

## DEPARTMENT OF PUBLIC WORKS

---

Mark L. Wetzel, P.E., Superintendent  
Pamela J. Martin, Business Manager

25 BROOK STREET  
AYER, MASSACHUSETTS 01432  
T: (978) 772-8240  
F: (978) 772-8244

### Memorandum

Date: August 22, 2104

To: Ayer Board of Selectmen

From: Curbside Solid Water and Recycling Collection Workgroup

Re: **Curbside Solid Waste and Recycling Collection Workgroup Report**



The Town of Ayer is considering the potential to provide curbside solid waste and recycling collection in the Town. The Town received a technical assistance grant from the MassDEP to assist in the evaluation of the alternatives, costs / benefits , and implementation process. A workgroup was formed and began meeting in January. The workgroup included:

2 members of the BOS ( Chris Hillman and Jannice Livingston)  
1 member of the BOH (Mary Spinner)  
1 member of the Recycling Committee (Laurie Sabol)  
1 member of the public (Barry Schwarzel)  
DPW Superintendent (Mark Wetzel)  
MassDEP Recycling Coordinator (Irene Congdon)  
MassToss Director (Tessa David)

The goals and objectives of the study are to:

- Determine what Town residents want for solid waste & recycling services
- Evaluate the potential cost savings
- Increase recycling / waste diversion / reuse
- Provide recycling opportunities to all residents and businesses

A summary of the workgroups activities to date include:

- Researched program costs, pricing structure, service components and waste and recycling tonnages for similar municipalities with curbside programs
- Developed proposed program options to be included in an RFP
- Met with area haulers to discuss the project
- Conducted two public input meetings to discuss goals, project scope and status of workgroup
- Developed and issued an RFP for curbside collection. Received 3 proposals.
- Evaluated proposals and price bids
- Developed Solid Waste budgets for various alternatives
- Prepared memo for Board of Selectmen

**Current Operation** - The Town operated a sanitary landfill until the late 1980's when the transfer station was constructed and the landfill was eventually closed and capped. The transfer station is open to the residents of Ayer and accepts municipal solid waste (MSW), zero-sort recycling, yard waste and bulk items. There are also containers for books, textiles and areas for metal disposal, oil and tires. Bulk items require an additional payment.

Household hazardous waste is not accepted at the Transfer Station but is collected at the Devens Regional Household Hazardous Products Collection Center for a small charge.

The Transfer Station is operated by the Ayer Department of Public Works (DPW) - Solid Waste Division. The Ayer Board of Health is responsible for public health related issues at the transfer station and the Board sets the permit costs and PAYT Bag charge each year.

The Town has a contract with Casella Waste Management for disposal of the MSW and recyclables. The contract with Casella expires in June 2015.

Yard waste is processed (cut up and chipped) at the Transfer Station and hauled to the DPW brush dump off of Bishop Road, where it is composted.

The Transfer Station site also includes the popular "swap shed", where residents can drop off items that they no longer need and other residents can take whatever they need. The shed does get cleaned out once per week.

There are also private trash and recycling services in Ayer, serving single family, multi family apartments, condominium complexes and commercial businesses. These services include curbside collection for both MSW and recycling, and dumpsters. Waste Management currently has over 1100 customers in Ayer. Their current annual charge, including fees, is \$516 for weekly pick-up. This results in an approximate cost to these residents of \$570,000.

**Budget and Costs** - The FY 15 budget for the DPW Solid Waste Division is \$491,847. This includes labor and related costs, utilities and maintenance, disposal of MSW and recycling, landfill monitoring and debt service on capital improvements. Approximately \$100,000 of the budget is related to the disposal of the waste.

The Solid Waste Division is an "enterprise fund" which establishes a separate accounting and financial reporting mechanism for municipal services which charge a fee in exchange for goods or services. Revenues and expenses of the service are segregated into a fund with financial

statements separate from all other governmental activities. The Transfer Station fees are established by the Board of Health and include a permit fee, Pay As You Throw (PAYT) bag cost and a rate schedule for bulk items. The FY15 fees are:

|                 |        |
|-----------------|--------|
| Resident Permit | \$80   |
| Senior Permit   | \$50   |
| Second Permit   | \$20   |
| Large PAYT Bag  | \$2.00 |
| Small PAYT Bag  | \$1.00 |

There are no additional fees for recycling and yard waste disposal.

The Solid Waste Budget does receive a General Fund subsidy to offset the difference in the budget and the amount received from the fees and PAYT receipts. The subsidy in this year's budget (FY15) is approximately 44% of the budget total.

**Ayer Solid Waste Demographics** - The Town of Ayer is relatively small; 9.6 square miles with a population (2010 census) of 7,427 people. Based on the FY 13 data provided by the Town Assessor, the Household Unit Summary is as follows:

| USE                    | PROPERTIES   | UNITS        |
|------------------------|--------------|--------------|
| Single Family          | 1,495        | 1,495        |
| Condominium            | 491          | 491          |
| Mobile Home            | 9            | 66           |
| Multiple Dwellings     | 28           | 129          |
| Two Family             | 211          | 422          |
| Three Family           | 50           | 150          |
| 4-8 Unit Apt. Building | 61           | 305          |
| 9+Unit Apt. Building   | 8            | 307          |
| Mixed Use Residential  | 20           | 20           |
| <b>TOTAL</b>           | <b>2,373</b> | <b>3,385</b> |

In FY13, the DPW issues 831 regular Transfer Station permits, 448 senior permits and 154 second permits. This results in 1,279 households using the Transfer Station, approximately 38% of the households in Town. FY14 numbers are very similar.

It is unknown what the remaining households do for solid waste disposal. There are a significant number of households who have curbside pick-up by private companies. During our discussions with companies that have private services, Waste Management stated that they have 1152 customers

in Ayer. The other companies did not quantify the numbers but there are numerous companies that operate in town. In addition, apartment and condominium complexes may have private waste pick-up.

We analyzed the Town of Ayer solid waste generation, based on the Transfer Station records of recent years. Since the Town went to zero-sort recycling, the residential solid waste usage at the Transfer Station is as follows:

| YEAR           | MSW<br>Tons | Recycle<br>Tons | Total<br>Tons | Permits*    | Bags         | MSW<br>Tons<br>per<br>User | Recycle<br>Tons<br>per<br>User | Lbs per<br>Bag |
|----------------|-------------|-----------------|---------------|-------------|--------------|----------------------------|--------------------------------|----------------|
| 2010           | 805         | 264             | 1069          | 1137        | 54920        | 0.71                       | 0.23                           | 29             |
| 2011           | 643         | 355.5           | 999           | 1268        | 57425        | 0.51                       | 0.28                           | 22             |
| 2012           | 600         | 373             | 973           | 1279        | 53260        | 0.47                       | 0.29                           | 23             |
| 2013           | 803         | 370             | 1173          | 1245        | 59300        | 0.65                       | 0.30                           | 27             |
| <b>AVERAGE</b> | <b>713</b>  | <b>341</b>      | <b>1053</b>   | <b>1232</b> | <b>56226</b> | <b>0.58</b>                | <b>0.28</b>                    | <b>25</b>      |

\* Number of permits does not include secondary permits.

Number of bags is based on revenue / cost per bag

Currently, 63% of the permits are regular and 37% are seniors. The percentage of senior permits has grown in the past few years. This is important as the cost of the senior permit is much less (\$50 vs. \$80) and if the trend continues, the permit costs will need to be adjusted to account for the decline in revenue.

**Curbside Collection in Massachusetts** - While every community is unique, it is useful to review what other towns in Massachusetts have for curbside collection process and costs. Using the MassDEP database, there are about a equal number of Massachusetts towns with curbside and drop off Solid Waste / Recycling. However, the curbside appears more prevalent in the larger cities and towns, as one would expect.

#### Municipal Solid Waste Services for Residents (MADEP 2006)

| Service                 | Curbside Collection                        | Drop-Off Facility                          | Private Subscription                    |
|-------------------------|--|--|---|
| Recycling<br>Collection | 163 Municipalities<br>4,960,000 population | 169 municipalities<br>1,200,000 population | 19 Municipalities<br>190,000 population |
| Trash<br>Collection     | 166 Municipalities<br>4,970,000 population | 150 municipalities<br>1,060,000 population | 35 Municipalities<br>320,000 population |

In reviewing the 2013 MA DEP data, there are a wide variety of alternative in both collection methods, frequency and fees. It was difficult to identify any trends or data that would be useful to Ayer in evaluating curbside collection and related fees. However, the information in the database would be useful if Ayer moves towards implementation and establishing a fee structure.

**Curbside Proposals** - In order to determine the costs for implementing a curbside collection program, the workgroup prepared a Request for Proposals (RFP). The RFP included submittal of a qualifications / technical proposal and price proposal. The proposal process was in accordance with Massachusetts GL 30B procurement. The proposal required pricing for a 5 year period for the following alternatives:

Carts: Price for the hauler to purchase and supply 48 gallon trash cart and 96 gallon recycling carts for the 5 year contract.

Option 1: Trash and recyclables delivered to Ayer Transfer Station. The Town will use its own disposal and recycling processing contract.

Within Option 1 there are a few alternatives.

- a. Recyclables picked up weekly
- b. Recyclables picked up every other week (EOW)
- c. No carts (residents will put out PAYT bags or buy their own carts)
- d. 2000 & 1000 participating households quotes

Option 2: Trash and recyclables collected and delivered to haulers chosen licensed disposal.

Within Option 2 there are a few alternatives.

- a. Recyclables picked up weekly
- b. Recyclables picked up every other week (EOW)
- c. No carts (residents will put out PAYT bags or buy their own carts)
- d. 2000 & 1000 participating households quotes

Option 3 : Provide prices for additional services including municipal buildings and price list for bulky items to be collected at the curb.

Three proposals were received on June 26, 2014. Price proposals were opened at the workgroup meeting on July 17. Proposals were received from Waste Management, GW Shaw and Son and Republic Services. We requested prices for up to 21 different items / options. The price proposals were different for all three. The summary of price proposals is attached. In general, the price proposals ranged from a low of \$277,920 for 2000 households to a high of \$399,080. However, they all included or excluded various items, such as cart costs, disposal costs, overflow bags etc. The

submitted prices were used in developing the total solid waste budget for the Town, depending on the specific alternative.

It should be pointed out that only GW Shaw submitted a price for 1000 household curbside collection, which would be the likely scenario if the Town selected the drop-off (Transfer Station) and curbside alternative. In addition, there were no differences in the costs for weekly recycling pick-up versus every other week recycling pick up.

**Public Input:** The workgroup conducted two public input meetings in order to keep the residents of Ayer informed on the workgroup progress and to get input on from the community. The first meeting was held on March 20, 2014 in the Great Hall at Town Hall. The meeting was broadcast on Ayer Public Access Channel and over 105 residents attended. There was a brief presentation regarding the project, workgroup and progress and the majority of the meeting was devoted to resident comments. The input was overwhelmingly in favor of keeping the Transfer Station open and there were concerns with curbside related to trash in the roads, ability of people to place carts on the side of the road, the cost to small SW generators and other potential problems.

A second public input meeting was held on July 31, 2014 at Ayer Town Hall in the Great Hall. This was also televised on APAC and well attended by over 80 residents. Again the comments were in favor of the Transfer Station operation.

The presentation slides and a summary of the comments is attached in the appendix of this report.

**Benefits, Advantages and Disadvantages of Curbside Solid Waste Collection:** In evaluating the feasibility of a curbside program in Ayer, the benefits to the community were identified. In addition, the disadvantages and problems with a curbside program were also identified and many of these issues were raised in the Public Input meetings.

The advantages to the Town of Ayer include:

- Added Town service for the residents who subscribe to curbside or don't want to drop off at Transfer Station
- Some residents may save money
- More control over Town-wide solid waste / recycling
- Reduce carbon footprint
- Increase recycling

The disadvantages are:

- Cost may increase for some residents
- Disposal of bulk items is must be scheduled
- Actual costs could take several years to properly budget

- DPW will need to manage the Contractor
- Still need Yard Waste disposal operations
- Could be difficult for some elderly residents
- Could create roadside litter due to spillage
- Some residents prefer the Transfer Station
- Swap shed is a good way to recycle goods

**Costs of Alternatives** : Costs for three different alternatives were developed based on the current (FY15) Solid Waste budget and the price proposals received in the waste collection proposals. The workgroup did get costs for curbside collection with every week recycling and every other week recycling but there was no difference in costs.

The costs were developed for comparison purposes. There are a number of variables that could impact the specific costs for both the Transfer Station and curbside for FY16 and beyond.

- Our contract with Casella Waste Management at the Transfer Station is up at the end of this fiscal year and we will be soliciting proposals for the next 3 to 5 years, is the Town continues with the Transfer Station operation.
- All of the Curbside proposals submitted would need to be negotiated for various items such as pick up at municipal buildings, bulk waste items and overflow containers/ bags.
- The Town would need to refine who is eligible for curbside pick-up and what is the opt-in / opt-out policy and procedure.
- Is the Town buying and managing the carts or should it be included in the Curbside contract.
- As the Town has no historical costs for operation of a curbside collection system in Town, there could be unexpected/ unknown items that could increase or decrease the estimated costs.

The costs for the various alternatives is shown on the following table. The costs are based on the budget structure and costs that the DPW Solid Waste Division uses with additional line items for Transfer Station capital items, curbside collection services, purchase of carts, and decommissioning of the station in the "curbside only" alternative. The costs and assumptions have been reviewed by the Ayer Town Accountant.

| Alternative |  | Annual Budget | Number of Users | Est. Cost per Household | General Fund Subsidy | Est. Cost to Rate Payer |
|-------------|--|---------------|-----------------|-------------------------|----------------------|-------------------------|
|             | FY15 Solid Waste Budget  | \$ 491,847    | 1245            | \$395                   | \$216,000            | \$222                   |
| 1           | FY16 Transfer Station  | \$560,978     | 1245            | \$451                   | \$220,000            | \$274                   |
| 2           | Transfer Station and 1000 Curbside Households - Weekly Recycle |               |                 |                         |                      |                         |
|             | Transfer Station   | \$467,085     | 1000            | \$467                   | \$104,630            | \$362                   |
|             | Curbside   | \$515,033     | 1000            | \$515                   | \$115,370            | \$400                   |
|             | TOTAL  | \$982,118     | 2000            | \$491                   | \$220,000            | \$381                   |
| 3           | All Curbside 2000 Households - Weekly Recycle                  | \$968,594     | 2000            | \$484                   | \$220,000            | \$374                   |

The table shows, for comparative purposes, the total cost per user, based on the estimated annual budget and the estimated number of users. The table also includes a General Fund subsidy similar to the subsidy in the current budget. This varies from year to year depending on the revenues and if there is an available surplus from the previous year. the last column (Cost to Rate Payer) is the estimated cost to each user, with the General Fund Subsidy. This would be the average cost that that would need to be collected in rates and fees.

It is also assumed that the solid waste generation per household will remain relatively consistent in the curbside alternatives. If the waste volume increases, the disposal cost will increase, resulting in a higher per household cost.

As the table shows, the lowest per household cost is the Transfer Station operation at \$451 per user per year. The increase in costs from FY15 to FY16 are related to the delayed capital improvements (paving and garage). In Alternative 2, it is anticipated that the number of transfer station users will decrease in favor of curbside collection. If the number of transfer station users decreases significantly, the cost per user for Transfer Station will go up and the cost for curbside will go down.

The Cost to Rate Payer, as discussed, includes the General Fund Subsidy. As the total cost increases and the General Fund subsidy remains constant, the cost to the rate payer increases, which will result in increased charges. Currently, the Transfer Station users pay an average of \$222 dollars for FY15, which is projected to increase to \$274 per user in FY16. This is due to the implementation of the planned capital improvements at the Transfer Station.

The Cost to Rate Payer for curbside collection for the entire town, is estimated at \$374 per user in FY16, which is \$100 more than the Transfer Station only alternative, but is less than the current private rate charged by Waste Management to their Ayer customers.

**Rate Structure:** The current rate structure for the Transfer Station, as discussed above, is a flat permit rate and a PAYT bag cost. There are numerous rate structures that could be implemented



with the Transfer Station and curbside alternative and the all curbside alternative, depending on the details of how the program is set up.

With such a diverse population (age, family size, and dwelling type / size) it is difficult to develop a single rate structure that is fair to all users. It is the workgroups recommendation that if curbside collection moves forward, then a fair and equitable rate structure should be developed depending on the type of user and use of curbside or the Transfer Station

**Conclusions and Recommendation;** Based on the workgroups work to date, our **conclusions** are summarized as follows:

1. The Town's current operation for solid waste and recycling is a drop-off Transfer Station operated by the DPW. It is a Pay As You Throw based fee structure.
2. There are over 1100 households with private curbside collection.
3. The FY15 Solid Waste Budget is \$491,847 and the permit fees and PAYT charges cover approximately 44% of the budget with the remaining amount funded from the General Fund .
4. There are approximately 3,400 households in Ayer including single family, multi family, apartments and condominiums. Approximately 38% of the households(1,279) use the Transfer Station.
5. Based on two public input meetings held by the workgroup, the public was in favor of keeping the Transfer Station in operation and had many questions and concerns regarding curbside collection.
6. The current cost per User for the Transfer Station is \$395, which is estimated to increase to \$451 in FY16.
7. The costs of the Transfer Station and Curbside Alternative with weekly recycling, is estimated to be \$491 per User.
8. The costs of the Curbside Only Alternative with weekly recycling, is estimated to be \$484 per User.
9. Development of a proposed rate structure for the curbside alternatives will require a more detailed analysis of user categories and waste generation to develop a fair rate structure.

Based on the information developed in this study, the costs to implement curbside and public input, the Ayer Curbside Solid Waste Workgroup **recommends that implementation of curbside collection in the Town of Ayer should be tabled** until there is a significant change in regulations, costs, or public demand. The costs for implementing a curbside program are higher than the current Transfer Station costs and the cost to the users will increase. The public input received by the workgroup has overwhelmingly supported the Transfer Station Alternative.