



HISTORIC
FRANKLIN
TENNESSEE

ITEM #5
WRK S 02/09/10

MEMORANDUM

January 20, 2010

TO: Board of Mayor and Aldermen

FROM: Eric S. Stuckey, City Administrator *Eric*
Becky Caldwell, Solid Waste Director

SUBJECT: Residential Recycling Options

Purpose

The purpose of this memorandum is to initiate a discussion with the Board of Mayor and Aldermen (BOMA) regarding options for enhancing residential recycling within the community.

Background

For a number of years, many citizens have expressed interest in receiving enhanced recycling services from the City of Franklin. In the past, City staff has examined options to deliver the service. The City of Franklin's recently adopted Community Sustainability Plan identified increased/enhanced recycling as a high priority need. The Solid Waste Department has developed options to respond to this service need and for consideration by elected leaders (BOMA), engaged volunteers (i.e. – the Sustainability Commission), and the community as a whole. The following options have been developed to begin this dialog:

Option 1: Private service provision only. This option leaves the service entirely to the private sector. The City would lose control of the level of service for our residential waste stream and would depend on private companies to “do the right thing” when considering final disposal of commodities. The City would have no control over reporting required waste diversion information to the State.

Option 2: Retain current service model. This option leaves recycling service to the Williamson County Solid Waste Department. The method of collection would continue to be through drop-off sites. The City can allocate funds to assist with locating and building new recycling drop-off sites that Williamson County will service. The City would continue to have no control over our residential recyclable waste stream but would know the product/service is with a dependable service provider. While the City would avoid concerns surrounding final disposal of commodities, it may lose credit for diverted materials, as the State requires city entities that provide collection services to report their recycling efforts and to meet a required diversion percentage.

This option most resembles our current Sustainable Community Action Plan, Action 1: Partner with Williamson County Solid Waste to locate, build, open and service two additional recycling drop-off sites within the City limits of Franklin.

Historic information does imply that when the Goodwill store moves from the Independence Square strip center (expected to be some time during the first quarter of 2010), the County could be forced to move or eliminate this recycling drop-off site as dictated by the center's owner.



The estimated relocation cost for this option depends on land availability and acquisition costs, as well as the cost of developing the property into a contained, but aesthetically pleasing, drop-off site.

Option 3: Blue Bag curbside service. This option could be seen as a “middle of the road” choice. The City would need to purchase three (3) mini-packers (small versions of rear loader trucks) and hire three (3) Solid Waste Driver/Operators. These drivers can follow our current knuckleboom routes that collect white goods, brush and bulky items at various residences throughout the community. Blue bags, purchased by residents from local vendors, allow the customer to participate at their own will. Preliminary communication with Sumrall Recycling, the company operating the County recycling facility, indicates they could initially accept our commodities and separate them appropriately for no rebate. This allows us to request a rebate be offered when commodities reach an equitable amount of return for Sumrall Recycling. This option allows for weekly recycling service that matches our service schedule for other curbside collected waste. We would continue to directly control our residential waste stream, be positioned to verify appropriate handling and disposal of recyclables and have direct access to records indicating our diversion rates. This option, with transparent blue bags, does allow for easier detection of contamination. Additionally, we can charge one (1) monthly service fee for all solid waste services with this option.

Initial Equipment Needs: 3 Mini-Packer Trucks @ \$80,000 per truck – A lease option could be used during the pilot program

Annual Costs:

Equipment Depreciation (3 trucks)	\$ 30,000.00 (based on 8-year life)
Fleet Cost	92,789.28 (based on KB mileage)
Labor (3 positions – existing positions could be explored)	<u>158,086.65 (includes benefits)</u>
Total Annual Cost	\$ 280,875.93

Costs Avoided:

Assuming 15% of 22,246 tons diverted (3,336.90 tons):	
166.85 loads avoided (@\$91.98 per load labor cost)	\$ 15,346.86
500.55 hours avoided (average 3 hours round trip)	
18,019.80 miles avoided (108 miles round trip @ \$1.05/mile)	18,920.79
Tipping Fees Avoided (3,336.9 tons @ \$25/ton)	<u>83,422.50</u>
Total Estimated Avoided Annual Costs	\$117,690.15

Net Annual Cost **\$163,185.78**

Option 4: Blue Rollout container curbside service. This service option is becoming more popular among communities nationwide. The City would need three (3) automated side-loading trucks and three (3) additional Solid Waste Driver/Operators. The City would also need to purchase and set blue rollout containers, similar to our current black refuse containers, at each household requesting service. The City would maintain control of the residential waste stream as well as reporting for diversion. Collection of recyclables in bins does not allow for easy detection of contamination but does follow a weekly curbside



collection, which is consistent with current service levels. This option requires that we further communicate with Sumrall Recycling for details of fees and services they can offer. Additionally, this option may require us to charge a separate or additional monthly fee for recycling services.

Initial Equipment Needs: 3 Side-loading Trucks @ \$245,000 per truck – A lease option could be used during the pilot program

Annual Costs:

Equipment Depreciation (3 trucks)	\$ 92,928.00 (based on 8-year life)
Fleet Cost	325,749.60 (based on KB mileage)
Labor (3 positions – existing positions could be explored)	158,086.65 (includes benefits)
Container Costs	<u>162,000.00</u>
Total Annual Costs	\$738,764.25

Costs Avoided:

Assuming 15% of 22,246 tons diverted (3,336.90 tons):	
166.85 loads avoided (@\$91.98 per load labor cost)	\$ 15,346.86
500.55 hours avoided (average 3 hours round trip)	
18,019.80 miles avoided (108 miles round trip @ \$1.05/mile)	18,920.79
Tipping Fees Avoided (3,336.9 tons @ \$25/ton)	<u>83,422.50</u>
Total Estimated Avoided Annual Costs	\$117,690.15

Net Annual Cost **\$621,074.10**

Financial Impact

Preliminary cost estimates associated with options are provided above.

Recommendation

Feedback from the Board is sought regarding enhanced recycling efforts in general and these options in particular. The Sustainability Commission has expressed support for enhanced recycling options beyond options 1 and 2. Of the options presented, City staff recommends pursuing implementation of option #3 (Blue Bag curbside program). A target date of July 1, 2010 could be established for implementation of the Blue Bag program.



RECYCLING

Presented by:
Becky Caldwell
Solid Waste Director
January 26, 2010

ITEM #10
WRK S 01/26/10



CURRENT RECYCLING EFFORTS

2007: Started recycling plastic and aluminum from City departments

May 2008: Introduced our public education booth at special events to promote recycling

June 2008: Began enforcement of small yard waste collected curbside only when biodegradable paper bags are used; bags of yard waste diverted from landfill to Lula Lane compost site



August 2008: Started diverting metals collected curbside to
B Miller Recycling for a rebate

November 2009: Introduced Buck-a-Bag (pay-as-you-throw) to
encourage recycling

November 2009: Introduced BOPAE drop-off site at our
Century Court Transfer Station

We continue to grind brush collected
curbside into wood
chips for use at our Parks, private
businesses, walking trails,
cover at the Williamson County Landfill,
boiler fuel, etc...



SUSTAINABLE COMMUNITY ACTION PLAN 2009

“Top 10” Sustainability Needs

No. 2 Increase the level of waste recycling

“Top 10” Sustainability Practices

No. 1 Recycling Program



RECYCLING OPTIONS:

1. PRIVATE SERVICE PROVISION ONLY
2. RETAIN CURRENT SERVICE MODEL
3. BLUE BAG CURBSIDE PROGRAM
4. AUTOMATED CURBSIDE PROGRAM



OPTION 1: PRIVATE SERVICE PROVISION ONLY

- Leaves service to the private sector
- We lose control of the level of service provided to our residents
- We depend on private companies to “do the right thing” when considering final disposal of commodities
- We have no control over reporting for State required information regarding diversion
- We know this option may require our service fees to continually rise with our recent landfill tip fee increase
 - Long-term this could be expensive if the State requires a percentage of diversion we cannot meet



OPTION 2: RETAIN CURRENT SERVICE MODEL

- Most resembles Action 1 from the Waste Reduction Committee recommendations to the Sustainability Task Force
- Collection method: Drop-off Sites
- Williamson County Solid Waste provides the service – no concern about responsible disposal of commodities
- Longevity of the existing sites is directly dependent on continued support from the owner(s) of the shopping centers
(i.e. Independence Square & Williamson Square)
- The cost of this option is directly related to land availability and acquisition, plus the specific needs to develop the property into a contained, but aesthetically pleasing, site



OPTION 3: BLUE BAG CURBSIDE PROGRAM

- Blue bags purchased by residents, at local businesses, allow customers the choice to participate
- Sumrall Recycling, under contract with Williamson County, is agreeable to accept our blue bags and separate the contents
- Providing weekly collection allows us to match our level of service for other solid waste services
- Residents can use an unlimited number of blue bags for their recyclable items
- We continue to directly control our residential waste stream
 - We are positioned to verify appropriate handling of recyclables
 - We have direct access to records summarizing our diversion efforts
 - We avoid costs associated with landfill tip fees and hauling costs



OPTION 4: BLUE ROLLOUT CONTAINER CURBSIDE PROGRAM

- Blue rollout containers purchased by residents, through the City, allow customers the choice to participate
- Providing weekly collection allows us to match our level of service for other solid waste services
- We continue to directly control our residential waste stream
- We are positioned to verify appropriate handling of recyclables
- We have direct access to records summarizing our diversion efforts
 - We avoid costs associated with landfill tip fees and hauling costs
 - May require additional research to find a processing facility for sorting



RECOMMENDATION

ADOPT OPTION 3: BLUE BAG CURBSIDE RECYCLING PROGRAM



HOW CAN OPTION 3 WORK?

WHO: CITY SOLID WASTE TEAM

WHAT: PLASTICS (1-7, NO FOAM), ALUMINUM, STEEL, MIXED PAPER, OFFICE PAPER, CARDBOARD, NO GLASS

WHEN: WEEKLY SERVICE

WHERE: FINAL DISPOSAL AT WILLIAMSON COUNTY RECYCLING FACILITY ON CENTURY COURT

RECYCLABLES HANDLED BY SUMRALL RECYCLING



STEPS TO BLUE BAG CURBSIDE RECYCLING:

STEP 1: Resident purchases blue, transparent 33-gallon or smaller bags at local retailers

STEP 2: Resident prepares accepted recyclables

STEP 3: Resident places recyclables into blue, transparent bag

STEP 4: Resident ties the top on the blue bag and places it curbside next to their black rollout container on regular collection day (no limit on number of bags)

STEP 5: City Solid Waste teams collect blue bags from curbside

STEP 6: City Solid Waste teams deliver recyclables to Williamson County Recycling facility, operated by Sumrall Recycling, for processing and separation

HOW MUCH WILL IT COST?

Initial Equipment Needs – 3 Mini-Packer Trucks
@ \$80,000 per truck – A lease option could be
used during the pilot program

Annual Costs:

Equipment Depreciation (3 trucks)	\$30,000.00 (based on 8-year life)
Fleet Cost	\$92,789.28 (based on KB mileage)
Labor (3 positions – existing staff could be used)	<u>\$158,086.65 (includes benefits)</u>
	\$280,875.93



HOW WILL WE PAY FOR IT?

AVOIDED COSTS:

Assuming 15% of 22,246 tons diverted (3,336.90 tons):

166.85 loads avoided (@\$91.98 per load labor cost) \$ 15,346.86

500.55 hours avoided (average 3 hours round trip)

18,019.80 miles avoided (108 miles round trip @ \$1.05/mile) \$ 18,920.79

Tipping Fees Avoided (3,336.9 tons @ \$25/ton) \$ 83,422.50

Total Estimated Avoided Annual Costs = \$117,690.15

Net Annual Cost \$163,185.78



ADDITIONAL IDEAS FOR FUNDING:

- * Lease trucks the first year to gauge diversion**
- * Ask for help from the public in diverting waste from the landfill to increase avoided costs**
- * Research additional grant opportunities for equipment purchases**
- * Re-direct existing position(s) to reduce new positions.**



IMPLEMENTATION:

February 2010 – BOMA decides to approve implementation of Option 3: Curbside Blue Bag Recycling Program

Contact local vendors to communicate the need for residents to have access to blue recycling bags on July 1
Begin process to lease needed collection trucks
Begin public education

March 2010 – Continue public education


April 2010 – Begin process to hire three (3) Solid Waste Driver/Operators

May – June 2010 –

Take possession of collection trucks
Hire and train new personnel
Continue public education



July 2010 –

Collect the first blue bag of recyclables



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QUESTIONS

