

June 14, 2006



Mr. Kris Howdyshell
Executive Director
Cambria County Solid Waste Authority
P.O. Box 445
507 Manor Drive
Ebensburg, PA 15931

Subject: Technical Assistance Project

Dear Mr. Howdyshell:

This letter summarizes the findings of two related projects: (1) an assessment of the existing, individual refuse and recycling collection services for seven small municipalities in the greater Johnstown vicinity compared to a conceptual, consolidated regional collection system, and (2) an assessment of existing, individual yard waste collection services for the same municipalities compared to a consolidated regional system. These jointly-conducted projects were undertaken as part of the Recycling Technical Assistance program sponsored by the Pennsylvania Department of Environmental Protection (DEP) and the Solid Waste Association of North America (SWANA).

This letter report summarizes the findings of R.W. Beck's evaluation and provides recommendations for the communities that would potentially participate in a regional collection system. The report is divided into the following sections, which correspond with the tasks identified in the scopes for the two projects:

- Executive Summary;
- Introduction;
- Current Collection Arrangements;
- Design of a Regional System;
- Annual Costs of a Regional System;
- Administrative and Political Considerations;
- Implementation Timeline; and
- Recommendations.

Executive Summary

Project Contacts

Project: Regional Consolidated Collection Services Evaluation
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Members of the Intergovernmental Council of Greater Johnstown (Council) - comprised of the City of Johnstown, Upper Yoder Township, Lower Yoder Township, Ferndale Borough, Brownstown Borough, Southmont Borough, and Westmont Borough - are experiencing budget shortfalls and are looking for ways to decrease operating expenses. One likely method to reduce costs is to join forces in the provision of recycling, yard waste, and refuse collection services. Each of these municipalities currently provides some form of refuse collection to their residents, and some currently provide recycling and yard waste collection. This study was conducted to identify potential benefits and barriers associated with consolidating collection services regionally.

To fulfill the goals of this study, R.W. Beck requested data from each municipality on their current collection services. After assembling the data into a matrix, R. W. Beck evaluated the information to draw conclusions regarding what minimum services should be provided as part of a hypothetical regional collection system, when a regional system could realistically begin, at the earliest, and what cost of service local residents would be likely to incur. Capital and operating costs for the conceptual system were then developed to determine total estimated costs for providing the services, and estimated costs per household.

Highlights of the study results include:

- Based on the existing level of service provided to most residents, a conceptual regional collection system could include the following:
 - Municipal solid waste collection at the curb, weekly, from 90-gallon carts, using semi-automated rear-loading vehicles;
 - Collection of yard waste at the curb, biweekly, from 90-gallon carts, using the same semi-automated vehicles; and
 - Collection of the following recyclables (#1 and #2 plastic bottles; 3 colors of glass; steel and aluminum cans; old newspaper; office paper; cardboard), in 20-gallon bins, with residents placing fiber materials in brown paper bags.
- The system uses semi-automated rear-loading vehicles with a two-person crew for refuse and yard waste and a two-stream sort for recyclables;
- 16,744 households in the Johnstown Intergovernmental Council jurisdiction will be served on a weekly basis for refuse and recycling and biweekly for yard waste, year-round;
- The expected capital costs with the collection system are \$3,252,484;
- The annual operating costs associated with the system total \$1,445,212;
- The average annual cost of the system is \$2,052,736;
- The average annual cost per household over 20 years would be \$114.06 annually.

The Council has two options for initiating a regional, consolidated collection system: implement public collection or procure private collection via contract. R.W. Beck discussed the differences between the two options that should be considered when choosing a system.

R.W. Beck outlined political and administrative issues that should be weighed and developed a conceptual timeline for system implementation.

R.W. Beck concluded:

- A regional, consolidated collection system for refuse, recyclables and yard waste would likely be more cost-effective than separate collection systems for the seven member municipalities.

R.W. Beck recommended:

- The Council must decide whether it wants to become involved in the solid waste collection business or contract with a private hauler to provide collection services.
- Prior to selecting any system, a complete analysis of all the costs associated with providing the desired solid waste management services should be performed to ensure all of the Council's unique costs are considered. These costs should not be limited to collection, disposal, and processing costs, but should also include costs associated with billing

customers, conducting education and outreach efforts, fielding customer service calls, servicing vehicles, and providing and servicing carts.

Complete details are contained in the full report.

Introduction

Members of the Intergovernmental Council of Greater Johnstown (Council) - comprised of the City of Johnstown, Upper Yoder Township, Lower Yoder Township, Ferndale Borough, Brownstown Borough, Southmont Borough, and Westmont Borough - are experiencing budget shortfalls and are looking for ways to decrease operating expenses. One likely method to reduce costs is to join forces in the provision of recycling, yard waste, and refuse collection services. Each of these municipalities currently provides some form of refuse collection to their residents, and some currently provide recycling and yard waste collection. This study was conducted to identify potential benefits and barriers associated with consolidating collection services regionally.

To fulfill the goals of this study, R.W. Beck requested data from each municipality on their current collection services. Information requested and analyzed included:

- Current levels of service;
- Historic tonnages of waste collected;
- Current contract terms; and
- Budgeted and actual service costs.

It should be noted that not all of the municipalities responded, and of those that did respond, none provided all of the information requested. After several attempts to contact the municipalities, no information was provided directly from Brownstown Borough and the City of Johnstown; however some portions of the requested information were obtained from Internet resources or previous R.W. Beck studies.

After assembling the data into a matrix (Table 1), R. W. Beck evaluated the information to draw conclusions regarding what minimum services should be provided as part of a hypothetical regional collection system, when a regional system could realistically begin, at the earliest, and what cost of service local residents would be likely to incur. Capital and operating costs for the conceptual system were then developed to determine total estimated costs for providing the services, and estimated costs per household.

Current Collection Arrangements

City of Johnstown

The City of Johnstown, home to roughly 9,000 households, currently contracts with Waste Management, Inc. (WM) for their refuse and recycling collection and disposal/processing. WM provides one pickup per week of municipal solid waste (MSW), and biweekly pickup of recyclables. WM's contract expires on December 31, 2009.

The City collects leaves and grass clippings that are swept into the street gutter weekly during street cleaning, or residents can call the City for schedule pickup of bagged leaves.

The City charges residents \$140 annually for these services. Bulky wastes are picked up for an additional \$35 per load. There is no charge for leaf removal services.

R.W. Beck received no responses to further inquiries, therefore no additional detail is available on the City's current refuse or recycling collection services.

Upper Yoder Township

Upper Yoder Township has approximately 2,000 households. The Township currently contracts with Waste Management for their refuse and recycling collection and disposal/processing. Their MSW contract has just been renewed (length unknown), and their recycling contract expires on December 31, 2008.

WM provides each household with one pickup per week of MSW and recyclables, and the Township provides leaf vacuuming at the curb. The Township charges residents \$80 for MSW collection and \$20 for recycling annually. There is no charge to residents for leaf vacuuming services. The contracted cost of service for WM (refuse only) for 2004 was \$153,600. No recycling contract cost could be obtained.

Lower Yoder Township

Lower Yoder Township has approximately 1,250 households. The Township currently contracts with Waste Management for their refuse collection and disposal. Their contract expires on December 31, 2009. No recycling services are provided through this contract or by the Township, however there is a County drop-off center located in Lower Yoder at the ballfield parking lot on D Street.

WM provides one pickup per week of MSW and bagged yard waste at the curb.

The Township charges residents \$137 annually for these services and \$0.50 per yard waste bag. The contracted cost of service for 2005 was \$169,200 (excluding an additional \$2.50 per yard waste bag WM charges the Township), and the Township's total budgeted amount for waste collection was \$188,120.

Ferndale Borough

There are approximately 800 households in Ferndale Borough. The Borough currently contracts with Pro Disposal for their refuse collection and disposal. Their contract expires on December 31, 2007. No curbside recycling services are provided under this contract or by the Borough, however there is a County drop-off center located in Lower Yoder at the ballfield parking lot on D Street.

Pro Disposal provides one pickup per week of MSW and bagged yard waste/bundled clippings at the curb. The Borough also vacuums leaves at the curb October 1 through November 15, after which time they must be bagged for pickup by Pro Disposal.

The Borough charges residents \$145 annually for these services. The contracted cost of service for 2005 was \$72,400, and the budgeted amount for waste collection was \$90,215.

Brownstown Borough

Brownstown Borough has 354 households.

R.W. Beck received no responses to our multiple requests for information, therefore no information is available regarding the Borough's current refuse, recycling or yard waste collection services.

Southmont Borough

Southmont Borough has 965 households. The Borough currently contracts with Waste Management for their refuse collection and disposal and with Total Recycling for their recyclables collection and processing. Both contracts expire on December 31, 2006.

One pickup per week is provided for both MSW and recyclables. The Borough offers leaf pick up at the curb in October and November and bundled limb and brush pick up once annually in the fall. This service is provided by Borough crews.

The Borough charges residents \$90 annually for these services. The contracted cost of service for 2005 was \$93,200, and the budgeted amount for waste collection was \$103,920.

Westmont Borough

Westmont Borough has 2,375 households. The Borough currently contracts with Waste Management for their refuse and recycling collection and disposal/processing. Both contracts expire on December 31, 2007.

WM provides one pickup per week of MSW and recyclables, and the Borough provides leaf vacuum service at the curb during October and November.

The Borough charges residents \$145 annually for these services. The contracted cost of service for 2005 was \$324,710, and the budgeted amount for waste collection was \$351,500.

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Table 1 provides a summary of trash, recycling, and yard waste services provided in the Greater Johnstown Municipalities.

Table 1
Current Collection Arrangements of Members of the Intergovernmental Council of Greater Johnstown

Service	Brownstown Borough	Ferndale Borough	City of Johnstown	Lower Yoder Township	Southmont Borough	Upper Yoder Township	Borough of Westmont
Number of Households	354	800	9,000	1,250	965	2,000	2,375
Service Provider	n/a	Pro Disposal	Waste Management	Waste Management	Waste Management	Waste Management	Waste Management
Refuse Collection Frequency	n/a	Once per week	Once per week	Once per week	Once per week	Once per week	Once per week
Set out Limits	n/a	5 bags or 4 cans	n/a	n/a	n/a	4 bags or 3 cans	4 bags or 4 cans
Curbside Recycling Frequency	n/a	None	Biweekly	None	Once per week	Once per week	Once per week
Recyclables Accepted	n/a	N/A	Clear Glass, Plastic Bottles, Aluminum and Steel Cans	N/A	Clear Glass, Plastic Bottles, Aluminum and Steel Cans	Clear Glass, Plastic Bottles, Aluminum and Steel Cans	Clear Glass, Plastic Bottles, Aluminum and Steel Cans
Yard Waste Materials Collected	n/a	Bagged yard waste and bundled clippings; leaves	Leaves and grass clippings*	Bagged yard waste	Bundled limbs and brush*	Yes*	Yes*

Service	Brownstown Borough	Ferndale Borough	City of Johnstown	Lower Yoder Township	Southmont Borough	Upper Yoder Township	Borough of Westmont
Curbside Yard Waste Collection Frequency	n/a	Collected with refuse once per week; Leaves in October and November only	Weekly during street cleaning or scheduled pickup	Once per week	Annually (fall)	n/a	October - November
Annual Cost to Household (includes all services, as applicable)	n/a	\$145	\$140 (plus \$35 per bulky waste load)	\$137 (plus \$0.50 per yard waste bag)	\$90	\$100	\$145
Annual Contract Cost to Municipality (2005)	n/a	\$72,400	n/a	\$169,200 (plus \$2.50 per yard waste bag)	\$93,200	\$153,600 (2004)	\$324,710

* By municipality
 ** By municipality in October and November only
 n/a = information not available

Design of a Regional Collection System

Based on the existing level of service provided to most residents and considering the goal of reducing operating costs, a conceptual regional collection system could include the following

Municipal solid waste collection at the curb, weekly, from 90-gallon carts, using semi-automated rear-loading vehicles;

- Collection of yard waste at the curb, biweekly, from 90-gallon carts, using the same semi-automated vehicles; and
- Collection of the following recyclables (#1 and #2 plastic bottles; 3 colors of glass; steel and aluminum cans; old newspaper; office paper; cardboard), in 20-gallon bins, with residents placing fiber materials in brown paper bags.

There are numerous types of collection technology and crew configurations operating in the Northeast. We have drawn from the collection industry's best practices to model a highly efficient, relatively low cost collection system that could be used in the Johnstown area, defined in Table 2. This system uses semi-automated rear-loading vehicles (to accommodate on-street parking and narrow streets) with a two-person crew for refuse and yard waste and a two-stream sort for recyclables. Although this type of system has higher capital costs than some other options, primarily due to the cost of purchasing semi-automated rear-loading vehicles and new containers, operating costs tend to be lower than other collection options.

Table 2
Consolidated Collection System Definition

	Refuse	Yard Waste	Recycling ¹
Crew size	1 person	1 person	1 person
Service frequency	Weekly	Biweekly ²	Weekly
Weekly work schedule	Four 8-hour days (M-Th)	One 8-hour day (F)	Five 8-hour days (M-F)
Daily work schedule	60 minutes allotted for lunch and breaks	60 minutes allotted for lunch and breaks	60 minutes allotted for lunch and breaks
Vehicle Type	Semi-automated rear-load	Semi-automated rear-load	Manual Dual Compartment
Containers provided	90-gallon carts	90-gallon carts	One 20-gallon bin

¹ Assumes a two-stream collection system, one bin and vehicle compartment for paper and another bin and vehicle compartment for mixed containers.

² Assumes half the households will be serviced one Friday and the other half the next Friday.

Based on the assumptions and system parameters above, R. W. Beck used their proprietary model to estimate the system requirements to provide the specified curbside collection services

(Table 3). These estimates assume that 16,744 households (all of the households located in the seven communities that are members of the Johnstown Intergovernmental Council) will be served on a weekly basis for refuse and recycling and biweekly for yard waste, year-round. The average route size is based on benchmark data from communities around the country.

Table 3
Estimated Consolidated Collection System Staffing and Fleet Needs

	Refuse	Yard Waste	Recycling	Total
Avg. Households per Route	574	546	496	
Routes per Day	7	8	5	12.2 ¹
Collection Crew	14	2 ²	5	13
Route Supervisors	1	0	1	2
Automated Trucks ³	7	1	0	8
Recycling Trucks ⁴	0	0	6	6
Pick-ups	0.5	0	0.5	1

¹ On average

² Monday-Thursday refuse collection staff plus one additional assumed for Friday yard waste collection.

³ One additional truck needed for yard waste collection; can be used as a spare during refuse collection days.

⁴ One spare truck assumed.

Annual Costs of Regional Collection System

Table 4 summarizes the expected capital costs associated with this collection system.

Table 4
Capital Cost Estimates

Item	Unit Cost	Number	Total Capital Cost
Semi-automated Refuse/Yard Waste Trucks	\$130,000	8	\$1,040,000
Recycling Trucks ¹	\$125,000	6	\$750,000
Pick-up Truck	\$22,500	1	\$22,500
90-Gallon Carts	\$40	33,488 ²	\$1,339,520
20-Gallon Bins	\$6	16,744	\$100,464
Total			\$3,252,484

¹ One spare truck assumed.

² Two carts per household (one for MSW; one for yard waste).

For purposes of projecting 20-year capital costs, it is assumed that vehicle replacement would begin in year 3 and would level out over time (i.e., new vehicle purchases would begin to spread out so that one or two new vehicles are purchased each year). Further, based on the conservative assumption that a steady customer rate will be maintained (the County's total population actually declined 6.4 percent between 1990 and 2000), it is projected that no new routes would need to be added. Table 5 summarizes the annual operating costs associated with the system which total \$1,445,212.

Table 5
2006 Operating Cost Estimates

Item	Unit Cost	Number	Total Cost ¹
Labor			
Refuse/Yard Waste Crews	\$13.00/hr	16	\$584,064
Recycling Crews	\$10.50/hr	5	\$147,420
Route Supervision	\$15.00/hr	2	\$84,240
O&M Cost per Route			
Refuse/Yard Waste	\$25,000	8	\$200,000
Cart maintenance/replacement	\$1	33,488	\$33,488
Recycling	\$18,000	5	\$90,000
Route Supervision	\$6,000	1	\$6,000
Subtotal			\$1,145,212
Mgmt/Admin/Overhead ²			\$300,000
Grand Total			\$1,445,212

¹ Assumes 40-hour work week, 52 weeks per year, and 35% benefits rate.

² Includes management (1 staff), customer service (1 staff), and an administrative assistant, as well as office overhead and other internally allocated services such as utility billing expenses, legal, human resources, etc. A profit factor is also included in this scenario although it is recognized a publicly-owned system may not collect this revenue.

Table 6 summarizes the estimated average cost per year, per household for curbside refuse, recycling and yard waste services. It should be noted that these are the average annual costs over 20 years, at 3 percent inflation, including the cost of purchasing vehicles and containers. The actual costs in a particular year will vary. For example, in the first year, an estimated \$4.7 million will be spent, including \$3.25 million to purchase fifteen new vehicles and containers for each resident. Annual costs are also high at the end of the 20-year period when inflation has the biggest impact.

Table 6
Curbside Collection Cost Summary

	Amount
Average Annual Cost Over 20 Years ¹	\$2,052,736
Average Annual Cost per Household Over 20 Years ²	\$114

¹ Factoring in capital costs on a 7 year equipment replacement schedule, inflation, and 4 percent interest rate.

² Assumes no growth in number of households.

As shown above, the total collection costs for providing curbside refuse, recycling and yard waste collection service is estimated to average \$114.06 per household per year over 20 years, which is less than most rates charged for separate collection systems currently.

Furthermore, the rate shown assumes an industry-standard profit factor is included. Given that officials running a public system typically would not “assess” residents a profit, the rate could potentially be lower yet. However, there are costs that private entities may be able to incur at a reduced rate, such as vehicle maintenance, employee benefit costs, and customer service/billing, due to the fact that they specialize in one activity. Therefore, the costs for these activities for a publicly operated system may offset any profit savings that might be realized.

In addition, costs may vary based on several factors including:

- Level of competition in the area; and
- Ability to receive DEP recycling grant funding for carts and other equipment.

It should be noted that costs were also calculated for a system using fully-automated collection vehicles and lesser staff, and the average cost per household was very similar to the semi-automated system since higher capital outlays were offset by lower labor expenses. The system was thought to not be appropriate for the Johnstown area’s narrow residential roads and on-street parking, however.

Prior to selecting any system, a complete analysis of the costs associated with providing the desired solid waste management services should be performed to ensure all of the Council’s unique costs are considered. These costs should include costs associated with billing, customer service, education and outreach, as well as operations and maintenance described above.

Options for Provision of Collection Services

The Council has two options for initiating a regional, consolidated collection system: implement public collection or procure private collection via a contract. The cost estimates above are representative of private collection, as they assume a profit is incurred. However, as described above, there are some economies of scale and cost savings that private service providers often incur, so costs are not expected to be notably different for public entities. Notable differences between public and private collection include:

- Benefits levels are typically higher in the public sector, especially for employees who remain employed for more than five years. Private-sector operations typically have higher turnover and lower benefit costs.
- Private-sector service providers have more flexible wage structures and can offer better wage-based incentives for collection performance. This typically allows private-sector haulers to achieve higher productivity compared to the public sector (although not better overall cost-effectiveness).
- Private-sector haulers typically require a certain profit over and above their direct costs. Conversely, public-sector providers must only cover their direct costs.
- Private-sector haulers must, out of necessity, focus appropriate and unique resources on maintaining their fleet. Many public-sector fleet maintenance shops have trouble maintaining solid waste fleets due to the complexity of the maintenance issues, e.g. heavy hydraulics, dirty vehicles, quick turnaround times, etc. The Council should realistically evaluate the ability of their fleet maintenance operation to handle this type of fleet before implementing a public collection system.
- Public-sector service providers are generally known for providing higher customer service compared to private haulers. For example, public-sector haulers are more likely to go back to a household that had not set out when the truck first passed by, whereas private haulers are more inclined to provide strictly the level of service defined in their contract. Although a well-written contract will minimize these differences in service levels, it is fair to expect a lower level of flexibility from a private-sector hauler.
- Public-sector service providers have flexibility to make program changes at any time, whereas with contracted service, program changes may have to be made at the end of a contract period.
- Private-sector service providers may have the opportunity to more fully utilize their vehicles, as they can provide service to many areas, not just one specific geographic area.

Options for Provision of Yard Waste Processing

There are several options for processing yard waste, including:

- 1) Processing yard waste at municipally owned and operated site or sites;
- 2) Developing a joint yard waste processing site; and
- 3) Having yard waste delivered to a privately owned site for processing.

Municipally owned sites vary significantly in both size and processing capabilities. For example, some municipal sites simply “stockpile” leaves and turn them occasionally, others have grinding capabilities, and build windrows, turning and watering them as needed to ensure proper decomposition. In some cases municipalities have screening equipment as well.

Currently Westmont Borough delivers leaves picked up curbside to a site owned by Grandview Cemetery on Menoher Highway. This site windrows the leaves and turns them monthly until the next fall season, when the compost is donated to farmers, homeowners and nurseries. Upper Yoder Township has its own composting facility where yard waste collected by Township crews is also processed in windrows.

Another option might be Blair County's leaf and yard waste composting facility located within Cambria County, although it is located approximately 40 miles from the study area and therefore may be cost prohibitive due to its distance.

In some counties, the County purchases yard waste processing equipment and allows each municipality to pay an annual fee for the right to use the equipment. The mobile processing equipment is then delivered to the site, the yard waste is processed, and the equipment returned or delivered to the next site for use. This option is less costly than each municipality purchasing their own processing equipment.

If yard waste were collected by a private hauler through a joint contract, it is likely that the hauler would serve several municipalities on one route and would therefore be unable to deliver yard waste to several municipal sites. It would be possible, however, for the hauler to deliver yard waste to different processing sites on different routes, depending on the location of the sites. If the member communities wanted yard waste delivered to specific sites, they could include such language in an RFP for collection services.

Developing a joint yard waste processing facility for all member jurisdictions is also a possibility. Often economies of scale are achieved by constructing just one sit, and more fully utilizing the site and equipment, as opposed to each municipality having their own site, assuming that the site is still conveniently located. However, if municipalities have built yard waste processing sites using DEP grants, they would potentially have to return the grant money to the DEP if the site were no longer used for that purpose.

Administrative and Political Considerations

There are several issues that would need to be considered before a regional, consolidated system could be considered a viable option. These include:

- ***Inconsistent expiration dates in existing contracts*** -- Currently, Southmont Borough's contract expires at the end of 2006, Westmont and Ferndale Boroughs' at the end of 2007, and the City of Johnstown's and Lower Yoder Township's at the end of 2009. No information was available for Brownstown Borough or Upper Yoder Township.
- ***Potential political pressure from current service providers*** – If contracts are terminated, will the current contract holders attempt to create local political pressure in order to regain the regional contract? This could ultimately affect the costs of the system, especially if there are more local and cost-effective contractors and/or facilities that could be utilized.

- **Levels of service** – Can local governments agree on an appropriate level of service, and if not, can different levels of service cost-effectively be offered to each?
- **Contract administration** – How will the Council involve the local municipal governments, especially if contract(s) are required?
- **Billing and Customer Service** – Who would be responsible for billing residents, and who would field customer service calls? If a contract is issued for service, one option is for the hauler to bill residents, however generally the monthly fee will be slightly higher for this service. Because haulers already have staffing and software in place, however, they may be able to provide this service more cost-effectively than municipal entities can. Similarly, municipalities often find it easier to let the hauler field customer service calls, however it may be beneficial to have the hauler provide reports to the municipalities on a monthly or quarterly basis, summarizing customer call issues. Similarly, it may be beneficial to survey residents from time to time about their level of satisfaction with solid waste management services, to ensure that the hauler is providing adequate service.
- **Opting out** – Would the jurisdictions allow residents to “opt out” of the system so that they could self-haul or burn their waste, or would the waste management system be mandatory? In general, this is only an issue where disposal options are conveniently located to residents, or in very rural areas where residents might be likely to burn their trash. In general, allowing an “opt out” option makes rates slightly higher for participating households, as the hauler must estimate the number of residents that he suspects will “opt out,” and spread operating costs among remaining households. In order to mitigate risk, it is likely that the hauler will estimate conservatively.

Implementation Timeline

The timeline for a consolidated system implementation is dependent upon many variables. In this case, cancellation of existing contracts may be required if the new system is to be started before the end of the longest contracts, December 31, 2009, in the City of Johnstown and Lower Yoder Township.

Table 7 outlines the steps that should be taken to implement a consolidated system by July 1, 2007.

Table 7
Implementation Schedule for Consolidated Collection System

Action		Date
Determine whether the Council or a contractor will operate the collection system		October 2006
Inform residents and private haulers operating in the area about the upcoming changes		November 2006
If Council Collects	If Contractor Collects	
Perform routing analysis to finalize equipment and staffing needs	Define role of Council and role of contractor (e.g., billing, customer service, purchase and distribution of containers)	November 2006
Issue bid solicitation for vehicles and containers	Issue RFP for services to be provided by contractor	December 2006
Order vehicles and containers	Negotiate contract with collector	February 2007
Determine impact of curbside collection on fees	Determine impact of curbside collection on fees	February 2007
Purchase equipment and containers, if Council is to provide		March 2007
Educate residents about changes in collection system and impact on fees		May 2007
Hire and train staff		May 2007
Distribute containers		June 2007
Distribute public education material about recycling		June 2007
Begin curbside collection program		July 1, 2007

Recommendations

First, it appears that a regional, consolidated collection system for refuse, recyclables and yard waste would likely be more cost-effective than separate collection systems for the seven member municipalities. For instance, the annual cost per household under this consolidated system could be in the \$115-range for private collection (and potentially lower for public collection) vs. an average cost per household of \$126 for varying levels of service. This is not surprising given the economies of scale provided by such contracts, however it should be noted that not all municipalities provided data for our use, therefore the evaluation of existing service may be somewhat skewed.

Also, although the average cost per household would decrease under a joint contract, according to the results of the model, the residents of one community, Southmont Borough, might fare worse under the assumed program as they would be receiving basically the same level of service but at a slightly higher fee. However, some factors might drive costs down, such as the ability to obtain recycling grants for some equipment.

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Based on the considerations above, the Council should first decide whether it wants to become involved in the solid waste collection business. Whether the private sector or public sector can provide the service on a less costly basis depends on several factors, including (but not limited to):

- Level of competition for service providers in the area;
- Ability of entities (both public and private) to fully utilize capital;
- Additional resources required to maintain and repair collection vehicles; and
- Additional resources required for billing and customer service.

Please do not hesitate to contact me at 404.870.9091 or bzern@rwbeck.com if you have any questions regarding this report.

Very truly yours,

R. W. BECK, INC.



Brent Zern, P.E.
Consultant

BZ:ls