City of Menasha • Office of the Mayor
Donald Merkes, Mayor
dmerkes@ci.menasha.wi.us

Menasha

Memorandum

DATE: October 3, 2013

TO: Board of Public Works

FROM: Don Merkes, Mayor

RE: Recycling Program Recommendations from the Sustainability Board

The following information is based on a report by UW Fox Valley students presented to the Menasha Sustainability Board earlier this year.

Recycling has become part of our everyday lifestyle; residents of Menasha recycle .08 tons of recyclable products per capita each year, equal to the statewide average. Unlike our neighbors, most of whom have more frequent curbside collection, Menasha has monthly curbside collection. Since the inception of automated collection some residents have requested more frequent pickups to handle volume. We would like to increase recycling pickup, however, with our current equipment we would be unable to do so without increasing staffing or decreasing other services. As an alternative we have allowed residents to place overflow container(s) out along with their regular recycling container. About 200 households per month take advantage of this option.

Studies have shown that ease of recycling results in increased participation. In fact with the implementation of single stream recycling in our city the amount of recycled material collected increased by 37.7% in one year. Currently, Menasha averages 31.0 lbs of recyclables per household when considering only curbside collection. That average increases to 36.5 lbs per household when the Public Works Recycling Facility amounts are included. In comparison, Oshkosh averages 36.1 lbs, and Neenah averages 40.8 lbs per household. Earlier this year Menasha partnered with UW Fox Valley environmental science students to collect more information on residents use and satisfaction of the recycling program in the city. The students surveyed 117 residents in multiple neighborhoods; findings included:

- 85% of residents always recycle
- 72% were happy with the service
- 60% said that more frequent pickups would make recycling easier
- 49% were willing to pay more for more frequent recycling
- The most frequent reason for not recycling was "inconvenience"

Starting in 2014, for every ton of solid waste diverted from the landfill to the recycling center the city saves $31 and reduces the need to construct new landfills. The city is moving forward with plans to further automate pickup, reduce solid waste, and increase recycling collection. We plan to do so by increasing recycling pickup, making fees more representative of actual costs, and maintaining or reducing employee hours dedicated to sanitation.

2014 Waste Reduction and Automation

- Continue vehicle replacement in July
    - Will allow most pickups of overflow refuse as part of regular route eliminating most usage of two person rear loading truck
    - Will allow most commercial pickups to be accomplished with a single person truck eliminating most usage of two person rear loading truck
- Increase cost of 96 gallon refuse container by 25 cents per pickup to 75 cents
- Reduce bulky item/overflow stickers from 6 to 5
- Encourage use of overflow containers and drop off site for recycling beyond 96 gallons per month

2015 Recycling Increase & Waste Reduction

- Increase curbside recycling to 18 pickups annual from 12 (because of changes in bulky pickup and commercial pickup this should be able to be accomplished without staffing increases)
- Increase cost of 96 gallon refuse container by 25 cents per pickup to $1

By continuing the implementation of the multi-year Sanitation and Recycling plan the city will continue to decrease operation costs, miles driven, and waste to the landfill, while increasing convenience and service levels to our residents.

Enclosure

C:\Documents and Settings\mradtke\Local Settings\Temporary Internet Files\Content.Outlook\PCWHAPM0\BPW sustainability board memo re recycling program_10-3-13.docx

Good Enough? Assessing the Recycling Habits and Attitudes in the City of Menasha

Danielle Handler and Dr. Teresa Weglarz
UNIVERSITY OF WISCONSIN-FOX VALLEY

BACKGROUND

- In January 2010, single-stream recycling collection began in the City of Menasha when Winnebago County, Outagamie County, and Brown County opened a jointly operated Single-Stream Recycling Processing Facility in Outagamie County.
- **Single-stream recycling** allows people to place recyclable paper, glass, plastics and metals in the same recycling container, reducing the need for residents to separate different types of recyclables.
- The Cities of Menasha, Oshkosh, and Neenah implemented single-stream recycling in 2010 and have used similar outlets for community education on recycling.
- The City of Menasha has approximately 6,400 recycling bins that can store up to 96 gallons of recyclable material, which gets picked up once per month.
- Before single-stream collection began in the City of Menasha, the annual average weight of residential recyclable materials collected from 2007-2009 was 866.9 tons.
- After single-stream collection began in the City of Menasha, the annual average weight of residential recyclable materials collected from 2010-2012 was 1,194.4 tons, a 37.7% increase of recycled material.
- The City of Menasha has the same recycling totals, .08 tons per capita, as statewide recycling collections in the state of Wisconsin for 2010 and 2011.

HYPOTHESIS AND OBJECTIVES

Hypothesis

Monthly curbside recycling pick-up decreases a communities recycling rate compared to communities that have more frequent recycling pick-ups per month.

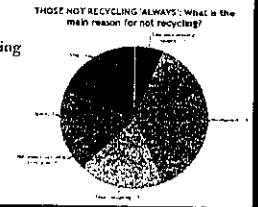
Objectives

Conduct recycling surveys of City of Menasha residents.

Compare recycling rates in neighboring communities using City and County recycling data.

SURVEY RESULTS

- Groups of students in an environmental science class at UW Fox Valley went door-to-door to conduct surveys in seven distinct areas in the City of Menasha. The 11-question survey, which assessed recycling habits, was completed by 117 residents.
- When asked how often do you recycle, 85% of surveyed residents said 'Always', and 15% said 'Sometimes.' Those answering 'Sometimes' received a follow-up question asking why, and what recyclables end up in the trash. The most **frequent reason for not recycling** was inconvenience. Residents reported that the recyclables which were most often put in the trash were paper and plastic.
- We found that **72% of the surveyed residents were happy with the recycling collection** in the City of Menasha.
- When asked what the city could do to make recycling easier, **60% requested more frequent pick-ups.**
- Residents were asked if they would be willing to pay slightly more to have recycling picked up more than once per month, 49% said 'Yes.'



CONCLUSIONS

- The majority of the City of Menasha residents surveyed reported recycling on a regular basis, however the City of Menasha has one of the lowest recycling rates in the area.
- The City of Menasha has a lower recycling rate compared to Oshkosh and Neenah. Oshkosh and Neenah have twice per month and weekly recycling pick-up, respectively. **We suggest that the lower recycling rate in Menasha may be due to less frequent recycling pick-up** (once a month). This is supported by an EPA report, "Waste Prevention, Recycling, and Composting Options: Lessons from 30 U.S. Communities," which suggests communities that have weekly refuse pick-ups and less frequent recycling pick-ups, may lead residents who have minimal storage for recyclables to dispose of their recyclables into their refuse container.
- Our findings are also supported by this EPA report which found that communities with weekly recycling collection have higher recycling rates.
- Based on our findings the City of Menasha's Mayor plans to explore strategies that encourage recycling and discourage refuse, while maintaining current employee staffing levels. The mayor has a goal for 2014 to **increase recycling tonnage by 5% and decrease refuse tonnage by 5%.** One strategy is to increase the recycling collection rate to 20 pick-ups per year.
- Our data suggests that if the City of Menasha increased the recycling collection rate to 20 times per year, the weekly average of recycled material per bin could be as much as 7.83lbs. The average weight per recycling pick-up could be 20.1lbs. This would result in a total of 1303 tons of recycled material collected in a year, **increasing the recycling rate by 9.5%.** This increase could delay costs incurred for construction of a new landfill.
- Communities with a higher recycling rate may increase both economic and environmental benefits. Recycling centers create jobs for communities and divert material from the landfill which saves local communities $34/ton in refuse tipping fees. The valuable recycled material is reused by industries, reducing the need to use greater amounts of energy to extract new raw material from the limited natural resources available.

RESULTS OF STATISTICAL ANALYSIS OF RECYCLING DATA FOR MENASHA, OSHKOSH, & NEENAH

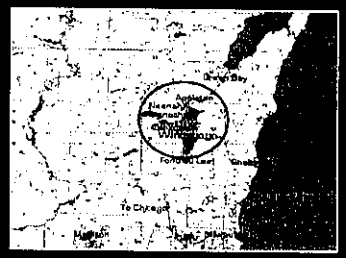
- Community recycling comparisons show that the City of Menasha has collected the lowest rate of recycled material per recycling bin, compared to the City of Oshkosh and City of Neenah since 2010. Recycling rates in Menasha also have decreased by 10.5% per bin since 2010. (See Table 1.)
- Data from the Public Works Departments of cities Menasha, Oshkosh, and Neenah was used to calculate the amount of recycled material collected per pick-up, then compared to neighboring communities. This data shows that having more frequent pick-ups of recycling has increased the amounts of material collected. (See Table 2.)
- Data collected by the City of Menasha and the City of Oshkosh was used to calculate the estimated weekly average weight of recycled material per bin, and per recycling pick-up, if recycling pick-up frequency is increased from 12 times to 20 times per year. We found total annual recycling rates could increase by as much as 9.5% with 20 recycling pick-ups per year, while recycling costs would increase by 38%. A pick-up schedule of 26 times per year would increase recycling by 17% with a 71% increase in costs (See Figure 3.)

Table 1: Average weight of Recycling Materials Collected Annually per Bin

	2010	2011	2012
Menasha	415.3lbs	400.5lbs	371.5lbs
Oshkosh	417.8lbs	424.5lbs	433.3lbs
Neenah	493.3lbs	491lbs	490.1lbs

Table 2: Weight of Recycled Material Collected

	Number of recycling bins (approximate)	Total tonnage collected in 2012	Weight of recycled material per pick-up (average)	Monthly weight of recycled material per bin (average)	Recycling collection frequency
Menasha	6,400	1188.8	31lbs	31lbs	• Once/month • 12 per year
Oshkosh	20,891	4526.2	16.7lbs	36.1lbs	• Bi-weekly • 26 per year
Neenah	8,800	2156.5	9.4lbs	40.8lbs	• Weekly • 52 per year



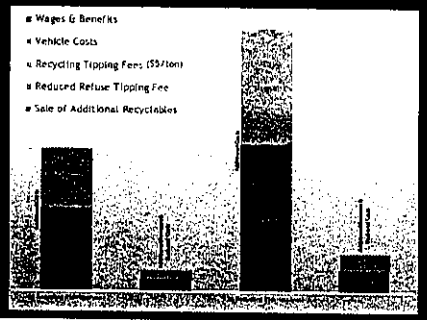


Figure 3. Additional costs and revenue for 20- and 26-recycling pick-ups per year in the City of Menasha. Additional cost for wages and benefits were calculated based on additional hours needed to collect recyclables, and additional vehicle costs were estimated for increased fuel and maintenance. Additional revenue estimates for the sale of additional recyclables were based on recycling weights from the City of Oshkosh

PARTNERS

City of Menasha's Mayor Don Merkes
Superintendent of Public Works from Cities of Menasha, Oshkosh, and Neenah
Jennifer Semrau, Recycling Specialist for Winnebago County
City of Menasha Sustainability Board