

**CITY OF BLOOMINGTON
WORK SESSION AGENDA
109 E. OLIVE
MONDAY, SEPTEMBER 24, 2012, 5:45 P.M.**

1. Solid Waste Analysis – First Interim Report (*35 minutes*)
2. Adjourn at 6:20pm



First Interim Report outlining the research and information to be examined in the Solid Waste Program Analysis

Solid Waste Analysis

First Interim Report

October 10, 2012



Respectfully Submitted by:

Alex McElroy, Assistant to the City Manager
Barb Adkins, Deputy City Manager
Jim Karch, Director of Public Works
Robbie Henson, Solid Waste Supervisor
Patti-Lynn Silva, Director of Finance
Tim Ervin, Chief Budget Officer

Reports to Council

Inception Report

✓ **First Interim Report**

Second Interim Report

Final Draft Report

Final Report

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Introduction

The intent of this report is to provide a comprehensive outline of all the information subject to examination in the Solid Waste Analysis. This includes (1) (a) program information and regional solid waste program information, (b) data gathered in each Solid Waste Program (c) cost allocation (direct & indirect), (d) historical fees for service (e) future customer satisfaction survey; (2) issues and needs in each Solid Waste Program service area; (3) collection, transport, recycling, and disposal alternatives which appear to be appropriate for analysis; (4) findings from legal, regulatory, and organization review and; (5) upcoming reports due to the City Council. The contents of this report will serve as supplementary information to the Inception Report and is intended to serve as the basis for analysis in the Second Interim Report.

1. Program Information



a. Solid Waste Practices in Central Illinois

To offer insight into the City's Solid Waste Program and current services provided within, City staff conducted a regional survey of nine municipalities all providing varying levels of Solid Waste services. The survey information represents an update and expansion of a similar community survey conducted in 2009. Through narrative summaries and a chart, it is designed to provide snapshots of how Bloomington and other Central Illinois cities handle refuse. The report should be viewed only as such and not as a comprehensive database of Central Illinois solid waste methods.

While community comparisons are made, the reader is cautioned: Because of differences in communities, the services offered, to whom it is offered, and the service providers, exact comparisons are elusive. It is the ultimate goal to provide a perfect comparison but differences confound this process. Some examples include, Bloomington will collect large household items up to two loader buckets without charge – per week – while Decatur will pick up five items total per year free of charge. Bloomington allows major apartment complexes to opt into curbside trash and recycling. No other city surveyed allows these businesses to opt into the service. Champaign and Urbana collect a fee and contract for recycling at large apartment complexes. No other surveyed community performs this service. What this survey will provide is a look at services offered by nine communities, costs to the residents and costs to city governments.

The most valued number – cost per household – proved the most elusive. Complicating any attempt at estimation for various cities is the fact that many of them provide services indirectly through contractors and only to houses and small apartments. Further, we were surprised to find that some cities do not track their services as well as Bloomington and Normal. Some officials elsewhere did not have available the total number of households served. (One city official provided an estimate, and a check with U.S. Census data showed that the estimate was greater than the total number of households in the city, let alone the total receiving that city's services.) In the report's chart, the number of "households" is the total households in a city as provided by the U.S. Census Bureau, and many of these households receive no municipal trash service; they live in apartment complexes and pay through their rent.

For this report, staff exclusively selected communities in Central Illinois because these cities generally share a culture and an economy, whereas communities in major metro areas such as Chicago or St. Louis operate in different economic climates. The Village of Morton was included even though it is much smaller than others because Morton frequently gets referenced during Bloomington City Council meetings. The following table represents a brief description of all the information gathered in the survey. The City of Bloomington's Solid Waste Program profile is provided following the table below and extensive narrative descriptions of other municipalities' solid waste program characteristics may be found in Appendix 1.a. on page 23.

| City /Population/ Households (1) | Service Provider Residents Served | Garbage Service Details | Residential Recycling Details | Large Items | Yard Waste | Residential fees (2) | City Funding Gap (3) |
|--|--|---|--|---|---|---|--|
| Bloomington 76,610 pop 30,078 hhs | City crews, All houses & apts eligible. Multiple units may opt out. | Unlimited number of cans. Manual pickup. Phasing in automated system. | Curbside every other week. Switching to carts/automated pickup. | Unlimited curbside, picked up weekly. Includes some contractor materials. | Curbside, except grass. Grass, other yard waste accepted at drop site at no charge. | \$16/mo refuse fee. | \$1,500,000. (unaudited) FY 2012. (Also counts gravel alley maintenance and weed removal.) |
| | | | | | | Lrg: \$25/bucket after 2nd bucket. | |
| Normal 52,497 pop 17,984 hhs | City crews, House & duplex-style homes only. | Tote carts required. | Automated curbside weekly replaces drop-off system. Some drop-off sites remain. | Curbside. Some drop-offs taken. | Curbside, except grass. Grass, other yard waste accepted at drop site at no charge. | \$12/ mo refuse fee. | \$2.1 million in current fiscal year. |
| | | | | | | \$60/garbage cart (mandatory) | |
| | | | | | | \$60/recycling cart (optional) | |
| Urbana 41,250 pop 15,666 hhs | Choice of 9 haulers. Fees unregulated. Houses & apts 4 units or fewer. | Details of service depend upon the hauler being used. | City contracts w/ 2 haulers -- one for apt. complexes not served by city trash contracts. | Haulers provide and set own rates. | Curbside up to haulers. Fall/Spring free leaf collection. Urbana drop-off takes all yard waste. | \$15 to \$57/mo refuse fee. | \$0. Self-funded. |
| | | | | | | \$2.50/mo recycling fee. | |
| | | | | | | Yrd dropoff: \$8 to \$11/cubic yrd | |
| Champaign 81,055 pop 30,712 hhs | Choice of 9 haulers. Fees unregulated. Houses & apts 4 units or fewer. (2) | Details of service depend upon the hauler being used. | Haulers required to provide curbside w/trash service. City contracts for cart collection at apt complexes. | Haulers provide and own set rates. | Curbside up to haulers. Fall/Spring free leaf collection. Urbana drop-off takes all yard waste. | \$14 to \$40/mo refuse fee. | \$0. Self-funded. |
| | | | | | | \$2.60/mo for apt. recycling. | |
| | | | | | | Yrd drop-off: \$8 to \$11/cubic yrd | |
| Decatur 76,122 pop 31,726 hhs | 9 haulers assigned to areas. No choice of hauler. City sets fee. Houses & apts 6 units or fewer. | Haulers take 96-gal carts at curb weekly. | Haulers must provide curbside collection of recycling tote carts. | 5 household items per year taken by hauler w/out charge. Exception: \$25 for Freon removal. | Private haulers must provide curbside. | \$14.50/ mo. for 1 cart. \$17.50 for 2. | \$2 million over three fiscal years ending in current year for tote carts. |
| | | | | | | \$2.50/mo recycling fee. | |
| | | | | | | \$1/mo for landscape waste. | |
| Peoria 115,007 pop 46,849 hhs | Contract with PDC. Houses & apts 4 units or fewer. | Unlimited curbside. Use of tote carts optional. | Monthly tote collection by PDC. | Unlimited for household items only, but not if piled onto curb. Contractor material excluded. | Curbside at no extra fee to household. | \$13/mo. refuse fee. | \$0. Self-funded. |
| | | | | | | \$50 deposit for recycling tote. | |

| City / Population / Households (1) | Service Provider/ Residents Served | Garbage Service Details | Residential Recycling Details | Large Items | Yard Waste | Residential fees (2) | City Funding Gap (3) |
|---|---|--|--|---|---|--|--|
| Springfield 116,250 pop 50,405 hhs | Choice of 4 haulers. City utility sets fee. Houses & apts 4 units or fewer. | Services vary by company. Cost increases after 1st 95-gallon can. | Haulers must provide. Picked up in 15-gallon bins. | One free pickup per year with max 3 items, only one of which may contain Freon. | Curbside taken if stickers used. Fall/Spring free collections. | \$11.75/mo for 1 cart. \$14.25 for 2. 50-cent/mo. recycling fee. \$1.50 per yard waste sticker. | \$330,000 to \$380,000 in current fiscal year. |
| Pekin 34,094 pop 14,044 hhs | City crews. Houses & apts 4 units & fewer. | Unlimited cans. Cart pickup with hydraulic lift. | Weekly collection of bins. | Curbside weekly. | Provided by the city. | No fees for refuse or bulk. \$40 to \$60 for garbage totes. \$8 for recycling bins. | \$1.2 million per year. |
| Morton 16,267 pop 6,462 hhs | Contract with PDC (Grimm Brothers) Residences 4 units and less. 4-plexes may opt out. | Weekly curbside pick w/ cans and/or carts. Co. maintains ownership of carts. Village sets rates. | Curbside every other week. 18-gal bins or 65-gal cart. | Billing per item w/ stickers. Example: \$15 for couch, \$2.70 for smallest items. | Curbside, including grass. \$2 per 32-gal bag or can. Free spring/fall drop-offs. | \$11.50/mo for 65-gal cart and./or... ...\$2.70/ sticker 32-gal can. \$2.50/mo rental for carts. | Village pays \$37,000 plus labor for seasonal yard waste drop-off; county grant of \$22,500 offsets. |

- (1) U.S. Census Bureau. Total Households, not just those served directly by city services.
(2) Differences in services provided and to whom it provided prevent exact comparison of service fees.
(3) Total spending by city government not covered by waste- or recycling-related fees, taxes or other revenue.

Bloomington

Users: The City of Bloomington is the most inclusive of the nine communities spotlighted in terms of providing service and it has a reputation statewide for its wide breath of services. Communities commonly exclude service to apartment complexes with more than 4 units. Bloomington allows apartment complex owners to opt-in for the full array of services. In Bloomington, mobile home parks are served; some communities surveyed exclude this service. Businesses must attend to their own collection needs in all the surveyed communities.

Transition: The city is in the midst of transition to automation in both recycling and household trash collection while maintaining a fairly complete array of solid waste services. In FY 2012, the City purchased four automated recycle trucks costing \$290,396 per vehicle for a total investment of \$652,158. In FY 2013, the City budgeted for and has ordered two automated garbage trucks costing \$326,079 per vehicle for a total investment of \$652,158. The garbage trucks are expected to arrive in December. Staff believes the City will need to purchase 6 automated garbage trucks in total for the provision of automated garbage service. Staff also plans to retain one manual collection crew with a rear loader vehicle and three staff members for routes which present challenges for automated vehicles. The City also budgeted for 19,000 recycle carts to be purchased at \$50.00 each and staff estimates between 12,000 and 14,000 carts will be ordered in FY 2013 depending on citizen registration numbers.

Funding Gap: The City uses General Fund revenue to subsidize part of the cost of providing solid waste services rather than placing the entire cost on the users. For the current fiscal year, the solid waste budget estimate is \$6.8 million in expenses and \$6.3 million in revenue, primarily from a household refuse fee included on water bills. (Note, though, that the solid waste division's cost also includes maintenance and weed removal for gravel alleys.) The city projects a total funding gap of \$1,304,000. For FY 2012, the actual gap is projected to be \$1,500,000. The city awaits audited, final numbers.

User fee: In 2012, the City Council increased the refuse fee from \$14 to \$16 per month per household, and city staff continues to examine ways to reduce the general revenue subsidy while maintaining service at a high level and at an attractive price to residents. The subsidy has dropped over the past decade as residents were asked to pay more directly, through user fees; the residential fee was \$5 in 2003. Automation marks one step in realizing efficiency. The actual impact of automation to the City's Solid Waste Fund is still too difficult to predict. It should reduce the number of workers needed for garbage detail, enabling the city to use them on other tasks. Safer conditions for employees and fewer worker compensation costs are also an expected result of this transition. Additional savings could also be realized if the City Council chose to discontinue City service to large apartment complexes (issue discussed in greater detail later in this report). With these savings also comes the higher capital expense for the vehicles. Future analysis must weigh the revenue gains experienced, both direct and indirect, with the capital investments.

Curbside household trash collection: The city intends to phase-in automated curbside collection. Two of the city's six pickup routes will have automated service sometime this fiscal year. The trucks use mechanical arms to pick up city issued carts, just as will be done with recycling carts. The automated system uses one person per truck as opposed to three-person teams who perform manual trash collection. The city will require cart usage within the affected routes. For an extended time, Normal had made the use of carts optional, and once it became mandatory the town noticed a dramatic increase in work efficiency.

Curbside recycling: The use of small recycling bins enabled fairly effective curbside recycling in Bloomington, but not without problems and limitations. The size of the bins is limiting and the lack of a top covering results in weather contamination and spilling of material onto the ground. Collecting the bins is labor intensive. The city utilizes a one-person truck and that worker is constantly starting, stopping, getting in, getting out, and dumping by hand. The city switches to 95-gallon and 65-gallon recycling carts by the 2012 calendar year's end. The carts have lids and wheels for cleaner storage and easy movement. Carts will be collected with

trucks equipped with mechanical arms, making collection efficient, effective, safe and clean. Like the bins, the carts allow for single stream collection, meaning the resident need not separate recyclables by type. Collection will be every other week, as is the case currently. The city is issuing one cart per household at no added expense to residents (and \$60 per cart thereafter). The goal is to ensure universal access and maximum participation. While this means up-front costs shouldered by the city budget, an obvious offset is that more recycling means less use of limited and expensive landfill space. Midwest Fiber pays the city for the recycled material based on the commodity markets at the moment. Prices fluctuate widely, but the curbside program always provides some revenue to offset costs and spares the city and residents the \$43.15 per ton landfill fee for that material.

Drop-off recycling: The city also collects recyclables from drop sites at more than 40 locations. They are school, government offices, the downtown and Illinois Wesleyan off-campus fraternities and sororities.

Curbside large items: This refers to items such as couches that do not fit into garbage containers. It is sometimes confused with “bulk,” but bulk items also include yard waste such as branches. Residents are allowed to leave large items on the curb. Pickup is weekly.

Curbside yard waste: The city picks up landscape waste, such as limbs and bush clippings, but not grass clippings, at no added cost to residents. It collects leaves with a vacuum machine during the spring and fall.

Drop-site large items, grass: The city runs a drop-off site on East Street across from the Public Works building. There, residents may dispose of appliances and landscape waste. Here and only here will the city accept grass clippings. The site accepts up to two loads from a front-end loader per household per visit without charge. Contractors are excluded. The City also offers curbside yard waste collection and during the regular leaf collection season in late fall staff utilizes 6 leaf vacuum trucks for leaf collection. The City owns a total of 8 vacuum trucks and utilizes 6 of the trucks on a regular basis during normal collection seasons.

Landfill: The city contracts jointly with Normal to dispose of household waste at the west-side McLean County Landfill at a cost of \$43.15 per ton. The facility is owned/operated by Allied Waste (aka Republic). The contract expires in 2013 and staff anticipates bidding the contract. At the current disposal rate of about 425 tons per day and barring expansion, the landfill is expected to run out of space in 2016.

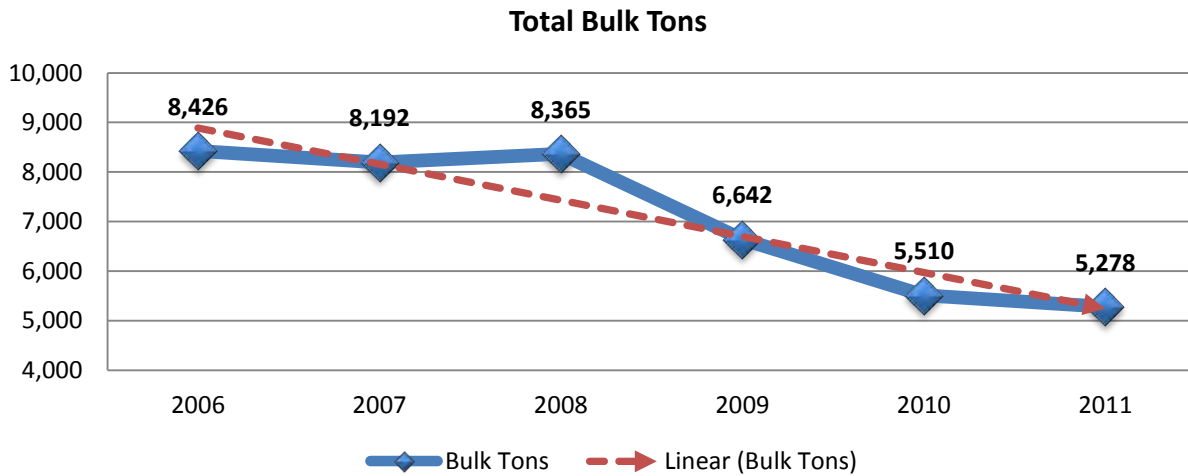
Descriptive narratives of the eight other municipalities surveyed may be found in Appendix 1.a. on page 23.

b. Workload Performance Data

Bloomington’s Solid Waste Division has tracked workload performance data in four key service areas dating back to 2006. The results of this information reveal trends within the program and provide some insight into the changing dynamic of the service delivery and operating policies. The performance data recorded by the Solid Waste Division includes the collection of bulk items, refuse/household wastes, recycle materials, and street sweeping services.

Bulk collection displays a declining trend in the volume of materials collected. While landfill fees continue to rise annually for the City, this is a positive indication that the volume of materials being transported and disposed of utilizing City resources may continue to decline. This reduction in volume may be attributed to a couple factors. In December 2009, the City changed its policy regarding the collection of bulk waste amending an unlimited bulk curbside collection to a 2 front end loader buckets per residence per week and a fee of \$25 for each additional bucket. This policy change resulted in \$34,367 in additional revenue from bulk collection services in FY 2011. The policy change also included an elimination of free collection of sod, dirt, concrete, rock, and shingles. This material gets extremely heavy, and landfill fees are paid by the ton. Instead residents

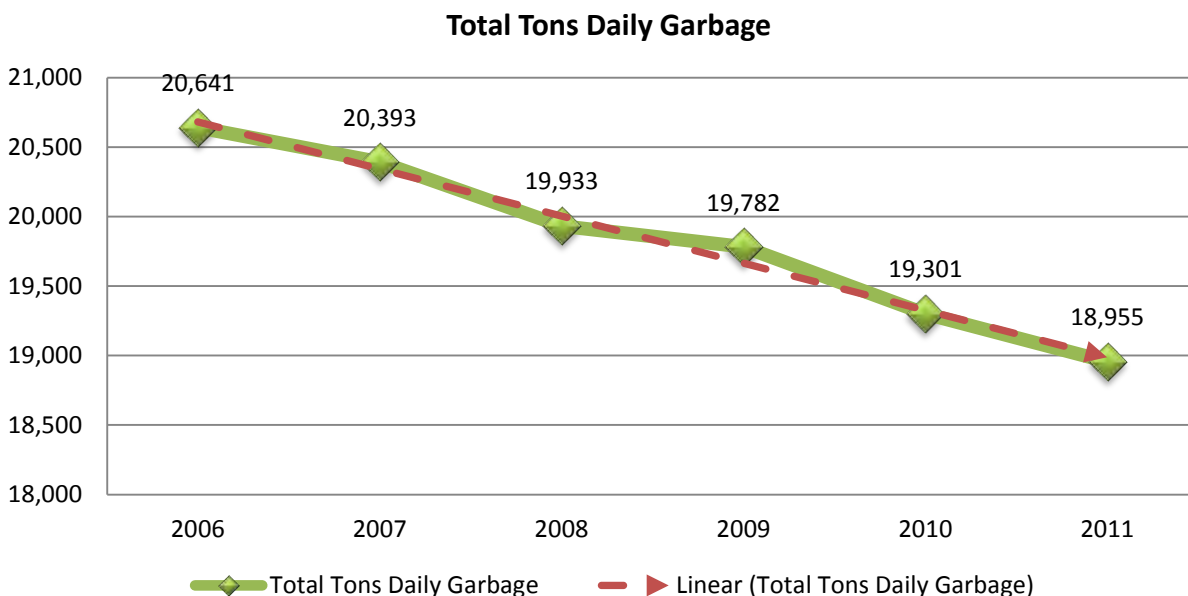
may contact the Solid Waste Division to receive a quote for removal of the materials which will cover the expense to collect and dispose of the debris. This may have also contributed to the 37.36% overall reduction in bulk waste from 2006 to 2011.



Bulk Tons

| Crew | Bulk Tons 2006 | Bulk Tons 2007 | Bulk Tons 2008 | Bulk Tons 2009 | Bulk Tons 2010 | Bulk Tons 2011 | 3 Year Average Pct Chg | 6 Year Average Pct Chg | 2006 to 2011 Pct Chg |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------------|------------------------|----------------------|
| Crew 1 | 1,793 | 1,782 | 1,918 | 1,172 | 1,120 | 1,040 | -16.83% | -8.70% | -42.02% |
| Crew 2 | 2,019 | 1,930 | 1,990 | 1,530 | 1,130 | 1,089 | -17.63% | -10.85% | -46.08% |
| Crew 3 | 2,108 | 2,061 | 1,987 | 1,765 | 1,373 | 1,282 | -13.34% | -9.18% | -39.21% |
| Drop Off Facility | 2,505 | 2,419 | 2,471 | 2,175 | 1,888 | 1,868 | -8.74% | -5.50% | -25.41% |
| Total Bulk | 8,426 | 8,192 | 8,365 | 6,642 | 5,510 | 5,278 | -13.95% | -8.50% | -37.35% |

Household refuse has also experienced a decline in tonnage with an 8.17% decrease from 2006 to 2011. This may in part be attributed to the City's recycling initiative which has experienced continual growth in participation rates in recent years. Household refuse tonnage numbers are expected to continue to decline in future years with the advent of the single stream recycling program commencing in November.

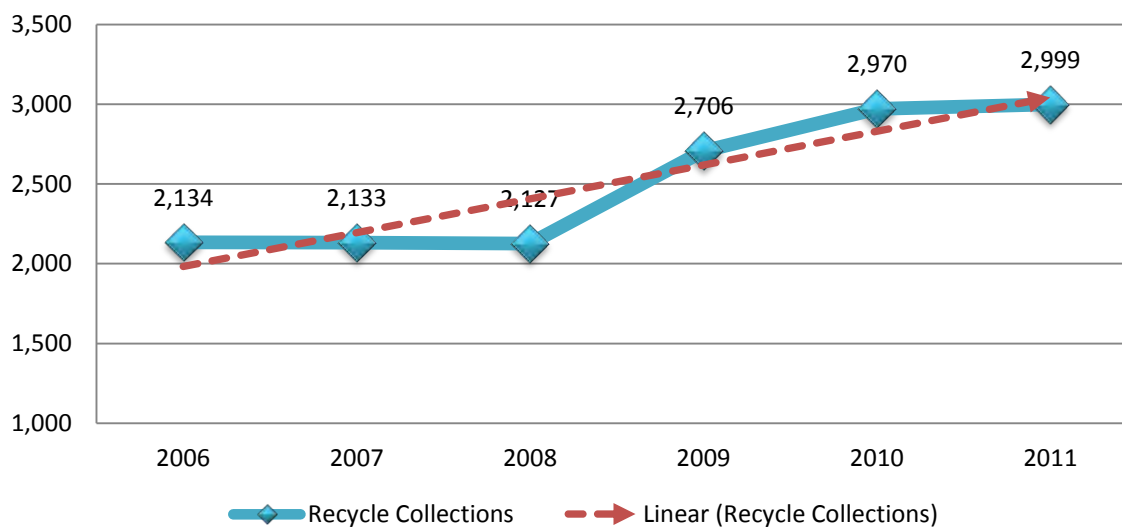


Total Tons Daily Garbage

| Weekday | Garbage Tons 2006 | Garbage Tons 2007 | Garbage Tons 2008 | Garbage Tons 2009 | Garbage Tons 2010 | Garbage Tons 2011 | 3 Year Average Pct Chg | 6 Year Average Pct Chg | 2006 to 2011 Pct Chg |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------------|------------------------|----------------------|
| Monday | 4,725 | 3,907 | 3,972 | 3,878 | 3,919 | 3,656 | -2.67% | -4.73% | -22.62% |
| Tuesday | 4,228 | 3,251 | 3,194 | 3,364 | 3,907 | 3,894 | 7.05% | -0.75% | -7.92% |
| Wednesday | 3,668 | 4,589 | 4,385 | 4,209 | 3,468 | 3,430 | -7.57% | -0.41% | -6.51% |
| Thursday | 4,216 | 3,977 | 3,886 | 4,056 | 4,236 | 4,126 | 2.07% | -0.35% | -2.14% |
| Friday | 3,803 | 4,669 | 4,497 | 4,275 | 3,772 | 3,850 | -4.88% | 0.89% | 1.23% |
| Total Year | 20,641 | 20,393 | 19,933 | 19,782 | 19,301 | 18,955 | -1.66% | -1.69% | -8.17% |

Recycle collection has experienced the greatest rate of change rising 40.54% in collection tonnage from 2006 to 2011. Staff expects this number to continue to increase as citizens prepare for the delivery of single stream carts in November. Increases in the number of citizens participating in the recycling program have decreased the amount of money charged to the City for landfill tipping fees. In FY 2011, the City saved \$124,433 in landfill tipping fees due to recycle collection efforts. From 2006 to 2011, the City experienced a 71.51% increase in savings due to recycle participation rates and landfill fees. The City contracts with Allied Waste for landfill services and has an annual increase of 4% built into the contract which occurs in March. The City's contract expires in March 2013. Citizens utilizing recycling services will save the City \$43.15 per ton in landfill tipping fees for FY 2013. As of September 1, 2012 the City's recycling program has over 60% of residential customers registered to receive recycling carts.

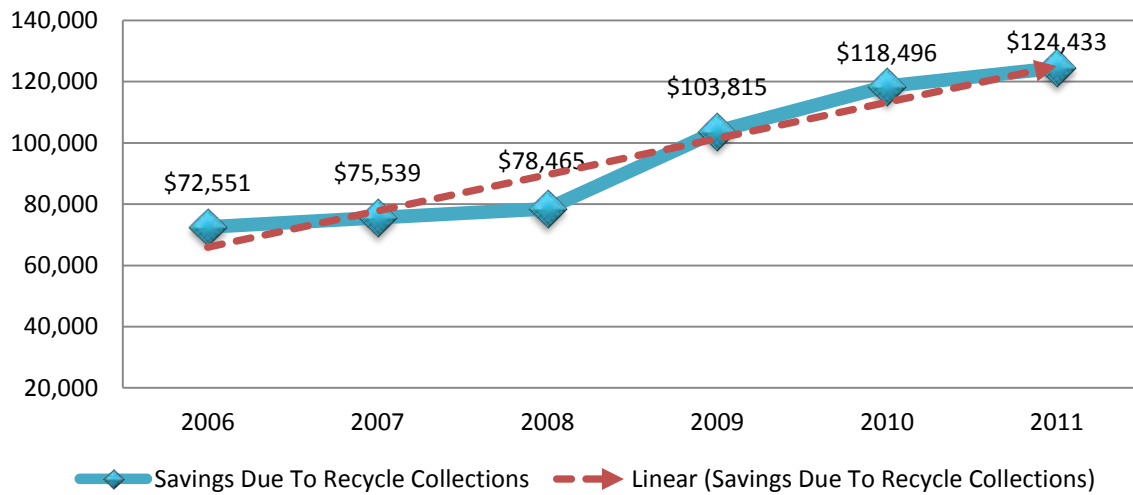
Total Tons Recycle Collection



Recycle Collections

| | Total Tons 2006 | Total Tons 2007 | Total Tons 2008 | Total Tons 2009 | Total Tons 2010 | Total Tons 2011 | 3 Year Average Pct Chg | 6 Year Average Pct Chg | 2006 to 2011 Pct Chg |
|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------------|------------------------|----------------------|
| Tons | 2,134 | 2,133 | 2,127 | 2,706 | 2,970 | 2,999 | 12.65% | 7.53% | 40.54% |
| Landfill Tipping Fee | \$34.00 | \$35.41 | \$36.89 | \$38.89 | \$39.9 | \$41.49 | 3.99% | 4.06% | 22.04% |
| Savings due to Recycle | \$72,551 | \$75,539 | \$78,465 | \$103,815 | \$118,496 | \$124,433 | 17.15% | 11.89% | 71.51% |

Landfill Savings Due To Recycle Collection



Further workload performance data may be found in Appendix 1.b. on page 28 .

c. Cost Allocation (Direct & Indirect)

In the Fiscal Year ending April 30, 2011, the City changed its accounting policies to establish the Solid Waste Fund, an enterprise fund used to account for the solid waste services provided by the City. The goal for removing Solid Waste operations from the General Fund to an Enterprise fund was for the Solid Waste Program to become self-supporting. Recognizing, however; the Solid Waste Fund would still require transfers from the General Fund to remain solvent in the early transition years, the City contracted with Pritchard Osborne, LLC in July of 2011 to analyze the financial impact of the Solid Waste Program on the City's General Fund. The study utilized single step allocation methodology to distribute costs among central services to the Solid Waste Program. Departments recognized as contributing directly or indirectly to the Solid Waste Program include:

- Administration Department
- Finance Department
- Fleet Management
- Human Resources Department
- Information Services Department
- Legal Department
- Public Works Administration Department
- Water Meter Services

Utilizing the single step methodology, the study analyzed fiscal years' 2006 – 2009 and May 2010 through February of 2011 (10 months of available financial information) budget numbers to show the financial impact of the Solid Waste program on these departments. The study took the percentage of the Solid Waste budget to the City's total budget and applied that percentage to the staff costs of each department in the analysis. The findings of this report will serve as the basis for City Staff assumptions of cost for the Solid Waste Program and will serve as the subject for analysis in future reports. Staff will also apply this same methodology to update the figures from the July 2011 report to provide FY 2012 data.

Schedule of Direct Costs

(Previous five years through 10 Months ended February 28, 2011)

| | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> | <u>May 1, 2010 - Feb. 28, 2011</u> | <u>Totals</u> |
|-------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|----------------------|
| Salaries | \$ 2,085,957 | \$ 2,229,164 | \$ 2,277,993 | \$ 2,277,486 | \$ 2,328,920 | \$ 2,127,528 | \$ 13,327,048 |
| Payroll taxes | 152,789 | 163,016 | 167,403 | 170,161 | 178,162 | 146,241 | \$ 977,772 |
| Insurance | 345,930 | 363,529 | 355,862 | 297,828 | 344,541 | 298,661 | \$ 2,006,351 |
| Retirement and pension | 208,561 | 238,209 | 237,161 | 240,661 | 258,971 | 274,333 | \$ 1,457,896 |
| Other benefits | 2,391 | 2,425 | 75 | 25,290 | - | 20,500 | \$ 50,681 |
| Total Labor | \$ 2,795,628 | \$ 2,996,343 | \$ 3,038,494 | \$ 3,011,426 | \$ 3,110,594 | \$ 2,867,263 | \$ 17,819,748 |
| Professional Services | - | - | - | - | - | - | - |
| Repairs and maintenance | 769,826 | 714,414 | 750,996 | 736,961 | 510,000 | 408,333 | 3,890,530 |
| Insurance | 255,536 | 428,287 | 428,236 | 414,224 | 306,078 | 273,598 | 2,105,959 |
| Advertising | - | - | - | - | - | - | - |
| Printing and binding | - | - | - | - | - | - | - |
| Postage | - | - | - | - | - | - | - |
| Supplies | 19,920 | 26,653 | 28,108 | 17,300 | 356,590 | 230,667 | 679,238 |
| Travel | 1,460 | 274 | 1,472 | 65 | 500 | - | 3,771 |
| Capital outlay | - | - | - | - | - | - | - |
| Other expenditures | 1,608,505 | 1,959,847 | 1,935,268 | 1,396,348 | 1,316,595 | 1,064,133 | 9,280,696 |
| Total Materials and Supplies | 2,655,247 | 3,129,475 | 3,144,080 | 2,564,898 | 2,489,763 | 1,976,731 | 15,960,194 |
| Total Expenditures | \$ 5,450,875 | \$ 6,125,818 | \$ 6,182,574 | \$ 5,576,324 | \$ 5,600,357 | \$ 4,843,994 | \$ 33,779,942 |

The table above represents the direct costs associated with the Solid Waste Program identified in the Pritchard & Osborne study.

Schedule of Indirect Costs

(Previous five years through 10 Months ended February 28, 2011)

| | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> | <u>May 1, 2010 - Feb. 28, 2011</u> | <u>Totals</u> |
|-------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|---------------------|
| Salaries | \$ 97,373 | \$ 112,579 | \$ 111,749 | \$ 112,052 | \$ 108,179 | \$ 110,491 | \$ 652,423 |
| Payroll taxes | 6,504 | 13,683 | 13,077 | 7,613 | 7,795 | 7,430 | \$ 56,102 |
| Insurance | 12,257 | 9,844 | 10,729 | 12,992 | 13,546 | 16,811 | \$ 76,179 |
| Retirement and pension | 7,235 | 9,342 | 9,417 | 10,285 | 22,513 | 57,289 | \$ 116,081 |
| Other benefits | 3,958 | 1,482 | 4,279 | 16,848 | 10,970 | 23,104 | \$ 60,641 |
| Total Labor | \$ 127,327 | \$ 146,930 | \$ 149,251 | \$ 159,790 | \$ 163,003 | \$ 215,125 | \$ 961,426 |
| Professional Services | 13,687 | 14,733 | 13,520 | 11,560 | 17,189 | 28,968 | 99,657 |
| Repairs and maintenance | 3,206 | 3,737 | 3,657 | 3,634 | 3,990 | 4,368 | 22,592 |
| Insurance | 24,074 | 32,576 | 40,938 | 44,346 | 26,001 | 23,517 | 191,452 |
| Advertising | 2,322 | 1,862 | 2,211 | 761 | 933 | 912 | 9,001 |
| Printing and binding | 994 | 1,084 | 459 | 231 | 193 | 847 | 3,808 |
| Postage | 1,005 | 782 | 583 | 506 | 760 | 902 | 4,538 |
| Supplies | 2,794 | 3,017 | 2,580 | 2,567 | 2,626 | 3,357 | 16,941 |
| Travel | 1,264 | 1,098 | 986 | 820 | 501 | 108 | 4,777 |
| Capital outlay | - | - | (2) | 245 | 1,562 | 4,922 | 6,727 |
| Other expenditures | 335,638 | 238,228 | 245,622 | 231,659 | 392,716 | 31,641 | 1,475,504 |
| Total Materials and Supplies | 384,984 | 297,117 | 310,554 | 296,329 | 446,471 | 99,542 | 1,834,997 |
| Total Expenditures | \$ 512,311 | \$ 444,047 | \$ 459,805 | \$ 456,119 | \$ 609,474 | \$ 314,667 | \$ 2,796,423 |

The table above is an aggregate of the indirect costs incurred due to the Solid Waste Program. To calculate the indirect costs, a series of assumptions were utilized by the study and applied to the departments identified as contributing resources to the Solid Waste Program. Staff will utilize this methodology to update these findings in future reports to include a full FY2011 and FY 2012 figures.

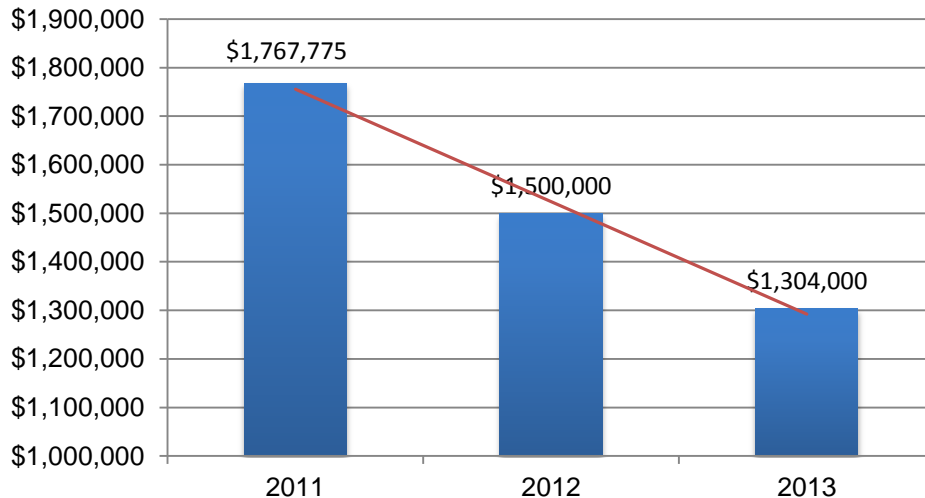
Schedule of Combined Costs

(Previous five years through 10 Months ended February 28, 2011)

| | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> | <u>May 1, 2010 - Feb. 28, 2011</u> | <u>Totals</u> |
|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|------------------------|
| Expenses | | | | | | | |
| Salaries | \$ 2,183,330 | \$ 2,341,743 | \$ 2,389,742 | \$ 2,389,538 | \$ 2,437,099 | \$ 2,238,019 | \$ 13,979,471 |
| Payroll taxes | 159,293 | 176,699 | 180,480 | 177,774 | 185,957 | 153,671 | \$ 1,033,874 |
| Insurance | 358,187 | 373,373 | 366,591 | 310,820 | 358,087 | 315,472 | \$ 2,082,530 |
| Retirement and pension | 215,796 | 247,551 | 246,578 | 250,946 | 281,484 | 331,622 | \$ 1,573,977 |
| Other benefits | 6,349 | 3,907 | 4,354 | 42,138 | 10,970 | 43,604 | \$ 111,322 |
| Total Labor | \$ 2,922,955 | \$ 3,143,273 | \$ 3,187,745 | \$ 3,171,216 | \$ 3,273,597 | \$ 3,082,388 | \$ 18,781,174 |
| Professional Services | 13,687 | 14,733 | 13,520 | 11,560 | 17,189 | 28,968 | 99,657 |
| Repairs and maintenance | 773,032 | 718,151 | 754,653 | 740,595 | 513,990 | 412,701 | 3,913,122 |
| Insurance | 279,610 | 460,863 | 469,174 | 458,570 | 332,079 | 297,115 | 2,297,411 |
| Advertising | 2,322 | 1,862 | 2,211 | 761 | 933 | 912 | 9,001 |
| Printing and binding | 994 | 1,084 | 459 | 231 | 193 | 847 | 3,808 |
| Postage | 1,005 | 782 | 583 | 506 | 760 | 902 | 4,538 |
| Supplies | 22,714 | 29,670 | 30,688 | 19,867 | 359,216 | 234,024 | 696,179 |
| Travel | 2,724 | 1,372 | 2,458 | 885 | 1,001 | 108 | 8,548 |
| Capital outlay | - | - | (2) | 245 | 1,562 | 4,922 | 6,727 |
| Other expenditures | 1,944,143 | 2,198,075 | 2,180,890 | 1,628,007 | 1,709,311 | 1,095,774 | 10,756,200 |
| Total Materials and Supplies | 3,040,231 | 3,426,592 | 3,454,634 | 2,861,227 | 2,936,234 | 2,076,273 | 17,795,191 |
| Total Expenditures | \$ 5,963,186 | \$ 6,569,865 | \$ 6,642,379 | \$ 6,032,443 | \$ 6,209,831 | \$ 5,158,661 | \$ 36,576,365 |
| Revenues | | | | | | | |
| Charges for Services | \$ 1,439,335 | \$ 1,418,702 | \$ 1,624,976 | \$ 2,184,537 | \$ 4,238,826 | \$ 3,506,788 | \$ 14,413,164 |
| Fines and Penalties | 0 | -153 | 0 | 56380 | 114681 | 102717 | 273625 |
| Miscellaneous | 20 | 11035 | 16650 | 19986 | 65363 | 27184 | 140238 |
| Total Program Revenue | \$ 1,439,355 | \$ 1,429,584 | \$ 1,641,626 | \$ 2,260,903 | \$ 4,418,958 | \$ 4,644,418 | \$ 15,834,844 |
| Net Balance | \$ (4,523,831) | \$ (5,140,281) | \$ (5,000,753) | \$ (3,771,540) | \$ (1,790,873) | \$ (514,243) | \$ (20,741,521) |

The table above represents both the direct and indirect costs associated with the City's Solid Waste Program as compared to the total revenue identified in the Pritchard & Osborne study. From 2006 to 2010 expenditures in the Solid Waste Fund has increased 4.14% or \$246,645. Total revenue for the Solid Waste Fund has increased 207.01% or \$2,979,603 from 2006 to 2010.

General Fund Transfer to Solid Waste Fund



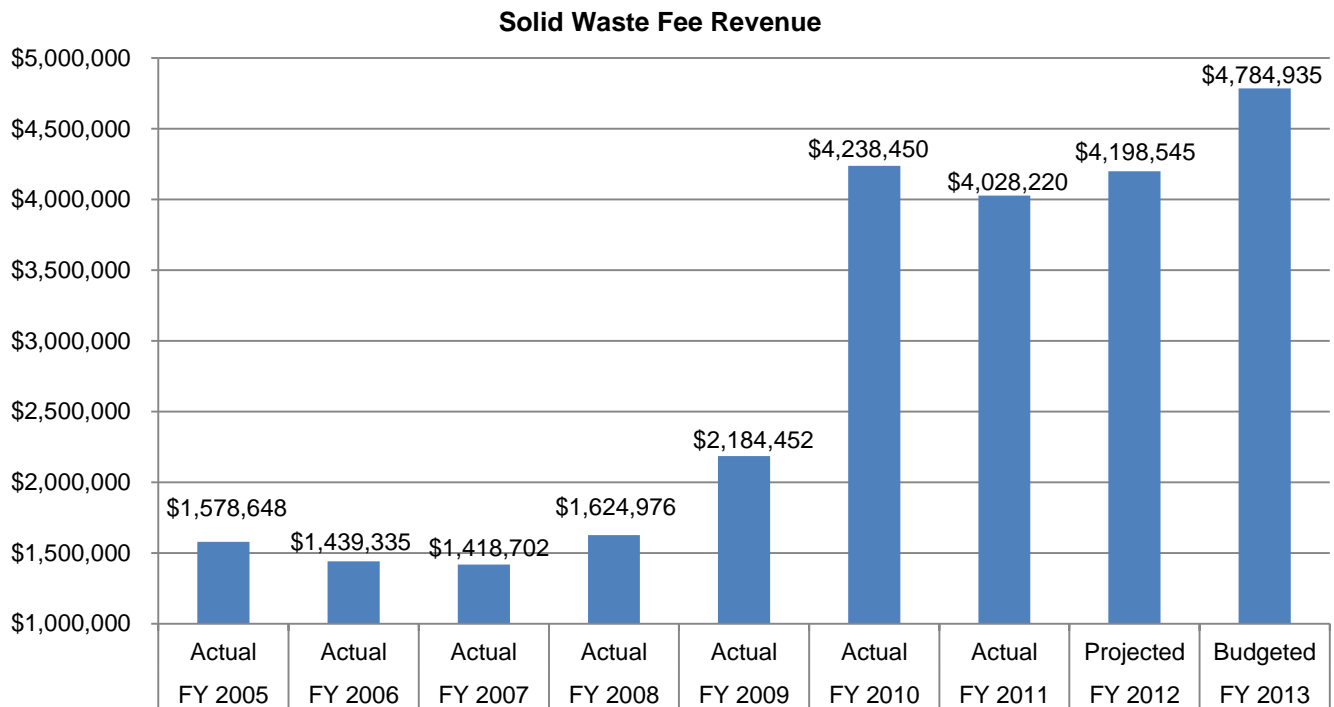
Transfers from the general fund have decreased 26.23% since the transition of the Solid Waste Program to an enterprise fund in FY 2011. This reduction may be in part due to several organizational and operational changes to the program. Over the past 3 years the City has experienced an average increase of 17.15% in recycle participation

amongst residents which reduces the landfill tipping fees charged to the Solid Waste Fund. The 2009 policy implementation regarding the collection of bulk waste has also contributed to additional revenue for the program by requiring residents to pay \$25 per bucket load when exceeding the two bucket load limit per week. The policy change also eliminated the free collection of sod, dirt, concrete, rock, shingles, and other construction related materials generated by private contractors which may have contributed to the 37.36% decrease in bulk waste collected from 2006 to 2011. This policy change resulted in \$34,367 in additional revenue in FY 2011 and staff expects this revenue to remain consistent in FY 2012 (audited numbers not yet available) and FY 2013. The Solid Waste Fund has also been affected by higher fuels costs in recent years which are being offset through the purchase of new and more fuel efficient equipment.

d. Historical Fees for Service

In FY 2004 through FY 2007, the City charged \$5.00 per residence for solid waste services generating an average of \$1,478,895 in user fee revenue for the solid waste program. In FY 2008, the City increased the user fee for solid waste to \$7.00 resulting in \$206,274 increase in revenue. In FY 2010, the fee was doubled to \$14.00 resulting in twice the revenue collections with \$4,238,450 in total revenue. The most recent increase occurred in the current fiscal year establishing a \$16.00 user fee for solid waste services and staff anticipates \$612,000 in additional revenue for the program.

| | FY 2004 | FY 2008 | FY 2010 | FY 2013 |
|--------------------|----------------|----------------|----------------|----------------|
| Rate per residence | \$5.00 | \$7.00 | \$14.00 | \$16.00 |



e. Future Customer Satisfaction Survey

To garner public opinion on current service levels and program restructuring sentiments, citizen surveys will be conducted and implemented in a manner that provides statistically significant results with a +/- 5% confidence interval, which is recognized by the Central Limit Theorem as an acceptable practice for predicting the opinions of the general public. Survey participants will be selected at random, utilizing the water billing database and support from the Geographic Information Systems (GIS) Specialist in the Public Works Department. An equal number of households will be selected at random from each ward in Bloomington. The survey participant selection process will be conducted utilizing random sampling techniques. A draft of the proposed questions for the Citizen Satisfaction Survey can be found in appendix 1.c. on page 32.

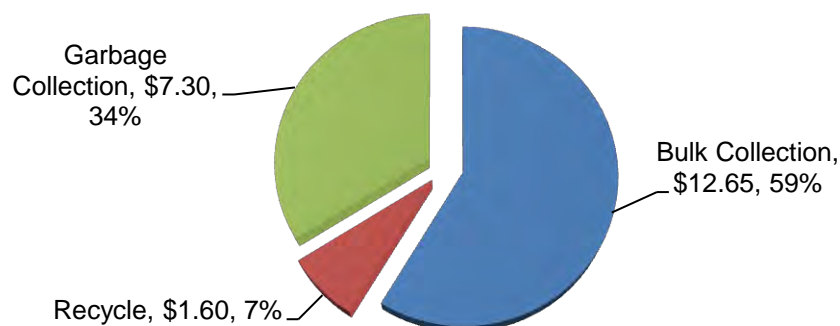
2. Program Issues and Needs



There are numerous operational and program issues and needs which confront the City of Bloomington's Solid Waste Program. The following issues have been identified by the Solid Waste Analysis Team and represent challenges which will require future action by the City Council and department leaders.

- a) Automated refuse and recycle collection services to apartments, apartment complexes, and condominiums
 - b) Provision of two bulk waste bucket loads at no charge
 - c) Transition to automated collection and staffing levels
 - d) Landfill service contract expiring in March of 2013
 - e) Midwest Fiber recycle contract expires May 2013
 - f) Volatile Recycle Commodity Rates
 - g) Wireless mobile phone service network coverage area
- a) Automated refuse and recycle collection services to apartments, apartment complexes, and condominiums:** An immediate issue facing the Solid Waste Program is the provision of automated refuse and recycle collection to apartments, apartment complexes and condominiums. This issue has been discussed in the past but it now presents an immediate logistical issue as the City switches to a more automated, efficient, and less labor intensive service delivery. A comprehensive draft document detailing this concern and proposing options for future Council consideration is provided in appendix 2.a. on page 35.
- b) Provision of two bulk waste bucket loads at no charge:** The provision of bulk waste collection services to citizens is identified by staff as being the largest cost to the Solid Waste Program which includes household refuse and recycling. At best estimates, bulk waste collection represents 59% of the program's cost to the City. This percentage is labeled an estimate because the City does not currently track the exact amount of time in which Public Works staff in the Solid Waste Division works on a particular service within the program, i.e. collecting bulk waste, recycling, or household refuse. Instead, exact costs such as equipment, bulk collection tonnage, recycle tonnage, and household refuse tonnage can be calculated and then applied to an estimated percentage of time labor force is dedicated to a particular service area, such as bulk collection. Utilizing this methodology, in 2009, the Public Works Department estimated bulk collection costing the City \$12.65 per residence compared to \$1.60 for recycle and \$7.30 for household refuse.

2009 Estimated Total Cost of SWP \$21.55



The bulk waste section of the Solid Waste Program has three crews with one operator, three truck drivers and one laborer. During the summer, an additional three packers (refuse trucks) are used for the bulk crews with one additional laborer for each packer. Weeds and alleys are also included in this area and use one truck driver and one laborer and a majority of the work is completed in May through the end of September. If an alley needs to be graded, an additional laborer is used.

In December 2009, the City changed its policy regarding the collection of bulk waste amending an unlimited bulk curbside collection to a 2 front end loader buckets per residence per week and a fee of \$25 for each additional bucket. This policy change resulted in \$34,367 in additional revenue from bulk collection services in FY 2011. The policy change also eliminated the free collection of sod, dirt, concrete, rock, and shingles which may have also contributed to the 37.36% overall reduction in bulk waste from 2006 to 2011.

Recognizing the City's bulk waste collection services represents a majority of the cost of the City's Solid Waste Program, staff provides the following options and proposes recommendations which would further enhance revenues to the program and potentially reduce the amount of waste materials going to the landfill.

1. Reduce Number of Free Buckets Collected from two (2) to one (1) (Staff Recommended)
 - i. This would be one more step toward those that use the service pay for the service.
 - ii. It would be easy to implement administratively in a short timeframe.
 - iii. The front end loader on each of the three (3) crews would continue to be the only piece of equipment tracking the extra buckets for charges to be placed on the water bill.
 - iv. Changes in program could start within a reasonably short time frame once notice is placed in the water bill.
2. Increase the charge on the buckets collected from \$25/bucket to \$30/bucket (Staff Recommended)
 - i. This represents a more accurate cost of collection for the service provided.
 - ii. It incentivizes citizens reducing their bulk or getting a roll-off cart from an outside vendor for larger amounts of material.
3. Eliminate bulk waste at the City's drop off facility (Staff Recommended)
 - i. If bulk waste is collected at the curb for residents who participate in the solid waste program, provision of a drop-off facility for the collection of the same materials may be seen as duplication of services and provides an opportunity for individuals not participating in the Solid Waste Program to utilize City services without paying for them.
4. Reduce Number of Free Buckets Collected from two (2) to zero (0)
 - i. This would truly be a pay as you throw type program.

- ii. Because of the amount of weekly stops this would entail, staff would need to make technology modifications to the equipment so that field staff could collect additional data to go directly into the billing system.
- iii. There would need to be additional education for the public.
- iv. Because of the additional administrative burden, an additional staff member would be recommended.
- v. This would be extremely difficult logistically at this time because our staff provides enhanced customer service by picking up the smaller loads (not in garbage cans) in a rear packer that is part of every crew.
- vi. Staff would recommend rolling out these changes if approved in the Fall 2012.

c) **Transition to automated collection and staffing:** In any industry, automation should increase efficiency and save on labor costs. However, the situation gets complicated for the City of Bloomington as it shifts to automated trash collection because the City's full-time Solid Waste Division employees are responsible for more than just trash collection. They perform snow removal, curbside bulk collection, leaf vacuuming, alley maintenance and curbside recycling collection.

There is the possibility of losing four employees from the Solid Waste Division as a result of putting two new garbage trucks online this fiscal year. The trucks use mechanical arms to lift 65 and 95 gallon wheeled carts and empty refuse into the trucks, replacing manual disposal of bags and cans placed on the curb by residents. This will affect two of six routes during the current fiscal year. Those two routes will shift from three-man crews to solo routes for a total potential subtraction of four people. The City Manager and City Council has indicated its intent to add more automated trash routes, although it has not yet ordered trucks capable of providing automated service. With every additional automated truck, the Public Works Department anticipates losing or reallocating two full-time employees. The following outlines some implications to this transition:

- **Snow Emergencies:** During and after significant snowfalls and ice storms, Solid Waste employees work overtime to clear streets, joining Streets & Sewers Division personnel and, in major emergencies, Parks & Recreation workers. In a major snow emergency, the City utilizes up to 68 employees on the streets. That number will be reduced to 64 workers, a 6 percent decline in available manpower. The City will lose two more of these workers with every addition of an automated garbage truck with an anticipated total of 18 workers once all vehicles are transitioned to automation.
- **Bulk collection, other services:** Staff reduction in normal household refuse collection will also reduce the staff available for bulk collection, leaf vacuuming and alley maintenance. During heavier work times, all periods except for winter when bulk needs decline, the City supplements the Solid Waste staff with seasonal workers. These seasonal workers provide labor but they do not drive City equipment. By contract with AFSCME local 699, *seasonal workers cannot drive City equipment even if qualified to do so*. Therefore, the City cannot fill the loss of full-workers with seasonal workers due to the contractual agreement stating they cannot drive snowplows and equipment used by bulk crews.
- **No easy fix:** No easy answers present themselves in terms of immediate fixes for the loss of employees for snow and bulk work.
- **Snow:** The City does not currently have the option of utilizing private vendors to supplement snow plowing operations, as doing so would constitute a violation of the contractual agreement with

AFSCME local 699. Parks employees are used in major snow emergencies; they, too, belong to AFSCME local 699 and are qualified to drive snowplows. However, Parks employees' highest priorities remain in the Parks Department. Any plan to supplement City snow removal crews requires the City administration to bring AFSCME and, potentially, the Parks & Rec Department into the conversation.

- **Bulk:** Seasonal employees already supplement full-time employees on bulk, but on the labor end, not as drivers. As automation leads to fewer full-time Solid Waste employees, the City will have fewer drivers. Bulk crews commonly use two vehicles per route. Continued automation of trash pickup may require a reduction in bulk collection. It may mean reduction from weekly bulk pickup to twice-monthly collection.

Impact to City employees: The City values its workers as individuals. These are men who perform bruising work of loading trash, cleaning City streets, removing people's discards from curbs and bringing the City into this modern recycling era. Many days, they do so during unforgiving weather. They plow streets to keep commerce moving in snowstorms and brave heat that keeps most residents indoors.

One potential option in dealing with the displaced employees could be a shift to the Streets & Sewers Division as it is also under the same AFSCME contract, or to other City jobs to the greatest extent possible as opportunities present themselves. Shifting full-time staff members to seasonal employees would result in a large pay reduction and the elimination of benefits previously received.

The prospect of contracted refuse collection presents difficult decisions outside of the displacement of City workers. On the logistical end, it must bring with it a full rethinking of snow and ice removal. Outsourcing curbside collection will result in the reduction of 24 workers, 18 from trash collection and 6 from curbside recycling. This would reduce the City snow crew from 68 to 44, a drop of 35 percent. The decline would be sharper if a contracted service also includes bulk waste, as cities commonly do. The City would likely lose most or all of its 41 full-time Solid Waste workers, who double as snow emergency responders. Thus, contracted refuse service likely would require contracted snow removal as well. Any calculation of savings for contracted waste service must also take into account the cost of contracted snow removal. The Public Works Department has not calculated that cost.

d) **Landfill service contract expiring March 2013:** Even with their growing stigma, landfills remain a necessity in modern American society. With the City's joint Bloomington-Normal landfill contract expiring in March 2013, Bloomington staff and counterpart Normal have begun discussions to produce an RFP for a new contract. As part of the discussions, the cities seek to divert more discards from landfills. Staff sees great potential in recycling large-item refuse.

- **Large-item recycling:** A local company has expressed interest in accepting the City's large-item curbside discards which includes woods, metals, construction material, demolition material and so forth. Other companies may come forward with similar interest. To make this possible, staff will take caution in wording the RFP. Currently by contract, all curbside large-item material *must* go straight to the McLean County Landfill, owned and operated by Allied Waste. The items get buried, presumably forever. In addition to being wasteful, the process costs the City \$43.15 per ton into a facility already approaching maximum capacity. At the current disposal rate of about 425 tons per day and barring expansion, the McLean County landfill is expected to reach capacity sometime in the year 2016.
- **Curbside recycling:** The primary landfill diversions now are composting of landscape waste through curbside bulk collection and the partnering with residents on more conventional recycling (paper, cardboard, cans, etc.). Toward that end, Bloomington and Normal have launched automated

curbside recycling programs using wheeled 65-gallon and 95-gallon carts. Bloomington and Normal expect substantial increases in recycling through the programs, which are run independently of one another.

- **Landfill contract:** The City’s landfill contract with Allied Waste started in 2008 at the McLean County Landfill location. The following table outlines the history of the landfill’s activities:

| Year | Phase | Activity |
|-----------------------|-------|---|
| 1991 (3 months) | 1 | Develop County criteria and determine ownership |
| 1991 (6 to 12 months) | 2 | Select and rank sites |
| 1991 (6 to 12 months) | 3 | Property negotiations |
| 1992 to 1994 | 4 | Preliminary investigation (24 months) and local approval process |
| 1994 (3 months) | 5 | Prepare financial planning |
| 1994 (6 months) | 6 | State approval process |
| 1995 (6 months) | 7 | Prepare specification and bid process |
| 1995 (6 months) | 8 | Construction |
| 1996 | 9 | Begin Operation |
| 1997 | | American Disposal (now Allied Waste) takes over operation of landfill |
| 2002 | | Efforts to site a new landfill are no longer actively pursued |
| 2006 | | Allied Waste permitted to expand McLean County Landfill |
| 2008 | | Bloomington begins contract with Allied Waste for landfill services |
| 2016 | | Anticipated closure of the McLean County Landfill |

The advantages of competitive bidding for a long-term, joint contract with Normal are as follows:

1. Staff believes allowing the contract to lapse would put Bloomington (and Normal) in a compromised financial position.
2. Staff believes a competitive process will enable the cities to get the best value and that jointly contracting with Normal gives community residents the advantage of volume, which should translate to a better price. The McLean County Solid Waste Technical Committee recommends the joint approach.
3. Having a set rate over 5 years secures a finite resource of landfill space. It also enables long-term planning and budgeting.

Our current landfill contract started in March 2008 with a rate of \$36.89 per ton. The rate rose 4 percent per year, to the existing charge of \$43.15/ton. A competing company, PDC/Area, has expressed interest in bidding. PDC would be required to build a transfer station in the Twin Cities so that City trucks do not have to travel long distances to landfills, and this provides further necessity for expedient action. Allied already has a transfer station in Bloomington.

The Illinois EPA lists the following nearby landfills, locations and owners.

| Landfill | Location | Owner |
|----------------------------|-------------|--------------------------|
| ADS/McLean County Landfill | Bloomington | Allied Waste, Phoenix AZ |
| Clinton Landfill 3 | Clinton | PDC/Area, Peoria |
| Indian Creek 2 | Hopedale | PDC/Area, Peoria |
| Livingston Landfill | Pontiac | Allied Waste, Phoenix AZ |

The City budgeted \$1.1 million for the current fiscal year on landfill dumping fees, making it the second largest line item for the Solid Waste Department behind salaries. Capital outlay numbers exceed \$1.1 million; however, the investment is paid over multiple fiscal years.

- e) **Midwest Fiber recycle contract expires May 2013:** From 2000 to 2010 Bloomington transported recycle material to the Town of Normal transfer station at 1301 Warriner Street, through a 10 year intergovernmental agreement. The City was paying an estimated \$60,000 to the Town annually for use of their transfer station and was not receiving payment for the recycling materials. The City of Bloomington had a contract with Phoenix Paper for the processing of co-mingled paper. The City of Bloomington also had a contract with Resource Management in Chicago Ridge for the co-mingled containers. Co-mingled paper is when all of the different types of paper are placed in one container and co-mingled containers are when the same is done for containers.

In May 2010, the contracts with Phoenix Paper, Resource Management and the Town of Normal expired. At that time, Staff recommended to the City Council to convert from a dual stream to a Single Stream Curbside Recycling Program. Accordingly, City staff solicited proposals from qualified vendors to accept and transfer their acceptable single stream recyclable materials starting Monday May 17, 2010. Any potential processing solutions for the City's single stream materials were considered in the selection process. Four firms were issued the proposal packet, including the Town of Normal which provided the existing transfer service. Two firms responded with proposals. The proposal from Henson Disposal, Inc. met all of the City's requirements and was approved as the contractor to coordinate with transferring the single stream material to Resource Management in Chicago Ridge as the Material Recovery Facility (MRF). Staff sought an outside Consultant to review the proposal packages and the Consultant concurred with the Staff recommendation. The contract to process the material expires May, 2012 and was on a variable market rate for the payment of the recycling material collected. Under this contract, the City began receiving payment for the recycling material on the average of \$12,000/month.

In August 2011, Henson Disposal notified the City of Bloomington that they could no longer provide transfer station processing under the current contract because of a conflict with the IEPA permit processes. In October 2011, the City Council approved a contract with Midwest Fiber for the processing of the single stream recycling material until May 2012.

The pricing received by the City for its recycling material is determined by subtracting Midwest Fiber's process fee of \$82.00 per ton from the Total Market Value for the material each month. The Total Market Value is based upon national industry publications reflecting the market value of community such as Waste News and The Official Board Markets. The following is an example of the calculation from July 2011:

Single Stream Total Market Value (\$141.91 per ton) minus Processing Fee (\$82.00 per ton) = Net material Rebate to City of Bloomington (\$59.91 per ton)

The City's contract with Midwest Fiber has since been extended to May 2013. A Request for Proposal (RFP) will need to be issued to potential vendors for material transfer and/or the processing of single stream materials for a (3) year period. Once issued, the City expects to receive bids from Midwest Fiber and Resource Management for the processing of materials.

- f) **Volatile Recycle Commodities Rates:** Give the issue of a need for a Request for Proposal for Material Recovery Facility (MRF) services, staff has also noticed a steady decline in revenue from recycle materials. The commodity rate decrease for these materials has been dramatic this current year but this does not alter staff's determination this it is beneficial to move toward a carted automated single stream recycling program. The alternative to curbside recycling is landfill dumping; which wastes resources, presents finite landfill space, and currently costs the City \$43.15 per ton.

Financial Impact: Staff has become increasingly concerned that the City may fall well below its budgeted amount of \$100,000 this fiscal year for recycling revenue. Thus far, the program has collected about

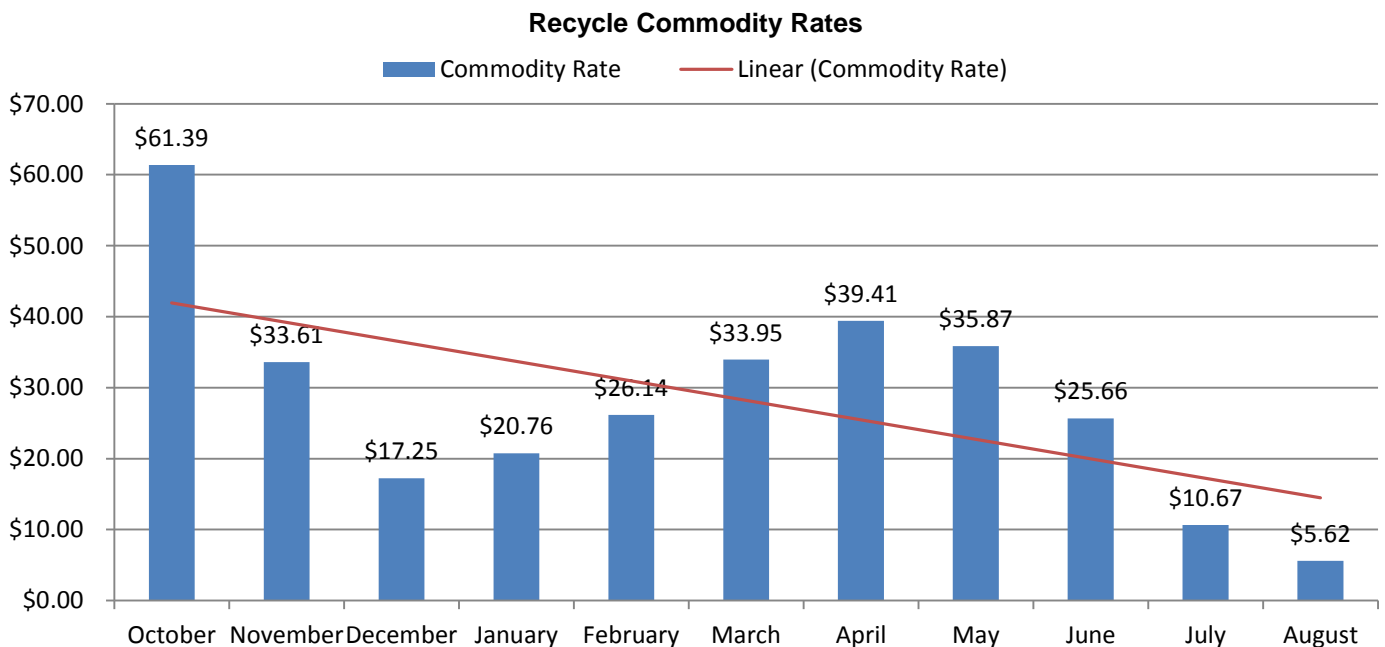
\$19,000 and at the current pace will collect about \$76,000 this year. However, the downward spiral in recyclables is expected to continue in the short term.

Background: Recycling revenue provides what staff considers to be an important offset, although it may sound comparatively small when viewing the overall City budget. The revenue helps the program hold down our costs. Please note, that no city to staff's knowledge "makes" money off recycling. Recycling does not pay for itself. Recycling "revenue" means money received from selling off the material collected through single-stream curbside pickup. It offsets, but does not pay for, the cost of recycling. Some cities charge residential recycling fees to recover costs; Bloomington does not.

Revenue in Freefall: The City uses Midwest Fiber, based in west Normal, for the processing and marketing of its recyclables. Midwest and the City use a shared-risk, shared-benefit method. Midwest changes its payment to the City from one month to the next based on the commodities market. Markets go up, City revenue goes up; markets go down, City revenue goes down. (An alternative method used by cities and recycling and companies is to set fixed payments. Companies who use the method set their payments extremely low to reduce their risk exposure. The original proposal from Midwest Fiber for a fixed payment was a payment from the City of \$6/ton. City staff realized significant revenue during the time period when the City would have been paying to have collected material processed if the City had accepted a fixed payment model. Using Midwest and another company, the City collected more than \$108,000 from recyclables during the last fiscal year.

The City has no control over price fluctuations, and neither to a great degree does Midwest Fiber. It works within the global markets in seeking profitability. For the past three months, the overall market and consequent City revenue has spiraled, from \$39.41 per ton to the City in May to \$10.67 in July. It was \$61.39 in October 2011, when the City began using Midwest Fiber as its recycling end source. Midwest projects continued poor market performance to the point where it may begin charging the City, eliminating this source of revenue from the Solid Waste Program. A company official said this may happen as early as September.

The following table gives a monthly breakdown of revenue to Bloomington per ton.



Quote: "One of the greatest sources of uncertainty in recycling is the level of prevailing prices for commodities such as newspaper, mixed paper, corrugated, glass, plastic, and metal cans."

--U.S. Environmental Protection Agency

Current Predicament: Basic supply-demand at work, especially in the recycled paper market. Slowdown of orders has been profound amid uncertainty toward future mill orders, especially from China. **Demand** is down. **Supply**, however, remains steady. People continue to recycle their newspapers. Thus, **price** falls. Plastic markets have been lackluster. Glass is consistent, but consistently bad. Midwest loses money on that aspect of its business. Making matters appear even worse: Fall 2011 was an abnormally strong market, making this year's numbers look even more disappointing.

Forecast: Midwest expects no substantial rebound through the rest of the calendar year. A harsh winter may help deplete the glut of paper supply because orders for insulation would go up and people are less likely to place their material on the curb in harsh weather. However, the autumn will bring a supply increase because newspapers get bigger due to the holiday season advertising and ad inserts.

Midwest source: Todd Shumaker, Vice President for Sales and Marketing

Going Forward: Staff in the coming months will prepare a new RFP for a recycling company, as the Midwest contract will expire in calendar year 2013. This does not reflect a negative opinion of Midwest, and a bid from Midwest is anticipated.

- g) **Wireless mobile phone service network coverage area:** The City currently utilizes Nextel wireless mobile devices and mobile network services. In 2005, Sprint merged with Nextel, by acquiring the company, and has been working to replace the Nextel wireless tower infrastructure since the time of the merger. The Bloomington-Normal area is now being affected by the tower conversions and staff is experiencing difficulties with wireless service coverage. One of the main selling points of the Nextel devices were the "push to talk" technology, enabling staff to utilize the devices much like a two-way radio system. With the advent and popularity of texting as a means of quick communication, the push to talk feature has lost its nostalgia and convenience with a healthy number of staff members. Department leaders now desire a more reliable mobile network without concern for the "push-to-talk" functionality previously giving Nextel the competitive edge. The City's contract with Nextel expired in August 2012 and is currently operating on a month to month basis. A Request for Proposal could be issued for wireless mobile services for the Solid Waste Division.

3. Alternative Service Providers



There are several alternative service providers in the Bloomington-Normal area which provide similar solid Waste services to that of the City of Bloomington. Over the course of this study, staff plans to meet with these vendors to discuss rough costs and comparative performance measures.

- a) Allied Waste services (a Republic Services Company)
 - b) Henson Disposal (Peoria Area)
 - c) Area Disposal (PDC Disposal)
 - d) Casali & Sons Disposal
 - e) Town of Normal
 - f) Midwest Recycling
- a) **Allied Waste services (a Republic Services Company):** Provides waste management services for collection, recycle composting, transfer and disposal. Republic Services is America's second largest non-hazardous waste services company with over 2,800 contracts for municipal collection services in over 40

states. Republic also owns and operates more than 200 transfer stations and nearly 200 solid waste landfills, including the McLean County Landfill located at 2105 W. Oakland Avenue in Bloomington and the Bloomington Transfer Station at 2112 W. Washington Street in Bloomington.

- b) **Henson Disposal:** Offers residential waste management services providing weekly curbside pickup for household refuse, bi-weekly curbside recycle collection, bulk item disposal, and operates an electronics drop off facility. Henson Disposal currently provides trash services & rural container service to the following areas: Rural Bloomington, Normal, Downs, Towanda, Lexington, Leroy, Hudson, Carlock, Bentown, Holder, Merna, Heyworth, Wapella, Shirley, Covell, Danvers, and Lake Bloomington.
- c) **Area Disposal (Peoria Area):** Provides solid waste disposal and recycling services to 38 counties across central Illinois, including McLean County, and five counties in northeast Missouri. Area disposal also operates 4 landfill locations around the regional area including Clinton Landfill, Inc. in Clinton, Hickory Ridge Landfill, Inc in Baylis (formerly Pike County Landfill, Inc.), Indian Creek Landfill in Hopedale, and PDC #1 Landfill in Peoria.
- d) **Casali & Sons Disposal:** Provides weekly curbside & rural route collection services, weekly/bi-weekly/or monthly container service, call ahead bulk item removal, and commingled recycle collection. Casali & Son's currently hold contracts with the City of Gridley, Danvers, Hudson, and Downs, Illinois.
- e) **Town of Normal:** Provides municipal solid waste services with the provision of weekly curbside collection of household refuse, recycle, bulk items, and landscape wastes.
- f) **Midwest Fiber Recycling:** Provides single stream recycling for residential and business customers with operating facilities in Bloomington-Normal, Decatur, Springfield and Peoria. The City of Bloomington currently utilizes Midwest Fiber for the disposal of recycling materials. The City's current contract with Midwest expires in May 2013.

4. Regulatory Implications



Staff continues to monitor Federal, State, and local policy issues to ensure the Solid Waste Program remains in compliance and future legislation does not adversely affect the City's ability to provide solid waste services to residents. The major regulating authorities for the City's Solid Waste Program are the U.S. Environmental Protection Agency (US EPA), the Illinois Environmental Protection Agency (IEPA), and the Bloomington City Council.

Pertinent Federal Regulations

Under the US EPA regulations the City is required to staff the city owned and operated drop off facility located on East Street. In order to satisfy this requirement the City employs seasonal labor year round so that residents may drop off their brush, bulk waste, leaves, grass clippings, and appliances. This is a cost which may be subject to further analysis as this service is already provided curbside for paying customers.

Pertinent State Regulations

The Illinois Solid Waste Planning and Recycling Act (SWRPA) requires Illinois county governments to prepare, adopt and implement a twenty-five year municipal solid waste management plan. In 1991, the McLean County Board formally adopted an Integrated Solid Waste Management Plan (ISWMP) in accordance with the Illinois Solid Waste Planning and Recycling Act. The Act also requires that the adopted plans be reviewed and updated

every five years. At each five year interval, any necessary or appropriate revisions are to be submitted to the Illinois Environmental Protection Agency (IEPA) for review and comments. McLean County's ISWMP has been updated four times since the adoption of the plan. In 1997, the Solid Waste Coordinator of McLean County prepared an update that satisfied the IEPA five year update requirement. In 2002, the McLean County Regional Planning Commission prepared the second five year update to the plan. In 2007, the Ecology Action Center provided Solid Waste Coordination services to Mclean County issuing the third update to the plan. Most recently, the Ecology Action Center completed the 2012 update to the ISWMP and issued the final report to the IEPA for review and comment. Goals outlined in the ISWMP focus on the following key elements:

1. Expansion of commercial and industrial recycling throughout McLean County.
2. Substantial expansion of residential recycling through a combined program of curbside collection and drop-off centers.
3. Continued composting and land application of landscaping waste.
4. Increased source reduction through an active educational and promotional program.
5. Development of opportunities for the recycling of construction and demolition materials.
6. Continued land application of sludge from wastewater treatment facilities.
7. Evaluated options for the separate collection and disposal of household hazardous wastes.
8. Increased opportunities for the recycling of bulky waste, tires, and motor oil.
9. Landfill disposal of wastes that are neither recycled or combusted.

Pertinent Local Government Ordinances

As previously discussed under the Issues & Needs section of this report, one issue requiring immediate policy direction from City leaders is the provision of automated refuse and recycle collection services to apartments, apartment complexes, and condominiums. The logistical issues of servicing these businesses have been previous topics of discussion, however, operationally; staff will need final guidance on the issue before the distribution of the recycle carts in November.

Bulk waste collection presents another policy discussion pertinent to this study. As presented in Issues & Needs, the provision of bulk waste is identified by staff as the single highest cost in the Solid Waste Program, representing an estimated 59% of overall program costs. In efforts to reduce the City's General Fund subsidy to the Solid Waste Program, staff proposed several options and recommendations in this report.

Organizational Review

The City of Bloomington is not unique in its endeavor to analyze current solid waste collection practices and research alternative methods and techniques utilized by differing municipalities and private industries. The City's decision to transition from manual collection to automation came from researching best practices with a goal of creating a safer and more efficient working environment. Further research into best practices may provide some insight into future options for the City of Bloomington as the City evaluates its policies governing the Solid Waste Program. Research into case studies of successful solid waste collection practices is provided in appendix 4. on page 44.

5. Upcoming Reports



Second Interim Report:

Within six months, the City shall produce a second interim report outlining (i) analysis of collection, transport, recycling, and disposal alternatives; and (ii) analysis of legal, regulatory, and organization findings.

Second Interim Report due date January 1, 2012

Final Draft Report:

Within ten months, the City shall produce a draft final report that includes (i) final presentation of all background information, data, and findings; (ii) analysis of issues and needs; (iii) plans to improve solid waste collection, transport, recycling, and disposal in each Solid Waste Program; (iv) recommendations to improve the legal, regulatory, and organization framework for solid waste management; and (v) recommended actions for potential investment programs.

Final Draft Report due date March 1, 2013

Final Report:

Within 1 month from receipt of comments from the public and City Council, City reviewers shall produce a final report to address review comments.

Final Report due date April 1, 2013

Appendix

1. Program Information

a. Solid Waste Practices in Central Illinois



Normal

Users: Users of city service are determined by building type: Only houses and duplexes are served. House-style and duplex-style structures receive service – and billing – regardless of how many related and unrelated people dwell in them. Landlords/owners of all other structures must contract for their own services.

Curbside Recycling: In mid-July 2012, the town launched a curbside program using tote carts which are collected by one-person trucks using machines equipped with mechanical arms. Previously, residents could recycle only at drop-off points. Residents pay \$60 for a cart – they paid half for early pre-orders this spring – and choose either 95- or 65-gallon containers. Recyclables are dual stream – not separated by type – and pickup is weekly. At the program launch, a 48 percent participation rate by the 10,500 households served in Normal exceeded expectations. Prior to this, Normal provided recycling at 14 drop points. It removed four drop sites and will close two more in April 2013.

Curbside garbage: The town has, for years, used one-man trucks with side-arm loaders that mechanically pick up a tote cart and empty it. However, use of the tote carts was not mandatory until September 2011, and only a quarter of residents opted to use them before required to do so. The town realized vast efficiency once the totes were required. Carts initially were distributed without direct fee to the residents. (They are charged \$60 per cart now.)

Large items and landscape: The city collects landscape waste -- excluding sod, dirt and grass -- at the curb weekly. All landscape waste, including grass and sod, is accepted at the Normal Public Works site on Warriner Street, where mulch is available without charge. That site also takes electronics and thermostats.

Dollars: Also for 2012, the council raised the refuse fee from \$10 to \$12 per month per user. The fee generates 35 percent of the cost for all solid waste services. For a budget nearing \$4 million, about 53 percent comes from general revenue.

Urbana

Revenue-neutral: Urbana defers trash collection responsibilities to residents, landlords, and private haulers while aggressively pursuing recycling. It defers trash collection issues to landlords in apartments with 5 or more units but it runs recycling in the large complexes. The city runs a revenue-neutral solid waste program, neither making money nor using subsidy from other revenue streams such as the general fund. To pay for all costs, it charges licensing fees to private haulers and assesses a \$2.50 per month recycling tax to each household. (Residents of boarding houses, such as fraternities and sororities, pay \$2 per occupant.) The tax generates about \$500,000 annually.

Curbside trash: Residents and landlords eligible for curbside trash collection choose from a list of city-licensed haulers, currently nine at the time of this report. Haulers pay \$320 per year for a license plus \$160 per truck being used in the city. The haulers charge based on a household's trash volume. They set prices without government regulation. A resident using a single, 32-gallon cart each week pays as little as \$15 a month, while a household using two 96-gallon totes pays as much as \$57 monthly – more, if there is extra garbage.

Recycling: The city contracts its weekly recycling to two haulers. ABC Sanitary Hauling and Recycling handles all recycling for single-family homes, plus apartments with fewer than 5 units. Recycling for larger apartment structures and complexes is contracted to Community Resources. The city spends \$195,000 on single-family/small apartments recycling and \$215,000 for recycling at larger apartment complexes. The city is converting from 14-gallon bins to 32-gallon carts. One cart will be issued free of charge. Residents pay \$32.67 for additional carts.

Yard waste, grass: Curbside fall and spring leaf collection is done at no added cost to residents; the city picks up compost bags at the curb. Some haulers also pick up yard waste year round for an extra fee. Landscape recycling (including grass clippings, etc.) may be dropped off for \$8 to \$11 per cubic yard, depending on the material. The center also serves Champaign. The Landscape Recycling Center is open to businesses, including commercial landscapers, as well as to residents. Chip and compost products sold there offset all costs, including equipment.

Large items: Urbana has no involvement in large-item pickup. Residents must make their own arrangements with a hauler.

Champaign

Hauler selection: Champaign employs essentially the same method as Urbana in handling trash collection for single-family homes and apartments with 4 or fewer units: It is up to the residents and landlords to arrange trash pickup from city-licensed haulers. The same goes for large-item disposal. On its Internet site, the city lists nine haulers but does not include a price list. The city does not publish a set rate schedule, but the city administration places the household's cost at \$14 to \$40 per month. Haulers pay the city \$100 per truck.

Curbside and apartment recycling: The private haulers for houses and small apartments (4 units or less) are required to offer weekly curbside. Additionally, Champaign contracts for a single hauler, Allied Waste, to handle its multi-family household recycling (more than 4 units). Allied places and maintains 96-gallon carts in the shared garbage areas of apartment buildings. Each apartment unit is assessed a \$2.60 per month recycling fee. (It's \$1.30 per person in boarding houses such as fraternities.) The city spends about \$250,000 per year to operate its recycling program. It at least breaks even annually.

Yard waste: Champaign residents and businesses may drop landscape waste of all types, including grass, at the Landscape Recycling Center at the former Urbana landfill. Champaign acts as a sort of silent partner to the operation, which is run by Urbana. User cost is \$8 to \$11 per cubic yard, depending on the type of material. Companies as well as residents may use the service. Champaign undertakes leaf collection in the spring and fall at no added cost to residents. Residents use compost bags. It costs the city \$170,000 per year and residential fees pay for the service.

Decatur

Hauler territories: Decatur historically has divided its city into territories served by private trash haulers. One hauler may buy rights to a territory from another. Currently, there are 9 trash companies serving houses and small apartment complexes, but at one time there were at least 45. There still were 20 haulers in the early 2000's. City government wants competition and to include small haulers but also has enacted reforms to ensure greater quality and promote conservation and recycling. Those reforms are one reason that a number of haulers have sold off their zones and stopped working in the residential Decatur market. Veolia Environmental Services is the major company, serving about three-quarters of the city's 27,000 stops. Decatur places apartments with 6 units or less into its city program. Larger apartment complexes must make their own arrangements. The companies pay a fee to the city.

Curbside trash: Prior to 2011, residents could discard unlimited amounts and could get twice-weekly collection. Now, they get service once per week – paying \$14.50 a month if using a 96-gallon cart or \$17.50 if using more than one. The city sets the rate for haulers.

Recycling: Residents pay a \$2.50 monthly recycling fee. The city gives haulers \$1.65 of that and uses the rest to pay for other recycling costs. Slowly, Decatur is recovering cost of a 2011 capital outlay for recycling tote carts that the city distributed without charge to residents as part of a major recycling push. That push resulted in an increase in recycling participation from 14 percent of households to 56 percent. Residents pay \$50.60 for additional recycling carts.

Large items: Residents get up to five large household items picked up annually without added cost but pay \$25 if an item has a refrigerant requiring removal. Residents pay haulers for additional large-item pickup.

Yard waste: Residents pay \$1 per month for hauling of all yard waste, including grass clippings.

Dollars: The city generally avoids spending from other areas to pay for solid waste but has spent about \$2 million over three fiscal years from other funds for recycling carts.

Peoria

One contractor: The City of Peoria uses contracted services from a single hauler for most of its refuse functions. Starting in 2010, PDC Area Disposal (formerly Peoria Disposal Company) took over primary collection service from Waste Management, the smaller PDC having outbid the solid-waste giant. The contract is for five years. PDC serves 40,000 stops and receives \$5.6 million per year from the city.

Curbside trash: The city is moving toward a self-sustaining refuse program rather than one dependent on other city funds. It collects a \$13 per household refuse fee (\$14 starting Jan. 1, 2013) and the revenue pays for PDC services. The rate had been \$6 before 2012, and condos pay the old rate because they receive no yard-waste services. Services are limited to single-family homes and apartments with 4 or fewer units. Landlords/owners of larger complexes must contract their own services. PDC sought to boost efficiency and decrease litter by introducing residences to trash tote carts. The cart stays with a dwelling and must remain if a resident moves. Residents may rent additional carts for \$2.50 a month with a choice of 95, 65 or 35 gallons. Tote use is not mandatory; one-person crews still collect by hand.

Curbside large items: For no additional fee, PDC will pick up neatly placed household items. Billing will ensue if the material is piled. No contractor material is excluded.

Curbside recycling: Recycling gets picked up monthly at no added user fee. PDC also aggressively promoted recycling upon taking over the Peoria territory, and it has increased participation from 3,000 to 9,000 households (23 percent). Recycling totes – 96-gallon -- remain company property, and residents pay a \$50 deposit to use one. They are required for recycling. As part of the company's push for recycling participation, it occasionally runs promotions in which the deposit is waived, and it targets lower-income areas for these promotions.

Additional services: Yard waste is collected from April 1 to Nov. 30, also with no extra fee, if placed on the curb in marked containers or compost bags. PDC will collect up to 20,000 illegally dumped tires per year under the contract and will drop off and collect Dumpsters for neighborhood cleanups up to 140 times annually. It collects roadside dead animals too.

City subsidy: The City of Peoria stated that no additional funds, beyond direct refuse fees, are used to pay for refuse services.

Springfield

Curbside: Single- family households and small apartments (4 units or less) get weekly curbside garbage and recycling collection controlled by the publicly owned utility City Water Light & Power (CWLP). The household cost is \$11.75 per week if using a single 95-gallon cart and \$14.25 if using two carts. Residents choose from four private haulers: Allied Waste, Waste Management, Illini Disposal or Lake Area Disposal. The city utility sets the price.

Recycling: CWLP also assesses a 50-cent monthly recycle fee to all residences covered by service whether they opt for recycling or not. The fee generates about \$188,000 and pays for 15-gallon recycling bins, which are given to residents at no additional charge. Recycling details depend on a resident's private hauler.

Large items: CWLP contracts with Allied Waste for \$120,000 to collect limited amounts of large items per customer. The recycling fee also pays for the service. A household is allowed one free pickup per year with a maximum three items, only one of which may contain Freon. Residents must make their own arrangements for additional large-item disposal.

Landscape waste: The city collects branches left by the curb, or dropped off at a city facility, without added cost to residents. Grass and leaf collection costs \$1.50 per sticker; the stickers must be placed on cans or compost bags. The material was being collected by the city's Public Works employees this summer (2012) while contractual services were being arranged. Collection is done in an area as needed, as deemed by the city. The fee is waived during special spring and fall collections.

Dollars: The city utility expects to subsidize its solid waste program this fiscal year by \$330,000 to \$380,000. Out of its corporate fund, it expects to spend \$50,000 to \$100,000 in the current fiscal year for landfill cost and another \$50,000 for a staff recycling coordinator. Part of the landfill cost stems from a neighborhood improvement project in which blighted housing is demolished. The utility spends about \$230,000 annually out of its sewer fund for spring and fall leaf collections.

Pekin

Municipal collectors: Countering the trend of contracting services, the City of Pekin bought equipment, hired its own employees and ended contracted service in 2004 for its refuse programs. Its city leaders questioned whether contracted service actually produced cost-effective service. Crews provide weekly trash, recycling and yard-debris pickup, with 1,100 to 1,400 stops daily. Only single-family homes and apartment buildings with 4 units or less get service.

Curbside trash: Residents pay \$40 for 35-gallon tote containers and \$60 for 95-gallon totes. Garbage trucks are equipped with hydraulic lifts to pick up the carts and empty them.

Curbside Recycling: Residents place 16-gallon single-stream bins on the curbside weekly. They pay \$8 for the bins.

Large items: The city picks up large household items from the curbside at no charge to the residents.

Yard waste: Residents can place compost bags or garbage containers with yard waste, including grass clippings, on the curb. Brush including limbs can be bundled with a bundle weight limit of 50 pounds. The city cost is about \$100,000 per year.

Dollars: The refuse budget totals \$1.2 annually and the revenue to pay for it, other than the container fees, comes from the city's general fund. There are no user fees for garbage, recycling, yard waste or large-item pickup.

Morton

Private company tradition: Morton operates under a system that is almost fully privatized. While the Village and the company PDC agree upon trash rates, PDC provides virtually all refuse services, billing included. The private relationship dates to at least 1941 when Grimm Brothers Trucking Inc., using a pickup truck, began a contractual arrangement. PDC bought Grimm Brothers in 1990 but kept the Grimm Brothers name and a family relationship. The operations manager in Morton, Mark Grimm, is third-generation in the industry. Village service includes homes, duplexes and small apartment buildings. Landlords of 4-plexes may opt-out of the program. Larger apartment structures and complexes are excluded.

Pay As You Throw: Morton operates under a "pay as you throw" system. Residents buy trash stickers for \$2.70 apiece at local stores. They affix a sticker to each 32-gallon can. In this way, residents pay by volume. A drawback to the system is that it creates a temptation to dump illegally to avoid the cost. Grimm Brothers also picks up 65-gallon tote carts. Cart users are billed \$11.50 per month, plus \$7.50 per quarter for cart rental. If they have more trash than the cart can hold, they can additionally put out cans with stickers.

Curbside Recycling: Residents may use 18-gallon bins, given to them by the city over the years, or they may rent a 65-gallon tote cart from Grimm Brothers for \$2.50 per month. About 350 of 5,200 households (7 percent) use the carts.

Yard waste: 32-gallon compost bags are picked up at the curb for \$2 per bag. They may include all types of landscape waste including grass clippings.

Village cost: During spring and fall, the village runs a free drop-off program at the sewer plant. Morton paid \$36,800 plus labor in the 2011-2012 fiscal year and received a \$22,500 grant from Tazewell County to offset that cost. This service and purchase of recycling bins are the only expenditures by the village.

Large items: Grimm picks up large household items, but not construction material, under the sticker system. Residents pay \$15 for a larger item such as a couch and \$2.70 for the smallest items, such as a broken lamp.

Mobile Home Parks

Service to trailer courts is something of a gray area in municipal solid waste. Some mobile home parks get service – or are excluded from it -- as if they are large apartment complexes or businesses. Other trailer parks get service as if they are a series of single-family homes. Service depends on the city and sometimes is different in different mobile home parks within the same city.

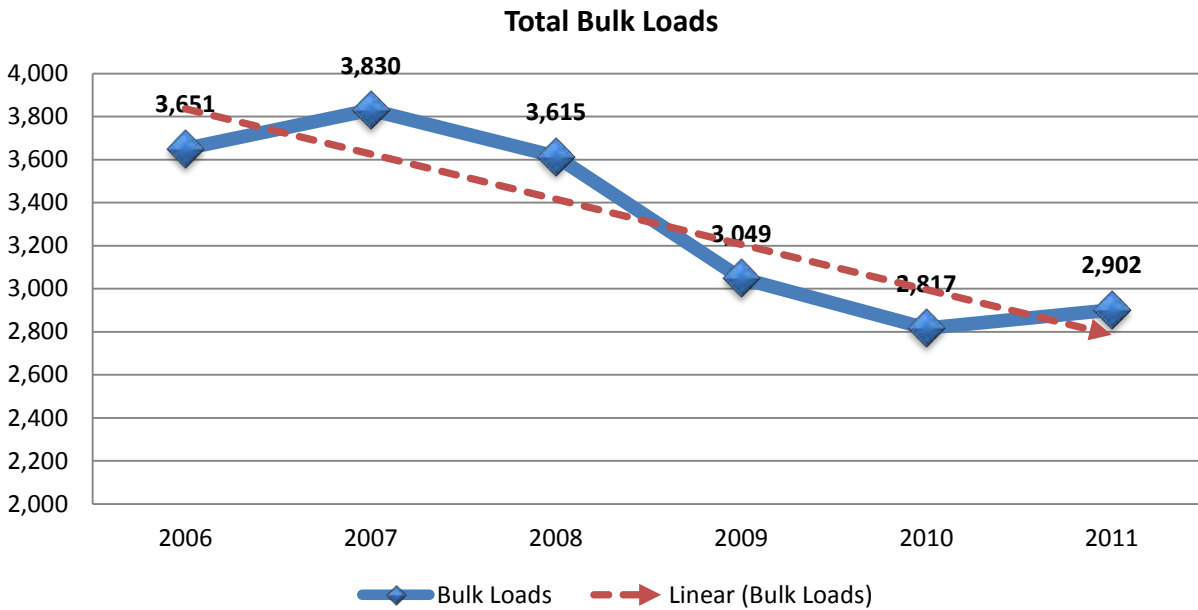
- **Bloomington:** Provides full service, treating trailer parks as a series of single-family homes.
- **Normal:** Does not provide service to mobile homes.
- **Urbana:** Has no mobile home parks within city limits.
- **Champaign:** Has two parks. One is treated as single family, one as multiple family. Policy is under review.

- **Decatur:** Does not service mobile home parks.
- **Peoria:** Does not service mobile home parks.
- **Springfield:** Case by case in 43 trailer courts.
- **Pekin:** Collections for one of two is done, and the one served has residents placing carts in a single spot at the front of the park.
- **Morton:** Does not service mobile home parks through village service.

Sources for this survey: Public Works and Finance employees and official Internet sites of City of Bloomington, Town of Normal, City of Champaign, City of Urbana, City of Decatur, City of Peoria, City of Springfield, Village of Morton and the City of Pekin, plus officials from PDC (Peoria Disposal Company) and Allied (Republic).

1. Program Information

b. Workload Performance Data

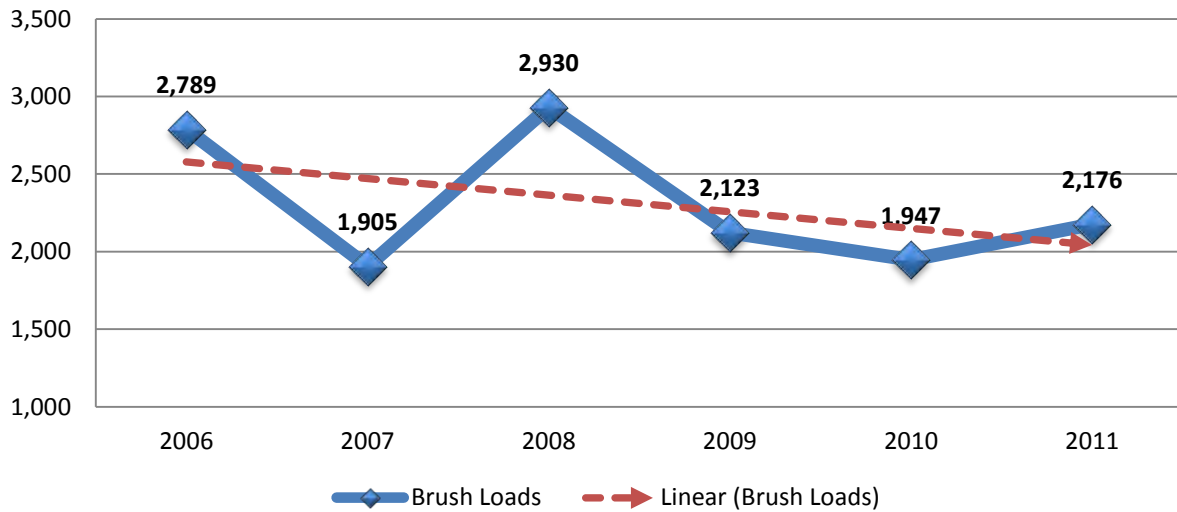


Bulk Loads

| Crew | Bulk Loads 2006 | Bulk Loads 2007 | Bulk Loads 2008 | Bulk Loads 2009 | Bulk Loads 2010 | Bulk Loads 2011 | 3 Year Average Pct Chg | 6 Year Average Pct Chg | 2006 to 2011 Pct Chg |
|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------------|------------------------|----------------------|
| Crew 1 | 853 | 928 | 907 | 575 | 635 | 667 | -7.04% | -2.92% | -21.81% |
| Crew 2 | 834 | 835 | 824 | 751 | 647 | 675 | -6.13% | -3.92% | -19.06% |
| Crew 3 | 977 | 1051 | 949 | 836 | 750 | 760 | -6.95% | -4.60% | -22.21% |
| Drop Off Facility | 987 | 1016 | 935 | 887 | 785 | 800 | -4.91% | -3.95% | -18.95% |
| Total Bulk | 3651 | 3830 | 3615 | 3049 | 2817 | 2902 | -6.75% | -4.19% | -20.51% |

The volume of Brush collected on an annual basis is a volatile measure as it may be greatly influenced by natural events such as wind and ice storms.

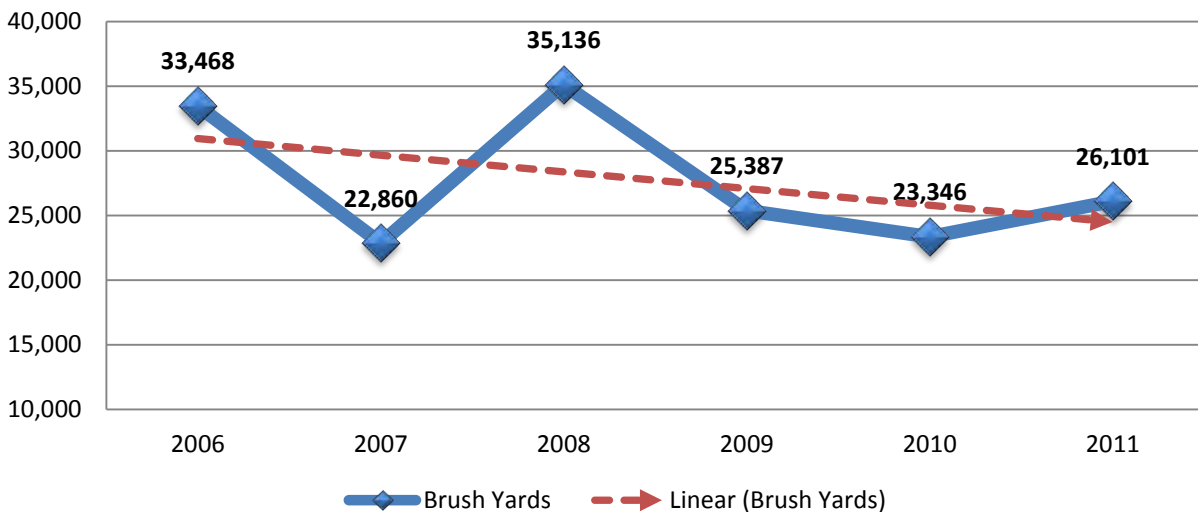
Total Brush Loads



Brush Loads

| Crew | Brush Loads 2006 | Brush Loads 2007 | Brush Loads 2008 | Brush Loads 2009 | Brush Loads 2010 | Brush Loads 2011 | 3 Year Average Pct Chg | 6 Year Average Pct Chg | 2006 to 2011 Pct Chg |
|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------------|------------------------|----------------------|
| Crew 1 | 765 | 477 | 671 | 553 | 517 | 571 | -4.55% | -2.13% | -25.36% |
| Crew 2 | 1077 | 755 | 1231 | 697 | 660 | 730 | -12.69% | -0.99% | -32.22% |
| Crew 3 | 799 | 498 | 855 | 745 | 699 | 776 | -2.67% | 5.20% | -2.88% |
| Drop Off Facility | 148 | 175 | 173 | 128 | 71 | 99 | -10.37% | -2.80% | -33.11% |
| Total Bulk | 2789 | 1905 | 2930 | 2123 | 1947 | 2176 | -8.02% | -0.39% | -21.98% |

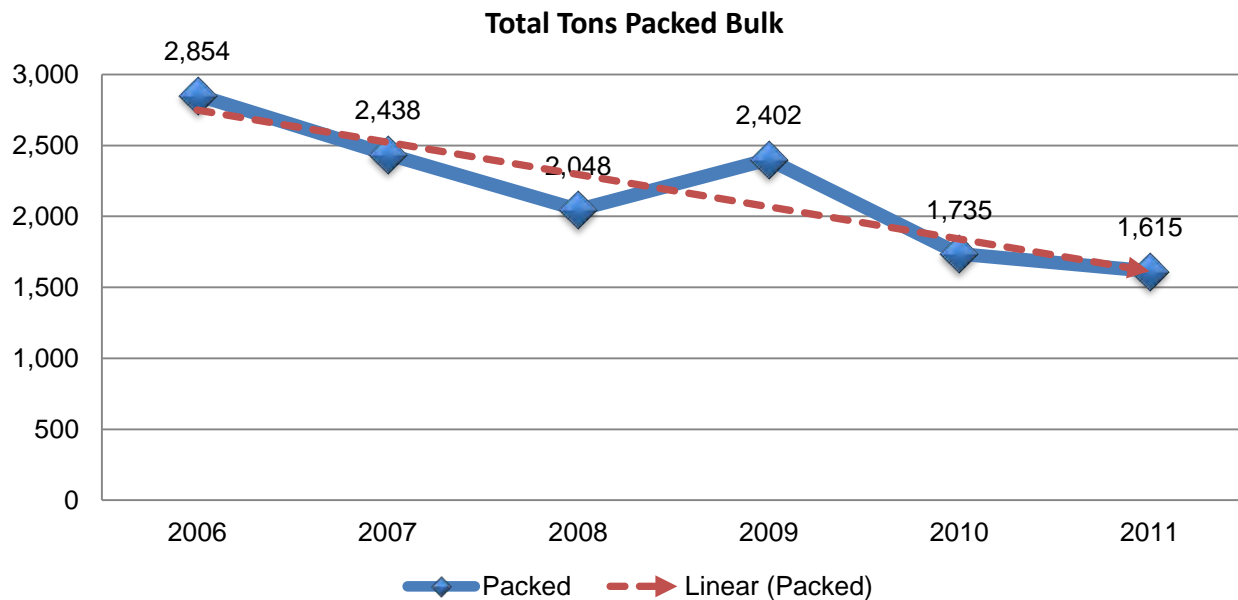
Total Brush Yards



Brush Yards

| Crew | Brush Yards 2006 | Brush Yards 2007 | Brush Yards 2008 | Brush Yards 2009 | Brush Yards 2010 | Brush Yards 2011 | 3 Year Average Pct Chg | 6 Year Average Pct Chg | 2006 to 2011 Pct Chg |
|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------------|------------------------|----------------------|
| Crew 1 | 9,180 | 5,724 | 8,058 | 6,624 | 6,228 | 6,888 | -4.39% | -2.01% | -24.97% |
| Crew 2 | 12,924 | 9,060 | 14,772 | 8,364 | 7,890 | 8,701 | -12.92% | -1.12% | -32.68% |
| Crew 3 | 9,588 | 5,976 | 10,230 | 8,862 | 8,376 | 9,348 | -2.42% | 5.25% | -2.50% |
| Drop Off Facility | 1,776 | 2,100 | 2,076 | 1,537 | 852 | 1,164 | -11.30% | -3.36% | -34.46% |
| Total Bulk | 33,468 | 22,860 | 35,136 | 25,387 | 23,346 | 26,101 | -8.00% | -0.40% | -22.01% |

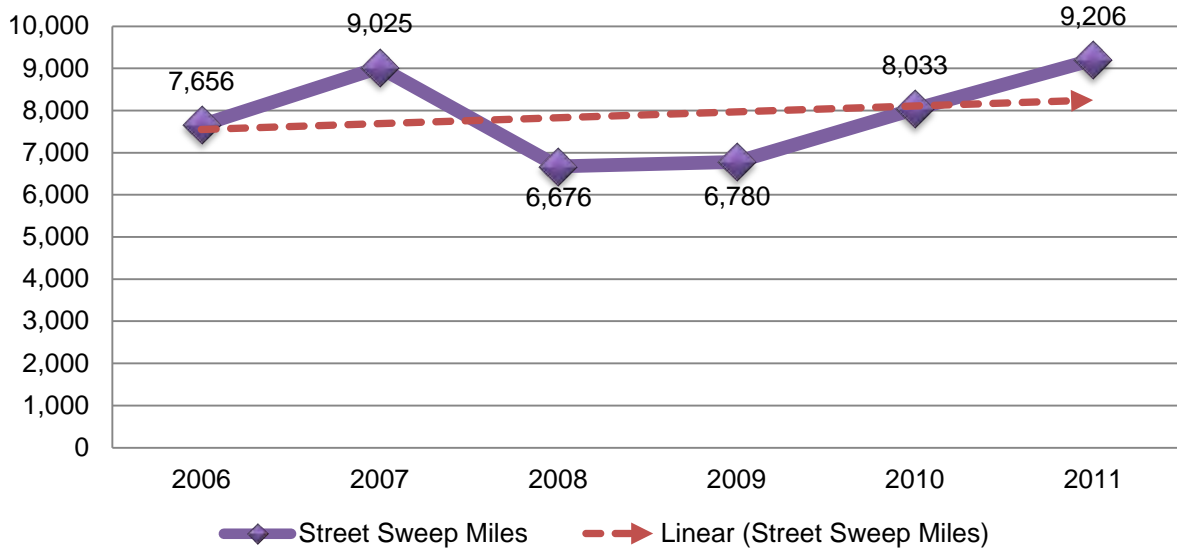
Packed Bulk is items collected curbside which is put into packer trucks for volume reduction.



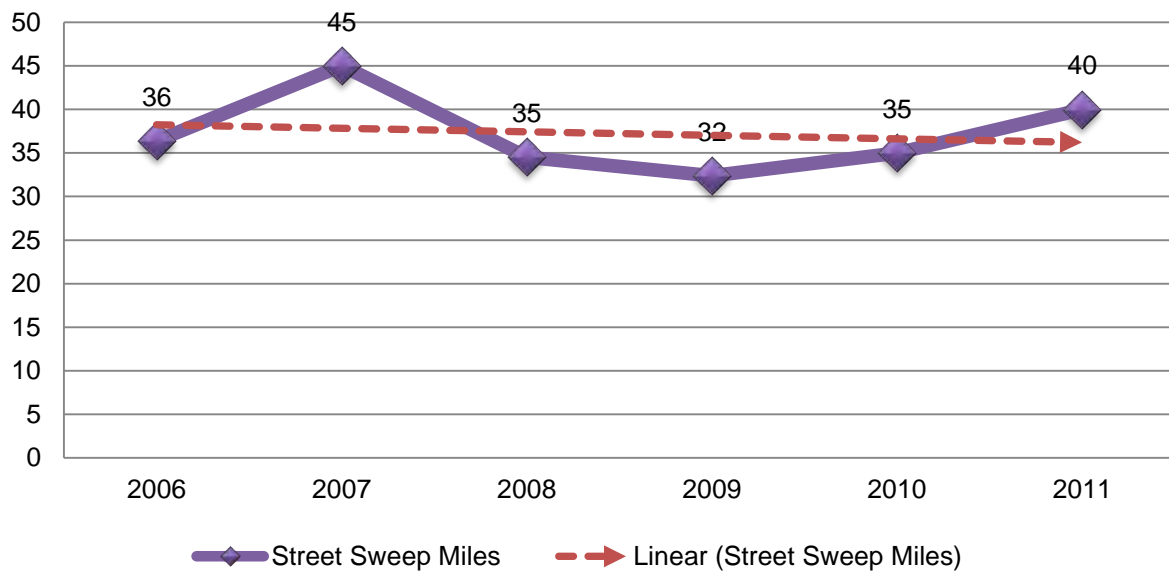
Packed

| Crew | Packed Bulk 2006 | Packed Bulk 2007 | Packed Bulk 2008 | Packed Bulk 2009 | Packed Bulk 2010 | Packed Bulk 2011 | 3 Year Average Pct Chg | 6 Year Average Pct Chg | 2006 to 2011 Pct Chg |
|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------------|------------------------|----------------------|
| Crew 1 | 1,089 | 806 | 667 | 680 | 477 | 482 | -8.93% | -13.99% | -55.69% |
| Crew 2 | 892 | 774 | 672 | 874 | 627 | 577 | -2.10% | -6.52% | -35.30% |
| Crew 3 | 874 | 858 | 708 | 847 | 631 | 556 | -5.92% | -7.41% | -36.39% |
| Drop Off Facility | 0 | 0 | 0 | 0 | 0 | 0 | N/A | N/A | N/A |
| Total Bulk | 2,854 | 2,438 | 2,048 | 2,402 | 1,735 | 1,615 | -5.79% | -9.59% | -43.41% |

Total Street Miles Swept



Avg Street Miles Swept Per Day



Street Sweep Miles

| | Total Miles 2006 | Total Miles 2007 | Total Miles 2008 | Total Miles 2009 | Total Miles 2010 | Total Miles 2011 | 3 Year Average Pct Chg | 6 Year Average Pct Chg | 2006 to 2011 Pct Chg |
|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------------|------------------------|----------------------|
| Total Miles | 7,656 | 9,025 | 6,676 | 6,780 | 8,033 | 9,206 | 11.54% | 5.30% | 20.25% |
| Average Miles Per Day | 36 | 45 | 35 | 32 | 35 | 40 | 5.39% | 3.30% | 9.89% |



2012 Bloomington Citizen Survey-Solid Waste

Background Information

| | | | | | | | | | |
|--|---|---|---|---|---|---|---|-------------|----|
| In which ward do you live? (Please refer to ward map for assistance) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| How many individuals currently live in your household? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | More than 7 | |
| If you have lived outside of Bloomington within the past 5 years, did your previous refuse collector charge for additional collection services such as recycle, bulk, yard waste, etc. | | | | | | | | Yes | No |

Please rate your level of satisfaction with each of the following services

| | Very Dissatisfied | Dissatisfied | Neutral | Satisfied | Very Satisfied |
|-------------------------------------|-------------------|--------------|---------|-----------|----------------|
| Curbside household trash collection | 1 | 2 | 3 | 4 | 5 |
| Curbside recycling | 1 | 2 | 3 | 4 | 5 |
| Curbside large items collection | 1 | 2 | 3 | 4 | 5 |
| Curbside yard waste | 1 | 2 | 3 | 4 | 5 |
| Drop-off recycling | 1 | 2 | 3 | 4 | 5 |
| Drop-site large items | 1 | 2 | 3 | 4 | 5 |
| Drop-site yard waste | 1 | 2 | 3 | 4 | 5 |
| Snow removal | 1 | 2 | 3 | 4 | 5 |

Please indicate how many times per month you use the following services

| | | | | | |
|-------------------------------------|---|---|---|---|------|
| Curbside household trash collection | 1 | 2 | 3 | 4 | More |
| Curbside recycling | 1 | 2 | 3 | 4 | More |
| Curbside large items | 1 | 2 | 3 | 4 | More |
| Curbside yard waste | 1 | 2 | 3 | 4 | More |
| Drop-off recycling | 1 | 2 | 3 | 4 | More |
| Drop-site large items | 1 | 2 | 3 | 4 | More |

Please indicate your level of familiarity with the following services below

| | Very Familiar | Somewhat Familiar | Not Familiar |
|-------------------------------------|---------------|-------------------|--------------|
| Curbside household trash collection | 1 | 2 | 3 |
| Curbside recycling | 1 | 2 | 3 |
| Curbside large items | 1 | 2 | 3 |
| Curbside yard waste | 1 | 2 | 3 |
| Drop-off recycling | 1 | 2 | 3 |
| Drop-site large items | 1 | 2 | 3 |
| Snow removal | | | |

I would support change to the current Solid Waste Program if...

| | | |
|---|-----|----|
| It saved me money by providing me an option to choose the services I would like to receive (i.e. Garbage, bulk, recycle, yard waste collection) | Yes | No |
| It increased the services that I receive | Yes | No |
| It enhanced environmental impact measures and practices | Yes | No |
| The program would become less dependent on General Fund dollar support | Yes | No |
| Costs were increased to provide additional drop off recycling sites | Yes | No |
| Space for other questions | Yes | No |
| Space for other questions | Yes | No |
| Space for other questions | Yes | No |
| Space for other questions | Yes | No |
| Space for other questions | Yes | No |

Please indicate whether you agree, disagree, or are unsure about each of the following statements

| | Agree | Disagree | Unsure |
|--|-------|----------|--------|
| Bloomington’s solid waste system is in need of change. | 1 | 2 | 3 |
| I favor a system where residents pay based on the amount of solid waste their household produces rather than a set rate. | 1 | 2 | 3 |
| I would be willing to pay more for waste collection services if it meant the fees paid for the service provided. | 1 | 2 | 3 |
| Recycling Services are a priority. | 1 | 2 | 3 |
| The current costs for solid waste are too high. | 1 | 2 | 3 |
| The current costs for solid waste are fair. | 1 | 2 | 3 |
| I favor a system where residents pay based on the amount of solid waste their household produces rather than a set rate. | 1 | 2 | 3 |
| Information about solid waste services in Bloomington is easy to find. | 1 | 2 | 3 |
| I support a change in services to decrease the city funding gap. | 1 | 2 | 3 |
| I am willing to pay extra to receive recycling services. | 1 | 2 | 3 |
| There are too many garbage trucks on the roads contributing to traffic congestion. | 1 | 2 | 3 |
| The City provides residents with large item pickup services once a week equivalent to 2 front end loader buckets at no additional charge (\$25 per bucket after 2 bucket limit). As a cost saving measure to the Solid Waste Program, I am willing to pay additional charges after 1 front end loader bucket per week. | 1 | 2 | 3 |
| I am happy with the snow removal services provided by Bloomington | 1 | 2 | 3 |
| Snow removal service is provided by the same city staff members who provide snow removal service. I am in favor of contracting out snow removal services if a private vendor can reduce costs even if it reduced the level of solid waste service provided to me. | 1 | 2 | 3 |

| Final Questions | Yes | No | Unsure |
|---|-----|----|--------|
| The City should provide curbside household trash collection | 1 | 2 | 3 |
| The City should provide curbside recycling | 1 | 2 | 3 |
| The City should provide curbside large items | 1 | 2 | 3 |
| The City should provide curbside yard waste | 1 | 2 | 3 |
| The City should provide drop-off recycling | 1 | 2 | 3 |
| The City should provide drop-site large items | 1 | 2 | 3 |
| If solid waste is outsourced, should the city restrict the monthly fee charged by an outside company? | 1 | 2 | 3 |

If you answered no to any of the questions in the “Final Questions” section, what alternatives would you recommend? _____

Thank you for your participation in the City of Bloomington’s solid waste survey



2. Program Issues and Needs



a. Automated refuse and recycle collection services to apartment, apartment complexes, and condominiums

Introduction

As the City approaches automated collection of recycling and household refuse, it has encountered foreseeable obstacles, especially in regard to collection at apartment complexes and in older neighborhoods built before big garages and long driveways kept most parked cars off the street.

Indeed, a few of the neighborhoods were constructed back when a standard mode of transportation was a horse and a move to automated transportation meant a trolley and, for a few fortunate people, a new invention called the automobile. Through the years, buildings were constructed to accommodate high density housing without thought that someday street parking would hamper public garbage collection. And many of our houses within the central areas of the City recall a day when families were bigger and now accommodate multiple unrelated people who rent pieces of the now-divided houses.

Currently, operations are retrofitting modern collection and modern goals into old style neighborhoods and into dense multi-family areas. This task is possible, but there are big logistical questions along the way, as noted by staff and Council members over the past months. Currently, wheeled recycling carts are being ordered. Garbage carts should be in use this coming spring. Thus, resolution of issues is needed. In this summary, staff presents recommendations and presents a variety of options for the City Council to decide upon. The issues and challenges presented are not unique to Bloomington. Every city that chooses automation faces obstacles. Bloomington's automation conversion experience is the norm.

City Goals

- Make recycling available to every resident of Bloomington.
- Vastly increase recycling while reducing landfill usage.
- Combine efficiency in recycling and garbage collection with good value and cost-effectiveness, while providing excellent services.

In some cases, goals collide. Some of the City's neighborhoods are not set up for maximum efficiency, and some Council options staff present in this summary are not the most cost-effective. Perfect answers are unattainable. However, the constant is the goal of access to recycling for all residents – a goal voiced clearly by a couple aldermen (without dissent from other aldermen) and by the City Manager on August 13. With this in mind, City staff respectfully presents the following recommendations.

Recommendations

Staff recommends that the City stop providing collection at apartments and condominiums with five or more units and at apartment complexes and condominium complexes. Owners/landlords of these buildings should be required to contract with private haulers to provide services. These private haulers should be required by ordinance to obtain licenses from the City to perform that function and be required to offer recycling to the apartment dwellings they serve as a condition of that license. In other areas of the City in which logistical issues prevent efficient, automated trash service, the City should retain manual garbage collection. This means the retention of one manual garbage route while automating the other five routes. This is referred to as a "hybrid" collection system.

Overview

Cities decide for themselves what level of refuse service they offer, how the service is funded, who delivers that service and how it is delivered. There tends to be at least minor, and often major, differences between any two cities being compared. It doesn't make one city "wrong" and the other "right." There is no template to follow other than the one a given city's staff and municipal council determine to be the preferred service level and delivery for the particular city. Staff believes the best template for this City at this moment is for the City to provide service to single-family homes and to apartments with four or fewer units and that owners of commercial enterprises, including those involved in rental of larger apartment buildings and apartment complexes, should be required to establish their own refuse arrangements with qualified private haulers.

Staff views large apartment buildings and apartment complexes as business endeavors – rather than merely groups of households – and, therefore, believes that these businesses should be treated as other businesses: Required to arrange for their own refuse needs. The city's practice now, in staff's view, amounts to a subsidy for businesses that are engaged in residential rentals which is a cost passed on City taxpayers as a whole. However, logistical issues, not financial ones, pose the primary concern and motivate the staff to seek a service change. It is for logistical reasons that staff also recommends eliminating city collection to condominiums with five or more units.

Timing: The matter has been discussed in the past, but the issue presents an immediate logistical issue as the city switches to a more automated, more efficient and less labor-intensive service delivery.

Scope: Currently, the City collects at 25,871 residences. Of that, 805 households fall within the definition of being an in an apartment or within an apartment complex or condo complex with more than four units.

Definitions of apartments: When we discuss an "apartment" building in this memo, we refer to a building constructed for the purpose of rentals and containing more than two units, or a single-family house that has been divided into more than two units for rentals. An "apartment complex" means:

- Two or more structures built as multiple-family dwellings.
- And containing three or more units per building.
- And located next to one another.
- And coming under common ownership.

Not counted as a "complex": A landlord might own two converted houses next door to each other with each containing four units. This does not constitute a "complex" *unless the houses are on a single lot.*

Logistical Issues

The city prepares to shift from collection of recycling bins to use of 95-gallon and 65-gallon wheeled carts. A mechanical arm attached to the recycling truck will pick up a cart at the curb and empty the cart into the recycling truck. In most neighborhoods, the system will be extremely efficient. However, City employees, certain homeowners, landlords and tenants simply cannot accomplish recycling at apartment complexes and in certain other neighborhoods using this automated curbside system as designed. Further, the city will be phasing-in collection of household trash using wheeled carts. Again, this will be unachievable, as designed, at apartment complexes.



Storage illustration: Trash-can storage areas, such as this one at an Eisenhower Street complex, will not accommodate a multitude of wheeled carts.

Storage

A major problem is **storage**. Imagine an apartment complex with multiple two-story buildings with each building containing eight units. If the City attempted to automate apartment recycling and trash collection, every resident would be entitled to a wheeled recycling cart and, eventually, a wheeled trash cart, too. Where would these carts be stored? At many apartment buildings, the existing storage areas are too small for cart storage. The carts are too large to be stored inside apartments (even if assuming the carts are kept in optimal sanitary conditions). Also, upper-floor residents could not possibly be asked to bring the carts up and down apartment stairs. The 95-gallon carts alone weigh approximately 40 pounds each.

Theoretically, the carts could be stored outside the building – if there is room behind the building. If using side yards, the landlord would be required to build some sort of storage areas such as wooden fencing to block the view of the carts from the street. City ordinance currently states: Carts and trash containers should not be visible from the street. It is not too much to ask a landlord of a four-plex, three-plex or duplex to provide trash and recycling cart storage for tenants. However, for the apartment complexes, with many buildings and a multitude of carts, the storage requirement becomes, what staff considers to be, burdensome.

Note that all residents do not recycle, especially apartment dwellers. A Public Works study found about a 25 percent participation at multi-family buildings using the existing curbside blue-bin collection. Per apartment unit, the participation drops; 25 percent participation counted an entire apartment building as participating if just one person from the building placed a single blue bin on the curb. And every apartment household will not order a cart. Nevertheless, the City anticipates serious cart storage problems if it includes wheeled cart collection at apartments.

Option: Shared carts. In an ideal situation, tenants in our hypothetical eight-unit apartment building could share carts, but that opens another problem: Who is responsible for a given cart? These carts are expensive and they are issued to customers at specific addresses and not to groups of customers. A resident who damages a

cart is responsible for paying for a replacement under current plans. Who will pay for a replacement cart if it is shared by multiple households at an apartment complex and no one steps forward to take responsibility? This will be an issue even if the Council eliminates service to major apartments and complexes. Staff considered options:

- Landlords and tenants could be made “jointly and severally liable” for the cost of a cart in a similar manner as they hold joint and several liability for water bills. If a tenant does not pay his/her water bill, ultimately the landlord must. Similarly, if a wheeled cart is damaged, lost or stolen, the landlord ultimately assumes responsibility for replacement.
- Another potential option is to place the responsibility of the carts squarely on landlords. Carts would be issued to them and they would be responsible for replacements.
- The only other option we can think of is that the City government replaces the cart and accepts the cost.



Photo illustration: Cars parked at apartment complexes would block the City from using automated wheeled cart pickup as designed.

Parking

A second problem is ***parking***. Outside apartments, cars line the streets during the day. Fully automated curbside collection becomes impossible. Instead, wherever a car blocks a cart, the driver would have to exit the truck, wheel the cart to the truck, get back into the truck, load and empty the cart with the automated lift, exit again and wheel the cart back to the curb. The driver would repeat the process for every cart with a car parked in front of it. It can be done, but not efficiently. In most neighborhoods, this will be an occasional inconvenience. In front of large apartments and at apartment complexes, this would be the norm. It provides an argument against continued service to these multi-family areas.

Option: Manual-collection neighborhoods. The parking issue also provides the prime reason staff recommends enactment of a hybrid system. It will enable us to accommodate areas with heavy on-street parking by continuing a manual garbage route while at the same time serving the rest of the City with automation. Areas such as Dimmitt’s Grove, the near-east side, older areas of the west side, neighborhoods abutting schools, Franklin Park, and the Illinois Wesleyan neighborhood area come immediately to mind as candidates for continued manual pickup. For now, staff recommends use of recycling carts throughout the City, except in areas the Public Works Director designates as a blue-bin pickup zone. Staff *strongly recommends* that Public Works maintain a manual trash route for certain neighborhoods, also to be designated by the Public Works Director.

If Council wants to retain service to apartments...

Should the Council reject the staff recommendation and continue service to apartment complexes, logistical issues remain. Many of those complexes would be candidates for manual collection but there are other alternatives.

Option: Parking bans. Parking bans on collection days could solve the parking issue at apartment complexes and in parking-heavy neighborhoods – but only by creating a new problem of parking for affected residents and, when school is in session, for school faculty and staff. Parking bans would be highly unpopular and hard to enforce. Staff *recommends against* parking bans. They may be effective in other cities, but staff doesn’t believe it a good answer for Bloomington.

Option: Central collection at apartments. An answer for apartment complexes might be to establish central collection points for the carts, rather than curbside collection. This would entail extensive deliberation and site visits with landlords to customize procedures for various apartment complexes. The Solid Waste Division would need another employee to achieve the task. Furthermore, lack of cart storage might require shared carts among tenants as discussed earlier.



Roll-offs: The landlord at 302-310 S. Madison opted out of City service and instead uses roll-offs for trash and recycling. Parked cars (right) rule out automated collection in front of the apartments there.

Option: Roll-offs: Apartments also could be served with **roll-off trash containers** commonly known by the trademarked name Dumpster. Wheeled recycling carts could be placed near the roll-offs. Or, the apartments could be served with large recycling bins similar in size to Dumpsters. However, the City possesses no trucks equipped to collect roll-off containers (Dumpsters). Theoretically, the City could buy a truck to handle roll-offs, plus the roll-off garbage containers and recycling containers. Staff would *recommend against* this option because of the added expenses. Costs:

- Estimated \$180,000 for the truck.
- Plus the cost of the containers.

- Plus one new union employee to operate the truck.
- Plus neighborhood disruption. The truck would in many cases block the street during a fairly slow emptying process; most commercial Dumpsters get emptied in the middle of the night.

Options for the City Council

Whatever City leaders decide to do, decisions must come soon, before the City starts distributing recycling carts to residents in November. Here are some of the alternatives addressing various issues for Council consideration:

Council option: Hybrid trash collection system.

The Council follows staff recommendation in retaining a manual trash collection route in parts of the City in which logistical problems (namely, parked cars) prevent efficient use of automation. These areas are to be determined by the Director of Public Works but will concentrate on areas near the center of the city, such as Dimmitt's Grove, the near-east side, the near-west side and along streets abutting Irving, Sheridan and Bent schools.

- Pros: Efficiency is maintained through manual collection in an area where logistics rule out efficient use of automation. Staff cannot foresee a better way.
- Cons: Manual collection poses some risk of injury. It is more labor-intensive, using three people – usually a union driver and two seasonal workers. It rules out use of trash carts and automation along an entire route. The rule has to be uniform throughout this route: No carts. That's because the City has no plans to buy the more expensive automation equipment for this route if it stays as a manual route. It will use an existing truck. Because of weight, it is unsafe for workers to manually empty carts into our existing trucks.

Council option: Hybrid recycling system: The Public Works Director designates certain zones as blue-bin zones. Most of the City will be mandated to use only the wheeled carts to recycle.

- Pros: The option gives the City flexibility on logistics.
- Cons: At times, cars will block carts from the curb and the employee will have to get out and wheel the cart to the truck. That is inefficient. When emptying a blue bin in designated zones, the worker has some risk of lifting-related injury. Because they have no lids, material falls out of the bins and becomes litter.

Council option: Discontinue some apartment services: As recommended, the City Council decides to require landlords of apartment complexes and apartments with more than four units to make their own collection arrangements with private haulers. Also excluded from service are rooming houses, condominiums with more than four units and condominium complexes with more than four units. Note that four is a common cutoff. The Council could decide upon six or more, or seven or more. However, as the density grows, so do the logistical problems.

- Pros: Many of the logistical issues are solved while apartments still are served by qualified haulers.
- Cons: The City loses direct control of services. Many landlords and tenants may oppose the change, as they for years have been benefiting from quality City service at an attractive price. They and members of the Council might feel as though the City is abandoning residents. Private haulers may have higher rates, and those rates will get passed on to tenants, many of whom are lower income. Or, haulers may reduce the scope of services, such as large-item pickup. Public housing residents become excluded from service. (However, see BHA option later in this report.)

Council option: Retain apartment service: The Council decides against the staff's recommendation and decides to retain collection at apartments as a City responsibility (with landlords being able to opt-out and make their own arrangements, as is currently the case). Public Works employees continue to provide the best service possible under Council guidelines. An outline of options within this option follows.

Council sub-options: Collection at large apartments, complexes.

- Recycling hybrid: Unlike the case in most of the City, apartment complexes continue to use blue bins.
 - ✓ Pro: Because of parking, these apartments can most efficiently be served with manual collection of 16-gallon blue bins.
 - ✓ Cons: The system is not optimally efficient. There remains a potential for worker lifting injuries when manually collecting recycling bins. The bins have limited capacity and they have open tops, allowing weather contamination in the recyclables and creating litter when material falls out of the bins.
- Automated but inefficient: The City collects in apartment complexes and does so with residents using carts. Cart collection occurs in an inefficient manner: Exit truck; wheel cart to truck; empty cart with mechanical arm; exit truck again; wheel cart back to curb. Repeat. This option leaves unresolved the logistical issue of storage discussed in the memo.
 - ✓ Pro: Lesser chance of worker injury.
 - ✓ Con: Highly inefficient.
- Automated, case by case: The City works through logistical issues on a case-by-case basis with landlords/owners.
 - ✓ Pro: The system will be tailored to precise needs at each precise locations.
 - ✓ Con: Doing so would be time-consuming; it requires discussions and site visits with dozens of property owners. Additional staff would be needed. As one industry expert put it, “It’s a study in itself for every building.”
- Parking bans: Discussed above.
 - ✓ Pro: Enables efficient cart collection.
 - ✓ Con: Will be unpopular and hard to enforce.

Council option: Recycling drop-off bins: With the goal of making recycling available to all in the City, Bloomington sets up drop-off boxes similar to those used for years by Normal. Staff *recommends against* their use for the reasons listed under “Cons” below.

- Pros. It helps the City attain its goal that 100 percent of residents have access to recycling. Even those living outside town can recycle.
- Cons: Cost. The truck to pick up the bins costs about \$180,000, and then the City would have to pay for the bins (about \$10,000 each) and a driver for the truck. Also, non-residents will use the drop-points, meaning the City would subsidize recycling costs of non-residents. Normal has had difficulty getting commercial landowners to allow them onto their property. Bloomington would expect the same.

Public Policy Outlook and Apartments

The public policy issue of services or non-service to apartments comes down to this: In terms of providing refuse service, should larger apartments and complexes be treated like businesses or should they be considered part of the residential community. Staff believes apartments are the undertaking of private businesses (with the exception of public housing structures). Beyond four units, an apartment complex starts becoming a serious business endeavor.

Trends in refuse collection: It is common among our neighbors to leave refuse hauling at most businesses, including apartment-complex businesses, to the private sector. Normal, for example, collects only at houses, and duplex-style structures. Decatur limits city services to apartments with six units or less. A common standard is city collection or city-regulated collection at apartments with four units or less, and that is the standard used

in Peoria, Pekin, Springfield, Champaign, Urbana and Morton, and Morton allows four-plexes to opt out. Champaign and Urbana governments involve themselves with recycling at all residences, including complexes, but they charge a recycling fee to pay the full cost (\$2.50 per month per household in Urbana and \$2.60 in Champaign).

City staff wanted to ascertain what percentage of cities statewide, regionally or nationwide offer city services at apartment complexes. We contacted various sources but were unable to find data. We are not sure there are any readily available public documents. Two of the experts contacted were:

- ISU economics professor David Loomis. An ecology specialist, Professor Loomis undertook searches on the Internet and using the Milner Library databases to see whether he could find material of which he was unaware. He found none pertaining to the question.
- Marc J. Rogoff, Phd., who is project director for SCS Engineers in Tampa, Fla., and a member of the Waste Management Committee for the American Public Works Association. His firm conducts studies on solid waste methods for municipalities and his work with APWA continually places him in conversations about municipal refuse. Mr. Rogoff knew of no studies and stated that the only standards when approaching automation issues, in his opinion, are the ones that individual communities decide fit their particular circumstances.

Financial Implications and Apartments

City subsidy: The financial issue does not drive the recommendation to end service at large apartment, condos and complexes. Nonetheless, the Council should know that the City government – i.e. taxpayers in the City as a whole, subsidized solid waste services to all households by an average of about \$50 per household per year in FY 2012. That amounts to an annual total of \$40,250 (805 units in question x \$50 per unit) for the apartment units in question. Thus, it can be stated that the City subsidized the housing rental industry's refuse services.

Hidden cost: A hidden cost to moving collection at large apartments from the City to private haulers involves wear and tear to streets. No dollar cost is affixed, but common knowledge tells us that multiple trucks from multiple haulers driving through the City to serve apartments will increase wear on the streets.

Implications for landlords and tenants: Ultimately, the consumers/tenants would pay any increase in cost that might occur if the City stops serving apartment complexes and apartment buildings larger than four-plexes. Owners/landlords would pass along costs, just as they pass on cost of property taxes. Landlords operate in the black, not the red. Landlords, however, may believe the change to be inconvenient and may argue against the change, as may tenants. Of particular concern to landlords will be the loss City large-item pickup. Tenants leave loads on curbs during move-outs, and the City adds no direct cost to landlords unless the load volume on a given day outside a given building exceeds two end-loader buckets.

Apartment tenants would be freed of the \$16 monthly City refuse fee. Tenants may or may not pay more, in the end. Competition should keep prices affordable. However, the costs passed to them from their landlord would depend on the hauler used and the level of service arranged by the landlord and hauler.

A comparison of municipal services between two cities might help Council members visualize the difference in costs and services. Here, we compare the costs and service levels in Bloomington versus Springfield for a tenant in a four-plex apartment. (Springfield does not service larger apartments and complexes.)

- Springfield: \$12.25 per month for trash and recycling; \$1.50 per bag of compost except during fall/spring free pickup periods; three-item maximum for large-item pickup *per year*; private haulers will pick up additional items for added charges.

- Bloomington: \$16 per month for trash, recycling and yard waste (except grass). Seasonal leaf collection at no added cost. *Weekly* large-item pickup at no charge for the first two end-loader buckets; \$25 per bucket after that.

Other Matters for Consideration

Downtown: Downtown cannot accommodate automated collection because of logistics. Staff recommends no change to Downtown service. It would retain weekly manual pickup but without bulk pickup. Recycling carts are stationed outside the Tiltons' Fox & Hounds building.

Bloomington Housing Authority: BHA property falls into a gray area. In Bloomington, BHA operates Kane Homes, Holton Homes, Sunnyside, Evergreen, Woodhill Towers, Woodhill family units and at least four group homes for persons with disabilities. These properties *act like* apartment buildings/complexes in terms of logistics of refuse services. However, the landlord/owner has no profit motive and isn't a business. If the City Council chooses, it could enact the staff-recommended change to end collection at apartment complexes but could exempt BHA property. Clearly, BHA properties lack storage and cannot be served with the wheeled carts. Public Works could continue to serve these dwellings with the existing system of manual garbage collection and blue-bin recycling. That would match the wishes that the Housing Authority's maintenance supervisor conveyed to staff, and it would be staff's recommendation.

Sororities and fraternities: Illinois Wesleyan University's off-campus fraternities and sororities *act like* bordering houses but also operate without profit/business motivation. The Council could choose to grant them exemptions as well. Some of them already are using recycling tote carts under special collection arrangements with the City.

Private haulers, licensing and recycling: Private haulers already work in the City, collecting for businesses and for apartment complexes whose owners have opted out of City service. They include Allied Waste (Republic), Area Disposal (PDC/Area), Henson Disposal and Casali & Sons. They could be licensed now, under existing ordinance. City staff believes a license requirement and requiring that they offer recycling services in residential areas serves two purposes. First, it helps control quality and limits the number of haulers working in the City. Secondly, it ensures the City keep intact its mission to encourage recycling and divert recyclables from landfills. Staff recommends that private haulers and landlords/owners be required to offer recycling at residential units *regardless of whether owners/landlords have opted out of City service and regardless of whether the Council decides to retain or end refuse service to apartment complexes.*

4. Regulatory Implications

a. Organizational Review



Source: Local Government Case Study: City of Eden, NC Fully Automated Solid Waste Collection Program; 2003

Summary: The City of Eden operates a fully automated solid waste collection program using two fully automated side-loading collection vehicles. Automated vehicles require only one employee for each collection route. The fully automated system reduces staff and associated labor costs, and provides a safer work environment for employees, thus reducing workers' compensation costs.

Results: Changing from the previous more labor-intensive collection program to the fully automated system, the city was able to reduce its collection staff by seven. Out of the seven staff members, five were reassigned to other duties related to waste disposal operations and two were laid off. At an average of \$20,000 per staff member per year, the city has realized significant annual savings. In addition to the costs savings, the new system provides a much safer work environment and reduces liability. Since implementation of the automated system in 1994, there has been only one workers compensation claim, which occurred when a driver attempted to quickly flee a snake occupying his vehicle.

Information available at: <http://infohouse.p2ric.org/ref/26/25011.pdf>

Source: Fairfax County, VA –Green” Trash Truck Hits Streets

Summary: The Fairfax County Solid Waste Management Program purchased a hybrid trash and recycling collection vehicle. This vehicle is predicted to reduce fuel costs by six percent along with reduced emissions and generation of heat from the braking process.

Information available at:

http://icma.org/en/Article/100960/Fairfax_County_VA_Green_Trash_Truck_Hits_Streets

Source: City of Montgomery Ohio

Summary: In October 2008, after the City of Montgomery, Ohio successfully implemented an automated solid waste collection program, they created a “pilot program” to offer curbside recyclables collection. The approach used by Montgomery, called “RecycleBank,” offers incentives to residents to encourage recycling. For example, based on the weight of recycled materials, households receive coupons and reductions in their solid waste collection bill for the following months.

The Results: The change in the corresponding 12 month periods between 2007-2008 (old system) and 2008-2009 (RecycleBank) shows that residents increased the weight of materials recycled by 51% while reducing the amount of weight of materials directed to landfill by 18%.

In August 2009, Montgomery issued a survey to every house that participated in the RecycleBank program. This survey provided a 37% response rate which allowed the City to learn more about ways to improve the program. (This information is included in Montgomery's report)

Before the RecycleBank program, Montgomery traditionally ranked in the top ten communities in Hamilton County for its resident's recycling rates. In the final year before the implementation of RecycleBank, Montgomery ranked 6th. After implementing RecycleBank, Montgomery moved to #1 in Hamilton County, Ohio.

Information available at: <http://icma.org/documents/document/document/301587>

Source: North Carolina Department of Environment and Natural Resources

Summary: This website provides information and workshops aimed at establishing and maintaining a special event and venue recycling program. (This may be important if the city attempts to provide solid waste and recycling for festivals, concert venues, stadiums and other community events both indoor and outdoor).

Information available at: <http://portal.ncdenr.org/web/deao/recycling/plastic-bottles/ev>

Source: Creating A Competitive Environment, Working Outside of the Traditional Contracting Box; 2010

Summary: Concord Township, a community of 19,500 residents, in Northeast Ohio started their own recycling program after the County offered a subsidy to all towns that wished to manage their own programs to eliminate the County's management of the recycling services. From 2005 to 2010, Concord struggled with managing various types of recycling programs from curbside programs to drop-off sites. Even with the subsidy offered by the county, this service was a drain on the township budget.

Results: In 2009, the Township Board of Trustees solicited a citizen's committee to study the recycling issue. The township decided to continue with the curbside program and reduce the drop-off sites from two to one. Before this program could be implemented, officials determined that a single hauler with 100% participation by the community was the best option. Through citizen input, the committee learned that many citizens were not in favor of losing their choice of solid waste hauler (a necessary component of the proposed program). After further committee research, it was predicted that implementing this recycling program without one exclusive hauler would cost approximately \$400,000.

Increased costs, demand by residents for curbside recycling, and strong community input for the ability to choose between haulers resulted in the creation of a new contract bid that was set to go out in February of 2010 with selection set for mid-April 2010 (Details of the bid can be found in Concord's article). One local firm beat out the national firm for the drop-off recycling services. In addition, the two local firms submitted offers for curbside recycling services. Eventually both firms would engage in a competitive process in which they would provide both weekly solid waste hauling along with weekly curbside recycling for a rate less than they had previously provided weekly trash hauling. The result of creating this competitive environment was that the residents were better served by increased service at a lower price.

Information available at:

http://icma.org/en/icma/knowledge_network/documents/kn/Document/302662/Creating_a_Competitive_Environment

Source: Local Government Case Study: Mecklenburg County Business Recycling Ordinance

Summary: In Mecklenburg County, non-residential waste accounts for 78 percent of the waste stream. As a result, in 2002, the County created an ordinance requiring businesses to recycle office paper and corrugated

cardboard. A civil penalty for noncompliance of \$50 begins following the issuance of a third notice of violation. Subsequent penalties increase by \$50 per violation.

Results: Overall, the amount of waste generated by the County decreased after the implementation of this program. Due to a weakened economy and the lack of tonnage reports by private businesses, it is difficult to determine whether this ordinance alone was responsible for the decrease in waste.

Information available at: <http://www.p2pays.org/bmp/payt.asp>

Source: Getting More for Less: Improving Collection Efficiency; 1999

Summary:

The collection efficiency study was undertaken to provide a more detailed understanding of cost saving methods for local government units involved with collecting residential solid waste and recyclables. This study offers multiple approaches and adjustments that municipal refuse planners can make to become more competitive in solid waste collection in the managed competition system.

- Studies undertaken by the Solid Waste Association of North America found that collecting solid waste and recyclables is the most expensive part of a solid waste management system (pg 5.) On average, these costs usually make up 50% of municipal solid waste management. In this category, labor takes up the largest portion of the budget.

Changing Collection Frequency: Common approaches include weekly residential solid waste collection and reducing recyclables collection from weekly to every other week or twice per month.

- Studies indicate that there is a positive correlation between collection frequency and underutilization of services by residents.
- Resident Concerns of Collection Frequency Adjustments
 1. Increase in flies
 - The Tucson, Arizona pilot program showed no increase in flies as a result of the switch to once per week collection.
- Benefits of Collection Frequency Change
 1. Makes each stop count more- Maximizes weights collected per stop
 2. Minimizes nonproductive time: Increases average set-out rates.
 3. Reduces fuel consumption and other environmental impacts
 4. Reduces vehicle and labor needs

Dual Collection: Trucks are equipped to collect residential solid waste, recyclables, and yard clippings in different compartments of the truck in a single stop. This system saves money in fuel costs, maintenance, and labor by reducing the collection frequency required to provide curbside solid waste, recyclable, and yard trimmings collection.

| Cost-Cutting Strategy | You Might Benefit If You Currently... |
|---|---|
| Changing Collection Frequency | <ul style="list-style-type: none"> • Want to implement a pay as you throw fee structure • Are collecting recyclable materials twice per week • Need or want to add a collection service • Operate or want crews with two or more people • Are not maximizing your vehicle payload |
| Improving Routing | <ul style="list-style-type: none"> • Have not examined route design or balance recently • Are changing service levels, vehicle type, crew size, or frequency of collection • Have a service area that is growing • Have a service population that is shrinking • Have Graphical Information System or mapping software |
| Increased Degree of Automated Collection | <ul style="list-style-type: none"> • Are using manual or semi-automated collection vehicles now • Want to implement a pay as you throw fee structure • Have experienced a number of work related injuries from lifting or handling refuse • Have high staff attrition rates or absenteeism |
| Implementing A Dual Collection System | <ul style="list-style-type: none"> • Want to add collection services (e.g. separate recyclables or yard trimmings pickup) • Have low participation rates • Have great distances between stops |

Information available at: www.epa.gov/osw/nonhaz/municipal/landfill/coll-eff/r99038.pdf

Pay-As-You- Throw: Waste Collection Program Overview By Sustainable Cities Institute

Pay-As-You-Throw (PAYT) programs charge households for solid waste collection based on the amount of waste that they throw away. Those who throw away more pay more and those who throw away less pay less. The goal is to create a financial incentive for residents to recycle, resulting in decreased volume of material sent to landfills and incinerators.

Traditionally, residents pay for waste collection through property taxes or a fixed fee, regardless of how much—or how little—trash they generate. PAYT breaks with tradition by treating trash services just like electricity, gas, and other utilities.

Most communities with PAYT charge residents a fee for each approved trash bag or can of waste they generate. In some communities, residents are billed based on the weight of their trash.

There are 3 common pricing structures:

- Proportional Pricing means residents pay a set price per bag or unit of trash that they generate

- Variable Rate Pricing means that the price per unit changes as the amount of waste created by an individual changes
- Multi-tiered Pricing uses a flat fee to create revenue stability, and then adds additional costs per unit of waste generated.
- Generally, the flat fee would be used to cover the program's fixed costs, and the 2 tier fees to cover variable costs such as collection, transportation, and disposal.

Rationale: PAYT programs provide the largest increase in recycling volume with minimal cost impacts to local governments and residents. It is a more equitable system for residents who can now pay only for the non-recyclable waste they generate without subsidizing neighbors who generate considerably more waste. PAYT rates also increase yard waste recycling tonnages, thus diverting compostable materials away from the waste stream.

Effort Required: The implementation of a PAYT program entails minimal operational changes and costs where established solid waste collection routes already exist. Some administrative processes are necessary to ensure billing and collection. Some communities forego billing by requiring the purchase of approved trash bags or trashcan decals. It is both critical and challenging to build public consensus, which will require good planning and public education efforts.

Benefits: PAYT programs significantly reduce the volume of municipal solid waste directed to landfills and incinerators. This can in turn reduce a community's landfill management costs. PAYT also increases citizen participation in recycling and composting activities. Lastly, a variable pricing model promotes equity in user payments by basing cost on actual volume of waste generated.

Risks: There are usually concerns that PAYT programs will lead to an increase in illegal dumping. However, most PAYT communities have found this not to be the case especially when PAYT is promoted alongside other legal methods of waste disposal, such as curbside recycling and yard trimmings composting.

Action Agents:

- Environmental Management Department
- Solid Waste Management/Recycling Department
- Public Works Department

Costs:

There are 3 general methods for determining PAYT user rates:

- Model Community Method uses data from successful programs in cities of similar size and characteristics
- Historical Data Analysis Method examines a community's own historical waste generation and trash hauling volume and costs to estimate the PAYT revenue and expenses
- Full Cost Method is the most rigorous approach and attempts to identify and quantify all direct, indirect, and future expenses associated with PAYT management and calculates user rates accordingly

Information available at:

http://www.sustainablecitiesinstitute.org/view/page.basic/class/feature.class/Lesson_Pay_As_You_Throw_Overview

Pay As You Throw (PAYT) Working Models

Craven County, North Carolina:

- Implemented PAYT in 1991
 - One sticker = 33 gallons or smaller and not more than 50 lbs.
 - Two stickers = larger than 33 gallons, up to 64 gallons and not more than 100 lbs.
 - Three stickers = larger than 64 gallons up to 90 gallons and not more than 150 lbs.
- An annual fee of \$24 is applied to each dwelling unit and small business for curbside recycling. The fee is charged to the property owner on their tax bill.
- Craven contracts with six franchised haulers for weekly garbage collection.

Results

- PAYT has helped the county to achieve a waste reduction rate of more than 40 percent in FY98-99. It is important to note that during FY98-99, officials did not notice an increase in illegal disposal following program implementation.

City of Eden, North Carolina

- Implemented PAYT in 2002
 - Group 1 = 0-30 gallons
 - Group 2 = 30-60 gallons
 - Group 3 = 60-90 gallons
 - Group 4 = Senior Citizens

Results

- As of September 2002, there has been an average decrease of approximately one truckload of waste, or 7.5 tons, per collection day. In the first month, the city experienced a 203.53-ton decrease in waste disposal as compared to the same month of the previous year.
- Since implementation, recycling has increased by approximately 20 percent.
- The program targets about 60 percent of waste disposal costs as opposed to the 26.4 percent covered previously

Information available at: <http://infohouse.p2ric.org/ref/26/25012.pdf>

Town of Ashland, MA Pay As You Throw Program

- Implemented in FY07
 - \$1.30 = 33 gallon bag
 - \$.75 = 14 gallon bag
- * Annual curbside trash and recycling collection fee for residents in \$138
- Seniors who qualify for abatement pay a \$48 fee –

Results

- Trash decreased by 38%
- Recycling increased by 98%
- Ashland saved over \$139,000 in disposal costs in their first year of PAYT

Information available at: <http://www.mass.gov/dep/recycle/reduce/ashlandpayt.pdf>



AFSCME is American Federation of State, County, and Municipal Employees union representation. Local 699 AFSCME represents City employees in Public Services, Police Department, Parks, Recreation & Cultural Arts Department, PACE Department, and the Library.

Apartment is a building constructed for the purpose of rentals and containing more than two units, or a single-family house that has been divided into more than two units for rentals.

Apartment complex is two or more structures built as multiple-family dwellings, containing three or more units per building, located next to one another, and coming under common ownership.

Bulk Waste is classified as furniture, items of waste generated by cleaning out a house (other than food waste), garage, basement, interior and exterior remodeling debris, and yard rehab debris.

Brush is classified as both trees and bushes that have been cut or trimmed by the resident or owner of the residential property. Garden trimmings (flower/plant/fruit and vegetable trimmings) are also accepted.

Drop Off Facility The City operates a drop off facility for City of Bloomington residents to bring their Brush, Bulk Waste, Leaves, Grass and Thatch Clippings, Appliances and empty propane tanks (valves must be removed) for disposal. Residents are responsible for the unloading of their own materials into the appropriate locations as directed by the City employee on-site. This facility is located at 402 S. East St. (corner of East and Jackson).

Funding Gap is the difference between expenses and the revenue received through the Solid Waste Program, such as the monthly trash fee, the sale of recyclables, and additional bulk waste collections. The City of Bloomington compensates the Solid Waste Fund with a subsidy from the General Fund to account for its funding gap.

Household garbage is normal household trash placed in garbage receptacles for curbside collection. Household garbage is used interchangeably with household refuse in this report.

Household refuse is normal household trash placed in garbage receptacles for curbside collection. Household refuse is used interchangeably with household garbage in this report.

Large item pickup is part of the bulk waste collection service and is used to describe the collection of large household items such as furniture, items of waste generated by cleaning out a house (other than food waste), garage, basement, interior and exterior remodeling debris. Large items collection does not describe the collection of yard waste which is also part of the Bulk Waste collection service.

Operator is a responsible for skilled work in the operation of both light and heavy public works equipment. Assignments include general maintenance work requiring utilization of heavy equipment, the general servicing and reporting of operating defects observed on equipment assigned. Performs as lead man if assigned. Work is performed independently or with a crew under general supervision, and is reviewed through inspections of completed work to verify the finishing of assignments according to established maintenance standards and instructions.

Packed Bulk is refuse items collected curbside that have been loaded into a truck with packing capabilities to reduce the volume of materials for transportation.