

City of Menasha

Public Works Facility

Memorandum

Date: 7/16/2009

To: Mark Radtke, Director of Public Works

Common Council

From: Tim Jacobson, Public Works Superintendent TJS

Re: Single Stream Cart Purchase

Single Stream Recycling (Part II)

Along with cost recovery document supplied by Tom Stoffel, the Department of Public Works is submitting several documents for informational purposes. Although I am not disputing the accuracy of Tom's calculations there are a couple ingredients that are not taken into account:

1. Workers Compensation Claims; I have requested any statistics or information regarding this item from our HR Department and CVMIC representative. Based on observation, I believe there are fewer claims associated with automation versus manual handling material.
2. Streetscape; the Department of Public Works has been a strong proponent of this item from day one. We have received numerous compliments regarding "how good our streets look on garbage day".
3. Simplicity; How much easier can it get? Refuse in one cart and recycling in the other.

One document being supplied by the Department of Public Works indicated that as far back as 2003, among other things "automated recycling collection" was our vision. As anticipated, a retro-fit has been developed within the life span of our existing vehicle. I am scheduling a trip to Illinois to observe it in operation with the vendor on Tuesday, July 21st.

One option the Department of Public Works has been investigating is the possibility of the retro-fit not being a permanent attachment. This could allow Menasha the prospect of phasing the automation process. The draw back of this procedure is that 2/3 of the community would have to comply with the "no bag" policy of the MRF.

The second document is the result of a quick survey of the community in 2007. The results of the survey indicated the majority of our residents support receiving a 96-gallon cart for single stream recycling collection.

Another other important item that was not discussed at the last meeting is that the state, in an effort to balance their own budget, added a \$7.10 fee per ton to landfill refuse (but they didn't raise taxes!!). This move will eventually force local operations to start "pinching down" on the refuse portion of operations. The City of Menasha once again is ahead of the game by instituting a "volume control" system in 1997. Although this system has served us well, it may have to be tweaked to recover the added burden our state politicians have given us.

I have read the blogs and heard the questions from some residents of "why can't we just". Once again, the horrific financial burden the Utilities has strapped the taxpayers has restricted economical advancements. By adhering to the "why can't we just", the department can muddle around like good little city workers, but the cost of this action will eventually catch up to the taxpayer.

The Department of Public Works continues to recommend automating recycling collection. On this day, the 40th anniversary of man walking on the moon, you can take the "small step for man" or a "giant leap" for the taxpayers!!



Menasha

Memorandum

Date: July 1, 2009

To: Menasha Common Council

From: Tim Jacobson, Public Works Superintendent TJS.

RE: Single Stream Recycling

Several years ago the Tri – County Consortium (Brown, Outagamie & Winnebago) developed a plan to construct a Material Recovery Facility (MRF) to accept recyclables in a form known as Single Stream.

Since 1997, communities separated recyclable containers and recyclable paper products at the curb and delivered these products to the MRF in this form. Single stream recycling will allow residents to place all recyclables in one container for collection with separation occurring at the MRF. Having implemented automated refuse collection during 1994-1995 puts the City of Menasha in a unique position to make the transition to single stream recycling relatively simple.

The DPW currently collects (tips) approximately 330,876 carts on an annual basis. The recommendation to collect recyclables in a single stream fashion will simply be a duplication of a service already established for refuse collection. The financing of the additional carts is a concern. Once the purchase of carts is established, the Department of Public Works will expedite the procurement of another automated collection vehicle to accommodate the operations.

The Department of Public Works recommends issuing each serviceable dwelling a 96-gallon cart for single stream recycling. It is estimated that roughly 6,363 carts are currently being serviced on a weekly basis for refuse collection. The Department also recommends the purchase of an additional 137 carts for a total of 6,500 to account for missed dwellings, growth inventory and replacements.

The Department of Public Works has received a qualifying proposal from Cascade Engineering to provide 6,500 carts for a total cost of \$277,745.00. This cost includes the following:

1. 6,500 96-gallon carts
2. Hot stamp the City logo on the side
3. Hot stamp "recycle only" on the lid
4. Assembly and delivery to the individual dwellings

It is the contention of the DPW that hot stamping our logo will provide quick and easy identification if one of our carts mysteriously appears in another community. The City of Menasha will no longer be exclusive in the use of automated collection carts with the expansion of single stream recycling in the tri-county region. Cascade Engineering has

indicated that they will honor this price until after January 1st (fiscal period) as long as a purchase order is issued soon. This offer is being extended to the City of Menasha even though there have recently been two resin price increases.

Depending on the frequency of collection, installing single stream recycling collection does not guarantee cost savings. While the three counties are attempting to streamline the separation and marketing of recyclables, the DPW is attempting to utilize technology in the collection and compliance with delivery.

Since adopting our procedure, Menasha has collected recyclables by manually handling material at the collection point. This type of collection has limited our stops per day to roughly 450; basically the same as previous refuse collection done with a rear load collection truck. The change to automated refuse collection has increased each truck's stops per day to over 700 which allowed the elimination of one residential collection vehicle. By switching to an automated single stream collection method we anticipate the results to be similar. The DPW is also confident that the collection period of three weeks per month will be scaled back to two weeks per month, virtually duplicating the refuse routing and collection. This will afford us one more week of allowing an employee to complete tasks such as cart delivery and repairs, appliance collection, drop-off site maintenance and other odds and ends that normally get pushed to the back burner.

The automated single stream recycling collection method should motivate the City to collect recyclables on a bi-weekly basis (twice/month). This would add one week of collection compared to present operations. The stops per day should bear out the possibility of bi-weekly collection but, and this is a huge but, until the Department of Public Works can install a fifth (5) automated collection vehicle into the fleet, the strain on the equipment and personnel may prove to be too intense. Having just one spare collection vehicle supporting both refuse and recycling collection will make it difficult if not totally impossible to double collection on holiday schedules. While regular vehicle maintenance could be scheduled for a night shift, any unanticipated failures/breakdowns could result in one product or the other not being collected on its regularly scheduled day.

The final recommendations of the Department of Public Works include:

1. Aggressively pursue automated single stream recycling collection
2. Issue a purchase order for 6,500 96-gallon carts to Cascade Engineering
3. Pursue collection vehicle to accommodate automated single stream collection
4. Cautiously develop bi-weekly (twice/month) recycling collection

Cost to Recycle-as currently done-going to automated pickup

Update: 07/14/2009

Prepared by: Finance Department

MANUAL PROCESS

	<u># of Carts</u>	<u>Stops/day</u>	<u># of days</u>	<u>hours/day</u>	<u>total hours</u>	<u>cost/hour</u>	<u>Monthly labor cost</u>	<u>Annual labor cost</u>
Labor	6,363	450	14	8	112	\$ 32.11	\$ 3,596.32	\$ 43,155.84
Vehicle			14	8	112	\$ 14.84	\$ 1,662.08	\$ 19,944.96
							Total	\$ 63,100.80

AUTOMATION PROCESS

	<u># of Carts</u>	<u>Stops/day</u>	<u># of days</u>	<u>hours/day</u>	<u>total hours</u>	<u>cost/hour</u>	<u>Monthly labor cost</u>	<u>Annual labor cost</u>
Labor	6,363	700	9	8	72	\$ 32.11	\$ 2,311.92	\$ 27,743.04
Vehicle			9	8	72	\$ 14.84	\$ 1,068.48	\$ 12,821.76
							Total	\$ 40,564.80

Est. 25% increase in recycling-reduced landfill charges	\$ 3,975.00
Total Annual Savings	\$ 26,511.00

Investment in Recycling Carts	\$ 277,745.00	
Payback of investment in years		10.48

DATE August 28, 2003

TO Mark Radtke
Director of Public Works

FR Tim Jacobson
Public Works Supt.

RE Blue Bag collection option

On August 18, 2003 we were directed by the common council to recommend an alternative option to Menasha residents pertaining to the usage of blue bags for the collection of recyclables. At that council meeting we discussed most of the pros and cons of allowing for alternative collection containers.

Two other issues not discussed but worth consideration are:

- 1) Since 1994 blue bags have been the staple for the visual identification of recyclables being collected. This has simplified the collection process for the collection crews and the aspect of separation for the residents. Simplification does come with a cost to the taxpayers as the department has requested allocations of \$14-\$16,000.00 in the annual budgets since the inception of curbside collection. The question I have is does the cost of simplification outweigh the cost and frustrations of confused and/or abusive residents?
- 2) Streetscape, one of our goals by automating the refuse collection in the City of Menasha was to "**make Menasha look good on garbage day**". This task has been accomplished more so than originally anticipated and we continuously receive compliments on this. The reason for the quality of this achievement was the **elimination** of the hodge-podge types of collection containers littering the terraces every day. I fear our streetscape will be set back a decade and our community will become one of many rather than one that stands out.

If we are to provide for alternative collection container options my recommendation would be:

- 1) The Department of Public Works will issue a sticker to be placed on containers. The container is to be placed at the curb for collection with the sticker facing the street and in **full** view of collection personnel. (any garbage discovered in container with recycling sticker attached will be rudely strewn all over lawn and front porch). Funny but what if?

- 2) The container shall be **thirty six (36) gallon Rubbermaid or equivalent.**
Absolutely no containers will be allowed that are, homemade, metal, paper fiber or plastic drums that had prior use for transporting dry or liquid chemicals or any container not in complete compliance with the Department of Public Works. Containers used for collection of recycling materials shall be removed from the terrace no later than nine o'clock (9pm) the evening of collection.
- 3) If there is an overwhelming desire on the council to stop supplying blue bags to the Menasha residents, I recommend providing stickers to be placed on approved containers and blue bags for fiscal period 2004. During the course of 2004 the Department can prepare the residents for any total changes. Starting in fiscal period 2005 residents that wish to continue using blue bags will not be dissuaded but they would have to purchase their own blue or semi-transparent bags. These bags would still have to meet state specifications.

I have also made contact with KANN, the company that supplied our collection body. They have informed me that a fully automated system is on the drawing board but, "still a ways out". I am confident that the system will be developed within the operational life of our present vehicle.

If you have any questions or would like to discuss this matter in more detail feel free to call me at the Public Works Facility.

250 SURVEYS SENT OUT - 1% OF POPULATION **17 RESPONDED - 7% OF SURVEYED**

On March 27th and 28th 2007 the Department of Public Works distributed 250 refuse and recycling surveys.

The survey illustrated the success of changing refuse collection to automated trucks and carts, along with a volume control policy. As indicated in the survey for the decade between 1995 and 2005 the City of Menasha added more than 1,000 collection stops per week and still saved the taxpayers approximately \$300,000.00. This savings was accomplished by comparing the average cost of the four years (1990-1994) prior to changing to automated collection. For each year thereafter a reasonable 3% cost of living was added to the annual cost. This cost increase also reflects costs if all things such as stops per week remained stagnant. While this projected cost escalated to more than \$832,400.00, the actual cost of collecting refuse in 2005 mirrored the 1990-1994 average plus .19% more stops per week were added to the collection routes.

The survey also asked the participants to rate the quality of service provided on a scale of 1-5, with (1) being positive and (5) being negative. Thirteen of the seventeen participants responding scored the quality of service at (1)-very positive with two responding at (2) and two at (3). One of the participants responding at (3) also wrote "job well done".

Although the 250 surveys only represent 1% of the total population the responses have indicated that overall the service has made a positive impact on the community.

The second part of the survey informed the participants of the research and development being done by the tri-county solid waste consortium into "single stream" recycling collection.

The intent of "single stream" collection is to place all recyclables in one (single) container. As indicated in the survey the City of Menasha Department of Public Works would require minor adjustments for "single stream" collection. The changes would entail issuing all dwellings a 96-gallon cart (preferably a different color than blue) and utilizing an automated truck, identical to the process for collecting refuse. The advantage to the City of Menasha is that the Department of Public Works would strive to double the daily stops per day and attempt to collect recyclables bi-monthly.

Once again we asked the participants to rate the idea of "single stream" collection of recyclables the same as the refuse collection, with (1) being positive and (5) being negative. Of the seventeen participants responding 12-rated the idea at (1) very positive, 1 at (2), 3 at (3) and 1 at (5). The person rating the idea at (5) does not want another cart; otherwise the majority is in favor of more frequent curbside collection.

The Department can expand on the survey in the fall newsletter which will reach all the residents if the council feels this would provide more accurate information.

At this time the Department of Public Works is meeting with representatives from Winnebago County to discuss the feasibility of a "single stream" recycling collection pilot study being done in the City of Menasha. I believe the data collected from our efforts will be very useful for everybody involved with our community setting the standards.