

**RECYCLING TECHNICAL ASSISTANCE
PROJECT #544**

**ELK COUNTY SOLID WASTE AUTHORITY
on behalf of
RIDGWAY BOROUGH
ELK COUNTY**

Options to Sustain Curbside Recycling as a Municipal Program in Ridgway Borough, Elk County

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Nestor Resources, Inc.

Purpose of the Project

The municipality of Ridgway Borough is located in Northwestern Pennsylvania in Elk County. Although the Borough does not meet the population criteria, which designates and mandates communities to comply with the residential and commercial recycling program provisions of the Municipal Waste Planning, Recycling and Waste Reduction Act, Act 101, it has provided a long standing curbside residential and in some cases commercial recycling collection program. To ensure participation in the program, the Borough adopted a local ordinance that requires residents and commercial establishments to recycle. The Borough utilizes its own workforce and equipment to collect municipal waste; however, it has an agreement with an independent hauler for the collection of recyclables.

This project was prompted in part by a review of the Borough's budget and finances and directives to reduce expenditures wherever possible. To accomplish this, the Borough explored the potential of eliminating municipal services, including the Borough's curbside recycling program. To assist the Borough in exploring options other than completely eliminating the service, the Elk County Recycling Coordinator retained a consultant through the Recycling Technical Assistance Program to evaluate current conditions, offer suggested operational modifications, and evaluate the dynamics of internalizing both waste and recycling services or privatizing everything.

The primary focus of the study was to determine if the Borough's traditional role in providing these municipal services was still valid, appropriate, and cost effective.

Approach and Methodology

The project was launched with a series of phone conferences between Nestor Resources, Inc. and the Ridgway Borough Manager. On different occasions, the Elk County Recycling Coordinator also participated. Both the Borough Manager and the Recycling Coordinator offered background information on the history and current status of the Borough's recycling collection program. Residential recycling participation, performance, and current collection contract issues were the primary topics. Labor related issues, contractor disputes, and service fees assessed to residents and commercial establishments were discussed at length.

On site meetings occurred to familiarize the consultant with the physical conditions of the collection routes and to gather pertinent municipal waste and recycling data and statistics. To determine the feasibility of the Elk County Recycling Center accepting materials directly from the Borough, the consultant conferred independently with the Elk County Recycling Coordinator. Together they also met with the Borough Manager to offer historical insight on public expectations, as well as to assess political objectives and financially related constraints driving the proposed elimination of services.

The Borough and the County provided tonnage data on the waste and recyclables collected in the Borough over the past several years. Materials collected for recycling were reported individually. The current waste collection routes were plotted on a map and reviewed in comparison with landfill weight slips. Recycling routes were reviewed as well.

To supplement the available reported data, the Borough asked the current contractor to provide a weekly report of the number of recycling bins set-out for collection.

Key Factors

The conference calls, meetings, and data review provided a wealth of information about the Borough's waste and recycling program, as well as related municipal services. Several factors influence the current program and its operation.

LAWS

- A Recycling Ordinance was adopted by Ridgway Borough under the powers and authorities provided to the Borough by the Pennsylvania Code. The ordinance requires residents and commercial establishments to separate materials for recycling. It also empowers the Borough Manager with the ability to create and modify rules and regulations for operation of the program. It also gives the Borough Manager power to secure a contract for the collection of the recyclables.

SERVICES

- Public employees perform the waste collection services.
- The Borough contracts with a private hauler to collect the recyclables.
 - The 2013 recycling collection contract specified collection from 1,700 residences and small commercial accounts. Since there are 1,650 homes, there would be 50 small commercial accounts.
- Neither the waste, nor the recycling routes operate five full days per week.
 - The waste collection routes with residential/ commercial stops include:
 - Monday – 298/30
 - Tuesday - 416/28
 - Wednesday – 411/31
 - Thursday – 525/25
 - Friday – 0/30
 - The recycling route operates Monday, Tuesday, and Thursday.
 - The number of stops per route was not provided. However, the streets serviced are known.
 - On Monday and Tuesday the bulk of the streets are serviced.
 - On Thursday only four streets are collected. It is assumed that the commercial stops are serviced on this day

LABOR

- Three full time public employees, two drivers and one helper, service the waste collection routes.
 - Each works five days per week with an eight hour shift per day from 5:00 a.m. to 1:00 p.m.
 - The collection routes take 4.5 to 5 hours to complete with an additional 2 hour round trip to the landfill. On Friday, the route takes 2 hours
- The contractor employs one full time driver to service the recycling collection routes

EQUIPMENT

- The Borough owns two waste collection vehicles and one recycling collection vehicle
 - A 2013 Mack Granite with a body capacity of 25 cubic yards
 - A 2008 Freightliner with a body capacity of 17 cubic yards
 - The exact make, model, and year of the recycling collection vehicle is unknown. It is similar to one used in St. Marys, with a Freightliner chassis and a five compartment side loading Kann body with 21.8 cubic yard of total capacity.
- The ordinance requires the Borough to provide recycling bins to each of the 1,650 residential units.

FUNDING

- The recycling vehicle was purchased by the Borough with funding secured by the County through the Act 101, Section 902 grant program.
- The Borough recently obtained an Act 101, Section 902 grant to purchase new and replacement containers.

Charges and Fees

- The 2013 agreement stipulated that the contractor would charge the Borough \$2.25 per month per residential and commercial unit to collect recyclables, for a total of \$45,900 annually. In the 2014, the agreement was extended, however, a change was made which allowed the contractor to bill commercial establishments directly. It appears that no discount was provided due to the removal of the commercial accounts, because in 2014, the Borough paid the contractor \$47, 532.
- Residents and small commercial businesses pay a fee for refuse services which is included on their sewer and water bill. The average current fee is \$15.50 per month per residential unit and \$17.50 per month for small commercial business. The charges are calculated using a formula that correlates to water usage, rather than the amount of waste placed at the curb.

The fees are allocated to a separate fund to cover the cost of refuse collection and pay the contractor for recycling collection. No other sources of revenue are allocated to this fund.

- Large commercial accounts pay for dumpster service based on the cubic yard capacity of the container and frequency of service. This service is provided by the Borough. An average of 30 commercial accounts are serviced per day, five days per week. It is assumed that these fees are also allocated to the refuse fund.
- Large commercial accounts, who desire to recycle, contract directly with the Borough's recycling collection contractor. The contractor collects these accounts using the Borough's grant funded vehicle at the same time as the residential routes. The contractor retains all the service fees.

PERFORMANCE

- According to the house counts provided by the contractor, an average of twenty-four percent of the homes in the Borough have a recycling bin at the curb on each scheduled collection week.
- Vehicles do not operate at full capacity on each route
- The 2013 reported curbside collection program for Ridgway Borough resulted in
 - 2,507 tons of municipal waste disposed
 - Each municipal waste load weighed an average of 5 tons
 - 223.35 tons of material recycled
 - Glass - 117.80
 - Aluminum – 2.5
 - Newsprint – 61.88
 - Plastic – 22.26
 - Tin – 18.91
 - Each load of recyclables weighed an average of less than 1 ton

Observations and Recommendations

Following is an assessment of the historical information, current data, and related issues reviewed during the project. Key indicators, which present potential opportunities to modify the program, reduce costs, and increase participation, are identified.

CONDITIONS THAT IMPACT PARTICIPATION

- The recycling routes do not coincide with the waste collection routes. Consequently, for the vast majority of residents, the collection day for waste and recycling differs.
- Until recently, many homes in the Borough did not have a recycling bin.

CONDITIONS THAT IMPACT THE BUDGET

- Waste and recycling are collected by two separate entities

- Recycling collection occurs weekly
- Residential routes are unbalanced
- Vehicles do not operate at full capacity on each route
- Unforeseen repairs and equipment replacement
- Other services paid from the refuse fund

PRACTICAL IMPROVEMENTS

This section discusses a number of common sense approaches to reducing cost, motivating participation, and increasing material recovery. Each requires minimal effort from the Borough to attain promising results.

Proper Tools

Providing to residents recycling containers with sufficient storage capacity is the foundation of most curbside recycling programs. Simply seeing the common bins at the curb serves as a reminder to other residents that it is recycling day. Since the bins are visible, it also creates a sense of peer pressure to behave at the social norm. Considering that the Borough only recently obtained grant funding to purchase recycling bins, it is obvious that many residents did not have the one basic tool that triggers participation.

Frequency

The contractor provided counts of the homes, which placed recycling bins at the curb each week. The survey was conducted over several months. At face value, the data appears to indicate that approximately twenty-four percent of the homes in the Borough participate in recycling. Unclear however, is if the same homes consistently set out a container each week, or if different homes put out their recyclables on varying weeks.

It is reasonable to suspect, if Ridgway residents share similar behaviors with other curbside collection communities, that differing combinations of homes set out containers each week. In order to show that level of detail, the actual address of each set-out would need to be recorded over a series of months. Undoubtedly, this would increase the overall number of homes participating above the reported twenty-four percent. There is already strong documented evidence from the Borough, which indicates the merit of this assumption.

Immediately after an interruption of the contract services in 2014, the number of reported set-outs on some routes almost doubled per day, with collective routes overall increasing to an average of thirty-six percent participation. This is a clear indicator that significantly greater portion of the population recycles than the simplified report can show.

Another important finding from the aftermath of the service interruption is that residents can easily hold recyclables for longer than one week between collections. In addition, the vehicle is able to handle the increased volume of materials. These conditions present opportunities for cost savings by reducing the frequency of collection.

Timing and Consistency

Studies show that to maximize participation in a collection program, both waste and recycling should occur on the same scheduled day of the week, even if recycling collection is only every other week, or once per month. When collection days for waste and recycling differ, participants either forget to place their bins out on the appropriate day, or consider the two day collection schedule enough of an inconvenience to refuse to participate.

The current contract allows the contractor to dictate the recycling collection days. This has been to the advantage of the contractor who has leveraged the use of the Borough's equipment to expand recycling services to paying accounts not included in the Borough's contract and potentially not in the Borough's service area. Neither is an allowable use of grant funded equipment.

The Borough could easily provide residents and commercial businesses with better customer service by scheduling the recycling routes to mirror the waste collection service days. How that is accomplished could further benefit the Borough as well.

Consolidation of Services

There are a number of ways that the Borough could coordinate routes to run on the same days. In doing so, an obvious consideration is to consolidate services. In other words, either the Borough would provide the recycling collection in conjunction with its existing waste collection services, or the Borough would outsource all services to a private contractor.

It has been demonstrated that greater efficiencies occur when the same entity provides both the waste and recycling collection services. Depending on how those services are managed, reductions in labor and fuel costs can occur. Shared use of employees and equipment is easier.

One option to coordinate the timing of services is for the Borough to reduce the frequency of recycling collection and service half of the homes on alternating weeks. Although the number of recycling collection days per week would increase, the number of homes per route would decrease. This should expedite the collection time per day and if managed correctly, create opportunities for better employee utilization.

Based on the current configuration, a combined labor force of four employees is used to provide both types of collection. By rethinking the timing, the number of days, the frequency of services, and the route configurations, it might be possible to reduce the overall labor required. These types of approaches are commonly used in the private sector. Because there may be fewer opportunities to reassign an employee for part of a day or week, the public sector does not always make these service adjustments work to their advantage. However, it is possible.

BALANCING COSTS AND REVENUES

During the discussions with the Borough Manager, it was revealed that in addition to municipal waste and recycling, the Borough covers the costs of leaf removal from the refuse fund. Typically, unless the separation of leaf waste is mandated and therefore it must be collected separately, leaf

management falls into the general public works budget, and thus is covered by general tax revenues.

The Borough's ordinance does not require leaf waste to be separated and indicates that it will be collected as regular waste. It is understandable that the Borough attempts to remove this material from the waste stream, since it pays directly for disposal. However, there is a labor cost, which in mature communities can be excessive due to the amount of older trees.

Interestingly, because these costs are totally internal their impact on the refuse fund is viewed quite differently than the curbside collection contract, and possibly not evaluated in the proper context at all. It is likely that the leaf and brush collection has as much, if not more, impact on the fund as the cost of recycling.

Labor and equipment utilization go hand in hand. The Borough owns and maintains the waste and leaf collection and processing equipment. It also owns the recycling collection vehicle operated by the contractor. The cost of equipment repair and replacement is the Borough's responsibility. Consequently, the Borough is at high risk by providing these services. In addition, the need to maintain the equipment requires additional skilled employees and a parts inventory.

Because the refuse fund is supported by user fees, the ability to establish the rate to cover the costs of all of these services is fully within the control of the Borough. If the fund is insufficient to cover the services provided, the first place to start is with the services that the municipality provides directly. The problem may not be within the cost of the recycling contract, but in the inability to manage and control the costs of labor, fuel, and equipment internally.

These issues, in particular, speak to the possibility of consolidating waste, recycling, and leaf collection services through privatization. The immediate advantage is that, at a minimum, the Borough would have one fixed and controlled cost for budgetary purposes. The onus to ensure that employees perform, equipment functions, and the routes are collected on time is all on the contractor. There is also the possibility that the Borough could divorce itself from all financial responsibilities by having the contractor bill each residence and business directly.

Materials and Markets

To preserve the program, the Borough may be able to negotiate with the Elk County Solid Waste Authority to initiate a profit sharing program. If the Borough would consolidate services and collect the waste and recyclables with the existing public crew, they may be able to deliver materials to the Authority in consideration for some pay out.

Conclusions and Recommendations

With the assistance of the Elk County Recycling Coordinator, several suggestions to evaluate costs and provide better services were offered to Ridgway Borough. These included restructuring routes, changing route days, and reducing the frequency of service. Rate adjustments were also suggested. An internal audit of labor and equipment costs and utilization was urged.

In addition, although it was not in the proposed scope of work, in an attempt to help the Borough get the best price for its contracted services, the consultant drafted new bid and contract

specifications for recycling collection. The specifications included a variety of service options to allow the Borough to select the least cost method of preserving the program.

The consultant also offered to modify the recycling collection specifications to include, for cost comparison at a minimum, the collection of municipal waste and leaf waste. It was suggested to the Borough that the inclusion of the waste services would increase the competitive nature of the bids and subsequent prices.

LEGALITIES

The Borough recently determined that by purposefully not renewing or seeking out a new agreement for the recycling collection service, the ordinance would no longer be in effect. Unfortunately, this was the means used to end the recycling collection program.

As written, the ordinance was to become effective after the establishment of regulations and after the Borough secured a contract for the collection of recyclables after the ordinance was adopted. It also states that until or unless the entry into this agreement, the Ordinance shall not be in effect. There are other ways to read and interpret the same language than the Council's determination. There is no question that the ordinance is poorly worded.

Summary Remarks

Regardless, of its current move to end the recycling collection program, Ridgway Borough still faces the need to review and evaluate the full costs of providing municipal waste collection and leaf waste collection and processing. The Borough is to be applauded for having user fees to make the public aware that there is a cost to these services. However, failure to cover the full costs in those fees simply puts the burden back on the tax base and negates their purpose. Consequently, this reduces the ability of the Borough to provide other valuable services for which those funds are intended.

Although the Borough does not currently intend to renew the recycling collection contract, there is no reason why this issue cannot be revisited. Once the Borough understands its internal costs, there are still opportunities to initiate the recommendations offered in this report and continue this long standing and well respected program in a more cost effective manner.