Municipal Solid Waste Reduction Handbook for New Hampshire

A guide for rural communities seeking to encourage their residents to reduce, reuse and recycle.
Our Mission

RCAP Solutions mission is to foster personal and public self-reliance and improve the quality of life for individuals, families and the communities in which they live.

Who We Are

RCAP Solutions is a comprehensive non-profit community development corporation that works with communities of all sizes to address a broad range of needs. We are part of a coordinated nationwide network with an integrated, multi-faceted approach to delivering high-quality services customized to each community’s unique requirements.
What We Do

RCAP Solutions provides services on a very competitive fee-for-service basis. We also help communities apply for and receive government and private sector grants and contracts. Our efforts often have a ripple effect that leverages millions of additional dollars annually for the communities who take advantage of our services. For qualified communities with funds available through the government and private grants and contracts we administer, we also provide some services at no charge.

Through the support of the United States Department of Agriculture’s Rural Development Solid Waste Management Program grant, we are able to meet with rural communities who would like to receive free education, training and technical assistance with regards to municipal solid waste management and recycling programs. Through this financial support we are grateful to be able to create and distribute this handbook to rural communities.
This handbook is not just about recycling. Recycling is just one of the many ways we manage our excessive amounts of waste. This guide is more about how to get people to think twice about the amount of waste they generate and outline the steps necessary for designing an infrastructure that makes it easy to reduce, reuse and recycle. As consumers, we are just one part of a larger waste problem, but we have the power to shift the materials economy toward a more sustainable path, one where everyone involved in the lifecycle of a material good is responsible for reducing the waste it creates.

Reducing waste is the economically and environmentally sensible thing to do, yet encouraging people to change their behavior and attitude toward managing their waste is a difficult task. Creating waste is an ever-present part of our modern society, but the general population hardly gives it a second thought and feels almost entitled to produce as much waste as they wish. Even the phrase “throw-away” is deceiving because there really is no such thing as “away.”

It is practical to reduce waste to avoid high disposal costs, earn revenue from recyclable materials and conserve valuable landfill space. However, there is an even more important reason to care. As members of global community it is our duty to meet our needs in a way that does not compromise the ability future generations to meet theirs. By neglecting how we manage our consumption and waste now we are essentially compromising the health and general quality of life for all generations yet to come. Everyone has a right to clean air, water and food, so let’s help protect that right for our children and their children by protecting the environment that will one day sustain them.

~ Sarah K. Nichols
Solid Waste Management Specialist
Acknowledgments

Special thanks to those who donated their time and expertise toward improving the quality of information found in this handbook.

Adam Clark, Member Services/Operations at the Northeast Resource Recovery Association, for helping us to understand recycling

Marjorie Bonneville, Chairman of the Tilton Recycling Committee, for her enthusiasm and helpful experience with waste reduction advisory committees

Scott Bradford, Peterborough Recycling Facility Manager, for setting a wonderful example at his transfer station and always being willing to share his experiences

Shelley Dunn, Communications Specialist at ecomaine, for providing valuable information in regards to single stream recycling

Jackie Albanese, Household Hazardous Waste Project Manager for the Northeast Resource Recovery Association, for sharing her knowledge of HHW in New Hampshire

Chris Wright, University of New Hampshire Economics Department, for sharing his experience with household residential survey techniques

Gerry Cornett, New Boston Transfer Station Manager, for gladly sharing his expertise with starting a successful recycling program at the New Boston Central School

James Elliott, Elliott Layout and Design Services, for editing and designing this handbook
## Table of Contents

### Part I: The Basics
- Introduction ............................................................................................................ 9
- Understanding Recycling .................................................................................... 12
- Identifying Your Issues ....................................................................................... 17

### Part II: Designing for Convenience
- Collection ................................................................................................................ 21
  - A.) Transfer Stations ......................................................................................... 22
    - i.) Resident Experience ................................................................................ 23
      1.) Traffic Flow .............................................................................................. 23
      2.) Clear Signage ............................................................................................ 24
      3.) Transfer Station Staff .............................................................................. 25
    - ii.) Accounting and Data Management ........................................................ 28
  - B.) Curbside Collection .................................................................................... 30
    - i.) Single Stream Recycling ................................................................. 32
  - C.) Composting and Organics Recycling ........................................................ 36
    - i.) Larger-Scale Community Composting .............................................. 38
    - ii.) Household Backyard Composting .................................................... 38
  - D.) Special Waste ............................................................................................. 39
    - i.) Household Hazardous Waste ............................................................ 40
    - ii.) Universal Waste .................................................................................. 43
    - iii.) Pharmaceuticals and Personal Care Products .............................. 44
    - iv.) Electronic Waste .................................................................................. 45

### Part III: Creating Incentives
- Programs .................................................................................................................. 48
  - A.) Pay-As-You-Throw ................................................................................... 49
    - i.) Economic Benefits of PAYT ............................................................... 50
    - ii.) Households can save money with PAYT ........................................... 51
    - iii.) Addressing Common Concerns about PAYT ................................... 52
| iv.) Administration and Accounting | 55 |
| B.) Mandatory Recycling | 57 |

### Part IV: Waste Reduction Education

Community Recycling
- A.) Use Interesting Facts and Figures to Capture Your Audience
  - 62
- B.) Use surveys as Effective Learning Tools
  - 63
- B.) Enable Those Who Already Recycle to Get Involved
  - 64
- C.) Encourage Participation Among Young People and Students
  - 65

School Recycling
- 67

Concluding Remarks
- 74

### Part V: APPENDIX

I. Forming a Waste Reduction Advisory Committee
- A.) New Hampshire's Open Meeting Law Citation
  - 79
II. Sample Transfer Station Manager Job Description
- 84
III. Sample Daily Collection Record
- 87
IV. Sample RFP for Transportation and Disposal of Municipal Solid Waste
- 88
V. Other Incentives that Affect the Recycling Rate in Towns with Single Stream Recycling
- 97
VI. Backyard Composting Basics
- 99
VII. New Hampshire’s Universal Waste Notification
- 102
VIII. Sample Pay-as-you-throw Savings Analysis
- 105
IX. Sample Pay-as-you-throw Warrant Articles
- 114
X. Sample Mandatory Recycling Warning Sheets
- 123
XI. Recycling Calculator Formulas
- 124
XII. Sample Household Survey Questions
- 126
XIII. Sample Recycling Quick Reference Guides
- 133
Part I:
The Basics
This handbook was created with the intention of assisting rural communities with the difficult task of reducing their municipal solid waste (MSW), which is more commonly referred to as trash or garbage.

Whether you are a town administrator, selectman, transfer station operator, member of a waste reduction advisory committee or an interested resident, this guide will provide you with a variety of ways your town can provide the education, convenience and incentives needed for each resident to reduce, reuse and recycle.

If your town is serious about making changes in your

---

1 The term municipal solid waste encompasses both the trash and recycling from a community. These materials include durable and non-durable goods, containers and packaging, food and yard waste, and other miscellaneous non-organic wastes.
solid waste management strategy, it is recommended that you form a waste reduction advisory committee (WRAC). Your WRAC could be a group of interested community members who can put the time and effort needed to research and evaluate the options available to meet your goals. The WRAC can provide recommendations to the select board or city council and help to educate and involve the whole community in the process. Please refer to Appendix I for guidelines to consider when forming a WRAC in your community.

---

**It does no good to wait around for other solutions while you continue throwing your money out with the trash. Be a champion in your community.**

---

When discussing MSW management options, it is very easy to become overwhelmed about the complexity surrounding our materials economy. There are a multitude of reasons why we, as a society, generate so much waste and many of those reasons may be beyond our control at a community level. Factors such as harmful extraction and manufacturing processes, excessive packaging, and the consumer driven economy are important issues that could frustrate you in this process, but it is important to stay fo-
cused on how your community fits into the larger picture. As consumers, we are but one part of the entire lifecycle of a product. We have a choice about the goods we buy and what we do with these materials after we’ve used them. It is the responsibility of the municipality to provide the infrastructure needed to collect and manage this waste effectively and in a way that is fair to the taxpayer.

Your WRAC should focus on what your community can do to reduce waste today. It does no good to wait around for other solutions while you continue throwing your money out with the trash. Be a champion in your community and don’t be afraid that you may cause a stir among residents who are resistant to change. Community-wide changes in your solid waste management plan will take time, patience and dedication. This handbook will provide you with basic information about positive changes that you can make towards reducing waste and saving money.
Recycling can be simply defined as the process of using post-consumer materials (i.e. waste, trash, rubbish, etc.) as an input for a new consumer product. Most of the material households and businesses “throw away” still has value and therefore a useful life in the commodities market. The reason there is a recycling industry, and why we have municipal recycling programs, is because recycling makes economic sense. When municipalities recycle materials that would otherwise be considered “waste,” they are diverted from the landfill or incinerator, which in turn avoids disposal costs. Additionally, the municipality will be able to sell these post-consumer products on the open market and earn revenue for the town. Furthermore, some manufactures may find

---

1 Disposal costs are generally referred to as “tipping fees”, which is a charge for each ton of waste sent to the landfill or incinerator. In addition to these tipping fees, disposal costs can include transportation and wages.
that using post-consumer materials is cheaper than mining for and processing raw materials, so they will create a demand for these materials in the marketplace. Adding to demand for recycled materials are eco-conscious consumers who desire their products and packaging to contain post-consumer content.

In order to have a strong market for recycling and keep the process cost-effective, the entire materials economy needs a synergistic relationship. Manufacturers need to produce materials that can be recycled or are made from recycled materials; consumers need to recycle, buy materials that can be recycled or are made of recycled materials; the municipality needs to efficiently collect, manage and sell these materials; then there needs to be quality recycled materials on the market that manufacturers can use for new products. If any part of this cycle fails, then recycling becomes less economically viable. The result of recycling being less economically viable is more pressure on our virgin resources. For a visual representation of this cycle, please see the diagram below.
Some people may not understand the economic benefits of recycling and only recognize the environmental benefits, but, just as with energy or water conservation, recycling is a win-win situation that saves money while alleviating some pressure on our planet’s virgin, non-renewable resources. Since we get economic and environmental benefits from recycling, it seems we should recycle everything, but it is a bit more complicated than that. Unfortunately, it extremely difficult to quantify and assign the non-monetary costs and benefits associated with the life-cycle of particular product or commodity, so the environment and human health part is often left out of the equation—leading to inefficiencies within this system.

The economic and environmental costs and benefits of recycling must also be considered on a commodity basis, each of which are dependent on consumer and manufacturer demand that change daily. Until the cost of recycling a commodity exceeds the cost of disposing of that commodity, recycling makes economic sense. Some towns may recycle different materials than other towns because of this very reason. So what you can recycle in one town, may be different than what you can recycle in another. If there is a particular commodity that is difficult to collect or sell, there are still creative ways to divert that material from the landfill (and avoid disposal fees). For instance, glass is one of those commodities that may not deliver much economic return to the town, or could prove to be very expensive to recycle in some instances. Instead of sending their glass to the landfill, many communities collect their glass and use a special crusher to transform
it into a non-sharp material used for their public works projects. This may not be “true recycling,” but it is still very smart to divert the glass from the landfill and find a valuable use for the glass in the local community.

Recycling Rate vs. Diversion Rate

Your recycling rate, which is the percentage of materials recycled in a given period of time, is a useful figure to know for a variety of reasons, and can be calculated by this simple equation: (tons of recycling/tons of total waste and recycling) x 100. Although, depending on what you include in your “tons of recycling,” this figure can be very misleading. For instance, one town could include any materials that were diverted from the landfill in their “tons of recycling,” such as compost or glass used in public works projects, even though they weren’t technically recycled into new consumer products. Your town could do just as much composting or glass crushing, yet you only include the true recycled commodities in your “tons of recycling,” so your recycling rate could appear lower even though both towns have the same landfill diversion rate.

Without a consistent and widely agreed upon standard for what can be considered “tons of recycling,” it can be difficult to compare recycling rates over time within your own community, and also between other municipalities, states and countries. Until there is a universally agreed upon definition of “recycling rate,” be sure to understand what is included in these percentages when you use them and at least be consistent within your own community about what you include in your recycling rate and/or landfill diversion rate.
The key point to “understanding recycling” is that recycling is just one way we are able to divert valuable materials from our landfills, and this in turn has economic and environmental benefits. While recycling is definitely “the right thing to do,” it may be even more ideal to not have the waste in the first place. As the diagram below indicates, it is better to reduce and reuse than recycle. To do so, we could try to extend the life of our stuff by purchasing durable goods, buying and selling used goods, borrowing, renting, and by investing in maintenance and repair. Also, we will save money by only shopping for quality goods rather than cheap, flimsy products that don’t last and need to be replaced. Reuse keeps valuable resources out of the waste stream and saves money in purchases and disposal costs. Reuse also preserves the “embodied energy” that was originally used to process and manufacture that good and also has the potential to create less air and water pollution than making a new item or recycling.
Reducing the solid waste budget is likely the main reason why your town has been prompted to explore different waste management options. Since most towns pay a standard fee for each ton of waste generated (tipping fee), there is a clear opportunity to save money through disposal cost avoidance. Any municipality should be particularly interested in reducing waste for each of these specific reasons:

- The solid waste budget can be drastically reduced and free up money for other town services
- Recycling costs are typically lower than MSW disposal and can even earn revenue for the town
- Waste reduction conserves valuable landfill space and lessens the need to create new landfills and close existing ones
- Diverting material from landfills reduces the costs
and local pollution associated with hauling, incinerating and landfilling waste

So how do you encourage residents to reduce, reuse and recycle their waste? Well, first you need to identify what is inhibiting them from doing so. If you answer “no” to any of the questions below, then you’ve already identified some problems. Before you attempt to encourage a change on a town-wide level, you need to first clearly justify what the problems are and why business-as-usual cannot continue. If there is a better way to be managing your waste, why not do it? Ask yourself the following questions. If the answer is no, consider the solutions written on the right:

| Is recycling convenient? | • Single-stream recycling  
• Curbside recycling pick up  
• Re-designing the transfer station  
• Build satellite recycling centers around town |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Do people know what items are recyclable?</td>
<td>• Begin a community based educational campaign to encourage residents to reduce waste and recycle more—see the Waste Reduction Education section of this handbook</td>
</tr>
</tbody>
</table>
| Is there a location where people can get information about reducing, reusing, and recycling? | • Design a recycling link on the town Webpage  
• Create recycling reference sheets and distribute them to residents by mailings or at public events |
| Do residents have an incentive to recycle? | • Switch to Pay-as-you-throw  
• Institute a Mandatory Recycling Policy with enforceable penalties |
| Does your town accept all of the materials that residents would like to recycle? | • Encourage residents to start composting organic waste at home  
• Contact your recycling broker to see if it would be cost effective to collect additional materials  
• If the town cannot accept certain materials, provide a list of possible locations that residents can bring their waste |
| Are residents publicly recognized for their waste reduction efforts? | • Let residents know how much revenue was earned from recycling by reporting it in the local newspaper or on signs at the transfer station  
• Present a friendly challenge residents to reduce their waste and if they reach a certain goal then reward them with a town social or free event |
| Do residents find the transfer station or recycling center visits to be easy, pleasant, and quick? | • Re-design the traffic pattern to allow residents to get in and out quickly  
• Re-train transfer station staff to effectively and efficiently help residents with their trash and recycling  
• Increase the amount of signs at the transfer station, include large letters and pictures to assist people |
This is a list of just a few of the ways that many towns have been successful at encouraging residents to change their behavior and attitude in regards to their waste. There is no one silver bullet solution for solid waste management problems, but the most effective programs use a combination of convenience, incentives and education. Before you begin any waste reduction education campaigns, you need to evaluate your solid waste management infrastructure because it doesn’t make sense to educate people about recycling if doing so is inconvenient, unpleasant, or unavailable. The sections to follow in this handbook will provide you with more information on various ways many rural communities have successfully decreased their solid waste management budget, increased recycling, and reduced waste.
Part II: Designing for Convenience
It will be difficult for your town to encourage people to reduce, reuse and recycle their waste if they feel they are entitled to produce as much as they please, and especially if it is much easier to simply throw it all away. It is important that people understand the money and natural resources that are lost when they choose not to recycle their waste, but it is essential for the town to provide residents with a convenient opportunity to do so.

A.) Transfer Stations

Transfer stations are an integral aspect of a municipalities’ waste management plan. They are the link between the public and the final destination of their household waste. The transfer station is also one of the only municipal buildings that most residents visit on a regular basis. This handbook isn’t de-
signed to explain how to site a brand new transfer station, but rather about how changing the way you manage your current waste or recycling collection programs can greatly help with waste reduction and lead to more savings.

\textbf{i.) Resident Experience}

Many of the great philosophers subscribe to the theory that individuals are born without built-in mental content and that their knowledge comes from experience and perception. In that light, if people find recycling and their transfer station visits to be tedious, irritating and unpleasant, it is not likely they will be interested in anything regarding waste reduction. Discussed below are three important aspects of your transfer station that could greatly affect how your residents view waste and recycling, these aspects include: traffic flow, clear signage and helpfulness of staff.

\textit{1.) Traffic Flow}

It is safe to say that no one likes to be waiting in traffic. Anything that your town can do to increase traffic flow and get people in and out of the transfer station as quickly and safely as possible is very important to their overall experience. Changes that increase traffic flow can range from constructing a new entrance, exit and parking area to merely requiring staff to help people sort their waste during peak hours. If your transfer station is designed so residents are forced to drive through the recycling area first, rather than a place where they can just drop off their trash and leave, they may be more inclined to recycle. Each transfer station location is unique and if traffic flow is a major issue at yours, it could be worthwhile to consider redesigning your facility.
2.) **Clear Signage**

Do not take for granted that people know what is and is not recyclable, or that they are aware of the proper place to dispose of things at the transfer station. The most efficient transfer stations post clear, easy-to-read signs with list of what can go into each of the bins. Pictures of examples can really help too. It is also required to have a sign at the entrance of the facility with the hours of operation, phone number, emergency phone number, permit numbers and what is NOT accepted at the facility. You could also include a list of what IS accepted and a Website to let people know where to find more information. Other helpful signs could be placed on the road going in and out of the transfer station that briefly state how much money was saved or gained from recycling different commodities last year. Get people to understand that recycling isn’t just an environmental issue; it’s about money too. These materials still have value and by simply throwing them away they are essentially throwing their tax dollars in the trash.

---

**New Hampshire the Beautiful**

NH the Beautiful, Inc. (www.nhthebeautiful.org) is a private, non-profit charitable trust founded in 1983 and supported by the soft drink, malt beverage, and grocery industries of New Hampshire. By offering municipal recycling grants (over $2.75 million) and signs, anti-litter programs, and technical assistance to recycling programs, NHtB is a unique organization that represents a voluntarily-funded alternative to expensive legislation intended to achieve the same end results. New Hampshire
the Beautiful, Inc. is now supporting the NRRA School Education Program (the Club). The Northeast Resource Recovery Association (www.nrра.net) administers the New Hampshire the Beautiful programs.

New Hampshire Municipalities are all eligible to apply for signs or grants toward the purchase price of recycling equipment. For a complete list of signs available, or to apply for a grant, please visit www.nhthebeautiful.org. Each municipality is allocated 60 points towards the purchase of signs each fiscal year (November 1- October 31) or until funds run out each fiscal year.

3.) Transfer Station Staff

The people who work at the transfer station play an integral role in the residents’ overall experience. Each transfer station staffer needs to understand that their duties include customer service. The residents are the customers, but they also may consider themselves to be the “boss,” since staff salaries and wages are funded through local taxes. Residents who visit the transfer station don’t want to see staff standing around when they could be helping to unload their cars or direct them to the correct location. Staff should greet people with a smile and assist them in any way they can to make sure their experience is pleasant and peaceful. The staff should never shout at a resident, even if they are about to put something in the
wrong area. This could embarrass the resident and also cause an unnecessary confrontation. If one of the staff members does have the unfortunate experience of dealing with a disgruntled resident, they should be able to rely on the transfer station manager for support and mediating.

The transfer station manager needs to be able to listen patiently and carefully to resident’s concerns without negatively reacting and be able to effectively address their needs. All too often there are stories about an angry, or even hostile, resident taking out their aggression on transfer station staff. Trash is in fact a very personal thing for many people, and when combined with the fact that the residents are paying to dispose of this unwanted personal material, the result can sometimes be a recipe for disaster. Never invade a residents privacy by conducting a trash bag “search”, meaning if recycling is mandatory never tear someone’s bag open if you feel they are not recycling properly. If you suspect a resident is not adhering to town policies, try to speak to them personally and confidentially, away from the rest of the public. It may be best to recognize these individual residents and be sure to do anything possible to avoid an outburst, even if it includes letting them put materials in an incorrect location. In some cases it may be easier to just go behind them and clean up the mess.

Both the transfer station manager and their staff should have a strong sense of pride in their facility. They should care about keeping operating costs low, recycling revenue high, and residents happy. For an example of transfer station manager’s job description, please refer to Appendix II.
This transfer station in Peterborough, New Hampshire is truly a beautiful and extremely well managed facility. The staff is always ready to drop what they are doing to help a resident and make them feel welcome. The Transfer Station Manager, Scott Bradford, takes great pride in the beauty and efficiency of the recycling center and this great attitude resonates through his staff and to the public. He has reported that local residents will sometimes even pack a lunch and eat among well-manicured lawns and gardens on one of the park benches. Residents have also been known to bring their out-of-town guests there on a tour because they too are proud of their recycling facility.

In addition to the friendly and welcoming atmosphere, they collect almost anything that residents want to discard ranging from corks and Styrofoam peanuts to food waste, books and clothing. They have a Pay-as-you-throw program in place along with an enforced Mandatory Recycling policy; they also sort and bale all of their recyclables. All of these factors have allowed the Peterborough Recycling Facility to cover up to 93 percent of their annual total operating costs, including salaries and benefits for the staff.
ii.) Accounting and Data Management

If you accept money at your transfer station, you should run the facility like a business. The transfer station manager should take pride in their ability to keep costs low and revenues high and also enjoy the ability to be accountable for the transactions at the facility. They should be able to record the daily, weekly, monthly and annual transactions that occur at the facility in case of audit and to clearly show the taxpayers how their money is being spent.

It is always good practice to have both a hard copy and computer file to cross reference the information if needed. The data should be organized so anyone could easily pull up a daily, weekly, monthly or annual report of all transactions.

You don’t need fancy or expensive computer software for record keeping at the transfer station. You could have a written collection sheet that you can spend time entering into a simple spreadsheet later. Other ways that many rural facilities keep track of daily collection could be with a cash register with programmable keys for each item accepted for payment, or even a bar code scanner for different items collected that
can be printed out in a tidy report at the end of the day. It is always good practice to have both a hard copy and computer file to cross reference the information if needed. The data should be organized in a way that anyone could easily pull up a daily, weekly, monthly or annual report of all transactions placed at the transfer station. Please refer to Appendix III for a sample written daily collection record sheet.

Aside from accountability aspect, keeping accurate data will help to determine the effectiveness of different waste reduction programs. For instance, if your town was determining whether or not to switch to pay-as-you-throw or single stream recycling and you wanted to estimate the savings associated with those programs, you would need to know how many tons of waste and recycling you were currently (and historically) collecting in order to have a basis for your analysis.

In addition to proper documentation of activities at the transfer station, most states require that each transfer station submit an operating permit, operating plan, closure plan and any changes made to those documents. Take some time to make sure that these documents are current, and accessible by the staff at the transfer station. By putting in the time to be specific with the operating plan, it can also be used as a training tool for new staff, or a quick reference for someone who is unsure of how to properly handle some of the materials being dropped off at the facility. For more information about what is required by the New Hampshire Department of Environmental Services’ Waste Management division, please visit: http://goo.gl/NyBXs
**B.) Curbside Collection**

Curbside recycling could be a fairly large expense for your town, but placing materials at the curb really is the most convenient way for residents to recycle. If your town is densely populated, and you don’t have curbside pick-up for trash and recycling, you may wish to explore this option. However, if the homes in your town are more spread out and residents are accustomed to dropping off their waste at the transfer station then it could be an unnecessary expense. Before a municipality can realize any savings from a switch to curbside pick-up, it must make significant investments in the system. Costs associated with switching to a curbside collection system include costs of the bins, costs of the trucks, and the costs of educating residents on how to use the system.

One thing that you **DO NOT** want to do is have curbside pick-up for trash but not for recycling. This severely deters people from recycling because it is much more convenient for them to just throw everything away. If your town is doing this, stop what you are doing right now and put a Request for Proposal (RFP) out for waste and recycling haulers to get quotes for a curbside recycling contract. The potential avoided disposal fees alone may be enough to cover the additional costs. Refer to Appendix IV for an example of an RFP for curbside recycling.

Smaller towns will typically contract with a hauler to collect their waste and recycling. But some municipalities have purchased their own truck for curbside pick-up and others may share a truck with a neighboring town. If you share a truck you can do pick-up on different days, or do the same day and share transportation fees. With so many options available your committee should carefully go through the costs and benefits
for each before deciding on what can be most cost-effective for your town. It is also wise to put out an RFP for several different options (single stream, dual-stream, etc.) and see what the costs are among your choice of haulers.

**Curbside Pick-up of Organic Wastes for Large-Scale Composting**

Over ninety North American cities have contracted with haulers and large-scale composting facilities to have curbside pick-up of residential organic wastes. At the curb in these cities there are three separate bins: black for waste; blue for recycling; and green for organic waste. San Francisco, for instance, has an aggressive goal of zero-waste by 2020 and a mandatory recycling and composting policy. The city currently diverts 72 percent of their waste from the landfill due to their three-bin system. Toronto also offers curb-side organics recycling, and to offer even more of an incentive for residents to recycle and compost, they only pick up the trash bin every other week. This motivates residents to remove all organic waste from their trash bins to avoid the smell of decomposition, and also recycle more so that they don’t have to store all the materials for two weeks at a time.
### Single Stream Recycling

Curbside Single Stream Recycling is the collection process by which all fibers, plastics, tin, aluminum, glass and other containers are placed together in one bin by residents before they are collected and transported to a materials recovery facility (MRF) to be machine sorted and sold as separate commodities. The most common alternative to single stream is dual-stream, where all containers go in one bin, and paper and other fibers go in another and are placed at the curb on the same day. These collection methods make it possible to collect a wider range of goods. For example, all types of plastic containers can be put into a single-stream or dual-stream collection system to be sorted out at the MRF, while it would be totally impractical to expect curbside collectors to separate all household plastics labeled #1 through #7, or to have trucks with a different compartment for each type (The Container Recycling Institute).

Most towns that adopt single stream recycling do so because they feel it would be more convenient for residents to participate in their curbside recycling since there is no need to sort and separate recyclable material at home into several bins. Evidence suggests that single
stream collection will increase recycling due to the convenience of not having to sort. However, the increase may also be a result of other factors that usually come with the introduction of any new recycling program, such as increased promotional efforts, distribution of larger recycling containers to residents, bag limits or pay-as-you-throw programs. Not to mention, your town may not currently be collecting some of the materials that the single stream facility can, which will provide an opportunity for residents to recycle waste they could not otherwise recycle easily. Please refer to Appendix V for a table provided by ecomaine, a non-profit waste management company, which shows the rates of recycling for single-stream towns with varying incentives in place.

Single Stream Recycling tends to provide the most economic benefit to towns with both curbside pickup and close proximity to the MRF, or towns that do not already have the infrastructure to efficiently collect, store and market their own source-separated materials. If your town
chooses to switch to single stream recycling, you will be paid (or pay) per ton of commingled recycling based on market conditions. Most towns have to pay for their own hauling, so be sure to get an accurate estimate of transportation costs from your hauler to factor into your decision. It is also important to consider that the switch to single stream could reduce the staff requirements at your transfer station, saving money on salaries and benefits. Also note that the town will not have the ability to take out the valuable commodities and sell them separately. In short, if your town already has a successful drop-off transfer station that earns revenue from recyclable materials, then Single Stream Recycling may not yield the same economic benefits as it would for towns that do not.

If your town is interested in switching to a single stream collection system, you should request a cost-benefit analysis from a curbside hauler or MRF near you, or contact RCAP Solutions for assistance.

Your town could already have the drop-off infrastructure and ability to collect and separate materials and may
Does Single Stream Recycling Affect the Quality of the Recycled Commodities?

There are various costs and benefits to consider with any collection method, but perhaps most important is the issue of the quality of the recycled commodities that are produced and sold to manufacturers. The Container Recycling Institute reports that single-stream collection systems generally results in a lower quality of material output destined for recovery when compared with other collection methods. However, the range of impacts on material quality and levels of contamination is directly related to a variety of factors that need to be considered on a case-by-case basis. In general, the final commodities will be more contaminated in a single-stream collection system than those that are collected in a dual-stream system or source separated. This contamination increase often results in the commodity being worth less than cleaner material. In addition, contamination can cause equipment failure, leading to lost productivity and expensive repairs. Both add costs to processors’ and recyclers’ bottom lines. This issue of quality should be of concern to your municipality because if your materials recovery facility (MRF) is unable to sell quality materials manufacturers due to contamination, or if they are being forced to landfill a large portion of their supply, the associated costs will trickle down to you. Be knowledgeable about what percentage of materials are not recycled at your local single stream MRF, and consider the potential quality issues you may encounter with a single stream program before you decide to make the switch.
forgo revenue with single or dual stream recycling. With curbside recycling, you won’t be able to time shipments with favorable market conditions from your choice of buyers. Understand that you may have to pay per ton of recycling in an unfavorable market. Also note that you will have to give the facility everything that they accept and you won’t be able to take out the more valuable commodities. Be sure to understand the implications of your contract with the hauler or MRF that you will partner with.

If your town is interested in switching to a single stream collection system, you should request a cost-benefit analysis from a curbside hauler or MRF near you, or contact RCAP Solutions for assistance. This is a complicated analysis to make accurately due to the fact that recycling markets are in constant flux and may involve reducing staff. Often residents don’t understand the economics behind recycling and will push for single stream recycling even though it may not be the best financial decision for the town. Be prepared to clearly explain the factors involved in the decision. Additionally, keep in mind that you should still also be able to collect some non-single stream materials at the transfer station, such as organic waste, electronics, scrap metal, tires and perhaps universal or hazardous waste.

C.) Composting and Organics Recycling

According to a 2010 waste characterization study by the Environmental Protection Agency, organic materials make up almost one-third of our total waste in the United States. These materials can be generally classified as food, yard waste, or manure. Composting is just
nature’s way of recycling organic material back into the environment. It involves decomposition of organic materials in a controlled environment and adding the nutrient-rich matter into our soil. While composting is a great idea, anything that your community can first do to reduce food waste is better. A good example of a way to avoid food waste is by feeding it to animals (pigs will eat just about anything and a lot of it) and then turn to composting the rest. Whatever your community can do to encourage both backyard composting and larger scale community composting is preferable to landfilling it for a variety of reasons, many of which are listed below:

• Large, heavy part of waste stream, so removing it can greatly reduce disposal costs
• When organics decompose in a landfill, they release methane gas which is both flammable and 21 times more potent than carbon dioxide emissions into the atmosphere
• Waste-to-energy facilities and other incinerators would prefer to not have these materials burned at their facility because they are often wet
• Transportation costs can be reduced because a significant amount of composting can be done on a local level
• Farming or gardening with compost can reduce or eliminate the need for chemical fertilizers or pesticides and increase crop yield
• Compost can also cost-effectively remediate soils contaminated by hazardous waste and also used to facilitate reforestation and habitat revitalization

i.) Larger-Scale Community Composting

Often the transfer station will have a leaf and yard waste pile for residents, or a good place they could put one. If the yard waste is tended to and turned when needed, this material could be returned to residents for use in their gardens, free of charge. However, large scale food composting is a little trickier. Your state may have a regulation barring the town from distributing compost made from food back to the residents. Also, composting food scraps could attract hungry critters to the compost site. Some cities have contracted with businesses to collect and maintain their food compost at a more industrial facility. With either the outdoor food or yard compost piles, there needs to be oversight to make sure the temperature, turning and nutrient requirements are met.

ii.) House-hold Backyard Composting

Residents who have a garden and a backyard could do their own composting with a small investment of time
and money. Their efforts could improve the health and appearance of their yard and save money on fertilizers and mulch. Just like with the larger scale food composting, they should be encouraged to use a bin of some sort to prevent critters from wandering into their yards. Many communities provide their residents with free or discount-ed bins to encourage backyard composting. Please refer to Appendix VI to learn more about the EPA’s backyard composting basics and view a list of what you can and can’t compost.

D.) Special Waste

Take some time to become aware of the rules and regulations regarding proper handling and disposal of household hazardous waste (HHW), universal waste, pharmaceutical waste and electronic waste because keeping them out of landfills avoids harmful impacts on our health and environment. There are specific handling instructions, regulations, and permits needed for many of these materials and it is important to know how to safely handle these substances so you can relay that information to the residents, and to be sure that you are operating within the guidelines set by the state.
i.) Household Hazardous Waste

Household Hazardous Wastes (HHW) are highly regulated because they are dangerous or potentially harmful to our health or the environment. HHW can be liquids, solids, gases, or sludges. HHW can typically be identified as either ignitable, corrosive, reactive, or toxic. These materials can include:

- Oil/Solvent based paint
- Solvents and many spray cleaners
- Aerosol cans containing flammable propellants
- Alcohol
- HTH pool chemicals
- Pool acid
- Battery Acid
- Muriatic Acid
- Drain Cleaners
- Dynamite
- Fireworks
- Gunpowder, bullets, grenades
- Prescription medicines (see special section on pharmaceutical waste below)
- Pesticides

If you have any HHW wastes at your facility you likely either have the proper permit, or someone has left it at your facility and now you have to deal with it. If you do not have a permit, be sure to notify the NH Solid Waste Management Bureau at 603-271-2975 and inform them of the situation, store wisely and safely and label all containers. For more information about how to properly collect and handle HHW in New
Hampshire, please take advantage of the resources found on the Department of Environmental Services HHW webpage at:
http://goo.gl/qpbLg

A less regulated hazardous waste is used oil. Never mix anything with your used oil and keep it closed to prevent spills, ignitions and contain any potential harmful vapors. Keep it on a leak-proof surface and away from surface water and wells. For more comprehensive information on the used oil program in New Hampshire, please visit:
http://goo.gl/Z5Q05

Additionally, if a resident has a potentially hazardous material, or something that your transfer station does not accept, you could also direct them to www.earth911.com, where they enter in their zip code and material type and then are given a list of locations they can safely drop off their waste.

What Happens To Our HHW?

Have you ever wondered where household hazardous waste goes after the transporter picks it up? The final destination of the material depends on its type. The items are reused, recycled, disposed of in a hazardous waste landfill, neutralized (acids/bases) to render the material harmless in waste water treatment plants or incinerated (pesticides/poisons).

Specific waste streams that can be recycling and/or reuse are aerosols, latex and water-based paints, thinners, stains,
waste oil, oil filters, antifreeze, batteries, fluorescent light bulbs, CRTs, and pesticides. Examples include used oil being re-fined and recycled; latex paint can be recycled into latex paint or turned into fuel; fluorescent bulbs can be recycled. Please note that some states still collected latex paint as a hazardous waste. One study estimated that over 90% of the HHW collected can be recycled or reused in some way.

Oil-based products and solvents are used for fuel blending or as fuel supplements at cement kilns. This includes oil-based paints and most other flammables. Fuel blending is preferred after recycling because it utilized the inherent BTU value, creating an alternative fuel source, as opposed to using the landfill. One estimate is that 20-25% of the total waste stream represents oil-based products and solvents.

Finally, some items are place in a special hazardous waste landfill. The drums are placed in these landfills that are designed to protect against contamination. They are specially lined and monitored to guard against the contamination of the groundwater and the environment.

Some towns have their RFPs indicate recycling as the preferable method of disposal. To insure this occurs, some organizations make sure that they receive a certification of disposal before payment for disposal is made to the contractor. There has been some contradictory evidence
Universal Waste

Universal wastes are still considered to be hazardous, but are less regulated because they are so common. Less regulation encourages the development of municipal and commercial programs to reduce the quantity of these wastes going to municipal solid waste landfills or combustors. In New Hampshire, the “Universal Waste Rule” exempts the wastes from the more burdensome hazardous waste requirements, as long as they are managed to prevent release to the environment and properly recycled or disposed. For example, the Universal Waste Rules do not require generators to provide separate waste storage areas, nor do they require a hazardous waste hauler for transportation. Wastes the NH Department of Environmental Services (DES) has declared to be universal wastes are:

- Auto antifreeze
- Some batteries
- Cathode ray tubes
- Some lamps

1 Please see Appendix VII to read New Hampshire’s “Universal Waste Rule”
- Mercury containing devices, thermostats
- Some Pesticides

If you do not regularly collect these materials, or other hazardous wastes at the transfer station, you may want to organize or join a HHW collection event. Often you can get together with neighboring towns or your regional planning commissions to increase the capacity to advertise and draw in a larger population.

**iii.) Pharmaceuticals and Personal Care Products**

The US EPA defines Pharmaceuticals and Personal Care Products as Pollutants (PPCPs), in general, to be any product used by individuals for personal health or cosmetic reasons or used by agribusiness to enhance growth or health of livestock. People contribute PPCPs to the environment when: medication residues pass out of the body and into sewer lines; externally-applied drugs and personal care products they use wash down the shower drain; and when unused or expired medications are placed in the trash.

PPCPs comprise a diverse collection of thousands of chemical substances, including prescription and over-the-counter therapeutic drugs, veterinary drugs, fragrances, lotions, and cosmetics. With so many products and formulations on the market today, and with the additional burden of understanding health and safety rules, environmental rules, Drug Enforcement Agency rules, and other guidelines, trying to determine disposal of pharmaceutical wastes can be confusing.

Communities are encouraged to take advantage of pharmaceutical take-back programs or household haz-
ardous waste collection programs that accept pharmaceuticals. These medicine collection events are staffed by law enforcement. DO NOT flush unwanted medicine down the toilet unless accompanying product information instructs otherwise. Don’t keep unneeded medications in the home. New Hampshire has a website at www.nh.gov/medsafety for additional information on medicine disposal issues.

*iv.) Electronic Waste*

Electronic waste, or “e-waste,” is generally considered anything that plugs into a wall or accepts batteries. E-waste has surfaced as an important issue, because it can be dangerous if disposed of improperly. Many major retailers have instituted take-back programs and municipalities have created drop-off locations to help control e-waste issues. Since new updated electronic products hit the market every day, it is very important to gain the knowledge on how to ensure that the outdated items are properly discarded.

---

**What Health Risks Are Associated With “e-waste”?**

Over 1,000 materials, including chlorinated solvents, brominated flame retardants, PVC, heavy metals, plastics and gases, are used to make electronic products and their components—semiconductor chips, circuit boards, display panels, and disk drives. Here are some examples of the substances found in electronic waste and their associated health effects:
Preventing electronic waste in the first place is preferable to any waste management option, including recycling. Donating used (but still operating) electronics for reuse extends the lives of valuable products and keeps them out of the waste stream for a longer period of time. Reuse,

**Lead:** The health effects of lead are well known; lead exposure causes brain damage in children and has already been banned from many consumer products.

**Mercury:** Mercury is toxic in very low doses, and causes brain and kidney damage. It can be passed on through breast milk; just 1/70th of a teaspoon of mercury can contaminate 20 acres of a lake, making the fish unfit to eat.

**Cadmium:** Cadmium accumulates in the human body and poisons the kidneys.

**BFRs:** Brominated flame retardants (BFRs) may seriously affect hormonal functions critical for normal development. A recent study of dust on computers in workplaces and homes found BFRs in every sample taken. One group of BFRs, has been found in alarming rates in the breast milk of women in Sweden and the U.S.

**Source:** Electronics Take Back Coalition

Preventing electronic waste in the first place is preferable to any waste management option, including recycling. Donating used (but still operating) electronics for reuse extends the lives of valuable products and keeps them out of the waste stream for a longer period of time. Reuse,
in addition to being an environmentally preferable alternative, also benefits society. By donating your used electronics, you allow schools, nonprofit organizations, and lower-income families to obtain equipment they could not otherwise afford. Many electronics manufacturers are accepting used household electronics for recycling. In some cases, these services are provided free-of-charge.

For more comprehensive information regarding electronics recycling, please visit these websites:

• Electronics Take Back Coalition  
http://goo.gl/Jwjdp

• United States Environmental Protection Agency  
http://goo.gl/dYm3Q

• New Hampshire Department of Environmental Services Waste Management Division  
http://goo.gl/WzpdY
Part III: Creating Incentives
Sometimes just providing the right infrastructure for recycling isn’t enough to actually get people to recycle. For the most part, people will need some kind of incentive that will encourage them to take advantage of the opportunity to reduce their waste.

**A.) Pay-As-You-Throw**

Pay-As-You-Throw (PAYT) is any method by which households pay for each unit (weight or by individual bag) of waste they generate, similar to how they are charged for any other utility. Towns typically adopt a PAYT program to avoid increasing waste disposal costs, since most households will reduce, reuse and recycle to avoid paying the unit-fee. Furthermore, the revenue earned from the unit-based fees can offset the solid waste budget and
reduce the amount of money needed to be raised through taxes to pay for the remaining disposal costs.

PAYT is also a more fair and equitable way to distribute the costs of managing waste throughout the town than through the general tax fund or flat fee. Imagine if your electricity or water were paid for through taxes, rather than by consumption. People would find that unfair and the same argument should be made for trash disposal. The inherent fairness of PAYT allows people to have greater control over their costs—it is based on how much of the service you use. Those who reduce waste are rewarded with a lower bill. You are no longer forced to subsidize your neighbors’ wastefulness.

\textit{i.) Economic Benefits of PAYT}

With a PAYT program, households will reduce, reuse and recycle their waste to decrease their own disposal expenses and the total MSW tonnage can be expected to decrease by 25-45 percent on average. This will result in drastically reduced disposal costs (tipping fees), which is typically one of the largest line items in the solid waste budget.

When households pay for their waste through unit-based fees, all of that revenue can go toward offsetting the solid waste budget. Depending on your rate structure, some support may still be needed from general fund, but it is possible to design your PAYT program to cover most or all of your costs.

PAYT should increase the volume of recyclable ma-
materials, which could earn more revenue for the town, and further offset the budget for municipal solid waste. It is recommended that towns adopt a special fund to accrue all revenues from unit-fees and recycling to the solid waste budget so that residents can clearly see the financial effects of the program.

**ii.) Households can save money with PAYT**

The equity that comes with only paying for the trash you create is a very good way to appeal to residents. No one, especially recyclers, want to pay for someone else’s trash costs. However, those people who don’t already recycle won’t be as happy with PAYT because they think they’ll have to pay more—but these are exactly the people you are trying to reach with the price incentive. If you can you show that, with a certain level of participation, the average households’ annual trash costs can decrease with PAYT, they may be more inclined to accept the program. There is a relatively simple savings analysis that you can use to show that out-of-pocket costs plus the tax dollars needed to support the budget amount to a savings with PAYT. You can estimate the total annual household costs by dividing the total solid waste budget by the total number of households. With PAYT, disposal costs typically decrease by 25-45 percent and the remaining budget will vary depending on the revenue earned from the PAYT unit-based fees. Refer to Appendix VIII to for a sample PAYT savings analysis.

It is important for households to understand that they are paying for waste disposal whether through taxes or PAYT unit-based fees, but they could ultimately pay
less with PAYT since they control how many bags of waste they generate. Revenue from the PAYT program unit-based fees will offset the solid waste budget and decrease the amount of taxes needed to cover the remaining costs. However, keep in mind that the price you charge per bag will determine how many tax dollars are needed to support the rest of the budget. As shown in the bar graph below, if your town charged only $1 per bag, less revenue would be accrued to the SW budget than if the bags cost $3 each.

![Bar Graph showing annual average household solid waste costs](image)

### iii. Addressing Common Concerns about PAYT

Switching to a PAYT program can raise a volatile debate among residents. To pass a PAYT program in your town you need broad support and a dedicated group of individuals to conduct a convincing public education campaign. It is important to give people the opportunity...
to openly discuss and debate the issues, and to know in advance the program that will be presented to them for vote. Here are the most common concerns of residents regarding PAYT, and how to respond to them.

<table>
<thead>
<tr>
<th>Concern</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;PAYT is just another tax, and now I am being double-taxed for the same thing&quot;</td>
<td>Opponents to PAYT see the unit based fee as an added “tax,” and they may express entitlement to produce as much trash as they wish, because they already pay property taxes. However, the reality is that their costs are split between the unit-based fees and a smaller portion of the general fund. Their total costs can go down if they reduce, reuse, and recycle their waste.</td>
</tr>
<tr>
<td>“Even if the solid waste budget is reduced with PAYT, my taxes won’t go down”</td>
<td>These people are probably right, but you can explain that maybe they won’t increase as much each year, and if they do it won’t be from the solid waste budget. PAYT is an effort to decrease their tax burden.</td>
</tr>
<tr>
<td>“PAYT and recycling are just part of an environmentalist, liberal agenda”</td>
<td>Actually recycling and PAYT are primarily about economics and cost avoidance. In fact, fiscal conservatives can feel better knowing that their taxes are not being thrown out with the trash, and that the town has less control over how much money is spent on disposal. Instead, most of that control is put in the hands of the residents.</td>
</tr>
</tbody>
</table>
"People are just going to end up throwing their garbage away in the woods"

Towns with experience have reported that illegal dumping is no more a problem after PAYT than it was before. Most residents will be law abiding, but in the case that there are a few people who actually illegally dump their trash to avoid paying, there needs to be proper enforcement and penalties in place.

"I'm on a fixed income, I can't afford even a little extra per week"

Some households may have a very limited budget and are burdened by even a small out-of-pocket fee each week. Consider offering a rebate or discount to low-income families and fixed-income elders.

Will the local businesses who sell the bags receive any benefit?"

Most local businesses are happy to sell the bags, tags, stickers or punch cards because it brings in foot traffic, and they are doing something important for their community. The businesses typically buy and sell these items for the same price, but it is up to the town whether or not the business will receive a small portion of the sale of each item.

PAYT is program to help reduce annual household solid waste costs, not add to them. Residents should be made aware of the benefits of reducing residential waste, how PAYT can achieve those goals, and how their households stand to benefit. Your campaign should be prepared, simple, transparent and unchanging. You need
time to build a consensus among residents, gather quotes for administrative program costs, and prepare the proper documentation before your PAYT program is voted on and approved. Community outreach ideas include:

- Public hearings and presentations
- Press releases to local media outlets
- Presence at local events and public areas
- Distribute information about PAYT and recycling at the local transfer station or recycling center
- Educational events for students and other organized groups within the community
- Survey residents to consider their concerns and get feedback
- Mail brochures or flyers outlining the recycling collection process
- Enable those who already recycle to get involved and to speak to their friends and neighbors

**iv.) Administration and Accounting**

PAYT is not one size fits all, and each aspect of the program is up to you. As a town, you can decide how you will charge, how much you will charge, any penalties for non-compliance, etcetera. The companies that manufacture PAYT bags, tags, stickers, bins, and punch cards are also great resources to help you design your program, and they can often include administrative and shipping services in the price of their products, which can be very cost-effective. Below is a brief description of the most common ways to charge for waste, but be sure to evaluate every option, be creative, and design whatever program works for your specific town.
Most towns that PAYT tend to go with town-approved bags for several reasons: 1) Bags are the most equitable way to control the volume of waste because everyone will be using the same ones; 2) Bags are easier to see than tags or stickers, and don’t run the risk of falling off; 3) With bags, less discretion is left up to the transfer station attendants or trash collectors, and their job will be easier; 4) PAYT bags come in a variety of sizes, strengths, colors, and can be printed to suit your needs.

Some people in the community may voice concern about bags, because they feel it may lead to more plastic in the local landfill. This is a valid concern only if residents are still using...
their own bags and then just placing them inside of the town bags. It is important to offer quality town bags so that residents will feel confident that they are just as strong as their current ones. Otherwise, PAYT tends to reduce the total number of bags used since people are creating less waste. Refer to Appendix IX for a collection of sample Pay-as-you-throw warrant article to refer to once you have designed your unique program.

A Unique Way to Help Pay for Pay-As-You-Throw Bags

Warren, NH can be credited with the idea to sell advertising space for local businesses on the PAYT bags as a way to earn extra revenue toward the solid waste budget. The local businesses were so quick to accept the opportunity that the town feared they may have charged too little, and the company that manufacturers the bags was happy to do the printing. In addition, the residents were glad to know that the select board was trying every possible solution to bring in extra revenue from non-tax related source.

B.) Mandatory Recycling

Mandatory Recycling is a policy that would require all residents to separate their recyclable materials from waste at home and then the materials can be sorted at the transfer station. This policy would allow the transfer station operators to monitor and enforce recycling by all residents. Anyone that does not
choose to recycle may be subject to any penalties set by the select board. In short, people are motivated to recycle because they will want to avoid any penalties for non-compliance.

This policy may not really affect people who already recycle. Those who don’t already recycle will need to learn about which materials are recyclable and then designate a couple of containers to recycling at home. Everyone will be rewarded for their efforts by doing something good for their community and by watching the budget for managing solid waste decrease when less recyclable material is sent to the landfill and is instead sold to manufacturers to make new products.

**PROS:**
- There are no direct added costs to residents to implement the program
- The town avoids disposal costs from the material diverted from the waste stream
• It pays to recycle and more money can be earned from the town when more people recycle
• Mandatory Recycling is the simplest and lowest cost program to encourage everyone to recycle

**CONS:**
• People do not like to be told what to do. Some taxpayers may oppose the policy because they feel entitled to throw away whatever they please since their taxes will cover the costs
• Mandatory Recycling is not the most effective tool to encourage people to recycle because it does not directly provide convenience or financial incentives
• The policy will only work with strict enforcement and established penalties
• When recycling is no longer seen as a choice, those who recycle may not experience the same “feel good” benefit that they currently do

Setting penalties for non-compliance is important for success of a Mandatory Recycling policy. Each town does this differently and rarely they do anything more than issue a written warning, or maybe restrict access to the transfer station for repeat offenders. The select board or city council can discuss appropriate penalties and adopt only the ideas that can be enforceable. Most importantly, however, the transfer station staff needs to be diligent and enforce the rules to the residents, otherwise the program may not be affective.

See Appendix X for a sample warning card issued to residents who do not comply with Mandatory Recycling.
Part IV: Waste Reduction Education
Waste reduction education is all about encouraging residents to take advantage of the infrastructure you have in place, whether it is new or has been in place for a while. People will reduce, reuse and recycle for different reasons, so you need to reach out to your residents in a variety of ways to get their attention.

Most people reduce, reuse and recycle because they somehow feel it is in their interest to do so. Some may want to minimize their individual impact on the environment and leave resources for future generations. Others recycle because it makes economic sense and they want to avoid throwing their tax dollars out with the trash. Most good recyclers see all the benefits of recycling, both economic and environmental. Be clear about which message you want to push and base that message on the concerns of your community members.
A.) Use Interesting Facts and Figures to Capture the Attention of Your Audience

People tend to respond well to interesting facts that put things in perspective. For instance, it is easier for people to picture 17 trees than it is to understand what 1 ton of paper looks like. The Curbside Value Partnership provides a “recyc-u-lator” on their website to help communities generate a resource savings report that can be tailored specifically to your town. Refer to Appendix XI for the formulas provided by the Curbside Value Partnership to do your own analysis. Additionally, here are a few examples of interesting recycling facts you may want to use in your educational campaign:

• If we dug up all of the aluminum cans that were land-filled between 1970 and 2010 we would earn $23 billion at today’s market prices (Container Recycling Institute)
• Our material economy is responsible for 42 percent of all greenhouse gas emissions (U.S. EPA)
• Enough plastic bottles are thrown away in the United States each year to circle the Earth four times.
• Recycling steel and tin cans saves 74 percent of the energy used to make them.
• Americans throw away enough aluminum every month to rebuild our entire commercial air fleet
• Recycling 1 ton of paper saves 17 mature trees, 7,000 gallons of water, 3 cubic yards of landfill space, 2 barrels of oil and 4000 kilowatt hours of electricity. This is enough energy to power the average American home for 5 months.¹

¹ This and the previous four facts from: http://www.benefits-of-recycling.com/interestingrecyclingfacts.html
B.) Use surveys as Effective Learning Tools

Designing a survey can be relatively simple, extremely daunting, or anywhere in between. You don’t need to be an academic who is collecting data from surveys for a complex statistical analysis; a survey can merely be a useful learning tool and a helpful way to solicit feedback from people in your community.

If your intention is to educate residents on the issues and to ask them what their preference would be for your proposed solutions, then a simple survey could be very effective. You should keep your survey brief, and easy to read so that people will be more inclined to fill it out. Be sure to include the basic information that people need to be able to knowledgably answer the questions and do not leave out pertinent information just because you are searching for a specific answer. Refer to Appendix XII for a sample survey that you can refer to when designing your own questions to present to residents in your town.

After you’ve designed your survey, you’ll need to make it available for all residents. Since mailing your surveys to residents who may or may not send them back can be expensive and not yield great results, you should explore other ways to reach them. Maybe try to recruit volunteers to spend a few days at the transfer station or recycling facility (or somewhere most residents visit regularly), either having people fill out surveys in person, or complete the survey on at home and send it back. You could also consider offering an electronic version online (using a free online survey and questionnaire tool like Survey Monkey) and either email the link to residents
or post it on frequently visited Websites. Remember the main point of your survey is to educate residents and solicit feedback, so you want to try to get as much of the population to fill it out as possible. It’s likely that people who already care about recycling will be most willing to fill out your survey and you need to make sure to get a range of opinions if you are going to use the feedback to influence your decisions.

**B.) Enable Those Who Already Recycle to Get Involved**

People who all ready recycle have many good reasons to care about encouraging others to do the same. One of the reasons is that reducing, reusing and recycling waste saves money (tax dollars) by avoiding expensive disposal costs and maybe even earning revenue from selling materials. Since municipal solid waste management is typically funded through taxes, people who recycle are essentially subsidizing those who don’t. Imagine if electricity or water bills were paid for through the general tax fund rather than by consumption? People would find that unfair, and the same argument should be made for solid waste. Unless residents are paying for their own waste disposal, this is an unfair distribution of tax dollars and this distinction will likely generate concern among recyclers. People need to understand that reducing, reusing, and recycling their waste is something that saves everyone’s tax dollars and lowers the solid waste budget. Those who are doing their part can encourage others to do the same by making that point.
C.) Encourage Participation Among Young People and Students

There are many benefits to teaching and involving young people. Residents who are not receptive to local government or anyone who they consider to be “environmental” types are often open to hearing from children or young people. By increasing recycling education among young people, they will bring their knowledge home and explain it to their families. Furthermore, they will become the next generation of good recyclers and instill these good habits among their children as well. The section to follow has more information about school recycling and involving the students in the education of the residents.

Educational Campaign Action Items:

- Develop a list of clear goals and assign committee members to then identify specific tasks to complete in order to reach those goals. For example, one of your goals could be to reach out to 75 percent of the town population. The specific tasks to reach that goal could include public presentations, spending a few days at the transfer station to talk to residents, or sending a mailing or email to each household.
- Develop your message and assign a committee member to write an article for the local newspaper. You may wish to submit articles on a regular basis.
- Initiate contact with local interest groups by calling or visiting schools, Boy/Girl Scouts, 4-H club, etc.
- Research interesting facts (both environmental and economic) to get people interested in recycling and
develop materials that you can distribute to residents
• Contact neighboring towns that have been successful at increasing recycling through similar means, there is no need to reinvent the wheel!
• Create a recycling page on your town Website so residents will have a centralized location to find information.
• Compose or update a recycling quick reference sheet so your residents know what is recyclable in your town.

Refer to Appendix XIII for examples of concise and effective quick reference sheets.
Do not underestimate the power of school recycling programs. Recycling in schools is an opportunity to educate children about the resources we use and instill good recycling habits that they will have for the rest of their lives. They will also encourage their families at home and eventually their own children to do the same. School recycling also offers hands-on learning experience to compliment lessons based on environmental stewardship and conservation. Furthermore, schools produce a lot of waste—from paper, to packaging and food waste—so if a school is reducing, reusing and recycling more effectively it is yet another great opportunity for your town to reduce waste.

A school recycling program requires effort and dedication from the students, school faculty and staff, as well
as transfer station or recycling center staff. There will be responsibilities assigned to different people depending on how you design your program, but the participation of the entire school community is an extremely important aspect of any successful recycling program.

Most successful programs begin with a dedicated and enthusiastic recycling coordinator to oversee the process. This person can be a part of the faculty or staff at the school, a town employee, or an outside volunteer. They will be in charge of organizing meetings, training the students and staff and providing supervision. At the outset, the coordinator will need to first acquire the permission and support of the principal and school board to carry out the recycling program. If the principal agrees that the advantages of recycling at the school are worth the effort, they may wish to bring the subject up to the school faculty and discuss any additional work that may be required by the staff and students.

A student-run program is the best way to involve students and instill a sense of pride and leadership in the recycling program.

Often times there is concern that it will be too much extra work for a few of the staff members who may be responsible for collecting and storing materials through-
out the school. However, the staff will be dealing with the same volume of materials, just handling them differently. It is important to discuss the nature of these responsibilities prior to designing your recycling program, so all responsibility will be taken into consideration while designing the structure of the program.

Once the school staff is on board with the recycling program, a group of students should be selected to help design the program and assign responsibilities for the everyday operations. You could start with the student council, particular classes, or allow the students to volunteer for the group. A student-run program is the best way to involve students and instill a sense of pride and leadership in the recycling program. Essentially the program should be run by the students with adult oversight.

The student group could start with a tour of the school to identify the places that tend to generate the most trash and site areas where there should be bins. Next to the current trash cans could be the best place to start. Typically, schools will have small bins in each classroom, and in other areas such as the cafeteria, kitchen and offices. Then responsibilities will be assigned to the students and staff to make sure each of those smaller bins gets consolidated into a larger area each day. After all of the materials have been consolidated, the janitorial staff typically stores the material before it is hauled away from the school and combined with the rest of the town’s recyclables.

If you are having trouble finding funds in the budget for bins, there are several ways you could acquire them
at little-to-no cost. First, decide on how many will you need and what size. In the beginning, you could even use cardboard boxes that are already in the school from supplies and food. While they are not as durable as the plastic bins, they are a great example of reuse! Many schools have been successful at soliciting donations from vendors or local businesses for their bins. Others have earned revenue from collecting and selling aluminum cans or ink cartridges to earn the money to buy them. You can always contact RCAP Solutions for a list of recycling bin vendors in your area.

If you are able to collect and store your materials at the school, it is imperative that the material has a place to go, and someone to take it there. Perhaps your transfer station will offer to pick the materials up for you and

1 Check with the fire marshal to make sure the cardboard boxes will not pose a hazard, just to cover your bases.
New Boston Central School Sets the Example

The New Boston Central School in New Hampshire partnered with the transfer station to make the school’s recycling program a huge success. With many generous donations from local businesses, civic groups, non-profits and corporations, they were able to purchase their “Go Green Machine” that they use to store waste and recycling from the school and transport it to the transfer station. Once or twice a week Gerry, the transfer station manager, drives to the school, picks up the recycling truck, delivers the material (MSW stored in the rear, recyclables in the front) and then returns the truck to the school. The school’s recyclable material is weighed and processed and then given credit when shipped with the rest of the New Boston Recyclables. Accounting for the costs of tipping fees and truck maintenance, disposal cost avoidance and revenue from recycling, the two-year program cost amounts to a mere $117.25. This is a small price to pay for a priceless educational tool that benefits not only the students, but their families and the entire community.
bring them to recycling center, or maybe you have a private hauler. Either way, you may end up earning some revenue from the materials recycled at the school. If the money will be returned to the school, there needs to be a way to weigh the materials. The simplest method may be that whoever picks up the materials each week can weigh them in their truck. If a large scale is not available, the students could have an extra responsibility of weighing their materials on a smaller scale and recording them. If neither option seems reasonable at your school, the recyclables could simply be added to town’s normal recycling and any revenue could be returned to the general fund.

If the students can earn the money for their efforts, they can vote on how to spend it within the school. They could give any profits to a charitable organization, buy something nice for the school, purchase a gift for the helpful janitorial staff so they can be recognized for their help, or any other number of ideas.

Let the students educate each other on the recycling program through presentations and posters. Have the children do presentations in front of the classroom, or have assignments that involve recycling. Make signs with pictures that go with the recycling bins. Write “landfill” on the trash bins, and “recycling” on the recycling bins. Make recycling fun, not a chore. You could also organize a friendly competition logo or name competition between the students to encourage more participation.

In addition to school recycling, many eco-conscience schools have collected food waste at the cafeteria and either
used it as compost, or found a local farm with hungry pigs who will gladly accept the free food from the school students. This is another great way to add to your current recycling program, and reduce waste at your school.
Concluding Remarks

The main point is that you need to provide a combination of convenience, incentives, education and to encourage your town’s residents to reduce, reuse and recycle their waste. Please remember that you don’t need to reinvent the wheel and you can learn so much from other towns with experience in instituting similar programs. Most people who have had success with passing waste reduction programs and improving infrastructure are happy to share their insights with others.

Now it’s time for the pep talk. Don’t be afraid to cause a stir in your community with any proposed changes. People are not generally open to change, no matter what it is, and creating change on a community level is not a task for
the faint of heart. If you are employed by the town, or represent the town in any way, you need to remember to always operate in the best interest of the community and always leave your self-interest at the door. Be prepared to communicate with people who don’t believe in what you are doing. Address their concerns in a fair, calm manner and try to gain common ground.

It is commonly believed that when you take a look at your community as a whole, there are 20 percent of people who are happy to participate in whatever it is you are trying to do, 20 percent of people who will loudly oppose any change, and then 60 percent who are going to be willing to listen and learn. Remember this, and try to focus on that 60 percent who have the capacity to change and don’t be discouraged by that 20 percent who will not ever change their ways no matter what.

If you haven’t already, please take advantage of the appendices in this handbook because they have proven to help a rural community, and they could be of use to you as well. Additionally, if there is anything you would like more information about, and were hoping to find in this handbook, please contact RCAP Solutions and we will be sure to help you with your issue as well as include anything you bring to light in our next edition.
Part V:
APPENDIX
FORMING A WASTE REDUCTION ADVISORY COMMITTEE

Waste Reduction Advisory Committee’s (WRAC’s) often consist of an average of three citizens, usually having some experience in business, or some other facet of volunteer civic service (school committee, planning committee, town council, etc.). Taking into consideration that one of the committee’s primary functions is planning, any committee should look at itself from time to time to assess its own makeup. What kind of qualities should you look for in recruiting new members? It’s tempting to want to bring people on committee who look, think and act as you do, but this may not always be wise. Instead, look for traits such as:

- Commitment
- Understanding
- Experience
- Availability
- Tolerance

Skills that are transferable might include experience as
a business manager, financial officer or previous experience as a committee member. People with technical skills, such as plumbers, fire fighters bring a valuable perspective when decisions need to be made from a list of options provided by a consultant. Keep in mind that a WRAC is a governing, planning and policy making body, where teamwork is the key.

Consider forming sub-committees to explore issues, such as project planning. Using other residents in addition to committee members on these committees will result in very positive results in terms of gaining public support for infrastructure improvement projects. These committees often serve as training ground for good people who otherwise might view full membership as beyond their abilities and commitment level.

The WRAC members are individuals who have come together to work toward a common purpose. In the case of solid waste management, this is to carry out a mission that will ensure that the public has the education, training, and incentives needed to reduce, reuse and recycle their waste. The mission will consist of making decisions that, in some cases, will involve some technical, managerial and financial information that may not always be within the grasp of all members. Therefore, the members of the committee must be open to listening to information and recommendations from experts (including the certified operator), regulators and the public.

In order to ensure that decisions are being made in the best interest of the public, anyone sitting on a town
committee must keep in mind that they are keepers of the public’s trust. It is up to each governing committee to make sure that their successors are persons of integrity and that they will act in the best interest of the public while they are serving on the WRAC.

If you are forming a WRAC in a New Hampshire municipality, please bear in mind that your committee is subject to New Hampshire’s Open Meeting Law. The wording of this statute is provided here for your reference.

New Hampshire’s Open Meeting Law
TITLE VI
PUBLIC OFFICERS AND EMPLOYEES
CHAPTER 91-A
ACCESS TO PUBLIC RECORDS AND MEETINGS
Section 91-A:2 Meetings Open to Public.

I. For the purpose of this chapter, a “meeting” means the convening of a quorum of the membership of a public body, as defined in RSA 91-A:1-a, VI, or the majority of the members of such public body if the rules of that body define “quorum” as more than a majority of its members, whether in person, by means of telephone or electronic communication, or in any other manner such that all participating members are able to communicate with each other contemporaneously, subject to the provisions set forth in RSA 91-A:2, III, for the purpose of discussing or acting upon a matter or matters over which the public body has supervision, control, jurisdiction, or advisory power. A chance, social, or other encounter not convened for the purpose of discussing or acting upon
such matters shall not constitute a meeting if no decisions are made regarding such matters. “Meeting” shall also not include:

1. Strategy or negotiations with respect to collective bargaining;
2. Consultation with legal counsel;
3. A caucus consisting of elected members of a public body of the same political party who were elected on a partisan basis at a state general election or elected on a partisan basis by a town or city which has adopted a partisan ballot system pursuant to RSA 669:12 or RSA 44:2; or
4. Circulation of draft documents which, when finalized, are intended only to formalize decisions previously made in a meeting; provided, that nothing in this subparagraph shall be construed to alter or affect the application of any other section of RSA 91-A to such documents or related communications.

II. Subject to the provisions of RSA 91-A:3, all meetings, whether held in person, by means of telephone or electronic communication, or in any other manner, shall be open to the public. Except for town meetings, school district meetings, and elections, no vote while in open session may be taken by secret ballot. Any person shall be permitted to use recording devices, including, but not limited to, tape recorders, cameras, and videotape equipment, at such meetings. Minutes of all such meetings, including names of members, persons appearing before the public bodies, and a brief description of the subject matter discussed and final decisions, shall be
promptly recorded and open to public inspection not more than five business days after the meeting, except as provided in RSA 91-A:6, and shall be treated as permanent records of any public body, or any subordinate body thereof, without exception. Except in an emergency or when there is a meeting of a legislative committee, a notice of the time and place of each such meeting, including a nonpublic session, shall be posted in two appropriate places one of which may be the public body’s Internet website, if such exists, or shall be printed in a newspaper of general circulation in the city or town at least 24 hours, excluding Sundays and legal holidays, prior to such meetings. An emergency shall mean a situation where immediate undelayed action is deemed to be imperative by the chairman or presiding officer of the public body, who shall post a notice of the time and place of such meeting as soon as practicable, and shall employ whatever further means are reasonably available to inform the public that a meeting is to be held. The minutes of the meeting shall clearly spell out the need for the emergency meeting. When a meeting of a legislative committee is held, publication made pursuant to the rules of the house of representatives or the senate, whichever rules are appropriate, shall be sufficient notice. If the charter of any city or town or guidelines or rules of order of any public body require a broader public access to official meetings and records than herein described, such charter provisions or guidelines or rules of order shall take precedence over the requirements of this chapter. For the purposes of this paragraph, a business day means the hours of 8 a.m. to 5 p.m. on Monday through Friday, excluding national and state holidays.
III. A public body may, but is not required to, allow one or more members of the body to participate in a meeting by electronic or other means of communication for the benefit of the public and the governing body, subject to the provisions of this paragraph.

1. A member of the public body may participate in a meeting other than by attendance in person at the location of the meeting only when such attendance is not reasonably practical. Any reason that such attendance is not reasonably practical shall be stated in the minutes of the meeting.

2. Except in an emergency, a quorum of the public body shall be physically present at the location specified in the meeting notice as the location of the meeting. For purposes of this subparagraph, an “emergency” means that immediate action is imperative and the physical presence of a quorum is not reasonably practical within the period of time requiring action. The determination that an emergency exists shall be made by the chairman or presiding officer of the public body, and the facts upon which that determination is based shall be included in the minutes of the meeting.

3. Each part of a meeting required to be open to the public shall be audible or otherwise discernable to the public at the location specified in the meeting notice as the location of the meeting. Each member participating electronically or otherwise must be able to simultaneously hear each other and speak to each other during the meeting, and shall be audible or otherwise discernable to the public in attendance at the meeting’s location. Any member participating
in such fashion shall identify the persons present in
the location from which the member is participat-
ing. No meeting shall be conducted by electronic
mail or any other form of communication that
does not permit the public to hear, read, or other-
wise discern meeting discussion contemporaneous-
ly at the meeting location specified in the meeting
notice.

4. Any meeting held pursuant to the terms of this
paragraph shall comply with all of the requirements
of this chapter relating to public meetings, and
shall not circumvent the spirit and purpose of this
chapter as expressed in RSA 91-A:1.

5. A member participating in a meeting by the means
described in this paragraph is deemed to be pres-
ent at the meeting for purposes of voting. All votes
taken during such a meeting shall be by roll call
vote.

a.m.; 303:4, eff. July 1, 2008.
Sample Transfer Station Manager Job Description

General Description:
Under the general supervision of the department of public works director, the transfer station manager is responsible for supervisory, organizational, mechanical and physical work involved in the operation of the recycling facility. The transfer station manager is also responsible for promoting and encouraging participation in the town’s recycling program and for enforcing compliance.

Essential Job Functions:
• Comprehends and implements the solid waste disposal facility’s operating rules and procedures
• Educates and assists the public in the proper procedures for recycling and the proper use of the recycling center
• Assesses, collects fees and maintains records of fees paid by customers, as required by established procedures
• Supervises and works with subordinates in the separation of glass, cans, newspaper, cardboard and other
materials as appropriate for recycling
• Prepares product for market using buyer specifications
• Maintains daily records as to volume and shipment date, prepares reports and summaries on recycling and disposal operations in compliance with town and state requirements
• Responsible for maintenance of the facility and equipment.
• Develops and follows a preventative maintenance program
• Provides budget input and makes recommendations regarding operations and equipment replacement

**Skills/Experience/Training Required:**
• Duties require knowledge of recycling equivalent to completion of a high school diploma along with advanced courses from a two-year college or technical school and one to three years of related experience, or equivalent combination of education experience.
• Must possess a valid State Driver’s License, and a Solid Waste Facility Operator certification as required by the state
• Knowledge of regulations, codes, policies and procedures that pertain to recycling licenses, certificates and permits, as well as the procedures that must be followed
• Ability to communicate effectively both verbally and in writing. To establish positive public relations for the department and to interact with a wide variety of people
• Ability to prioritize, organize and perform work independently, as well as maintain records and prepare reports
• Must be able to effectively manage staff, establish and maintain effective working relationships, and be able to encourage staff development
• Ability to operate equipment such as forklift, front-end loader, baler and related recycling equipment. Have working knowledge of the operation and maintenance requirements, as well as a working knowledge of safety precautions common to machinery and equipment used in recycling and solid waste operations
• Knowledge of modern office equipment, including the use of a computer, printer and fax machine
• Ability to perform manual labor under adverse weather conditions
• Ability to understand, give and follow oral and written instructions and be part of a team

Supervisory Responsibility:
Supervises attendants, carries out supervisory responsibilities in accordance with the town’s policies and applicable laws. Responsibilities include interviewing and training employees; planning, assigning, and directing work; appraising performance; addressing complaints and resolving problems.

Working Condition/Physical Demands:
• May perform periods of outside work, subject to all weather conditions and extremes.
• May require periods of physical exertion, requiring ability to lift, carry, bend and position heavy objects utilizing proper body mechanics and techniques.
• Exercises caution when operating equipment.
• May use office equipment requiring eye-hand coordination.
## Sample Transfer Station Daily Collection Record

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit Cost</th>
<th># of Items Collected (month/day)</th>
<th>Account #</th>
<th>Total $ Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSW (15gal)</td>
<td>$1.00</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>MSW (30gal)</td>
<td>$2.00</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>MSW (40gal)</td>
<td>$3.00</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Total MSW</td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Tires</td>
<td>$5.00</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Stove</td>
<td>$10.00</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Washer</td>
<td>$10.00</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Dryer</td>
<td>$10.00</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Heater</td>
<td>$10.00</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>AC</td>
<td>$15.00</td>
<td></td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

Date: ____________  Signature: __________________________

---

**APPENDIX III**
The Town of Reductionville is seeking proposals from qualified Vendors to provide transportation, disposal, and/or recycling services for Municipal Solid Waste (MSW), Construction and Demolition Debris (Demo Debris), Bulky Items, and Miscellaneous Recyclable Materials.

The Vendor must be qualified and licensed to service solid waste transfer stations in accordance with applicable Federal, State, and local laws and must be willing to enter into a contract that will expire no sooner than December 31, 2013.

Proposals shall be in a sealed envelope or box and
clearly marked “Solid Waste Proposal”. The Town is requesting 8 copies of the proposal for review by the Selectmen and Solid Waste Advisory Committee. Proposals can be delivered to the Reductionville Town Hall at 100 Village Road, Reductionville, 04530 or mailed to PO Box 50, Reductionville, 04530. Proposals will be accepted until 4 pm on Monday, January 31, 2011 and will be opened at 5:30 pm on Tuesday, February 1st during a properly posted Selectmens Meeting. The Town of Reductionville reserves the right to accept or reject any and all proposals. The Selectmen anticipate awarding the contract at the February 8th Selectmens Meeting. A Certificate of Insurance will be required prior to commencement of services.

The Vendor must be willing to enter into a contract to provide services in accordance with the following conditions:

TERM

The term of this Agreement shall be for a period of years beginning March 1, 2011 and ending no sooner than December 31, 2013.

TRANSPORTATION AND DISPOSAL SERVICES

The Vendor shall provide the expertise, labor and equipment necessary to haul loaded roll-off containers or other receptacles to an approved disposal facility and/or processing facility on an on-call or scheduled basis as requested by the Town. The Vendor must perform within twenty-four hours of a request for hauling, except on scheduled holidays or other days when the Vendor is normally closed for business.
**RATES**

Transportation: MSW $/single-haul; $/tandem-haul
Construction and Demolition Debris $/single-haul; $/tandem-haul
Recyclables $/single-haul; $/tandem-haul

Disposal: Rates:
- MSW $______/ton
- Construction and Demolition Debris $______/ton
- Bulky Items $______/ton

Recycling (OPTIONAL): It is understood that rates for recyclable materials are variable and will fluctuate with market conditions. Vendor guarantees that the Town shall receive the fair market value for all recyclable materials serviced by the Vendor.

‘Single-Stream’ Option: The Town will accept proposals for ‘single-stream’ recycling from vendors equipped to provide such an option.

Other Alternatives: The Town also will accept any other proposals for transporting, handling, or disposing of waste materials and recyclables that may offer potentially attractive alternatives to the Town, including the duration of this agreement.

**EQUIPMENT**

Vendor’s equipment shall be designed for the collection and transportation of materials collected at the Reductionville Transfer Station. All roll-off containers used to haul construction & demolition debris and bulky items shall have a capacity of 40 cubic yards, unless otherwise specified by the Town. Compactor bins shall have a capacity of 50 cubic yards unless otherwise specified by the town. Vehicles shall be kept in good repair, appearance, and in a sanitary condition at all times.
Vehicles shall be operated safely and only during normal business hours. Each vehicle shall have the Vendor’s name and phone number clearly visible on each side.

**REPORTING**

The vendor shall provide a monthly report at the same time as the invoice, in a digital spreadsheet format compatible with Microsoft Office Excel.

- Commodity
- Date
- Container Size
- Total Tonnage
- Tipping Fee
- Haul Fee
- Total Cost
- (MSW, C&D, Bulky, Paper, Commingled, etc.)
- (Pickup Date)
- (40 yd roll-off, 52 yd compactor, 80 yd roll-off if a tandem haul)
- (to two decimal places)
- (in negative numbers if it is town revenue from recyclables)
- (Transportation cost for pickup of this/these container(s))
- (Total cost for this pickup)

**PERMITS AND LICENSES**

The Vendor, at its sole cost and expense, shall maintain throughout the term of this Agreement, all State, Federal, and Local permits, licenses and approvals required for the Vendor to perform the work and services
described herein.

COMPLIANCE WITH LAWS AND REGULATIONS

The Vendor agrees that in the performance of work and services under this Agreement, the Vendor will comply with any and all federal, state and local laws and regulations now in effect, or hereafter enacted during the term of this Agreement, which are applicable to the Vendor, its employees and agents with respect to the delivery of services described herein.

INDEPENDENT VENDOR

The Vendor shall perform all work and services described herein as an independent Vendor and not as an officer, agent, servant, or employee of the Town. The Vendor shall have exclusive control of and the exclusive right to control the details of the services and work performed hereunder and all persons performing the same and nothing herein shall be construed as creating a partnership or joint venture between the Town and the Vendor. No person performing any of the work or services described herein shall be considered an officer, agent, servant, or employee of the Town, and no such person shall be entitled to any of the benefits available or granted to employees of the Town.

INDEMNIFICATION

The Vendor agrees to indemnify, save harmless, and defend the Town from and against any and all liabilities, claims, penalties, forfeiture, suits, and the costs and expenses incident thereto (including costs of defense, settlement, and reasonable attorneys’ fees), which it may hereafter incur, become responsible for, or pay out as a result
of death or bodily injuries to any person, destruction or damage to any violation of governmental laws, regulations, or orders to the extent caused by Vendor’s employees, or its agents in the performance of this Agreement.

The Town agrees to indemnify, save harmless, and defend the Vendor from and against any and all liabilities, claims, penalties, forfeiture, suits, and the costs and expenses incident thereto (including costs of defense, settlement, and reasonable attorneys’ fees), which it may hereafter incur, become responsible for, or pay out as a result of death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment, or any violation of governmental laws, regulations, or orders to the extent caused by Town’s breach of any term of or provision of this Agreement, or any negligent act or omission, or act of willful misconduct by the Town or its employees in the performance of this Agreement.

In no event, whether in contract, tort, or otherwise shall either party be liable to the other for any special, indirect, incidental, or consequential damages.

INSURANCE.

Vendor shall obtain and maintain insurance throughout the term of this Agreement, at Vendor’s sole cost and expense, not less than the insurance coverage set forth below:

- Coverage Limits of Liability
- Worker’s Compensation Statutory
- Employer’s Liability $1,000,000
• Personal/Bodily Injury Liability $2,000,000 Combined Single Limit
• Property Damage Liability $2,000,000 Combined Single Limit
• Automobile Bodily Injury $5,000,000 Combined Single Limit
• Automobile Property Damage $5,000,000 Combined Single Limit

TERMINATION.

In the event the Vendor materially defaults in the performance of any of the material covenants or agreements to be kept, done, or performed by the Vendor under the terms of this Agreement, Town shall notify the Vendor in writing of the nature of such default. Within twenty (20) days following such notice:

1. The Vendor shall correct the default or:
2. In the event of a default not capable of being corrected within twenty (20) days, the Vendor shall commence correcting the default within twenty (20) days of Town's notification thereof, and thereafter correct the default with due diligence.

If the Vendor fails to correct the default as provided above, Town, without further notice, shall have all of the following rights and remedies which Town may exercise:

1. The right to declare that this Agreement together with all rights granted to the Vendor hereunder are terminated, effective upon such date and the Town shall designate. Town shall make payment of all monies due through the termination date
2. The right to license others to perform the services
otherwise to be performed by the Vendor, by mutual consent of the parties, or to perform such services itself.

- c) Items (a) and (b) above notwithstanding, either party may terminate this agreement for any reason with 90 days written notice to the other party.

- d) In the event an Annual or Special Town Meeting fails, neglects, or refuses to raise and appropriate the funds necessary to make payments for services rendered under this Contract, the Town may terminate this Contract upon providing not less than 90 days notice to Contractor.

**DEFINITIONS**

**Municipal Solid Waste ("MSW"):** Non-baled solid waste normally generated and disposed of by households and small businesses in the State of New Hampshire, and not containing any Hazardous Waste.

**Construction and Demolition Debris (Demo Debris):** A wide variety of materials, not including MSW, Special Waste, or Hazardous Waste. “Demo Debris” shall include, but not be limited to the following items: wood, siding, shingles, concrete, bricks, and other materials typically describing Demo Debris. Demo Debris shall not include appliances that may contain or have contained Chlorofluorocarbons or “CFCs,” as commonly understood.

**Recyclables:** A wide variety of post-consumer materials that lend themselves to recycling or reuse applications for which established markets exist or may be developed.
**ADDENDUM**

I. Tonnage History – Below is a table containing the tonnage history for the last three years by category of material being collected at the Reductionville Transfer Station. This is being provided to assist prospective vendors in making quotes for transportation and disposal of material from the Reductionville Transfer Station.

*Three Year Totals Tonnage by Category*

<table>
<thead>
<tr>
<th></th>
<th>Mixed Paper</th>
<th>Commingled</th>
<th>MSW</th>
<th>C&amp;D</th>
<th>Bulky</th>
<th>Cardboard</th>
<th>Electronics</th>
<th>Metal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>89.62</td>
<td>56.32</td>
<td>1043.76</td>
<td>193.31</td>
<td>185.33</td>
<td>39.21</td>
<td>12.34</td>
<td>36.52</td>
</tr>
<tr>
<td>2009</td>
<td>91.83</td>
<td>71.03</td>
<td>884.45</td>
<td>184.22</td>
<td>166.91</td>
<td>42.61</td>
<td>10.88</td>
<td>60.93</td>
</tr>
<tr>
<td>2010</td>
<td>83.12</td>
<td>48.82</td>
<td>873.5</td>
<td>184</td>
<td>129.91</td>
<td>43.5</td>
<td>8.98</td>
<td>70.86</td>
</tr>
</tbody>
</table>

Note: 2010 numbers represent year to date through late December. Potentially there may have been one more pickup.
APPENDIX V

Other Incentives that Affect the Recycling Rate for Single Stream Towns

The table below was provided by ecomaine, a non-profit waste management facility located in Portland, Maine. The percentages here are based on total tonnage of waste and recyclables received by ecomaine from their twenty member towns.

Each of the member towns have single stream recycling. This table shows that with each added incentive, the recycling rate has been shown to increase. The three added incentives that the towns may have adopted are: pay-as-you-throw; mandatory recycling; or curbside recycling.

Eight of the single stream towns don’t have any of the three other incentives, and their average recycling rate is 21%. As the table indicates, the more incentives that the single stream towns have to recycle, the higher their recycling rate. The town with the highest recycling rate has mandatory single stream curbside recycling, and also charges per bag of waste.
If you’d like more detail on which incentive each town has adopted, please contact RCAP solutions or visit www.ecomaine.org.

<table>
<thead>
<tr>
<th>Results for Single Stream Towns by # of Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>None</strong></td>
</tr>
<tr>
<td>Casco</td>
</tr>
<tr>
<td>Harrison</td>
</tr>
<tr>
<td>Limington</td>
</tr>
<tr>
<td>Lyman</td>
</tr>
<tr>
<td>Ogunquit</td>
</tr>
<tr>
<td>Waterboro</td>
</tr>
<tr>
<td>Yarmouth</td>
</tr>
<tr>
<td><strong>One</strong></td>
</tr>
<tr>
<td>Freeport</td>
</tr>
<tr>
<td>South Portland</td>
</tr>
<tr>
<td><strong>Two</strong></td>
</tr>
<tr>
<td>Falmouth</td>
</tr>
<tr>
<td>Gorham</td>
</tr>
<tr>
<td>Hollis</td>
</tr>
<tr>
<td>North Yarmouth</td>
</tr>
<tr>
<td>Portland</td>
</tr>
<tr>
<td>Scarborough</td>
</tr>
<tr>
<td>Windham</td>
</tr>
<tr>
<td><strong>Three</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Compiled by: <strong>ecomaine</strong> 7/18/12  <a href="http://www.ecomaine.org">www.ecomaine.org</a></td>
</tr>
</tbody>
</table>
Backyard Composting Basics

Backyard compost bins should be put placed in a location that is slightly protected from the elements, but also not too far from the home. Keep in mind that in the winter, you do not want to have to dig a path to your compost bin. Compost has certain nutrient requirements such as carbon, nitrogen and water. For carbon you could add in some paper, dry leaves, twigs or used potting soil. For nitrogen, the pile can use wet grass clippings, vegetable or fruit peels, coffee grounds or tea bags. Keep your pile covered and moist to facilitate the decomposition process.

What you CAN compost:

- Animal manure
- Cardboard rolls
- Clean paper
- Coffee grounds and filters
- Cotton rags
- Dryer and vacuum cleaner lint
- Eggshells
• Fireplace ashes
• Fruits and vegetables
• Grass clippings
• Hair and fur
• Hay and straw
• Houseplants
• Leaves
• Nut shells
• Sawdust
• Shredded newspaper
• Tea bags
• Wood chips
• Wool rags
• Yard trimmings

What you CAN’T compost (and why):

• Black walnut tree leaves or twigs
  – Releases substances that might be harmful to plants
• Coal or charcoal ash
  – Might contain substances harmful to plants
• Dairy products (e.g., butter, milk, sour cream, yogurt) and eggs
  – Create odor problems and attract pests
• Diseased or insect-ridden plants
  – Diseases or insects might survive and be transferred
• Fats, grease, lard, or oils
  – Create odor problems and attract pests
• Meat or fish bones and scraps
  – Create odor problems and attract pests
• Pet wastes (e.g., dog or cat feces, soiled cat litter)
  – Might contain parasites, bacteria, germs, pathogens,
and viruses harmful to humans
• Yard trimmings treated with chemical pesticides
  – Might kill beneficial composting organisms

_EPA’s Steps to Make Compost:_

1. Add brown and green materials in a 3:1 ratio and make sure that larger pieces are chopped or shredded. Place these items in alternate layers of different sized particles.
2. Mix grass clippings and green waste into the piles and bury fruit and vegetable waste under 10 inches of material.
3. As materials breakdown, the pile will get warm and maybe even steamy.
4. Every time you add to the pile, turn it over with a pitchfork to provide aeration, unless your bin has a turner.
5. When the material on the bottom is dark and rich in color, and you cannot identify the materials in it, it is ready to use. Screen out any larger chunks and put them back into the pile. This compost can be applied to lawns and gardens to help condition the soil and replenish nutrients. It should not, however, be used as a potting soil for houseplants.
Universal Waste Notification

NOTICE: For those NH Transfer Stations that have 20’ & 40’ electronics storage containers or trailers on-site that could reach 11,000 lbs of electronics (CRTs) and fluorescent bulbs, please be aware of the following DES Notification Requirements:

Universal Waste Notification Requirements

Overview for NH facilities:
Prior to accumulating 5,000 kilograms (or 11,000 lbs.) of universal waste:
Note: This requirement applies to the total of ALL universal waste on-site. For a transfer station facility, automotive antifreeze might be a factor. While lead-acid batteries can be considered a universal waste, if managed under the even EASIER regulations at Env-Hw 809, it will not be counted toward any universal waste calculation.

If you do not have an EPA #:
You must complete and submit a “RCRA C Site Identification Form (EPA # 8700-12– see attached)
• Note the $150 fee is not applicable to municipalities as they are exempt from paying this fee.
The form can be found at: http://des.nh.gov/organization/divisions/waste/swmb/rims/categories/forms.htm

If you already have an EPA #:
You need to notify RIMS at 603-271-2921 that you will be storing more than 11,000 lbs. of universal wastes.

Additional Details:
Env-Hw 1102.03 Waste Management Requirements.
(a) A universal waste handler shall manage:
1. Universal waste batteries in accordance with Env-Hw 1109;
2. Universal waste pesticides in accordance with Env-Hw 1110;
3. Universal waste mercury-containing devices in accordance with Env-Hw 1111;
4. Universal waste lamps in accordance with Env-Hw 1112;
5. Universal waste cathode ray tubes in accordance with Env-Hw 1113; and
6. Universal waste antifreeze in accordance with Env-Hw 1114.

Env-Hw 1101.03 Definitions.
(b) “Large quantity handler” means a universal waste handler who accumulates greater than or equal to 5,000 kilograms (11,000 lbs), but less than 20,000 kilograms (44,000 lbs), combined total of universal waste listed in the definition of “universal waste” in Env-Hw 104, on-site at any one time.

Env-Hw 1104.03 Notification.
(a) Before accumulating greater than or equal to 5,000 kilograms of universal waste, a large quantity handler shall notify the department by submitting to the department a completed New Hampshire notification form as described in Env-Hw 504.02.
(b) Notification shall include the following information:
1. The company name of the handler
2. The mailing address of the handler
3. The street address of the universal waste accumulation site
4. A contact person, title, and telephone number
5. The name of the company owner
6. The name of the property owner of the accumulation site
7. Generator classification pursuant to Env-Hw 503, if applicable
8. A list of all the types of universal waste to be managed at the accumulation site
9. Universal waste handler classification indicating whether a large quantity
10. Handler or a very large quantity handler
11. Certification by an authorized company official as to the accuracy of the information provided on the notification form

For additional information regarding DES reporting contact:

NHDES, Waste Management Programs
29 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
(603) 271-7837
Sample Pay-as-you-throw Savings Analysis

Estimated Savings with a Pay-as-you-Throw Program
Sample of a report prepared by RCAP Solutions’ Solid Waste Management Specialist: Use this sample as a guide for your own savings analysis, or contact RCAP Solutions for a saving analysis that is specific to your town

Justification:
The Town of “Recycleton” has tasked the public works director with increasing the rate of residential recycling, especially among multi-family housing. The town spends around $400,000 each year to dispose of waste, which is nearly half of the entire solid waste management budget. This figure can be drastically decreased if residents reduce, reuse and recycle their waste, as more material is diverted from the landfill. Currently, solid waste disposal costs are shared equally among property owners through taxes, regardless of how much waste they generate, resulting in an unfair distribution of costs among residents.
Pay-as-you-throw (PAYT) is any method by which households (and affected businesses) pay for each unit of waste they generate, just like any other utility. Towns and cities typically adopt PAYT for three reasons: 1) To provide a financial incentive for households to generate less waste and increase recycling. 2) To create a more fair and equitable way to distribute the costs of managing waste throughout the town, and 3) To decrease the solid waste management budget by disposal cost avoidance and using the revenue generated by the user fees to offset remaining disposal costs. By charging a small fee for each bag of waste, residents will reduce, reuse and recycle their waste to avoid the fee. This will in turn decrease the volume of waste destined for the landfill and result in cost avoidance. Furthermore, depending on the rate structure, the revenue earned from the unit-based fees can offset a substantial portion of the budget and free up valuable tax dollars for other town services. A PAYT program in Recycleton is estimated to result in an annual net savings for households, lower solid waste management costs and the added benefits from diverting waste from landfills and conserving resources.

Disclaimer:

The following analysis is a planning tool to estimate the costs and savings associated with introducing a PAYT program for waste disposal. It is to be used as a conceptual model for decision making purposes only, and the figures estimated can be considered “best-guess” by the RCAP Solutions’ Solid Waste Management Specialist, considering the information available. The total budget, including tipping fees, transportation costs and total
tons of MSW are all subject to change from year to year and could affect the estimates provided in this analysis. The base figures used in this analysis are from the solid waste budget line items under the approved budget from 6/13/2011.

**Current Program Overview:**

Recycleton has 2,577 single-family residential homes, 489 duplex and multi-family homes (with an average of three dwellings each), and 41 commercial businesses; which add up to a total of 4,089 households and businesses that contribute to the waste managed by the Town. To manage Municipal Solid Waste (MSW) in the town, the amount of $898,980 is needed to be raised through taxes. For reference, it costs an average $89.44 per person and $219.85 per household for the year to manage waste. These costs include:

- Tipping fees to the landfill ($67/ton)
- Hauling and transportation
- Salaries and benefits for staff
- Transfer station facility costs
- Repair and maintenance of equipment

In 2010, residential MSW totaled 4,465 tons and only 465 tons of that was diverted through recycling, leaving the town with a small estimated recycling rate of 10 percent. For every ton of waste that is diverted from the landfill the town will save $67 in tipping fees. The 4,000 tons that were sent to the landfill cost $268,000 in tipping fees, and the 465 tons that were diverted resulted in an avoided cost of $31,155. This is where the savings are
realized with increased recycling: Cost avoidance through diverting waste from the incinerator and landfill. Recycling some of this material also has the potential to earn money for the town, but just throwing it away will only drain the budget and fill the landfill.

*Estimating the Total Savings with a PAYT Program:*

With a PAYT program, residents who wish to place their waste at the curb for pickup will be required to do so by placing all waste in town-approved bags to be purchased locally. Any waste placed at the curb in non-approved bags will be left there and subject to any penalties. This way, residents will only be charged for the volume of material they throw away and the revenue from the bag sales will be used to offset the costs of tipping fees for the town. This is not a tax, but a user-fee where households will be responsible for paying for the waste they generate. Those who generate less waste will pay less.

Since recycling will be convenient for residents through curbside pick-up of materials, it will be easy to avoid the cost of purchasing the town approved bags by separating the recyclable waste and placing at the curb at no additional cost. It is estimated that at least 60 percent of your household waste is recyclable material and residents can take out even more by composting food or yard waste.

Under a PAYT program, towns typically experience a substantial decrease in total MSW and increase in recycling, thereby avoiding tipping fees and maybe even earning revenue. The tipping fee that Recycleton pays to the
landfill is $67 per ton; there are 2,000 lbs in a ton. Let’s assume two different size bags for sale with Recycletons PAYT program:

<table>
<thead>
<tr>
<th>Bag Size</th>
<th>33 gal</th>
<th>15 gal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price Recycleton pays per bag</td>
<td>$.30</td>
<td>$.20</td>
</tr>
<tr>
<td>Charge to residents per bag</td>
<td>$2.00</td>
<td>$1.00</td>
</tr>
<tr>
<td>Average lbs. per bag</td>
<td>22</td>
<td>10</td>
</tr>
</tbody>
</table>

On average, the total weight of material discarded by residents in Recycleton (trash and recycling) is about 4,465 tons. It is important to note that the strength of the economy has a direct influence on the amount of waste generated by households. Should the economy improve in the coming years, you can expect the total tons to increase, and should we fall into a recession, you can expect the total tons to decrease. For this analysis we will assume a total of 4,089 households and businesses producing a total of 4,465 tons of residential MSW (both trash and recycling combined), and the new estimated budgets and savings under each scenario are each compared with the current Solid Waste Management Budget of $898,890.

Summary of PAYT Program Benefits to Recycleton Households:

Using the estimates described above, the following table reports various waste reduction scenarios and the corresponding costs and revenues associated with the PAYT program in Recycleton. The reduction in total MSW with a PAYT program is difficult to predict, but most towns experience around a 40 percent decrease in
the first year after implementation. These decreases may either be a result of increased recycling, composting, donations, reuse or general reduction of waste due to the financial gain that residents experience by avoiding the costs of disposal.

If all costs and revenues from managing waste in Recycleton are accounted for in a special revolving fund, it will be easier to see the financial effect of this proposed program. The following table summarizes the estimated total monetary benefits that the town and each household will experience with various waste reduction scenarios under a PAYT program for MSW disposal\(^1\).

<table>
<thead>
<tr>
<th>Reduction in TOTAL MSW</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Tons of MSW</td>
<td>3,572</td>
<td>3,126</td>
<td>2,679</td>
<td>2,233</td>
</tr>
<tr>
<td>Annual lbs. MSW</td>
<td>7,144,000</td>
<td>6,251,000</td>
<td>5,358,000</td>
<td>4,465,000</td>
</tr>
<tr>
<td>Revenue from Bags</td>
<td>$649,455</td>
<td>$568,273</td>
<td>$487,091</td>
<td>$405,909</td>
</tr>
<tr>
<td>Cost to purchase Bags</td>
<td>$97,418</td>
<td>$85,241</td>
<td>$73,064</td>
<td>$60,886</td>
</tr>
</tbody>
</table>

---

1 Any revenue from recycling is not included in this analysis because it is difficult to predict the market for recyclable commodities. If the market is favorable, the town can expect to earn money that will offset the costs of disposal with the landfill.
<table>
<thead>
<tr>
<th></th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit from bags to offset budget</td>
<td>$552,036</td>
<td>$483,032</td>
<td>$414,027</td>
<td>$345,023</td>
</tr>
<tr>
<td>Remaining Disposal Costs</td>
<td>$239,324</td>
<td>$209,409</td>
<td>$179,493</td>
<td>$149,578</td>
</tr>
<tr>
<td>Annual Tons of MSW Avoided</td>
<td>893</td>
<td>1,340</td>
<td>1,786</td>
<td>2,233</td>
</tr>
<tr>
<td>Annual MSW costs avoided</td>
<td>$59,831</td>
<td>$89,747</td>
<td>$119,662</td>
<td>$149,578</td>
</tr>
<tr>
<td>Total SW Budget after PAYT</td>
<td>$287,113</td>
<td>$326,202</td>
<td>$365,291</td>
<td>$404,380</td>
</tr>
<tr>
<td>% Decrease from Current Budget</td>
<td>68%</td>
<td>64%</td>
<td>59%</td>
<td>55%</td>
</tr>
<tr>
<td>Average Taxes/ Household for Budget</td>
<td>$70.22</td>
<td>$79.78</td>
<td>$89.33</td>
<td>$98.89</td>
</tr>
<tr>
<td>Average Cost per Household for bags</td>
<td>$158.83</td>
<td>$138.98</td>
<td>$119.12</td>
<td>$99.27</td>
</tr>
<tr>
<td>Average Total Costs per Household</td>
<td>$229.05</td>
<td>$218.75</td>
<td>$208.46</td>
<td>$198.16</td>
</tr>
<tr>
<td>Total Average Savings per household after PAYT</td>
<td>$9.19</td>
<td>$1.10</td>
<td>$11.40</td>
<td>$21.69</td>
</tr>
</tbody>
</table>
• The profit from the town trash bags will more than offset the costs of disposal and ultimately decrease the budget.
• The greater the waste diversion rate, the more money that Recycleton will avoid in disposal costs.
• Since the revenues from the bag sales (at price of $1/$2 per bag) will not cover the entire solid waste budget, the average household will still have a portion of their taxes go towards supporting the solid waste budget.
• When households generate less waste, they will buy fewer town approved trash bags and save money.
• Households may not experience any financial gain from PAYT unless they reduce their waste by more than 30 percent. They can reduce waste by reusing and recycling, composting, and donating unwanted items.
• The combination of average taxes needed per household and average cost per household for bags will decrease with an increasing diversion rate. For the savings, compare total costs after PAYT under each scenario with before ($219.85 in taxes alone).
• Households should understand that they are paying for waste disposal in the town whether through buying PAYT bags, or paying taxes for the budget. Their total costs will be less with PAYT than before as long as they reduce, reuse and recycle.
• Households will have more control over their costs. The more families reduce, reuse and recycle, the more they save.
• If Recycleton adopts PAYT, there should be an enterprise or revolving fund for all MSW and recycling activities, as opposed to accruing them to the general
fund. This more clearly demonstrates to the residents of Recycleton the financial benefits of PAYT.

- In addition to the economic benefits of this program, the town can feel a sense of community by taking part in a program that benefits each other resident in town. The long-term conservation effect of recycling and creating less waste is something that people can feel good about. At first it will take a small amount of effort to adjust to this program at home, but soon it will become second nature and not feel like an effort at all.
Sample PAYT Warrant Articles

Example 1:
To see if the town will vote to authorize the Selectmen to establish and implement a mandatory “pay-as-you-throw” program and further to adopt the provisions of RSA31:95-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 sue 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-as-you-throw 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.

Example 2:
To see if the Town will vote to raise and appropri-
ate the total sum of $25000.00 to implement curbside
recycling on a weekly basis and authorize the selectmen
to adopt the provisions of RSA 31:95-c for the purpose
of accounting for the sale of designated solid waste bags
and other receipts as budgeted annually, to be used to
offset the cost of collection and disposal of residential
solid waste. Such revenues and expenditures shall be
accounted for in a special revenue fund known as the
Tilton recycling revenue fund, separate from the general
fund. Recyclables will be disposed of at no charge. Non-
recyclable solid waste must be placed in approved bags.
The first 50 bags per dwelling unit to be supplied at no
charge, additional bags to be purchased at a nominal fee.

**Example 3:**

To see if the town will vote to authorize the board of
Selectmen to establish and implement a mandatory “pay-
as-you-throw” program and further to adopt the provi-
sion of RSA 31:95-c for the purpose of accounting for
the sale of designated solid waste bags (and/or coupons
and other receipts) as budgeted annually, to be used to
offset the cost of collection and disposal of residential
solid waste and such other direct costs as budgeted annu-
ally. Such revenues and expenditures shall be accounted
for in a special revenue fund to be known as the Pay-as-
you-throw fund, separate from the general fund. Any sur-
plus in said fund shall not be deemed part of the general
fund accumulated surplus and shall be expended only
after a vote by the legislative body to appropriate a spe-
cific amount from said fund for a specific purpose related
to the purpose of the fund or source of revenue. (Major-
ity vote required)
Example 4:
To see if the Town will raise and appropriate $250,000 for the landfill capital reserve or will vote to authorize the Selectmen to institute a user fee (pay per bag) upon the use of the landfill with all the proceed going for the engineering and closure of the landfill and to adopt the provisions of F “A31:95-c to restrict the revenues from funds raised in this manner to expenditures for the purpose of landfill engineering, legal, and closure 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 the legislative body to appropriate a specific amount from said fund for a specific purpose related to the purpose of the fund and source of revenue. The suggested fee is $1.00 per bag with equivalent fee for similar amount if upon a request made in advance; arrangements are made with the Board of Selectmen. (Pay per Bag option included in Article 7)

Example 5:
To see if the Town will vote to authorize the establishment and implementation of a mandatory Pay-by-Bag tern with the revenue generated to be used to offset the cost of solid waste disposal and reduce the tax rate accordingly: and furthermore to adopt the provisions of RSA 41:9- . Establishment of fees.
Article 23: Fees for Solid Waste Disposal
To see if the Town will vote to authorize the Selectmen to establish and administer a user fee system, such as a “Pay per Bag” program, to offset the cost of disposal of the town’s solid waste. Recommended by the Solid Waste Committee
Example 6:
To see if the Town will require residents to deposit refuse in specifically designated bags to be brought to the Transfer Station Recycling Center; furthermore such bags shall be sold by the town at a reasonable price. Recommended by the Selectmen and the Budget Committee

SAMPLE Pay-as-you-throw Ordinance:

As Adopted 09-20-2010
TOWN OF RECYCLETON RULES & REGULATIONS – PAY-AS-YOU-THROW ORDINANCE ORDINANCE NO: 10-01

1.00 Authority
Pursuant to the authority of NH RSA 31:39, 47:17, 149-M, and Article 19 adopted at the March 13, 2010 Annual Town Meeting, and working in conjunction with the Town of Recycleton Refuse Disposal Ordinance, the Board of Selectmen of the Town of Recycleton do hereby enact the following:

2.00 Purpose
To implement a mandatory pay-as-you-throw program which proceeds shall be used to offset the cost of collection and disposal of residential solid waste at the transfer station.

3.00 Definitions
3.01 “Attendants” – Those person employed by the Town of Recycleton who shall be given the authority by the Operator to enforce the terms of this ordinance and
require compliance with any other rules and regulations pertaining to the transfer station.

3.02 “Commercial Haulers” – Anyone who hauls materials to the transfer station for others for a fee and has received the appropriate permit from the Board of Selectmen.

3.03 “Commercial Solid Waste” – Solid waste generated by stores, offices, restaurants, warehouses and other businesses.

3.04 “Recycleton Bags” (Bags) – Specially marked bags designed for refuse as approved by the Town of Recycleton, sold by the Town through various commercial/retail outlets.

3.05 “Industrial Solid Waste” – Solid Waste generated by manufacturing facilities within the Town.

3.06 “Operator” – Duly authorized agent running the day-to-day operation of the facility. Town of Recycleton – Pay-as-you-throw Ordinance As Adopted 09-20-2010

3.07 “Residential Solid Waste” – Solid waste derived from the normal and customary operation of residential households or dwelling units including single family detached homes, multi-family detached homes, mobile homes, condominiums, apartment buildings and other residential housing.

4.00 Disposal of Solid Waste

4.01 All Recycleton residents directly disposing of Residential Solid Waste at the transfer station are required to dispose of it in Recycleton Bags. Residential Solid Waste not in Recycleton Bags shall not be accepted at the transfer station. (Residential Solid Waste picked up by a commercial hauler shall follow the “Commercial Hauler”
requirements.)

4.02 Recyclables are to be separated and placed in designated areas as directed by the Transfer Station Attendants. These items do not need to be in Recycleton Bags.

5.00 Recycleton Bags

5.01 The retail price of bags covers fees associated with residential waste disposal and the cost of purchase and distribution of the bags. Retail price of the bags shall be set by the annual Town Meeting upon recommendation of the Board of Selectmen.

5.02 Bags are available in two sizes, 13 and 33 gallons. No other bags or containers shall be accepted for rubbish disposal.

5.03 Bags shall not be available at the Transfer Station. Bags are presently available at: (this list may change at the discretion of the Board of Selectmen without amendment to this ordinance)

Colonial Village, 54 Park Avenue, Bottleville
The Cracker Barrel, 377 Main Street, Recycleton
Mr. Mike’s, 891 Main Street, Bottleville
Aubuchon Hardware, Route 103, Bottleville
Reductionville Cooperative Market, 24 South Main Street
Hannaford’s Supermarkets, 73 Fort Knox Road, Reductionville
Shaw’s Supermarket, 20 Fort Knox Road, Reductionville

5.04 Bags shall be available at no or low cost, based on need, to low income residents through the Human Services Department. The number of bags allocated shall be based on the number used by a similar sized household which recycles. Town of Recycleton – Pay-as-you-throw Ordinance

5.05 Bags shall be made available at no cost for roadside clean-ups performed by local service organizations
and others as determined by the Board of Selectmen. Any unused bags shall be returned to the Town Hall.

6.00 Commercial Haulers

6.01 Commercial haulers are able to use the Recycleton/Webster Transfer Station

6.02 Residential Solid Waste from Recycleton residents delivered to the transfer station shall only be accepted in Recycleton Bags. Residential Solid Waste from Recycleton residents that is not in Recycleton Bags shall not be accepted at the transfer station, unless a specific exception has been granted by the Board of Selectmen in accordance with Section 8. There shall be no tipping fee charged for Residential Solid Waste delivered to the transfer station in Recycleton Bags by Commercial Haulers. The tipping fee for these loads shall be paid from bag revenue.

6.02.01 All loads from haulers shall be weighed on the truck scales. If on visual inspection by the attendant there is no significant loose trash and no significant trash in unauthorized bags, the load shall be designated as meeting the bag requirement.

6.03 There shall be no charge to commercial haulers for the disposal of recyclables, except for certain items with disposal fees as outlined in the Town of Recycleton Refuse Disposal Ordinance.

6.04 Commercial haulers shall adhere to a strict separation of wastes as directed by the operator. No loads shall be accepted which are not properly separated.

7.00 Commercial or Industrial Waste

7.01 Any acceptable waste which is Commercial or Industrial Waste generated within the Town which is not in
Recyleton Bags, shall be charged a tipping fee as outlined in the Town of Recyleton Refuse Disposal Ordinance.

7.02 Those disposing of waste from commercial or industrial facilities within the Town shall pay the same rate to dispose of recyclables as residents. There is no charge except for certain items with disposal fees as outlined in the Town of Recyleton Refuse Disposal Ordinance.

7.03 Those disposing of waste from commercial or industrial facilities within the Town shall adhere to a strict separation of wastes as directed by the operator. No loads shall be accepted which are not properly separated. Town of Recyleton – Pay-as-you-throw Ordinance As Adopted 09-20-2010

7.04 Those wishing to dispose of waste from commercial or industrial facilities with the Town shall receive a permit to do so from the Board of Selectmen.

8.00 Exemptions

8.01 Where Commercial Solid Waste and Residential Solid Waste are co-mingled in a dumpster, such mixed solid waste shall be treated as Commercial Solid Waste and shall be exempted from the Recyleton Bag requirements. Dumpsters containing such waste shall be accepted at the transfer station and charged a tipping fee as outlined in the Town of Recyleton Refuse Disposal Ordinance.

9.00 Penalties

9.01 Any person or business found to be violating any provision of this ordinance shall be deemed to be guilty of a violation and shall be fined not more than $200.00 and upon a second conviction within a period of twelve
months, shall in addition to any fine imposed, be denied the right to use said facility area for a period of time not to exceed twelve months.

9.02 Any person or business violating any of the provisions of this ordinance shall become liable to the Town of Recycleton for any expense, loss or damage occasioned by the Town by reason of such violation.

10.00 Separability

10.01 If any section, clause, provision or portion of this Ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect or impair any other section, clause, provision or portion of this Ordinance.

11.00 Ordinance in Force

11.01 This ordinance is in force effective September 1, 2010.

With amendments effective October 4, 2010.
APPENDIX X

Sample Mandatory Recycling Warning Sheet

<table>
<thead>
<tr>
<th>Warning Notice</th>
<th>Town of Colebrook Transfer Station</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Date</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Your household garbage, recyclables, or materials have been refused for the reason(s) checked below. If you are unclear about what is allowed in the transfer station please ask the operator for assistance:

- [ ] You brought non-acceptable items and or hazardous chemicals
- [ ] Your household garbage contains non-household items (such as recyclables and metals)
- [ ] Your Recyclables are not clean
- [ ] You Have not removes covers from recyclables
- [ ] Your are depositing unclean metal in pile
- [ ] Your behavior is unacceptable (such as dangerous driving, foul or threatening language)
- [ ] Other

Warning 1: The operator will refer you to the Transfer Station Handout. Once you have corrected the problem, you may return with your waste.

Warning 2: The operator will refer you to the Transfer Station Handout. Once you have corrected the problem, you may return with your waste after one month.

Warning 3: You may be denied access to the Transfer Station for up to one year.

Top Copy: Town, Bottom Copy: Customer

[Image of recycling symbols]
### Recycling Calculator Formulas

| Money saved last year/month by recycling | • Communities required to input their local per ton landfill tipping fee x number of tons recycled  
 • Calculation example: The City pays $45 per ton to landfill their trash. They recycled 1,000 tons last year. That recycling saved them $45,000 in landfill fees |
|---|---|
| Landfill space saved | • Communities provide total tons recycled  
 • Calculator input: 1 ton of recyclables saves 3 cubic yards of landfill space  
 • Calculation example: The county recycled over 13,000 tons last year. They saved over 39,000 cubic yards of landfill space. |
| Trees saved through paper recycling | • Communities provide total tons of paper recycled  
 • Calculator input: 1 ton of recycled paper saves 17 trees; 1/2 ton saves 8.5 trees  
 • Calculation example: the city of Reduceville last year recycled over 75,000 tons of mixed paper. This saved 1,275,000 trees!  
(Source: American Forest and Paper Association) |
| Gas saved through aluminum recycling | • Communities provide total tons of aluminum cans recycled • Calculator input: 1 can recycled = 6 ounces gasoline saved; 1 ton on aluminum recycled saves 3,125 gallons of gasoline • Calculation example: Last year the state recycled 15,000 tons of aluminum cans. That saves the energy equivalent of 46,875,000 gallons of gasoline! (Source Aluminum Association) |
| Energy saved by recycling aluminum cans | • Communities provide total tons of aluminum cans recycled • Calculator input: 1 can recycled = .684 kWh saved (1 can recycled = 684 watt hours (wh) saved; 1,000 wh= 1 kWh (kilo-watt hours).) • Calculation example: In 2007, the state estimates they can recycle over 10,000 tons of aluminum cans. That would save over 6,840 kilo-watt hours! (Source Aluminum Association) |
Sample Survey Questions

An effective survey should be tailored to your town’s needs. The questions should reflect what changes you are proposing to your residents. The survey questions below may or may not be applicable to your specific town, but may serve as a reference and a starting point as you begin to design your town's survey. Before you distribute your survey throughout the town, your WRAC may want to do a “field test” by only sampling a few people in the town to check for any potential wording or survey design issues.

1. State the reason why you are asking the residents to fill out this survey
   (a) Example: “The town is very interested in your opinions about recycling. The results of this survey will be used to help the town better serve its residents. Please take a few moments to complete this survey and be assured that your answers are completely confidential and your identity will not be known. Please return this questionnaire to
Town of Recycleville, 100 Reduce Street, by October 1, 2012.

2. Include more background information and reinforce the educational benefits
   (a) If for PAYT: “We are considering adopting a pay-as-you-throw (PAYT) program, which would require you to dispose of waste through the town transfer station; each household will have to pay for every bag of waste they generate by purchasing town approved bags to be sold locally for a small fee. Revenue earned from the PAYT bags will offset the disposal costs in the town budget and reduce the amount of money needed to dispose of waste that would otherwise be raised through taxes. For those who choose to reduce, reuse and recycle, your out-of-pocket expenses, plus the average taxes raised per household for the solid waste budget, will be lower with PAYT.”
   (b) If for Single Stream: “Single Stream Recycling is the process by which all fibers, plastics, tin, aluminum, glass and other containers are mixed together in one bin by households before they are taken to a materials recovery facility (MRF) to be sorted and sold as separate commodities. With this program, recycling would be more convenient because you would not need to sort and separate recyclable material at home, or at the transfer station. Fewer bins will also save space and time at home.”
   (c) If for Mandatory Recycling: “All residents would be required to separate their recyclable material
from their waste at home and sort the materials at the transfer station. This policy would allow the transfer station operators to monitor and enforce recycling by all residents. Anyone that does not choose to recycle may be subject to any penalties set by the select board. If you already recycle, this policy may not affect you. If you don’t already recycle, you will need to learn about which materials are recyclable and then designate a couple of containers for recycling at your home. Everyone will be rewarded for their efforts by doing something good for their community and by watching the budget for managing solid waste decrease when less recyclable material is filling the landfill and is instead making money for the town when it’s sold to manufacturers to make new products.”

3. Find out how people feel about recycling and trash currently. Circle your choice

• Do you currently recycle everything you can?
  A) Yes
  B) No
  C) Only some materials

• If you currently recycle, do you...
  A) Pay a private company to pick it up
  B) Take them to the recycle center
  C) Recycle some other way___________________
  ________________________________
  ________________________________
• If you don’t recycle, why?  
A) I don’t know what is recyclable  
B) I don’t believe in recycling  
C) State your reason ________________________ ___________________________________

• Do you agree that increasing recycling in your town is something that you would like to see?  
A) Yes  
B) No

• Are you satisfied with your current recycling program?  
A) Yes  
B) No

• Would you be willing to pay more for curbside recycling?  
A) Yes  
B) No

• Would you be willing to pay $1 per bag of trash?  
A) Yes  
B) No

• Would you be willing to pay $2 per bag of trash?  
A) Yes  
B) No

• Would you be willing to pay $3 per bag of trash?  
A) Yes  
B) No
<table>
<thead>
<tr>
<th>Statements About Recycling</th>
<th>Strongly Agree</th>
<th>Mildly Agree</th>
<th>Unsure</th>
<th>Mildly disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>For me household recycling is a difficult task</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not have enough time to recycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not have the space needed to store recyclables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am concerned storing recyclables will attract pests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel good about myself when I recycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not think recycling is worth the effort</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I could increase my level of recycling if all recyclables could be placed in one container</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I could increase my level of recycling if I could place all my recyclables at the curb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I recycle because I feel like it is the right thing to do for the environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I recycle because I feel that is the right thing to do for the economy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other people are not doing enough</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t think recycling provides benefits to the community or society</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t have enough space to store recyclables at home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is often difficult to know what items can and cannot be recycled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• How should trash and recycling be paid for in the town?
   A) Through property taxes only
   B) A combination of property taxes and user fees
   C) User fees where only people who make trash pay for it
   D) The resident should pay directly to the waste collection company for curbside pick-up of waste and recycling
   E) Other ________________________________

• If your community provided a recycling program where all recyclables could be placed into one collection bin would you be more likely to recycle materials?
   a) Yes
   b) No

• Do you compost food waste?
   A) Yes
   B) No

• Are you interested in learning more about home composting?
   A) Yes
   B) No

<table>
<thead>
<tr>
<th>How often do you recycle these materials?</th>
<th>Always</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardboard</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ask about any demographic information if you think it would be interesting to know which groups of people have answered your questions, and how:

• Do you own or rent your home?
  A) Own
  B) Rent

• How frequently do you vote at town meeting?
  A) Always
  B) Sometimes
  C) Never

• Do you have children currently in the school system?
  A) Yes
  B) No

Leave room on the survey for people to state their opinions. Please provide us with comments! We appreciate your input and hope to address your concerns about the proposed program:

(Please print) ______________________________________________________________

__________________________________________________________________________

<table>
<thead>
<tr>
<th>Aluminum</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin</td>
<td></td>
</tr>
<tr>
<td>Plastic</td>
<td></td>
</tr>
<tr>
<td>Glass</td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX XIII

### Sample Recycling Quick Reference Guides

<table>
<thead>
<tr>
<th>Material</th>
<th>Specifications</th>
<th>Examples</th>
<th>Earnings in 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastics (#1-#7)</td>
<td>If you can answer YES to these three questions, then it is probably recyclable. 1) Does it have a number 1-7 in the revolving arrows? 2) Is it a container? 3) Is it rigid?</td>
<td>Soda and water bottles, milk jugs, detergent bottles, yogurt containers,</td>
<td>$3,500 for recycling more than 23 tons of Plastic</td>
</tr>
<tr>
<td>Aluminum</td>
<td>Rinsed and clean (No coated aluminum or cat food cans)</td>
<td>Soda, beer and juice cans, shaving cream cans</td>
<td>$6,360 from recycling 5 tons of aluminum</td>
</tr>
<tr>
<td>Tin</td>
<td>Rinsed and Clean</td>
<td>Canned food, Pet Food, Soup and empty Aerosol Cans</td>
<td>$1,400 from recycling 7 tons</td>
</tr>
<tr>
<td>Corrugated Cardboard</td>
<td>Double or Triple Walled Cardboard Only, (No waxed cardboard, i.e. milk and o.j. containers)</td>
<td>Clean pizza boxes, shoe boxes, appliance boxes, etc.</td>
<td>$4,834 from recycling close to 35 tons</td>
</tr>
<tr>
<td>Mixed Paper</td>
<td>Clean and dry loose paper</td>
<td>Junk Mail, Office and Classroom Paper, Magazines</td>
<td>$4,250 from recycling 64 tons</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------</td>
<td>--------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Newspaper</td>
<td>All #8 newspaper</td>
<td>Newspaper</td>
<td>$1,620 from 18 tons</td>
</tr>
<tr>
<td>Glass</td>
<td>All colors and sizes of glass (no ceramics)</td>
<td>Bottles, Jars, Windows, Glasses</td>
<td>Diverted from landfill!</td>
</tr>
<tr>
<td>Yard Waste</td>
<td>Place these in the compost pile</td>
<td>Leaves, grass clippings, etc.</td>
<td>Diverted from landfill!</td>
</tr>
</tbody>
</table>

We also accept: Garbage Cans, Kiddie Pools, Plastic Toys, Milk Crates, Plant Pots, Clean 5-Gallon Pails, Boat Wrappings, Motor Vehicle Batteries, Rechargeable Household Batteries, Scrap Metal (fees may apply), Motor Oil, Tires (fees apply), Yard Waste, Construction and Demolition (fees apply), Burn Pile, Household Hazardous Waste on Hazardous Waste Day (solvents, stains, oil-based paints, pesticides, etc.) Please see recycling attendant about where to put these special items.

### NOT Recyclable

Styrofoam, plastic bags (bread, chip, frozen vegetable, sandwich and trash bags), plastic wrap or film, hardcover books, rope or twine, light bulbs, ceramic dishes, diapers, clothing and shoes, kitty litter, wood, weiddles and sharp objects, paper napkins or paper towels

### More Information

For more documents and forms concerning recycling, household hazardous waste, home composting, and other topics please visit the Recycling Facility page on the town website at:  
[www.recycling.org](http://www.recycling.org)

### The Recycling Facility, located at 284 Recycling Road

- **Wed. 7 am to 6 pm**
- **Sat. 7 am to 1 pm**
- **Sun. 12 pm to 5 pm**
- Closed Holidays
DO Recycle

Paper, Plastic, Metal, & Glass can all be mixed together.

PAPER
- All Clean Cardboard, Paperboard & Pizza Boxes
- Newspapers & Inserts
- Magazines
- Mail & Catalogs
- Paper Bags
- Office Paper & Envelopes
- Wrapping Paper
- Phone Books
- Hard Cover Books
- Paper Plates (clean)
- Milk & Juice Cartons
- Drink Boxes & Aseptic Containers
- Shredded Paper (put in clear bags)

PLASTIC
- Water Bottles
- Milk Jugs
- Detergent Bottles
- All rigid containers marked with a #1-#7 (except Styrofoam)
- Plastic Grocery & Large Shopping Bags marked with #2 or #4

METAL
- Tin Cans
- Aerosol Cans (empty)
- Aluminum Cans/Foil
- Pots & Pans

GLASS
All glass Bottles & Jars (all colors)

All Containers Must Be EMPTY

Don’t Recycle

Note Size!
Nothing bigger than a 5-gallon bucket

Trash/Garbage
Needles & Sharps
No Large metal parts
Car, boat, truck, etc.
Wood/lumber
Propane, helium or other gas cylinders
Piping, plastic or metal
Clothing & shoes
Plastic bags:
- frozen vegetable
- bread bags
- newspaper bags
- potato or snack
- sandwich
- trash bags
Plastic wrap or film
Garden hoses
Batteries, alkaline or button-cell
Boat shrink-wrap/tarps
Bubble-wrap
Diapers
Envelopes that are plastic or Tyvek®
Food (compost it)
Kitty litter
Knives
Light bulbs (any type; return CFLs to store)
Paper napkin/towels
Styrofoam® or polystyrene foam (even if marked #6)
Toys
Vinyl siding
Waxed paper / boxes

For more information:
www.ecomaine.org
773-1738.
Know which Plastics to Recycle

With the exception of Styrofoam®, your plastic is recyclable if the answers to all three questions are YES:

1. Does it have a number (1-7) in the middle of the chasing arrows?

2. Is it rigid or hard? (However, large shopping bags are recyclable)

3. Is it a container?

No hazardous waste — ever!

Items categorized as “hazardous waste” must be disposed of carefully and cannot be included with your trash or with single-sort recycling. Such as:

- Ammunition
- Anti-freeze
- Button-cell batteries
- CFL light bulbs (compact fluorescent lights)
- Chemicals
- Computers & related parts
- Fertilizers
- Fluorescent bulbs (of any kind)
- Fuel (gasoline, diesel, kerosene)
- Mercury (in any amount)
- Oxygen tanks
- Paint thinner
- Pesticides
- Propane tanks
- Rechargeable batteries
- TVs

However, area transfer stations and recycling centers often offer programs to take this kind of waste.

For more information,

- Go to www.ecomaine.org
- Call ecomaine at 773-1738
- Call your town office

ecomaine

Printed on 100% post-consumer recycled paper.
This material is based upon work supported under a grant by the Utilities Programs, United States Department of Agriculture. Any opinions, findings, and conclusions or recommendations expressed in this material are solely the responsibility of the authors and do not necessarily represent the official views of the Utilities Programs.

RCAP Solutions is an equal opportunity provider and employer.