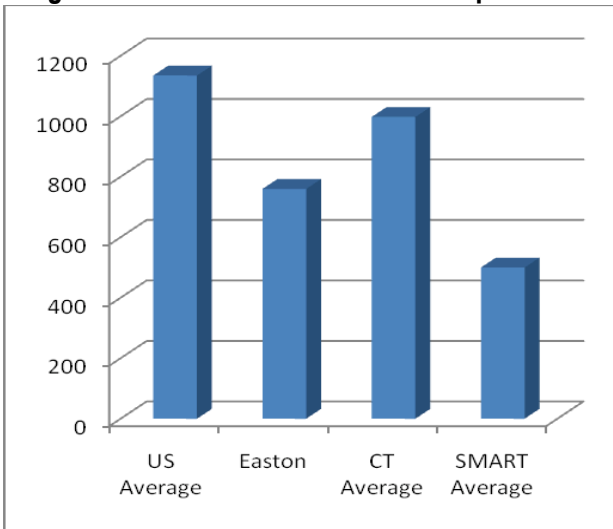
**Image 7. Overview of residential waste costs per household (hauler and town combined)**



**4.4 Waste Minimization Goals for the Town Easton and the State of Connecticut**

The Town of Easton has no specific recycling or diversion goal for fiscal year 2008/09. The longer term goal of 58% diversion by the year 2020 was set by the State of Connecticut in the 2006 in the Solid Waste Management Plan. This diversion includes yard waste. The United States EPA has a goal of 35% recycling including both commodity materials and yard waste.

**Image 8. State and National rates compared with SMART communities**



**5. SMART Unit Based Pricing (UBP) Program Projections and Design**

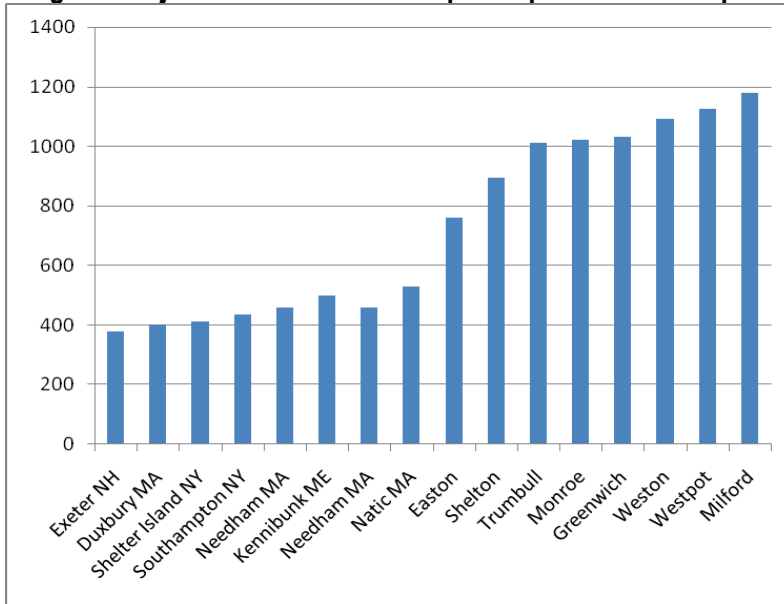
**5.1 Projected per capita disposal change**

The Town of Easton 07/08 residential waste tonnage, including bulk items is 2,800, which equals 760 pounds of trash per capita. Unit Based Pricing (UBP) could decrease the disposal to approximately 500lbs per person per year. Based on a population of 7,366 a decrease in disposal of 260 lbs per person per year would yield a total reduction of 1,842 tons annually for Easton \$95,000. This is a decrease of 34% per year in the estimated

residential waste stream.

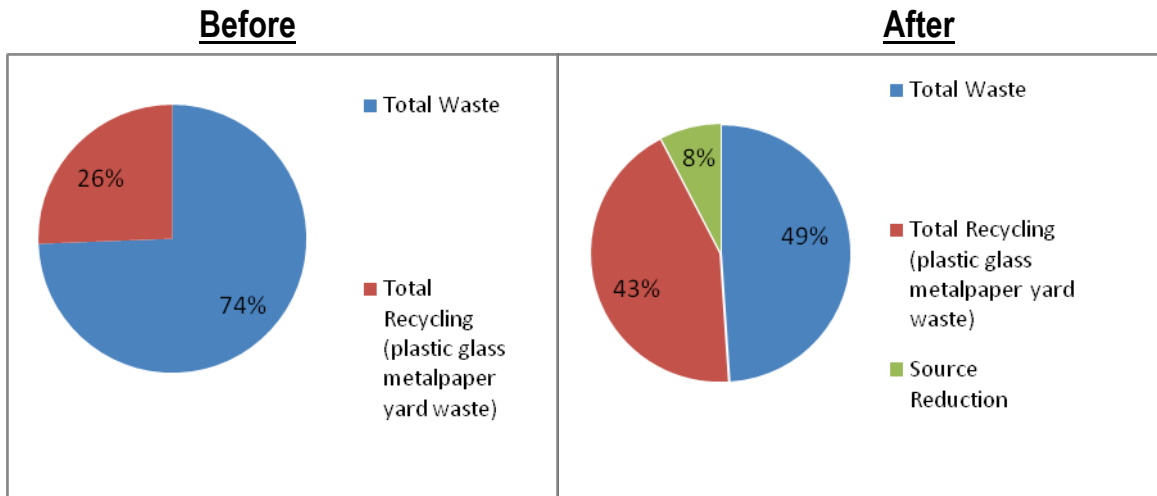
The following chart is a look at other communities with similar populations and curbside recycling collection programs or curbside collection plus PAYT programs. This comparison demonstrates the waste reduction that Easton may achieve through unit based pricing. The Towns on the left all have (UBP) unit based pricing with weekly recycling. The Towns on the right just offer weekly recycling. Easton's per capita disposal is low compared to peer communities and may be due to waste recording at the Trumbull Transfer station.

**Image 9. Projected Town of Easton per Capita Waste compared with peer communities**



The following before and after charts demonstrate the potential change in the residential waste stream, after the implementation of a SMART UBP waste plan.

**Image 10. Waste Stream Before and After SMART**



Trash represents 74% of Easton's total 2008 residential stream (before UBP) but reduces to only 49% after the implementation of a SMART program. An estimated decrease of 34% in waste brought to the transfer station would equal approximately \$95,000 in avoided disposal costs annually for the residents of the Town. The town would benefit from additional compost and yard waste diversion as well. This number is difficult to predict since

we have no yard waste number to start with.

The overall residential recycling rate (including commodities and banned items) could increase from 26% to 43% an increase of about 70%. Waste reduction (i.e., through reducing and reusing) provides an added environmental benefit. When faced with financial incentives, consumers actually make better purchasing decisions at the source or retail level. Therefore, products that are packaged better, smaller or with recyclable materials are chosen over those that do not fit the new environmentally inspired criteria. EPA studies show that approximately 70 to 75% of diversion in SMART programs is recycled or composted, but 25 to 30% can be categorized as source reduction.

## **5.2 SMART Design for Easton**

A SMART waste management plan for the Town of Easton would utilize the current trash and recycling collection structure in order to meet the needs of the Town and residents. With the implementation of unit based pricing it is best to keep the same collection system in place to avoid too much change at one time. After implementation the Town would have the ability to upgrade or change the actual collection system at a later date.

### **Program Design**

#### **Option 1**

The Town of Easton is not responsible for the hauling of trash or the tipping cost. Eliminating the tip cost to the haulers would allow residents the opportunity to be SMART. The estimated annual (regional) residential disposal cost is approximately \$100-140 per household. Reducing the tip cost to haulers will result in a per household reduction in hauler charges. Basically the haulers can reduce their costs per household by approximately \$10 per month which reflects the costs associated with disposal of material only. The exact pricing from hauler to residents would be up to each hauler. The market should drive fair competition and create a pricing structure agreeable to both hauler and resident. The Town of Easton would now collect the tip cost through the sale of special Town of Easton colored trash bags. A per bag charge would motivate residents to recycle more instead of paying for trash bags.

Official Town bags would be purchased by the Town and then made available at local retailers (there are companies that handle this for the Town so it is virtually hands off). The Town may be required to create an ordinance stating that residential trash must be placed in Official Town Trash Bags. The bags are purchased by residents in lieu of the portion reduced from their hauler.

This is actually a simple solution to waste reduction within the Town. A SMART program will not affect the haulers logistically because they will continue to be contracted separately by residences. The residents who use the transfer station will not be required to use bags. (This could be adjusted if the program were regional or in lieu of the transfer sticker charge). Haulers will actually benefit from a reduction in volume of waste. They will increase their productivity and be able to maximize trucks and routes. However, this will require a rate structure adjustment. The town will have to work with the haulers and possibly help them review their actual disposal costs. The haulers will have to monitor compliance. Since it is the haulers responsibility to collect trash from the household, it will ultimately fall on their shoulders to make sure residents are following the ordinance. Stickers for non compliance should be provided by the Town for the hauler to use. If household trash is not in Official Town of Easton Trash Bags the haulers will label it and leave it behind. Haulers will be accountable for compliance and there will have to be a penalty / fine set up for non-compliance.

This is a winning situation for everyone. The haulers will benefit from increased productivity and reduced collection costs, the residents will benefit from decreased costs and the opportunity to pay as they go, the town will benefit from increased recycling of commodity materials, and the environment benefits from an approximate

14% in decreased GHG (green house gases).

### **Option 2**

The haulers could create their own unit based program and continue to charge residents for both collection and tipping through either bags or a true unit based container or weight based program. This would leave the tip cost in the hands of each hauler. Creating a unit based bag cost to include collection costs and tipping is actually very easy for haulers and it would decrease their administration costs (billing and collecting monthly from residents). If haulers prefer they could use a unit based pricing system for different size containers, providing an incentive for residents to choose smaller containers. Option 1 is less risky to the hauler because they are insured a profit through their monthly fee. But option 2 could be explored further, if haulers prefer to handle this on their own.

### **Option 3**

The town could offer municipal collection through one contracted hauler. The town could use one or even multiple haulers to collect curbside or backdoor. The cost of the hauler would be built into the price of the special Town of Easton trash bags. The tipping cost would also be built into the price of the bags. This cost structure would be based on the estimated volume of trash as well as the cost of collection. In order to determine an exact bag cost for the option the town should send out an RFP for collection.

## **5.3 Rate Structure**

The following rate structure option uses 500 pounds per capita as a benchmark. This equals a 34% reduction in waste for the Town of Easton. This analysis also makes assumptions on 3 other benchmarks: a waste reduction to 400, 600, and 700 lbs per capita, representing: 47%, 21%, and 8% waste diversion respectively. Several towns throughout the US have achieved per capita disposal of 400 pounds and under. The projected decrease in residential waste due to SMART is of critical importance since an overly optimistic projection will result in underestimating the projection of waste. Conversely an overly conservative waste reduction projection will result in lower revenues than necessary to fund the program costs.

**Image 11. Rate Structure Option 1 (covers residential disposal only)** The rate structure should cover the tip cost and also leave some padding for education and fluctuations / or increases in the tip cost over the next 5 years. The suggested bag costs are based on an \$85.00 per ton tip cost.

Projected Per Capita Disposal	500	500	500	400	400	400	600	600	600	700	700	700
<b>Bag price</b>	1.50	2.00	2.50	3.75	4.00	4.25	3.75	4.00	4.25	3.75	4.00	4.25
<b>Revenue/\$</b>												
Trash Fee / base	-	-	-	-	-	-	-	-	-	-	-	-
Sale of Trash Bags	276,225	368,300	460,375	552,450	589,280	626,110	828,675	883,920	939,165	966,788	1,031,240	1,095,693
Increased Recycling Revenue	3,355	3,355	3,355	4,644	4,644	4,644	2,066	2,066	2,066	777	777	777
<b>Total Revenue</b>	<b>279,580</b>	<b>371,655</b>	<b>463,730</b>	<b>557,094</b>	<b>593,924</b>	<b>630,754</b>	<b>830,741</b>	<b>885,986</b>	<b>941,231</b>	<b>967,564</b>	<b>1,032,017</b>	<b>1,096,469</b>
<b>Cost Reductions</b>												
Avoided Disposal Cost	94,892	94,892	94,892	131,353	131,353	131,353	58,430	58,430	58,430	21,968	21,968	21,968
Reduction Labor	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Cost Reductions</b>	<b>94,892</b>	<b>94,892</b>	<b>94,892</b>	<b>131,353</b>	<b>131,353</b>	<b>131,353</b>	<b>58,430</b>	<b>58,430</b>	<b>58,430</b>	<b>21,968</b>	<b>21,968</b>	<b>21,968</b>
<b>Total Source of Funding</b>	<b>374,471</b>	<b>466,546</b>	<b>558,621</b>	<b>688,447</b>	<b>725,277</b>	<b>762,107</b>	<b>889,171</b>	<b>944,416</b>	<b>999,661</b>	<b>989,532</b>	<b>1,053,985</b>	<b>1,118,437</b>
<b>Cost of PAYT</b>												
Trash Bag Cost	46,038	46,038	46,038	36,830	36,830	36,830	55,245	55,245	55,245	64,453	64,453	64,453
Cost of additional containers	-	-	-	-	-	-	-	-	-	-	-	-
Cost of additional vehicles	-	-	-	-	-	-	-	-	-	-	-	-
Total cost of program	46,038	46,038	46,038	36,830	36,830	36,830	55,245	55,245	55,245	64,453	64,453	64,453
<b>NET</b>	<b>328,434</b>	<b>420,509</b>	<b>512,584</b>	<b>651,617</b>	<b>688,447</b>	<b>725,277</b>	<b>833,926</b>	<b>889,171</b>	<b>944,416</b>	<b>925,080</b>	<b>989,532</b>	<b>1,053,985</b>
<b>Budget</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>
<b>Difference</b>	<b>28,434</b>	<b>120,509</b>	<b>212,584</b>	<b>351,617</b>	<b>388,447</b>	<b>425,277</b>	<b>533,926</b>	<b>589,171</b>	<b>644,416</b>	<b>625,080</b>	<b>689,532</b>	<b>753,985</b>

## 6. Recommendations

The Town of Easton is a great candidate for a SMART waste management program. SMART can be achieved with very little change to the current collection system, and meets the Town's objective of creating a successful, sustainable, user-friendly, cost effective residential recycling program while working within the current collection infrastructure.

- 1). Begin a SMART Program in March 2009. The timing is perfect because the Town will be at the start of a new contract with no put or pay penalty for waste reduction. The savings is significant both financially to the Town and its residents but, also the environment. There are very few logistical changes that need to be made for collection of trash and recycling.
- 2). An ordinance will be needed that requires residential trash must be contained in an 'official' Town of Easton Trash Bag. Create enforcement guidelines and also stickers for hauler to use non compliant bags.
- 3). The town will have to work with haulers to suggest a per household cost reduction by evaluating their average annual tonnages and the number of households they service. The town does not wish to make the hauler's business or profit suffer through this program. The town should also go out to bid in order to make an informed decision about the design options. The bid can be used to determine potential overall collection savings to residents. The objective of the SMART program for Easton is to allow residents a chance to save money and also create a significant overall reduction in waste.
- 4). The Town should address the Trumbull Transfer Station. Since Easton uses this transfer station and allows residents to drop off directly it is possible that they would have to require a special sticker or a bag and tag

system.

5).Begin an enterprise fund in March 09. Determine how to handle the new revenue stream. The enterprise fund could also be used to capture additional recycling revenue form the increased stream of material. It is up to the administration to decide the best use of the additional funds. Should money be rebated (given back) to residents or used for Town services?

4) Convey a clear message to the public. Residents need to know that this is a program saving both money and natural resources. They need to understand that their efforts are worthwhile and are making a difference. If this message is well delivered residents will be very satisfied and happy to participate in a SMART program

5). Create a volunteer advisory committee to carry out the implementation. This committee would be a communications link between the needs and concerns of both residents and the Town officials. The members should be comprised of a combination of residents, Town officials and employees. Committee members should bring experience in areas like legal, PR, marketing, and education. The committee should monitor and advise on the current implementation and the future phases of the program.

The committee should:

1. Decide on the public relations and education leading up to implementation. Design a tool kit to be distributed to all residents. Examples of items to include in each kit are:
  - Detailed explanation and instructions of the new program.
  - A small, easy to understand, how-to quick reference guide with graphics and short reminders.
  - Schedule of curbside pick up and drop off items and dates.
  - Other materials for a smooth, simple start up.
2. Help decide on bag color and design; choose participating grocery stores.
3. Create multifamily enforcement suggestions and guidelines.
4. Suggest ways to recycle cardboard for residents
5. Suggest additional items to be added for recycling collection. Investigate other state recycling lists.
6. Create up-stream producer responsibility by educating local restaurants, grocery, and convenience stores about 'one way carry out packaging' which meets recycling regulations.
7. Address the potential of illegal dumping. Penalties should be consistent with those currently in existence, such as litter. The Town will need extra staff in the beginning to educate local businesses about the possibility of illegal dumping and encourage them to lock dumpsters and report problems.
8. Address bulky items at transfer station drop off. The Town should utilize the current transfer station as a drop off location and consider charging for car loads.
10. Encourage source reduction. Source reduction is a great benefit of unit based pricing. Residents are motivated to think before they act by pulling items out of the waste stream that used to be considered trash but actually have value to someone else.
  - Work with Salvation Army, Goodwill and local charities to create additional drop off locations or a bag system such as NJ.
  - Create a Swap Shop in town. A means for residents to exchange usable items. This can also be achieved through a website a "Town EBay.
  - Work with groups like Got Books, and electronics manufacturers to take back additional items that can be reused.
11. Update Town Website
12. Deal with renters and create penalties for those not following the ordinance so that home owners or management companies don't bear the burden of noncompliance.

## 8. Timeline to Implementation

The first step is to say **YES to SMART** waste management and decide on details of program such as: rate structure; cash flow; and how additional bag revenue will be handled.

The next step for the Town of Easton is to create an advisory committee made up of some Town employees, residents, and council members (as suggested above). The advisory committee can guide the Town through the implementation process. Generally a 6 month period is ideal.

### Phase 1 Oct / Nov

1. Create a clear message to sell the SMART program to residents.
2. Create official timeline and outline goals for committee
3. Plan meeting calendar with dates to speak with local groups.
4. Check into recycling containers. Do residents have enough containers to maximize recycling?
5. Create public education and relations strategy target dates and costs. Much of this will be free because this is big news, however some planned adds will be helpful
6. Develop materials for residential tool kit
7. Fine tune details of low income families
8. Determine if ordinances are needed / fines / penalties

### Phase 2 Dec

1. Public relations through local newspaper, advertorials, interviews, PSA, flyer for households etc
2. Address the issues listed in above section (illegal dumping, cardboard recycling, producer responsibility etc)
3. Determine how to handle bulky items that are picked up at household stickers / design order stickers
4. Determine weight limits on items or bags
5. Create bid specifications for Official Town of Easton trash bags and related services.
6. Present RFP specifications for approval by Town.
7. Send specifications out through internet and by mail allow 3 weeks for return of RFP
8. Determine a specific start date by working backwards from bag delivery time. Ideally Official Town bags should be in stores 4 to 5 weeks before start date.

### Phase 3 Jan

1. Work on Website information / links to other programs and EPA
2. Possible school education program / contest for website and bag art

### Phase 4 Feb

1. Continue public relations so residents understand where to purchase bags and what items can be recycled etc,
2. Mail information in tax bill / show discount or disclosure of disposal costs.
3. Mail out starter Kit
4. Distribute additional recycling containers if necessary
5. Order stickers for bulky items



Phase 5 Implementation and follow up March

1. Continue positive press during first year to reinforce the decision of the Town. Appear on morning shows or other local or CT state news shows over the first quarter to boast about the success of participation and compliance