

SOLID WASTE  
MANAGEMENT  
OPTIONS COMMITTEE

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PRELIMINARY REPORT

20 JULY 2009

SUDBURY, MASSACHUSETTS

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## COMMITTEE MEMBERS

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Craig Blake

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## EXECUTIVE SUMMARY

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The Solid Waste Management Options Committee (SWMOC) has been working on ways to improve handling of solid waste and recyclables in Sudbury since its appointment by the Board of Selectmen in the spring of 2007. In accordance with SWMOC's Mission Statement, the Committee has interviewed officials in comparable towns, executives of trash hauling companies, and an environmental consultant. We have conducted a survey of Town residents and held a public hearing.

Our research indicates the current system for handling solid waste and recyclables in Sudbury is not serving the best interests of the Town. The 80% of residents who use a private hauler are paying several hundred dollars more a year than hauler customers in comparable towns for curbside service. Multiple haulers also mean more trucks on Town streets and trash out on the streets two or three days each week. Our survey showed Transfer Station customers are satisfied with the cost of their option, however many residents cited its inconvenience.

We conclude that a Townwide system with the newest available technology—automated trucks and single-stream recycling—would save residents money, improve convenience and should significantly increase the Town's rate of recycling. Single-stream recycling permits residents to put all recyclable materials—paper, glass, plastics and metals—into a single bin and the recyclables are sorted at a recycling facility.

The SWMOC mission statement, however, precludes proposing a system that would go on the tax levy or require residents to change from their current option. Given those constraints, the Committee cannot recommend the adoption of a single-hauler, townwide, curbside, single-stream system. Such a system would require the participation of at least 60% of households to be economically viable and about 70% to achieve significant savings. It would expose the Town to financial risk, since the Town would have to guarantee a minimum participation rate. If the Selectmen choose to revisit this topic in the future or feel it would be possible to add such a service under the tax levy and require participation, SWMOC believes such a townwide, single-hauler, single-stream system could result in significant savings for the 80% of residents who now use private haulers, increase convenience and provide a strong boost in recycling rates.

The Committee does make the following specific recommendations to improve solid waste management in Sudbury:

- The Board of Health should establish and enforce solid waste management policies, including hauler registration at a minimum.
- The Town should actively encourage use of the Transfer Station.
- The Town should require a fee-based sticker to recycle at the Transfer Station.
- The Town should improve resident education on available haulers, Transfer Station operations and recycling.

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## INTRODUCTION

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The Solid Waste Management Options Committee (SWMOC) was appointed in the spring of 2007 by the Sudbury Board of Selectmen, as the result of a vote at Town Meeting in April 2006, to create such a committee to investigate solid waste options. This Committee has built on the work of a similar committee which studied and developed pay-as-you-throw (PAYT) options from 1997 to 2003.

The Selectmen set forth this mission statement for the SWMOC:

It is the intention of the Selectmen in creating this Committee to provide a mechanism for the Board to be advised on options for Town residents in making solid waste disposal decisions. This new Committee will gather, study and evaluate information that will help the Board determine if an enhanced menu of solid waste disposal options can be created that accomplishes ALL of the following objectives:

1. Significantly enhances the rate of recycling in Sudbury.
2. Offers options that reduce or maintain costs for nearly all Sudbury residents, but do not directly increase costs for any resident.
3. Allows residents to have a choice about which solid waste option they prefer, and does not force anyone to discontinue whatever option they are currently using.
4. Keeps the Transfer Station open as an attractive and self supporting option for all the current uses.
5. Is not an unreasonable management or administrative burden on Town staff.
6. Is not financially structured so that initiation or continuation of the program beyond the first year depends on an override or Proposition 2 ½ limits.
7. Makes the costs of each of the menu options clear to residents to aid in their decision making.

In carrying out this mission statement, the Committee over the past two years has taken several steps as mandated in our charter. We found it surprisingly difficult to obtain basic data about Sudbury, such as a list of haulers operating in town, overall trash and recyclables tonnage, and associated costs, unlike the availability of data in other towns. The Sudbury Department of Public Works (DPW) was able to provide such data about the Transfer Station.

Our findings in each of the areas listed below are detailed later in this report.

- **Sudbury Status Quo.**

We reviewed how Sudbury residents currently handle their solid waste and recyclables.

- **Solid Waste Management Options**

We reviewed the options we found to exist for financing and for operations of solid waste management systems.

- **Survey of comparable towns.**

We sought to determine the solid waste management practices of towns with demographics similar to Sudbury's. In doing so, we first selected those characteristics we felt would be

most relevant to solid waste management, such as population, land area, percentage of single-family homes, and median household income. We then narrowed our focus to six towns most closely matching Sudbury for those criteria. The Committee talked with officials in each of those towns to determine their solid waste management practices.

- **Interviews with waste haulers.**

The Committee conducted telephone interviews with four hauling companies which currently operate in Sudbury to get information on the costs and offerings of those services. We invited executives with the two largest haulers in town, Allied Waste and Waste Management Co., to meet with the Committee to discuss how other towns operate and the state of the art and the direction of solid waste disposal.

- **Interview with Environmental Consultant.**

John A. Merritt, president of Merritt Communications and author of a waste management program review study done for the Selectmen in 2003, spoke to the Committee on changes that have occurred since that study was done. He predicted more widespread adoption of automated curbside collection programs and an increase in single-stream recycling over the next 5-10 years. He also noted the \$200 per household per year savings from switching to a townwide, single-hauler system that was projected in his 2003 report should still be attainable.

- **Resident survey and public hearing.**

In September 2008, the Committee conducted a survey of Town residents, available online or in paper form, on their current methods of solid waste and recyclables disposal and asked their opinion of a hypothetical townwide, single-stream system priced at \$350 annually. We received 371 responses from the Town's approximately 5,700 households. About 88% of respondents who currently use a private hauler favored the hypothetical system and 27% of current Transfer Station users said they would switch to such a system. The Committee also held a public hearing for residents in late October 2008, which was sparsely attended and drew no questions. It was carried live and rebroadcast on Sudbury cable access channels.

- **Research into steps the Town could take immediately.**

In addition to investigating wholesale changes in the way solid waste and recyclables are currently handled in Sudbury, the Committee looked into smaller steps the Town could take immediately, including requiring haulers operating in the Town to register with the Board of Health, changing the Town's bylaws to better regulate trash and considering whether to require a "recycling only" sticker for residents who use the Transfer Station just for their recyclables.

Each of these areas will be covered in greater detail in the following sections of this final report.

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## SUDBURY STATUS QUO

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SWMOC found a serious lack of information available on the volume of solid waste and recyclables generated by Sudbury residents. We could obtain no credible current or historical data on the tonnage of waste or recycled material being handled by private haulers servicing Sudbury. The DPW estimated that about 80% of the households in Sudbury contract with a private hauler.

Data on solid waste and recycled material handled at the Transfer Station is available and is reported annually to the Massachusetts Department of Environmental Protection. Detailed information for the years since 2002 is available on the tonnage of various recyclable materials handled by the Transfer Station.

Residents currently pay \$125 a year for a Transfer Station sticker, and must use pay-as-you-throw (PAYT) bags for solid waste, priced at \$1 for a 15-gallon size and \$2 for a 30-gallon size, available at Town retailers. No sticker is required for residents depositing only recyclables at the Transfer Station or for residents disposing of such waste as latex paint, mattresses or television sets for which a per-item disposal fee is charged. The Board of Health has periodically held collection days for certain hazardous waste material such as pesticides, chemicals and oil-based paints.

In an effort to obtain information from private haulers operating in Sudbury, SWMOC asked the Board of Health for a list of haulers, but found there is no requirement that private haulers register with the Board of Health. We identified Allied Waste (formerly BFI), BP Trucking, Mr. Trashman and Waste Management as haulers operating in Sudbury; there may be others.

We conducted telephone interviews with these four haulers in an effort to determine the current state of solid waste/recyclables collection in town. None of the four haulers provided information on the tonnage they collect in Sudbury or on the ratio of solid waste to recyclables by volume. The information we collected on number of trucks operating in town, pricing and other factors is available in Appendix I.

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## SOLID WASTE MANAGEMENT OPTIONS

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### FINANCING OPTIONS

Options for financing solid waste/recycling systems involve some type of relationship among three parties: Town, resident and hauler. We identified four options for financing solid waste systems, and we outline some of the features of each below:

#### **I. Private Subscription**

This system, currently used in Sudbury, features a direct relationship between residents and haulers, with little or no Town involvement.

- Competition among haulers
- Minimal or no cost to Town, depending on licensing requirements
- No economies of scale realized by residents
- Residents can negotiate for desired services with hauler
- Recycling and trash data reports unavailable unless required by Town
- Residents have the responsibility to contract for service

#### **II. Tax-Based Service**

Under this system, the Town contracts with a hauler to provide service or the Town provides service directly. Residents pay for it in their taxes and have little contact with the hauler. It would be similar to the public school system; every resident pays for the system, but residents who want could find another hauler just as they can use private schools.

- Solid waste management becomes a municipal service, like snow plowing
- Economies of scale
- Town has control of the operations within its borders
- Town can specify rates and services in its contract
- Service is subject to budget constraints, particularly Prop 2 ½
- Some administrative costs to Town if service is contracted out; major costs if Town operates service
- Fewer options for residents
- Residents do not have to negotiate with haulers

#### **III. Fee-Based or Enterprise Fund Service**

Sudbury currently operates the Transfer Station under this model. Solid waste/recycling service is not included on the tax levy nor is use of the selected hauler mandatory for residents.

- Not subject to budget constraints of Prop 2 ½
- Revenue stream is uncertain; Town may have to cover shortfall
- Residents can opt out
- Economies of scale if widespread participation
- Requires a critical mass of users to achieve financial benefits
- Funded by users

- Town oversight
- Town can specify rates and services in its contract
- Some Town administrative costs
- Residents do not have to negotiate with haulers

#### **IV. Franchise System**

This option is comparable to a cable television franchise. The Town awards a license, with specific service requirements, for trash and recycling collection to a single hauler, who is then the only hauler authorized to operate in the Town. This system is widely used in other parts of the country, but the Committee heard opinion that it would probably be considered illegal under the Massachusetts Constitution, though no such case has been brought.

- Town awards franchise license to single hauler, who pays a licensing fee
- Town can specify rates and services in the licensing agreement
- Economies of scale
- Limited administrative costs to Town
- Residents restricted to selected hauler; license would prohibit others in Town
- Residents usually pay franchisee directly

### OPERATIONS OPTIONS

Operations options for handling solid waste and recyclables fall under one of two broad categories: (1) household pickup by a hauler or (2) resident delivery to a collection site. In Sudbury's case, the latter option is the Transfer Station. Below, we outline some of the issues to be considered in handling disposable trash and recyclables; most would apply to both of these broad categories.

#### **I. Disposable Solid Waste**

- PAYT requirement with a system to price on the basis of the amount of trash disposed of
- Unlimited disposal with no pricing by volume of trash
- Special fees for special items, for example furniture, white goods
- Curbside collection versus back-door pick-up by hauler
- Frequency—how often hauler collects curbside or how many days the transfer station is available
- "Packaging"—bins, wheeled totes, garbage cans, plastic bags, other
- Shared services—Could neighbors or relatives share a curbside pickup tote or a transfer station sticker? Is there any way to police a restriction on doing so?
- Hazardous waste handling

#### **II. Recyclables**

- Curbside collection—Scheduled with solid waste pickup? How segregated from solid waste at curb and on truck?
- Single-stream recycling—Curbside option.
- Fully co-mingled, partly segregated or fully segregated.



- Weekly or biweekly or other.
- Transfer Station as recycling option with curbside trash pickup for common recyclables and particularly for valuable recyclables
- Special items requiring special handling such as compact fluorescent bulbs, batteries, electronics
- Yard waste, Christmas trees

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## SURVEY OF SURROUNDING TOWNS

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Early in 2008, the SWMOC gathered information from towns with similar demographics to Sudbury with the goal of comparing their solid waste practices with those of Sudbury and understanding the mechanisms practiced or considered for solid waste management and the relative successes of each. Information gathered was to include how solid waste disposal is currently handled and financed in these towns, and comments from the management and/or executive board of each town. The towns selected as being “most similar” to Sudbury were: **Sharon, Westford, Duxbury, Concord, Hopkinton, and Wayland**. This information gathering included telephone interviews with employees of these towns and surveys of public information, e.g. town websites.

The Committee used a screening process to identify “comparable” towns. The Committee selected several dozen towns in eastern Massachusetts as candidates likely to be “comparable” to Sudbury. Those towns were then screened based on coarse demographic data, principally total population and land area. The screening was not an absolute comparison to Sudbury; towns that matched only in population, or land area, or population density were considered as possibly comparable, for example.

About three dozen towns passed the initial screening. The Committee had selected finer demographic criteria for further screening, including total number of households, percentage of households with school age children, median household income, and percentage of households that were in single-family dwellings. Specifically excluded as a criterion for both stages of screening was consideration of a town's present solid waste disposal process as the Committee did not want a bias toward any specific disposal process.

All the towns were compared to Sudbury on a criterion-by-criterion basis, and ordered based on the absolute difference of the values of each criterion between Sudbury and the subject town under consideration, regardless of the metric involved. For example, a subject town whose population differed from Sudbury by 1000 persons, either smaller or larger, was ranked “closer” than one that differed by 1100, either larger or smaller. Each town's aggregate score was the sum of its rank orders across all the criteria; thus a low aggregate score meant that the town was overall closer, or more comparable, to Sudbury than a higher aggregate score.

The advantage of this method is that a town could be markedly different from Sudbury in one or two categories, but still rank as “comparable” to Sudbury if the rest of its categories had a low rank order. Such flexibility in the criteria provided for some diversity in comparative selections, which proved useful in leading the Committee to a wider range of possible solid waste management practices than we might otherwise have uncovered in a more homogeneous collection of towns.

After the initial evaluation of the three dozen towns was automated by computer spreadsheet, the Committee expanded the list of candidate towns to include some that had been rejected in the initial screening, and others suggested as similar to towns on the list that had “close” aggregate scores.

Several towns seemingly similar to Sudbury were eliminated from the final list as the Committee felt they were not sufficiently “comparable” to Sudbury. Weston and Lincoln were eliminated due to their land areas and populations being much smaller than Sudbury. Acton was eliminated as it has a significantly higher percentage of multi-family homes than Sudbury.

A summary of the information concerning solid waste management practices **as of March 2008** obtained from each town follows:

## SHARON

- Single town-contracted private hauler for *all* residents.
- Town bylaw allows Town to restrict solid waste pickup within Town to one hauler (Grandfathered into state law; no longer possible.)
- No transfer station.
- Commercial establishments not included in Town pickup.
- Program paid by user fees. Invoiced to residents by hauler.
- Residents currently paying \$280 per year but likely to increase due to expiration of favorable waste disposal contract.
- Town views current system favorably except for low recycling rate.
- No recycling information on town web site.

## WESTFORD

- Single town-contracted hauler for all residents.
- Town manages solid waste disposal program.
- Program funded by Town tax levy.
- Town contracts with 3 vendors, one for curbside trash pickup, one for trash disposal and one for recycling.
- White goods and bulky items picked up monthly after Residents pay for sticker.
- Home page of town web site has a link to a “New to Town” page with a “Trash and Recycling” section.
- Recently instituted user fee-based yard waste pickup/disposal program.

## DUXBURY

- 70% of population uses Town-operated Transfer Station.
- 20% uses independent third-party haulers.
- Uses PAYT system.
- Sticker required to recycle at the transfer station, sticker fee is \$25 per year.
- Haulers must have a permit from the Board of Health. Permit fee is \$225 per year.
- No list of registered haulers on the town web site.
- \$1 for 13-gallon bag; \$1.50 for 33-gallon bag.
- Subsidized with \$200,000 from Town general taxes.
- Home page of town web site has a “Transfer Station Recycling” link.
- Very little success increasing recycling by educational programs.

## CONCORD

- Town-run trash / recycling using PAYT bags/stickers.
- \$1.50 for 34-gallon bag or \$34 per trash barrel per 6 months
- Town contracts with single curbside pickup hauler to serve households that sign up for service, while leaving option for residents to use private hauler if desired.
- 3300 of 5500 households subscribe to service.
- Town curbside pickup households pay \$74 every 6 months.

- The Town's simplest (least costly) plan is \$226 annually (includes curbside pickup with one trash barrel picked up per week).
- No transfer station.
- Recycling is free and unlimited.
- Trash and recyclables picked up weekly by two different vendors.
- Haulers must have a permit from the Board of Health. Permit fee is \$75 per year.
- A list of registered haulers is available in the Board of Health section of the town web site.
- Home page of town web site has a "Recycling and Trash Information" link.
- Town manages program with three dedicated DPW staff.

#### HOPKINTON

- Single town-contracted hauler for all residents with limit on number of bags (4) that can be disposed each week.
- Apartment buildings with three or fewer units included in program. Businesses and larger rental complexes not included.
- Financially supported by tax levy.
- No transfer station but does have a "Recycling Center" open on Saturdays only that accepts recyclables plus yard waste and car batteries.
- Solid waste program monitored by DPW.
- Trash collected weekly, recyclables collected every other week.
- "Recycling Inspector" has increased rate of recycling by monitoring materials put out for trash pickup.
- Town recycles paper, glass, metal and plastics.
- Home page of town web site has a "Trash and Recycling Info Center" section.
- In process of soliciting bids for curbside pickup contractor.

#### WAYLAND

- Town-operated landfill which accepts trash (expected to close in 2009).
- Transfer station operated at landfill for recyclables.
- Solid waste program dual funded. Fixed costs such as staff pensions and benefits funded by tax levy. Operating budget funded by user sticker sales.
- Two levels of service offered by Town. Base service is for recycling only. The "full sticker" service includes trash disposal, recycling, universal waste disposal, and waste oil and yard waste drop-off and disposal.
- Cost of solid waste program expected to increase significantly once landfill is closed.
- Sticker required to recycle at the transfer station. A Recycle Only sticker is available for \$25 per year.
- Haulers must have a permit from the Board of Health. Permit fee is \$100 per truck per year.
- A list of registered haulers is available in the Board of Health section of the town web site.
- Home page of town web site has no trash or recycling information.
- Independent third-party haulers used by 50% of residents.

## SUMMARY

Common threads that were noted during the information gathering included the following:

- All communities are striving to increase recycling as means of reducing waste disposal costs.
- Town-wide contracts work when Town can dictate management of solid waste.
- PAYT programs have a higher associated recycling rate than programs which do not place any limits on material being discarded by residents.
- Townwide single hauler systems can lead to lower costs.

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## INTERVIEWS WITH WASTE HAULERS

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### INTRODUCTION

SWMOC learned that there are at least four private haulers operating in Sudbury. The two largest companies, Allied Waste and Waste Management, serve the majority of households using private haulers. BP Trucking and Mr. Trashman also serve many households. We invited representatives of Allied Waste and Waste Management to come meet with SWMOC after we had conducted telephone interviews with all four haulers. We provided a questionnaire prior to the meeting and then had wide ranging conversations in the meeting. From these interviews we learned the following:

### FACTORS AFFECTING EXTENT OF RECYCLING WITHIN A TOWN

- Single-stream systems and PAYT systems, if resident education is good and the plan is enforced, both increase the tonnage of recycling and decrease the disposal fees. Single stream drives up total recyclables by about 30%.
- Single-stream systems typically use rollable, closable recycling totes – no more lugging stuff to the street for dogs to get there first.
- Single stream does mean that the stream is not as high grade as the current Transfer Station recycling.
- Mandated PAYT also increases recycling, but not as much as single stream.
- Education improves recycling.

### OTHER FACTORS

- Haulers will do contract administration, but for approximately a 15% fee added onto the basic disposal costs.
- Provisions for picking up white goods, yard waste and Christmas trees are possible, and have associated fees. This is true for voluntary or townwide (tax levy) mandated programs.
- We suspect that the current attempts by Allied Waste to have customers sign very onerous two-year contracts is a direct outcome of their understanding of the options this Committee was investigating.
- Most residents currently using commercial collection would realize a substantial cost benefit if the Town were to go to a single hauler system. Most current users of the Transfer Station would experience some cost increase for any mandatory system.
- Typical contracts with municipalities are for 3 to 5 years.
- The large haulers have no interest in our Transfer Station for any purpose due to its inconvenient location and small acreage.
- Any contract can have white goods, yard waste, Christmas trees, etc. covered at additional costs. Even if basic service is in the tax levy, there can still be a separate fee-per-event call.
- Single stream recycling has an upfront capital cost associated with it, because all totes must be of automated-pick-up type and trucks must be equipped for automated pickup.
- Single stream recycling has added benefit that all recyclables are in a covered tote, thus eliminating unsightliness and animal problems associated with current curbside recycling.
- Tax levy contracts usually come in at 8-12% of EBITDA (Earnings Before Interest and Taxes and Depreciation and Amortization).
- Tax levy contracts are bid very competitively, because they create a monopoly for the hauler.

REASONS CITED BY HAULERS FOR TOWNS WANTING TO GET WASTE DISPOSAL OFF THE TAX LEVY:

- Disposal rates are increasing, and towns have to add that to taxes (applies more to towns which have old contracts expiring than to a new contract). However, uncertainty in future rates will always be present.
- Condo associations either need to be part of the contract or exempt from that tax levy, or else they have a legitimate complaint.
- Residents' expectations concerning non-standard disposal items need to be properly managed or disputes arise. Thus, some town administrative time ultimately is involved in enforcement/ customer service, even though the contracted hauler is the "first called."

REASONS CITED BY HAULERS WHY A VOLUNTARY "PREFERRED HAULER" SUBSCRIPTION PROGRAM IS UNLIKELY TO WORK:

- Haulers not selected will undercut on price (threat and reality).
- The town signs a contract for price based on guarantee of some percent participation. If actual number is less than the guarantee, the town is financially responsible for the difference.
- Need an oversight program to assure recycling and pickup rules are observed. This costs the town money and issues can arise among residents, hauler and town.
- Back door service (Allied Waste reported about 600-700 Sudbury households) is typically not available in townwide uniform service contracts. Trucks are different (tighter turning radius) and bonded drivers, since they entering private property. However, on a voluntary plan, need not have totally uniform service; there could be service options.
- Even if implemented such that residents must "opt out," it is still difficult to get the 60% voluntary subscription required for economic viability in a voluntary program.

HAULER RECOMMENDATIONS/ OBSERVATIONS FROM THESE CONVERSATIONS:

- Sudbury should comply with Massachusetts law and license haulers, gathering data and fees as part of this.
- Both haulers interviewed recommended licensing as a minimum first step the town should take.
- The haulers recommend pre-RFP meetings with haulers to sort out any confusions and to tighten specifications.
- Automated handling is the future. Any new program implemented should mandate automated handling. While an automated system requires greater upfront capital costs, it results in more efficient, cleaner systems with improved overall recycling and no lugging recyclables to the curbside.
- Any change in system needs to consider condominiums and small businesses.

COMMITTEE OBSERVATIONS FROM THESE CONVERSATIONS:

Both vendors we interviewed did their best to present reasons why Sudbury (or any town not currently under contract) would want to avoid going townwide. The private haulers, as became

obvious from the resident survey responses, have a much higher profit margin and much more flexibility in how they provide services when there is no townwide contract. Thus, haulers have a vested interest in preventing towns from converting to single contractor hauling. Conversion on a voluntary basis with the town guaranteeing a minimum number of households is financially risky to the town. A mandated, tax-levy, single contracted hauler program is the most efficient, least expensive way to increase total recycling and reduce overall costs. Current haulers do not want to see this happen in Sudbury, because all but one would lose out entirely, and the one getting the contract would trade their current high profit margin on individual contracts for servicing the entire town at significantly lower margin.



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## INTERVIEW WITH JOHN MERRITT

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SWMOC invited John Merritt, president of the Environmental Solutions division of Merritt Communications, to help the Committee understand trends in the solid waste industry. Merritt conducted a waste management program review for the Town, which included a survey of residents, in 2003.

Asked about future trends, Merritt told the Committee the greatest change likely in the next five to ten years will be more general adoption of automated curbside collection programs. This will be driven by the reduced staffing required, greater efficiency per vehicle per route, and reduced worker's compensation claim exposure. He also cited an increase in single-stream recycling programs in which all recyclable materials are collected in one container at each residence and sorted at a specialized facility.

On the subject of PAYT programs, Merritt noted state grant money for recycling programs has somewhat decreased since his earlier Sudbury report.

The 2003 report indicated a townwide, single-hauler program would likely result in savings of over \$200 a year for households contracting with private haulers. Merritt said if private subscription rates are still as high or higher than the \$300-\$500 range reported in the 2003 survey, savings should still be realized. In 2007 bids received by the Town of Lexington for curbside collection, to collect and haul waste ranged from \$36 to \$93 annually (that figure does not include disposal costs). With current disposal costs for a ton of waste in the mid- to upper \$80s, the per household annual cost should not be appreciably above \$200. The consolidation of the hauler industry has slowed, and competition among the remaining companies is still substantial so collection charges have not increased dramatically.

Frequent and clear outreach and education is necessary to keep residents informed of existing recycling options, he said. Any solid waste program should place the financial burden of waste generation and disposal on those generating the waste through a PAYT program or unit-based program. PAYT programs have been the best vehicle for increasing recycling rates in communities. Communities are also seeing increased recycling rates by providing larger recycling containers, implementing single-stream recycling, or both. Private haulers, he said, will do as little recycling as they can get away with.

None of the relatively few area communities which, like Sudbury, have private subscription as the primary method of waste management have recently moved away from that approach. Therefore, Merritt noted, it is difficult to compare Sudbury to other towns. One of the most difficult issues with any private subscription approach is the total absence of reliable waste or recycling tonnage data from private haulers.

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## RESIDENT SURVEY

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SWMOC conducted a survey of Sudbury residents, available online and in a paper version, in September 2008 to update residents' views on solid waste issues since the Merritt report survey in 2003. A copy of the survey is Appendix II.

SWMOC received 371 responses to the survey from the Town's 5,700 households. Households using private haulers accounted for 170 responses, and Transfer Station users for 167 responses. The remainder of the responses listed some other option for disposing of trash.

### RESULTS OF THE SURVEY

The survey found that 88% of the private hauler customers responding would participate in a hypothetical system using a single hauler and "single-stream" recycling. And 27% of the current Transfer Station users responding said they would switch to such a program. SWMOC estimated the system would cost users about \$350 a year. While the number of responses may be too small to base a final decision on, there is an indication of strong support for a less-expensive, townwide system among current private hauler users. The Committee would encourage a further polling of residents if such a system comes under serious consideration.

Cost and convenience were the primary reasons behind residents' current choice of trash disposal methods.

A substantial majority, 71%, of Transfer Station users reported they were satisfied or very satisfied with the cost of that option. Users pay \$125 for a car sticker, plus \$2 for each 30-gallon bag or \$1 for each 15-gallon bag for trash; there's no charge for leaving most recyclables. The annual cost for Transfer Station users ranged from less than \$150 to as high as \$350, with most users saying the Transfer Station cost them between \$150 and \$250 a year.

Private hauler users were less happy with the cost of their service, with only 12% saying they were very satisfied with the cost and about 40% rating their satisfaction 3 on a 5-point scale. The cost of a private hauler ranged from about \$250 to over \$1000, with most private hauler customers paying between \$450 and \$650 a year. On the other hand, private hauler customers were much more satisfied with the convenience of their service than Transfer Station users.

### PRIVATE HAULER COSTS ARE HIGH IN SUDBURY

If most private hauler customers pay between \$450 and \$650 a year as the survey showed, that rate appears to be considerably above what residents in comparable towns pay. Concord residents, for example, pay \$225 to \$250 a year. That there is room in the current private hauler contracts for lower prices became apparent to the Committee when one member, who was paying about \$625 a year for private hauler service from Allied, received a promotional offer from Waste Management of about \$480 per year, and Allied was willing to match that offer when asked.

In the comments section of the resident survey, several respondents reported an ability to negotiate pricing with their private haulers.

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## COMMITTEE RECOMMENDATIONS

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The Committee believes that a Townwide system with the newest available technology—automated trucks and single-stream recycling—would save residents money, improve convenience and should increase the Town's rate of recycling.

The SWMOC mission statement, however, precludes proposing a system that would go on the tax levy or require residents to change from their current option. Given those constraints, the Committee cannot recommend the adoption of a townwide, curbside, single-stream system. To ensure financial stability, such a system would require the participation of at least 60% of households. Otherwise, there would be a financial risk to the Town, which would have to guarantee a minimum participation rate. If the Selectmen choose to revisit this topic in the future or feel it would be possible to add such a service under the tax levy or to require participation, SWMOC believes such a townwide, single-stream system would solve most of the problems with the current, high-cost way the majority of Sudbury residents handle solid waste and recyclables.

We also conclude that a franchise system, similar to a cable television franchise, with the Town awarding a contract to a single hauler for curbside solid waste and recyclables collection for all households, would provide more efficient, lower-cost service to the Town. Such a system is widely used in other parts of the country, but it is of questionable legality in Massachusetts. Should the legal issues be resolved in the future, a franchise system is an option we recommend be explored at that time.

The Committee does make the following specific recommendations to improve solid waste management in Sudbury:

- The Board of Health should establish and enforce solid waste management policies, including, at a minimum, implementing hauler registration.
- The Town should actively encourage use of the Transfer Station.
- A fee-based sticker should be required for residents using the Transfer Station only for recycling.
- The Town should improve resident education on available haulers, Transfer Station operations and recycling.

Discussion of each of these recommendations follows.

### **The Board of Health Should Establish and Enforce Solid Waste Management Policies**

Sudbury already has a regulation requiring that all haulers register with the Board of Health. However, at this time, this regulation is not being enforced. The local Boards of Health actively regulate haulers in all of the surveyed comparable towns in which residents contract with private haulers for trash pickup.

This Committee recommends that Sudbury enforce this regulation and collect a basic set of information from each of the haulers who register with the Board of Health. At a minimum, this process would provide the Town with another revenue source and tracking and planning information about the overall state of the town's solid waste management system.

The Massachusetts General Laws (MGL) provide towns with the ability to use Boards of Health to monitor and enforce recycling- and waste-related practices.

There are two primary practices that towns are afforded through the Board of Health:

- Require hauler registration
- Enforce standard practices

## **REQUIRE HAULER REGISTRATION**

MGL Chapter 111, Section 31A states that “No person shall remove or transport garbage, offal or other offensive substances through the streets of any city or town without first obtaining a permit from the board of health of such city or town.” It continues to say that an applicant must supply “such information, on oath, as such board shall require. All such permits shall expire at the end of the calendar year in which they are issued, but may be renewed annually.”

This provision of MGL is often used to implement a “hauler registration” system whereby all haulers operating in the town are required to register with the Board of Health and provide standard information about their operations.

This Committee recommends that haulers be required to provide the following information:

- Information about number of the vehicles used to collect waste so the Town can understand the impact on the volume of traffic.
- Route plans/schedules for trucks so the Town can understand the impact on traffic.
- Regular reports (e.g., monthly, quarterly, or annual) showing the tonnage of waste and recycling handled to help the Town understand the overall waste and recycling volumes generated by town residents.
- Contact information for whom residents should talk to in the event that they have comments about the hauler’s service.
- The number of residents contracting with the hauler in any period.
- Their policies on how they deal with customers who violate any waste bans (e.g., including recyclable materials in the garbage).

Towns are permitted to include a registration fee as part of this process. This could be a flat fee used to cover administrative costs or could be a “per vehicle” fee to help offset any load being created on town resources based on the hauler’s fleet of vehicles.

As this Committee found, collecting much of this basic information is currently very difficult. This means that it is hard to get a basic understanding of what the current state of affairs is in the Town. Collecting this sort of information through a standardized hauler registration system would give the Town greater control over system safety and accountability.

## ENFORCE STANDARD PRACTICES

MGL Chapter 111, Section 31A states: “Boards of Health shall, from time to time, make rules and regulations for the control of the removal, transportation or disposal of garbage, offal or other offensive substances.” This provision of MGL is used to create minimum acceptable standards of operation that apply across all haulers operating in Town and prevent haulers from providing minimal, low priced services that negatively impact the health (physical or environmental) of the Town or its residents.

The Board of Health could set a minimum standard that requires all haulers operating in Town to provide recycling services at no extra cost. Desirable minimums for the licensing by the Board of Health could include 1) requiring all haulers to accept recycling on a regularly scheduled basis, 2) mandating a unit-based fee system whereby customers generating more trash pay higher fees, and 3) denying a permit or renewal of permit to any hauler found to have repeatedly accepted banned waste or mandated recyclables in their trash pickup. To elaborate further on these:

- If the Town mandates recycling pickup for a license, that assures all residents have recycling available. Today recycling can be priced separately and/or not provided, which lowers recycling rates for the Town. Without a license requirement, haulers have an incentive to offer lower prices by refusing recycling.
- Just as the Transfer Station uses PAYT, a hauler can be mandated to charge based on volume of trash collected, e.g. by charging extra for larger totes or overages or having a PAYT system of stickers placed on totes or bags. Both mechanisms would qualify as a “unit-based fee system.” This policy would mandate all haulers to put some form of increased cost on larger volumes of trash. This is an example of how the Board of Health can implement requirements designed to increase recycling rates and decrease trash rates.
- Board of Health could require that no permitted hauler accept a load from a customer containing prohibited Waste Ban materials. While it is illegal for individuals to include recyclable materials – including glass, aluminum cans, paper and cardboard – in their trash, the actual enforcement of this regulation is entirely left up to the municipalities. Municipalities can use the Board of Health regulations, including penalty clauses on the haulers, to enforce the Waste Bans defined by Massachusetts Solid Waste Regulations. The Board of Health could require that the haulers report repeat offenders and the Board of Health could put in place specific penalties for haulers found to not be in compliance with the regulations.

In a competitive market with multiple haulers in Town, unless the hauler and the customer see the Town as the enforcer, neither party has any incentive to obey this law. A hauler is unlikely to leave behind a load that clearly isn’t sorted if they feel that doing so could cause the customer to switch to another vendor.

By turning the Town into the enforcer, it means all haulers have the same incentive to enforce the ban and cite the Town requirement when dealing with their customers. In addition, if the Town is willing to put some teeth into these regulations and fight against any flagrant abuses, then it can give the haulers confidence that they are operating on a level playing field, where all haulers will be held to the same standard.

In addition, even the threat of enforcement has been shown to have a real impact on resident behavior. A common approach used by towns is to precede any waste ban with a high profile education campaign (articles in the newspaper, door hangers, mailings, etc.) to educate residents that enforcement will begin. And then, when the ban does go into effect, have someone from the Town travel with the haulers looking for flagrant violations and leave the offending load behind with a sticker or door hanger explaining to the resident why their load violated the ban. Towns that have used this technique in the past have seen that a very small burst of soft enforcement at the beginning of the program can have a real impact on user behavior. Some towns (like North Andover) have even used volunteers to work with the haulers and act as the enforcers during this time to reduce any direct costs on the Town.

According to MGL Chapter 40, Section 8H: "A city, town, or district may establish, by approval of the local legislative body, a recycling program for the purpose of recycling any type of solid waste including but not limited to paper, glass, metal, rubber, plastics, used tires and compostable waste. ... Any recycling program established pursuant to this section may require that all residents, schools and businesses in a city or town separate from their solid waste those recyclables designated by the local legislative body." This provision of MGL basically says that the town can create bylaws that regulate trash and recycling practices in town.

### **The Town Should Actively Encourage Use of the Transfer Station**

The Committee believes the Town should actively encourage residents to use the Transfer Station for trash and recyclables, both to improve recycling efforts and to create a participation level that will provide financial stability for the Transfer Station enterprise fund. The revenues generated from increased participation will be needed as aging equipment at the Transfer Station has to be replaced.

Among the tactics we recommend are:

- Maintain a page on the Town website with information on the Transfer Station.
- Include information on the Transfer Station in the annual Census mailing, with a form to fill out for Transfer Station use stickers.
- Develop an information sheet on the Transfer Station and distribute it to Realtors in the Town to give to new residents.

### **Require a Fee-Based Sticker to Recycle at the Transfer Station**

The Committee notes that under the current system, residents who use the Transfer Station for their trash and recyclables and who pay the \$125 annual sticker fee are subsidizing those residents who use the Transfer Station only for recycling. Residents who only drop recyclables at the Transfer Station do not need a sticker and do not pay anything to recycle, but have a direct impact on the cost of running the facility. The Committee recommends that the Town require a "Recycle Only" sticker priced to cover administrative costs and the disposal costs for recycling for those residents wishing to leave recyclables at the Transfer Station. This sticker revenue would help offset the cost of running the facility, and the situation would be more fair to those residents using the Transfer Station for all of their solid waste disposal.

There is some reason to believe that a "Recycle Only" sticker might not just be a good idea from a financial perspective, but may also be required under the Massachusetts regulations on permissible

fees which state that the only people who are allowed to “benefit” from a fee-based system are those paying the fees. The Transfer Station is funded entirely through a fee-based system (in the form of the stickers and PAYT bags). But those fees are used to pay for both the trash services that are only available to sticker holders and for other services (plastic, paper, glass, and metal recycling; oil disposal; fluorescent light bulb disposal; handling of materials from the Put and Take; etc.) that are available to all residents.

In order to come into compliance with the rules on permissible fees, the Town should make one of the following changes:

- Institute a fee-based system (e.g., a “Recycle Only” sticker) that allows use of the non-trash oriented services (our recommendation),
- Only allow users with a Transfer Station sticker access to the Transfer Station, thus eliminating the distinction between trash-services and recycling services, or
- Move the costs of the non-trash services onto the tax levy and, thus, have those services available to all residents.

To be clear, SWMOC believes that providing recycling services to all Town residents is a positive policy that helps encourage recycling. However, we do not believe that this can be funded through a fee-based system if it is available to all residents whether they pay a fee or not.

### **Improve Resident Education on Available Haulers, Transfer Station Operations and Recycling**

The Committee recommends that the Town educate residents about solid waste and recycling options:

- Establish a single page on the Town website with all information available on solid waste and recycling options in town.
- Post a list of all of the registered haulers operating in town on the Town website.  
Currently residents have to determine this on their own and have no easy way to do so. Making this information available online is one benefit of requiring haulers to register with the Board of Health.
- Provide all new residents in town with information about the Transfer Station.

When residents move into Town, they have no easy mechanism for learning about the Transfer Station, how it works, why they should use it, etc. If the Town had a new resident welcome package, this would be a great place to publicize the Transfer Station.

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## CONCLUSION

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SWMOC concludes that the current system of solid waste and recyclables disposal in Sudbury is not serving the best interests of the Town and its residents and could be vastly improved.

Residents who use a private hauler pay \$400 to \$625 a year on average, much more than residents in other towns. Concord residents, for example, pay \$225 to \$250 annually. We believe a townwide, single-hauler system is likely to come in at \$350 or less. Residents who use the Transfer Station pay \$150 to \$250 per year, but use a less convenient system than townwide, curbside service.

If a townwide, curbside service also included single-stream recycling, convenience would be greatly enhanced and recycling rates would be expected to increase significantly. The Massachusetts Department of Environmental Protection reported in 2008 that 10 communities in the state had adopted single-stream recycling. The City of Boston has phased it in by neighborhoods, and on July 1, 2009, will go city-wide. Boston expects to save about \$1 million annually, based on the reduction in trash and the 50% increase in recycling experienced in the pilot programs. In Southbridge, which implemented the program in fall 2007, recyclables increased 125% in the first three months, while disposable trash decreased by 10%.

Our survey of Town residents indicated a strong interest in a townwide, curbside service using single-stream technology. SWMOC concludes, however, that we cannot recommend Sudbury adopt such a townwide, curbside service using single-stream technology given the mission statement's prohibition on putting the system on the tax levy or making it mandatory. Our research indicated that for such a system to be financially viable, at least 60% of the households in Town would have to participate and that, to achieve significant savings, over 70% of the households would have to participate.

We feel it is likely the private haulers who operate at a very high margin in Sudbury would undercut the initial price of a proposed voluntary townwide system to prevent residents from switching. Shortly after the SWMOC resident survey with the hypothetical single-stream proposal was circulated, Allied Waste sent letters to its customers in Sudbury trying to have them sign up for a two-year contract that was difficult to break; Allied customers had previously not been asked to sign a contract.

The Town would likely have to guarantee a minimum household participation percentage for any townwide system, and if the participation was low, the Town would be financially responsible for the remainder of the contracted amount. If the Selectmen choose to revisit this topic in the future or feel it would be possible to add such a service under the tax levy and require participation, SWMOC believes such a townwide, single-hauler, single-stream system could result in significant savings for the 80% of residents who now use private haulers, increase convenience and provide a strong boost in recycling rates.

SWMOC also recommends the Town seriously consider the following specific actions that would improve solid waste management and recycling:

- We recommend that the Board of Health implement a program of registering private haulers, including a fee structure, to operate in Town pursuant to MGL Chapter 111, Sections 31A and 31B. The Board of Health should require those operators, as part of their registration, to provide regular reports on the tonnage of solid waste and recycled materials picked up in town, to be combined with Transfer Station data. The availability of such data



would be invaluable in any future efforts to restructure Sudbury's solid waste management options.

- We recommend that the Town take steps to actively encourage resident to use the Transfer Station.
- We recommend the Town require a "Recycle Only" sticker with a reasonable fee for residents using the Transfer Station to dispose of recyclables to help offset the cost of operating that facility, currently borne entirely by residents who buy a \$125 annual sticker to dispose of both trash and recyclables.
- We recommend that the Town improve resident education on available haulers, Transfer Station operations and recycling

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