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# Building Financially Sustainable Recycling Programs

Technical Report for Pennsylvania Local Governments

# **BUILDING FINANCIALLY SUSTAINABLE RECYCLING PROGRAMS**

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## Table of Contents

<b>SYNOPSIS</b>	<b>2</b>
<b>Section 1 INTRODUCTION</b>	<b>5</b>
Background	5
How to Use this Guide	6
<b>Section 2 BENEFITS OF ALTERNATIVE FUNDING AND MANAGEMENT STRATEGIES</b>	<b>9</b>
Current Practices in Pennsylvania	9
Vision for a Financially Sustainable Recycling Program	12
<b>Section 3 STRATEGIES FOR REDUCING COST AND GENERATING REVENUE</b>	<b>15</b>
Management Strategies	16
Funding Strategies	29
<b>Section 4 PRACTICAL STEPS FOR MOVING FORWARD</b>	<b>53</b>
<b>APPENDIX A GLOSSARY</b>	<b>59</b>
<b>APPENDIX B SUMMARY OF A SURVEY OF PENNSYLVANIA LOCAL GOVERNMENTS</b>	<b>63</b>
<b>APPENDIX C SURVEY FORM</b>	<b>77</b>

## BUILDING FINANCIALLY SUSTAINABLE RECYCLING PROGRAMS

### SYNOPSIS

**Background:** Act 175 of 2002 required the Pennsylvania Department of Environmental Protection (DEP) to develop a plan to help local governments make recycling programs more self-sufficient. DEP submitted the Act 175 Recycling Program Plan to the Legislature in 2003. DEP contracted with R.W. Beck, Inc. to examine recycling program funding and management practices on the national level, to survey Pennsylvania programs, and to develop this report on building more financially sustainable local recycling programs. The report identifies options for raising revenues and reducing costs, and practical steps to move programs toward improving financial sustainability.

**Findings:** There are nearly 1,500 recycling programs in Pennsylvania with various approaches to recycling. Many communities have underutilized equipment or facilities. Some facilities operating at near capacity have opportunities to reduce costs. Jurisdictions that work independently could gain economies or bargaining power by combining resources. Only 30 percent of R.W. Beck survey respondents, for example, indicated they jointly market recyclables. Although some local governments work cooperatively, there is a definitive need to increase cooperation.

The average overall annual recycling budget for local governments is \$339,000, ranging from \$133,000 in rural areas to \$1.9 million in urban jurisdictions. The average county recycling budget is \$334,000 and the average authority recycling budget is \$608,000. Administrative fees contribute 13 percent of budget needs, on average, or 24 percent of survey respondents. General funds cover an average of 10 percent of program costs for more than 20 percent of survey respondents. Act 101 funding makes up an average of 42 percent of recycling program costs for 80 percent of survey respondents. Act 101 grant support has been key to Pennsylvania remaining in the forefront of recycling in the U.S., with substantial opportunity for further recycling program expansion. The scheduled sunset of the Act 101 recycling fee may threaten further expansion.

**Vision:** A sustainable program is self-sufficient in its ability to fund and operate highly effective recycling services as part of a comprehensive integrated waste management system. While some funding may come from external sources of support, sustainable programs are designed to thrive regardless of changes in outside support or municipal budgeting priorities. Ideally, attributes of a sustainable program include:

- Sufficient and reliable funding;
- Incentives for waste diversion and market development;
- Program costs and revenues associated with each program component are known and tracked separately;
- Implementation, administration and enforcement is feasible;
- Public understanding, awareness and support are present;
- Optimization efforts are documented;
- A review and adjustment process is in place; and

- Integrated planning exists for all of the above attributes.

**Strategies for Reducing Cost and Generating Revenue:** Numerous management and funding strategies are available to reduce program costs and generate revenue. These are listed below and discussed in depth in the Guide.

**Management Strategies:**

- Adopting integrated waste management planning and partnership practices;
- Expanding multi-jurisdictional cooperation;
- Improving bidding and contracting practices, and;
- Considering privatization and managed competition when multiple competitors and public/private partnership opportunities exist.

**Funding Strategies:**

- Implementing risk and revenue sharing in recycling contracts;
- Charging a service fee on a utility bill, on a property tax bill or through bag or sticker sales;
- Increasing property tax millage rates;
- Charging private disposal facilities a host fee;
- Charging a tip fee at publicly owned disposal or materials recovery facilities;
- Charging an administrative fee to private disposal facilities, and;
- Considering supplemental funding options such as grants, general funds, license fees and franchise fees.

**Practical Steps for Moving Forward:** There is no single cookie cutter approach to any given situation. One or more practical steps may be applied to take advantage of specific short term opportunities or they may be implemented in full as a comprehensive, systematic strategy for building financial sustainability over the long term. Stakeholder input is important throughout the entire process.

- **Define integrated solid waste management goals relative to current programs** – Create a vision statement to guide decision makers in analyzing current program effectiveness and establishing priorities.
- **Seek stakeholder input and support** – Identify all potential affected parties and involve them in the vision setting process and defining needs and priorities.
- **Un-bundle rates and fees** – This allows each program and service to be evaluated on its merits separately, an essential step for considering options to reduce costs and/or enhance services.
- **Analyze services, projected costs, and revenues** – By identifying factors that may affect costs, decision makers and stakeholders will understand possible future requirements and the need for contingency plans.

- **Benchmark program costs and performance** – Determine costs and performance levels and compare them to similar programs in other jurisdictions on an “apples-to-apples” basis.
- **Identify and analyze strategies to optimize system efficiency** – Any action that reduces cost or increases recycling tonnages will improve the system efficiency. While there is a cost involved in analyzing and adjusting, the cost of not doing so may be higher.
- **Establish clear criteria for evaluating options** – Both qualitative and quantitative criteria may be used, such as: ability to cover all anticipated costs, legal and administrative feasibility, ability to provide incentives to increase recycling and allowing for adjustment in revenue.
- **Meet with elected officials and key decision makers** – Schedules of elected officials may not permit full participation in the options evaluation and public input processes. Therefore it is imperative that they be thoroughly briefed prior to public hearing in which they may be asked to make decisions.
- **Evaluate and rank options** – Attempt to objectively evaluate options and include stakeholder input prior to asking decision makers to choose among them.
- **Develop a draft funding plan** – The plans should include the vision and goals, the needs, options evaluation methodology, estimated costs and revenues, methods for implementing cost cutting or revenue generating strategies and implementation steps and timeline.
- **Solicit feedback from stakeholders, decision makers and elected officials** – Provide all parties an opportunity to review the draft strategy and provide feedback.
- **Finalize and implement the funding strategy** – Consider feedback from stakeholders, decision makers, elected officials, and the solicitor. Finalize the strategy and begin implementation. It may be helpful to set interim milestone to maintain momentum.
- **Track program costs and performance** – This step is necessary to evaluate how well the program is functioning and the need for adjustments. Having the information will make any adjustments to funding programs more acceptable, and may continue to help define opportunities for additional program enhancements.
- **Schedule periodic reviews and program adjustments** – Anticipate the inevitable changes in the marketplace and local conditions that will impact program services, costs and revenues.

By institutionalizing the above steps, a recycling program will be able to continually improve its performance as efficiently as possible.

## INTRODUCTION

### Background

In 1988, Act 101 transformed recycling in the Commonwealth of Pennsylvania. Since the Act was adopted, nearly 1,500 local recycling programs have been established – over three times the number mandated under the Act. Fueled by a statewide tip fee surcharge of \$2 per ton on all solid waste disposed in the Commonwealth, the Pennsylvania Department of Environmental Protection (DEP) has provided a four-part system of annual grants to help support and reward local recycling efforts. These grants have consisted of:

- Section 901 grants to fund County solid waste master plans, including strategies for recycling and composting programs;
- Section 902 grants to reimburse 90 percent of qualifying recycling program development and implementation expenses;
- Section 903 grants to fund up to half of the cost of County Recycling Coordinators' salaries and certain expenses; and
- Section 904 performance grants to provide a financial reward to local governments, based on the quantity of Act 101 materials recycled.

In 2002, Act 175 was enacted which contains a sunset date for the statewide tip fee surcharge to be discontinued in January 2009 and directs the DEP to assist local recycling programs in becoming financially sustainable. While the DEP regards Commonwealth recycling grants to local governments as vital to the development and success of Pennsylvania recycling programs, DEP also is committed to assisting local programs in becoming as strong and sustainable as possible, consistent with Act 175.

DEP supports local recycling programs that are a part of a well-designed integrated waste management system. To achieve such a system, counties and local governments need to:

- Manage waste in a manner that protects public health and the environment;
- Promote resource conservation through reducing the amount and toxicity of waste, maximizing materials reuse, providing convenient recycling and composting opportunities, and recovering energy, while minimizing landfilling;
- Match waste management processes and technologies with particular waste streams in a manner that most appropriately fits the characteristics of those waste streams;
- Recognize the appropriate roles of public, private and nonprofit entities and optimize their involvement in establishing and operating cost-effective, efficient solid waste management services and programs;
- Encourage manufacturers, retailers, and consumers to treat discards as resources rather than waste, and maximize the use and value of recovered materials, and;

- Allocate solid waste management system costs equitably among those who use or benefit from the system, including, full cost accounting, documenting avoided disposal costs, establishing Pay-as-You-Throw user fees, and sharing market risks and revenues.

To assist local governments in building financially sustainable recycling programs as components of integrated waste management systems, DEP commissioned R.W. Beck, a national solid waste consulting firm, to complete this technical report. R.W. Beck helps municipalities across the country to strengthen and fund their solid waste management systems, including residential and commercial recycling programs.

In developing this guide, R.W. Beck:

- Surveyed local recycling programs;
- Participated in numerous discussions with Commonwealth and local recycling officials and other key stakeholders;
- Reviewed input received from the Solid Waste Advisory Committee and Recycling Fund Advisory Committee for the draft Act 175 Recycling Plan prepared by the Department; and
- Drew from R.W. Beck's in-house experience working with cities, counties and states in other U. S. localities.

## How to Use this Guide

This guide is intended for anyone interested in strengthening and funding local recycling programs, including program staff and managers, elected officials, local advisory board members, and recycling service providers. The following table suggests some practical uses for the information provided within this Guide.

Guide Contents	How to Use
Vision for a Financially Sustainable Program	<ul style="list-style-type: none"> <li>▪ Describe a long-term vision for local programs that can both reduce costs and enhance services.</li> <li>▪ Assist in evaluating their programs and establishing priorities for moving forward.</li> </ul>
Options for Raising Revenue and Reducing Costs	<ul style="list-style-type: none"> <li>▪ Describe a range of funding options for consideration.</li> <li>▪ Identify communities that have successfully implemented the optional approaches.</li> </ul>

Guide Contents	How to Use
Practical Steps for Moving Towards Improving Financial Sustainability	<ul style="list-style-type: none"> <li>▪ Determine practical short-term steps that can be taken, regardless of community size or available resources.</li> <li>▪ Suggest a systematic approach that can be implemented over the long-term to develop funding plans, and gain financial sustainability.</li> </ul>

Supplemental information is provided in the Appendices. Appendix A is a glossary that defines key terms. Appendix B is a detailed summary of the results of R.W. Beck’s survey of Pennsylvania local governments, and Appendix C is the survey instrument used.



## **BENEFITS OF ALTERNATIVE FUNDING AND MANAGEMENT STRATEGIES**

This section briefly reviews Pennsylvania's current recycling programs and discusses four key ways that Pennsylvania local governments could benefit from strengthening program funding. R.W. Beck's work with communities across the country has shown that local programs in a wide range of demographic, legal and economic circumstances can succeed in reducing program costs, enhancing services, and strengthening the long-term viability of their programs if they identify and implement opportunities for doing so.

### **Current Practices in Pennsylvania**

As in other states, local solid waste management and recycling programs are influenced greatly by Commonwealth laws. In Pennsylvania, local governments are not required to provide garbage collection services, and waste generators are often not required to subscribe to such services. Recycling service, however, is mandated in many communities. Consequently, recycling services often are not part of an integrated solid waste management system to the degree that they are in other states. Also, Pennsylvania local governments do not routinely make use of managed collection practices. As described in the following section, many local governments throughout the nation issue franchise agreements or contracts authorizing selected service providers to operate in their jurisdiction. This can allow local governments to exercise a high degree of control over services and the flow of waste and recyclables, and also provides a convenient funding source through franchise fees.

Another distinguishing characteristic of Pennsylvania is the large number of relatively small municipalities, each of which often has developed its own recycling systems and infrastructure, independent of neighboring communities. This has resulted in:

- Nearly 1,500 recycling programs, with various approaches to recycling;
- Many communities (40 percent, according to survey results) with underutilized facilities or equipment (e.g., to process yard waste);
- Facilities operating near capacity with opportunities to reduce costs;
- Many jurisdictions working independently, when they could gain economies or enhance bargaining power by combining resources (for example, only 30 percent of survey respondents indicated they jointly market recyclables).

In some regions and states, municipalities and counties have cooperated to reduce the investment and operating costs of their recycling and yard waste recovery programs. In Pennsylvania some communities are working jointly; however there is a definitive need to increase cooperation between local governments.

### **Size of Recycling Budgets**

Not surprisingly, annual recycling budgets vary widely among jurisdictions in the Commonwealth.

Among survey respondents:

- The overall average recycling budget is \$339,000 annually;
- The average county recycling budget is \$334,000;
- The average authority recycling budget is \$608,000;
- The average municipal recycling budget is \$306,000;
- The annual recycling budget is \$133,000 in jurisdictions identifying themselves as “rural;” and
- “Urban” jurisdictions have an annual budget of \$1.9 million.

Only about 37 percent of respondents indicated that they track program costs separately by facility, service, or activity. Unbundling these costs by tracking them separately is a prerequisite for analyzing program cost-effectiveness and efficiency, strengthening overall operations and funding.

## **Recycling Program Funding**

Another distinguishing characteristic about Pennsylvania’s local recycling programs is how they are funded. Figures 1 and 2 show that Pennsylvania local governments responding to R.W. Beck’s survey use a wide range of funding mechanisms to cover recycling program costs. These and other funding mechanisms are defined in the Glossary provided in Appendix A.

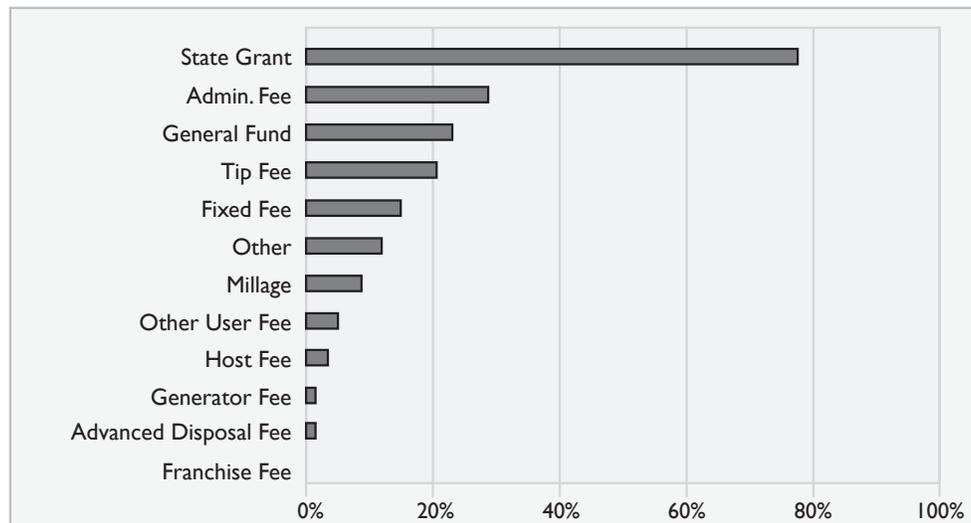
The three most commonly used funding sources among respondents are:

- Commonwealth grants (used by nearly 80 percent of respondents, on average covering 42 percent of recipients’ program costs);
- Administrative fees (used by approximately 24 percent of respondents covering, on average, 13 percent of their program costs); and
- General funds (used by over 20 percent of respondents covering, on average, 10 percent of their programs).

While some other states have provided substantial financial support for local recycling programs, particularly during their early stages, Pennsylvania may have the largest and longest running program. This support has been key to Pennsylvania’s remaining in the forefront of recycling in the United States. Commonwealth investment in local recycling programs has paid off; however there is still substantial opportunity for further recycling program expansion. Most local programs throughout the country rely on state funding to a far less degree than is the case in Pennsylvania. The scheduled sunset of Pennsylvania’s recycling fee may eliminate the availability of state funding in subsequent years.

Figure 1

**Funding Mechanisms Used to Cover Recycling Costs in Pennsylvania  
(Percent of Respondents Using Each Mechanism)**



Source: R.W. Beck Survey, 2004

Relying on these three funding mechanisms puts local Pennsylvania jurisdictions' recycling programs at risk, for the following reasons:

- State grant funding is insufficient to cover all jurisdictions' recycling program costs, and the future of this funding source is uncertain (see text box below);
- The legality of administrative fees is being questioned in court; and
- General Fund revenues are competed for by a variety of programs.

**Some Opportunities to Strengthen Local Funding Programs in Pennsylvania**

Reduce reliance on general funds.

Expand the number and type of funding mechanisms used.

Unbundle rates and fees by tracking costs and revenues separately for each facility, service and activity.

Manage competition to ensure government and contractor operations are as efficient as possible.

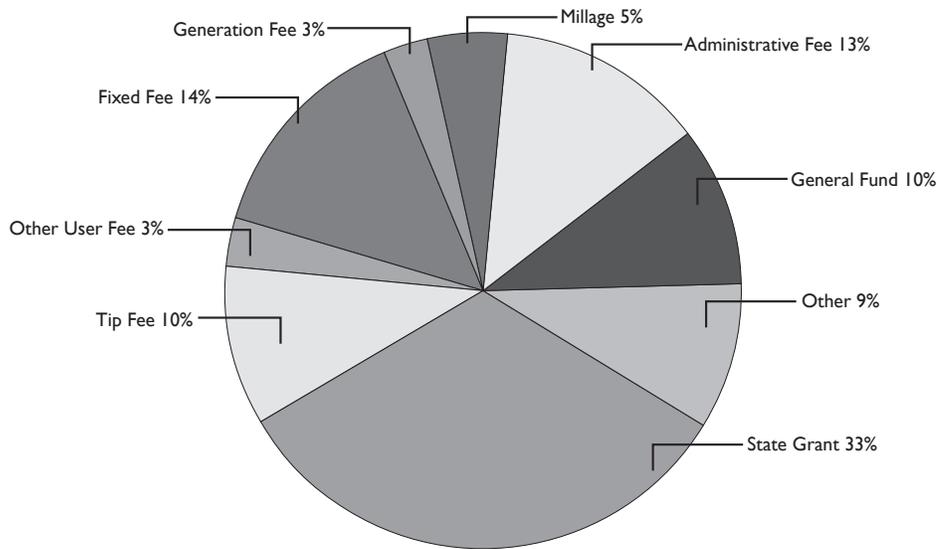
Move towards an integrated approach that optimizes recycling and all other solid waste management efforts.

Expand cooperation with neighboring jurisdictions.

A host of funding and cost reduction strategy "tools" are available to local jurisdictions, to help design their solid waste management programs such that the risk of losing a recycling program, or being unable to fund program enhancement, due to lack of financial resources is mitigated. A vision for a financially sustainable system is described below, including a description of ideal attributes and the benefits associated with them.

Figure 2

**Sources of Funds Used to Cover Recycling Costs  
(Based on 34 Respondents Reporting)**



**Vision for a Financially Sustainable Recycling Program**

When considering the funding and management strategies described in this Guide, it may be helpful for the reader to keep in mind a vision of a sustainable recycling program. In general, a sustainable program is self sufficient in its ability to fund and operate highly effective recycling services, as part of a comprehensive integrated waste management system. While some funding may come from outside support or state grants, sustainable programs are designed such that the program will thrive regardless of changes in outside support or in other municipal budgeting priorities. Ideal attributes of a sustainable program include the following:

- **Sufficient and Reliable Funding** – Sufficient funding is consistently available to cover all program costs, even as markets, pricing, and technologies change over time. Grant funding is utilized for launching new programs and providing for program enhancements as opposed to sustaining ongoing operations. *Benefit: Minimized risk of financial shortfalls.*
- **Waste Diversion and Recycling Market Development Incentives Exist** – Incentives for waste reduction and recycling result in increasing levels of waste diversion. Diverted materials are of high quality and value and are used by processors and manufacturers locally and beyond to produce high value added products. The jurisdiction actively promotes the start-up and expansion of local and regional recycling-based businesses, and supports state and national efforts to secure product stewardship commitments that further strengthen local recycling efforts.

*Benefits: Improved end markets enhance long-term salability of recyclable materials;*

*Supporting local and regional markets ensures that, to the extent possible, economic benefits are accrued to the local area;*

*Increased diversion of materials from landfills extends landfill life;*

*Increased recovery minimizes the use of other resources;*

*Increased recovery of recyclables helps recycling processing centers operate more cost-effectively.*

- **Costs and Revenues Associated with each Program Component are Known and Tracked Separately** – Funding mechanisms are unbundled; that is, the actual full cost of each component of the local recycling program is known, and specific and appropriate funding sources are identified to cover specific cost centers.

*Benefits: Cost cutting measures may be easily identified;*

*Revenue-increasing measures may be more easily identified;*

*Information supports the establishment of defensible, equitable fees where appropriate.*

- **Implementation, Administration and Enforcement is Feasible** – Funding and management practices are feasible given all legal, contractual and community constraints, including the ability to enforce obligations on all parties.

*Benefits: Increased likelihood that funding and management practices will be feasible over the long-term;*

*Increased stakeholder support.*

- **Public Understanding, Awareness, and Support are Present** – As a result ongoing education and outreach, the need for funding, why certain funding mechanisms are being employed, the funding mechanisms used, and level of services provided are supported by stakeholders, and are perceived to be reasonable, fair, and equitable. In addition, ongoing public information and education aids in promoting waste reduction and recycling and use of proper set out procedures.

*Benefits: Stakeholders have a positive perception of the recycling program, and are more likely to participate and encourage others to participate;*

*Recyclable materials quality, program efficiency, and cost-effectiveness improved.*

*Changes to funding systems are more palatable if the program is equitable and supported by all stakeholders.*

- **Optimization Efforts are Documented** – Managers have tracked and documented efforts to reduce costs and increase system effectiveness, and publicized performance results so that these efforts are acknowledged by customers and other stakeholders.

*Benefits: Encourages managers to be pro-active and creative in identifying and implementing cost reduction and efficiency increasing measures;*

*Changes to funding mechanisms or increases in fees are more likely to be supported if stakeholders are assured that adequate steps have been taken to increase efficiencies.*

- **Review and Adjustment Process is in Place** – A periodic process for reviewing, evaluating and adjusting funding and management practices is in place, including significant input and involvement by concerned stakeholders. Ideally, this process allows for continuous improvement of the system over time.

*Benefits: Stakeholders are more aware of program specifics, and are more likely to participate in and support programs;*

*Adjustments to financing mechanisms can be made before serious financial impacts ensue, thus mitigating financial risk.*

- **Integrated Planning** – The above attributes are implemented as part of an integrated waste management plan involving all waste management, recycling, waste reduction, and market development efforts.

*Benefits: Improved operational efficiencies;  
More comprehensive waste management programs;  
Increased stakeholder support.*

Although in practice few programs can achieve all of these attributes, they nevertheless describe an ideal system that local governments can aspire to achieve. Consequently, they form the backbone of this Guide.

## STRATEGIES FOR REDUCING COST AND GENERATING REVENUE

As discussed above, there are both management and funding opportunities to enhance program sustainability.

**Management strategies** include:

- Adopt integrated waste management planning and partnership practices;
- Adjust operations and infrastructure to reduce cost;
- Expand multi-jurisdictional cooperation;
- Improve bidding and contracting practices; and
- Consider privatization and managed competition when multiple competitors and public/private partnership opportunities exist.

**Funding strategies** that jurisdictions might consider include:

- Implement revenue sharing in recycling contracts to provide an incentive to increase materials recovery and share market risks and benefits;
- Charge a service fee on a utility bill;
- Charge a service fee on a property tax bill;
- Charge a service fee via bag or sticker sales;
- Increase property tax millage rate;
- Charge private disposal facilities a host fee;
- Charge a tip fee at a publicly owned disposal facility;
- Charge a tip fee at a publicly owned material recovery facility;
- Charge an administrative fee to private disposal facilities; and
- Supplemental funding options, such as grants, general fund, license fees, and franchise fees.

These options are described in more detail below, along with key advantages and disadvantages, conditions when each option works best, implementation steps, potential implementation challenges, and means of overcoming those challenges. Examples of communities that have employed each option are also included.

### **Opportunities to Strengthen Local Funding Programs in Pennsylvania— Chester County Example**

Many counties have negotiated host fees and administrative fees based upon tonnage deliveries to pay for needed recycling and household waste programs. When cuts were threatened to the Chester County (PA) recycling program, County officials asked the Chester County Solid Waste Authority (Continued)

(which operates the Lanchester landfill) to make contributions to continue funding. After two years of voluntary payments, the Solid Waste Authority formalized these payments in a proposal to the County to pay a \$3.00 per ton administrative fee for up to 350,000 tons per year. The County signed a five year agreement with the County committing the payment of \$3.00 per ton for deliveries of 350,000 tons per year and higher payments per ton for additional tons delivered.

## **Management Strategies**

### **Adopt Integrated Waste Management Planning and Partnership Practices**

Integrated waste management systems strive to minimize waste, prevent pollution, maximize efficiency, and supply resources to revitalize local economies. Effectively managing waste as a resource entails reduction, reuse, and recycling of waste materials whenever feasible, and using environmentally sound disposal practices when waste prevention or recovery is not feasible. Waste reduction and management programs are designed and operated as an integrated system entailing sharing of personnel and equipment, an integrated approach to communication with service recipients and the general public, and appropriate use of both public and private sector resources.

Benefits of integrated solid waste management include the following outcomes:

- Waste is seen as a resource, rather than a liability to be disposed, such that recyclables, reusable products, and energy are extracted to the maximum extent possible;
- Material resources are conserved;
- Jobs and economic activity are created;
- Full cost accounting is used to manage waste, and costs are allocated equitably;
- Individuals, businesses, local governments, and DEP are fully informed and able to make optimal solid waste management decisions;
- Jurisdiction resources are utilized in the most efficient and effective manner.

### **Adoption of Integrated Waste Management Planning and Partnership Practices Works Best When...**

- Jurisdictions assume responsibility for the proper management of solid waste through collection service provision and access to suitable disposal facilities;
- Recycling and solid waste management staff work as a team both within individual jurisdictions, and between jurisdictions in a region;
- Public and private sector organizations understand each other's respective needs and interests, and seek win/win working relationships.

## Steps to Implement

Local jurisdictions can make their solid waste management systems more integrated in a variety of ways. Key steps include:

- 1) Ensure that the infrastructure components for integrated waste management are in place and utilized appropriately.
- 2) Evaluate opportunities for better integrating recycling and solid waste collection operations.
- 3) Evaluate opportunities for public/private partnerships to make effective and appropriate use of both public and private sector resources while recognizing the different needs and business objectives inherent in these sectors (For example, a local government could provide the site and building for a processing facility while a private service provider supplies the equipment and operates the facility, thereby reducing the capital investment required by local government.)
- 4) Consider establishing user fees that discourage waste generation and provide funding for recycling as well as solid waste management services.

## Adjust Operations and Infrastructure to Reduce Cost

Efficiency studies can be performed on recycling and solid waste management systems in order to make operational changes that can result in reduced expenditures. The Solid Waste Association of North America (SWANA) recently examined municipal solid waste management systems for six communities. Although the type of services and associated costs varied from community to community, one variable remained consistent: collection of solid waste and recyclables typically represented the single largest percentage of municipal solid waste management budgets – from 39 to 62 percent of total system costs. Therefore, improving collection efficiency offers the best opportunity for reducing overall solid waste management and recycling program costs.

Improving collection efficiency means getting more for less – picking up more solid waste or recyclables using fewer trucks, people, and/or time. Improvement strategies sometimes require changes in system operations or require new or improved solid waste facilities and/or equipment. Because strategies for increasing efficiency affect different stakeholders in different ways, an interactive approach to address the concerns of both internal and external stakeholders should be utilized.

The Systems Focused Approach brings together group discussions and systems analysis techniques that have been developed through the management fields of System Dynamics and Systems Thinking. The Systems Focused Approach emphasizes an understanding of the challenge(s) being addressed at all levels of the organization, provides an objective consideration of the alternative solutions, and enhances communication among stakeholders during the decision making process. This approach results in the following benefits:

- Enhanced understanding of complex business systems;
- Enhanced understanding of implications of feedback and time delay characteristics of the system;
- Increased support for program enhancements by all stakeholders, including program managers, workers, contractors, political representatives, and customers;
- Enhanced understanding of potential consequences via testing strategy scenarios;

- Improved communication among all stakeholders;
- Development of solidly-supported, viable solutions.

### **Systems Thinking**

Systems Thinking is a way of thinking about, and a language for describing and understanding, the forces and inter-relationships that shape the behavior of systems. This discipline helps us see how to change systems more effectively...

- The Fifth Discipline Fieldbook, Peter Senge, et al.

### **Reducing Operations and Infrastructure Costs Works Best When...**

- Costs of various options can be clearly presented;
- Internal and external stakeholders can be represented in an interactive decision process; and
- Management is willing to devote resources to analyzing programs.

### **Steps to Implement**

- 1) Establish relationships with all stakeholders, such as customers and service providers.
- 2) Establish feedback process.
- 3) Conduct benchmarking analysis.
- 4) Analyze cost of services.
- 5) Analyze system efficiency.
- 6) Identify opportunities for reducing costs/enhancing efficiency.
- 7) Identify, with stakeholders, strengths and weaknesses of each approach.
- 8) Identify, with stakeholders, strategies to be implemented and timeframe.

### **Cincinnati, Ohio's Cost Savings**

The City of Cincinnati faced potentially losing their curbside recycling program in the midst of a budget shortfall in 2000. The City had an efficiency study done to identify potential cost savings, focusing on refuse collection fleet maintenance. The results of this analysis saved the City \$800,000 during the first year that the recommendations were implemented, and was able to retain its curbside recycling program. As important, the relationship between the recycling managers, drivers and mechanics improved tremendously through the process.

### **Potential Challenges and Suggestions for Addressing Them**

Potential challenges to adjusting infrastructure to reduce costs, and some suggested ways of addressing those challenges, are provided in the following table.

## Reducing Infrastructure Costs

Potential Challenges	Suggested Solutions
<p>New or upgraded technologies may require capital to implement initially.</p>	<ul style="list-style-type: none"> <li>▪ Amortize the costs over of the life of the equipment/facility.</li> <li>▪ Study the cost-effectiveness of the system implemented in other communities.</li> <li>▪ Educate stakeholders about cost-efficiencies experienced in other communities.</li> <li>▪ Keep stakeholders involved in the decision-making process from the beginning.</li> </ul>
<p>Future costs and revenues are uncertain.</p>	<ul style="list-style-type: none"> <li>▪ Many costs and revenues can be estimated fairly accurately, but even when they can't, simply identifying them helps decision makers understand options and plan for contingencies.</li> <li>▪ Benchmark costs and track them regularly over time. This will help identify priorities and opportunities for cutting costs, and provides a means of measuring progress over time.</li> <li>▪ Evaluate how local decisions about pricing and services may impact revenues and costs. While difficult to do accurately, evaluating potential impacts of potential changes is critical to understanding future scenarios.</li> </ul>
<p>We don't have the resources to evaluate our programs.</p>	<ul style="list-style-type: none"> <li>▪ Seek assistance. Network and find communities that have successfully evaluated their programs.</li> <li>▪ Check the DEP web site to see if your question may have already been addressed and answered by another community: <a href="http://www.dep.state.pa.us/dep/deputate/airwaste/wm/RECYCLE/Tech_Rpts/Proj_Sum.htm">www.dep.state.pa.us/dep/deputate/airwaste/wm/RECYCLE/Tech_Rpts/Proj_Sum.htm</a>.</li> <li>▪ Apply for a DEP technical assistance grant. DEP has funded a number of efforts to strengthen local funding and programs, and considers it a top priority for future technical assistance funding, as long as funds are available.</li> </ul>

Reducing Infrastructure Costs	
Potential Challenges	Suggested Solutions
We don't have the resources to evaluate our programs.	<ul style="list-style-type: none"> <li>▪ Evaluate and implement improved practices as opportunities arise. If nothing else, consider the steps in this guide as opportunities arise, such as when contracts must be re-bid, or when markets change or infrastructure is retired.</li> </ul>
People resist change.	<ul style="list-style-type: none"> <li>▪ Know that even in communities where change has been resisted, it has also been embraced after new technologies and programs have been implemented.</li> <li>▪ Keep long-term goals in mind.</li> </ul>

**Expand Multi-Jurisdictional Cooperation**

Many communities have found it cost-effective to work jointly in providing solid waste management services. Pooling resources can increase bargaining power with private service providers, whether it be for a collection contract or for contracting for recyclables processing. Pooling resources, such as yard waste processing equipment, collection equipment, or facilities, can also increase equipment, labor, and/or facility utilization, thereby increasing economic and operational efficiencies. Cooperation between two or more municipalities is becoming more common as municipalities face increasing budgetary constraints. Inter-municipal agreements can be executed to clearly define responsibilities and requirements of each participating jurisdiction.

Some counties have created a solid waste authority to implement their recycling or solid waste systems. One advantage of creating a solid waste authority with several municipalities and/or counties is that the authority may be large enough to issue debt. All communities would also share the financial risk if capital is secured for building a facility, such as a waste-to-energy facility, landfill, or materials recovery facility. There are also economies of scale to be gained by sharing resources, and risk is reduced when the authority can be assured that member jurisdictions will deliver their recyclables or waste to a specific facility.

Jurisdictions might implement cooperative efforts in more low-risk activities, such as education and outreach campaigns. In this manner, jurisdictions can share resources and take advantage of economies of scale (such as reduced printing costs), but maintain direct responsibility for their programs. It is possible that developing a relationship in this manner could lead to other joint efforts in the future.

**Expanding Multi-Jurisdictional Cooperation Works Best When...**

- Jurisdictions within the region are in need of the same set of services.
- Jurisdictions have worked together successfully in the past.
- Responsibilities and roles are clearly defined.
- There are clear advantages to working cooperatively.

## Steps to Implement

- 1) Identify service needs of each potential cooperating jurisdiction.
- 2) Identify and communicate advantages to working cooperatively.
- 3) Identify and implement communication and control protocols among potential member jurisdictions.
- 4) Determine and document clearly how the regional program will be funded.
- 5) Identify strategies for providing for accountability, monitoring, and shared decision-making authority on the part of the service provider to all participating jurisdictions.
- 6) Identify costs (and cost savings) associated with cooperative program.
- 7) Test regional strategies to work cooperatively in low-risk circumstances, such as a joint outreach and outreach campaign. Build on successes of such efforts.

### **A Cooperative Marketing Approach – Cambria and Indiana Counties, PA**

Cambria County and Indiana County have an inter-municipal agreement for Indiana County to process and market Cambria County’s recyclables from their drop-off program (approximately 1,200 tons per year). Cambria County is billed quarterly for processing and marketing costs, and they receive an 80 percent revenue share. This arrangement has been in place since 1998.

## Potential Challenges and Suggestions for Addressing Them

Potential challenges to expanding multi-jurisdictional cooperation, and some suggested ways of addressing those challenges, are provided in the following table.

<b>Expanding Multi-Jurisdictional Cooperation</b>	
<b>Potential Challenges</b>	<b>Suggested Solutions</b>
We do not want to lose control of our program.	<ul style="list-style-type: none"> <li>▪ Explore opportunities for shared decision-making and management authority, while empowering one entity to provide services on the joint parties’ behalf.</li> <li>▪ Clearly document roles and responsibilities, such that control is not lost, but economies are gained.</li> </ul>
Services provided are different in surrounding jurisdictions.	<ul style="list-style-type: none"> <li>▪ Consider some programs that you could work together on. Share educational items, for example, or share model contracts or communication literature that can be adjusted to suit individual programs.</li> <li>▪ Consider why programs are different, and if it might be mutually beneficial to join forces, even if it means altering a program.</li> </ul>

## Improve Contracting Practices

Improved contracting practices can take many different forms. It is generally assumed that the more competition from qualified firms, the greater competition will occur from potential bidders and proposers. Hence, it is important to take note of the number of bidders responding to RFPs, and consider adjusting the RFP accordingly. Other potential improvements to contracting could include means by which the jurisdiction is willing to share financial risk with the contracted service provider. For example, the jurisdiction might have a revenue-sharing arrangement with a materials recovery facility (MRF) in which market risk is shared. Similarly, incentives could be built into the contract, such as variable compensation to haulers based on the tonnage of marketable recyclables they collect as opposed to compensation being a flat fee per household served. The jurisdiction(s) issuing the solicitation should consider the following questions:

- Does the proposed scope of services in the RFP meet the service needs of our customers?
- Are we soliciting services that are difficult for service providers to perform (e.g., unpassable roads or difficult-to-access sites)?
- Are equipment specifications burdensome (e.g., a dedicated fleet or expensive equipment)?
- Can the volume of business be expanded through inclusion of additional jurisdictions, thereby making this contract more attractive? Alternatively, can contracting opportunities be apportioned to provide means by which smaller as well as large contractors can bid on services to be provided, and/or more than one contractor can be engaged to provide service?
- Are there opportunities to build incentives into the contract?
- Are there opportunities for risk sharing (such as a base fee plus revenue-sharing for processing of recyclables)?
- Is there an opportunity to combine services such as recycling and solid waste collection or collection of yard waste?
- Is the proposed contract length sufficient to allow the contractor to amortize their capital costs?
- Can administrative burdens (such as reporting requirements) be streamlined without sacrificing needed information?
- Are there political or stakeholder consequences to the contract language that need to be considered?

### Improving Contracting Practices Works Best When...

- Positive relationships exist between potential contractors and jurisdiction(s) and opportunities for regional cooperation have been explored.
- The jurisdiction can be flexible in how it develops specifications.
- The jurisdiction is knowledgeable about alternatives to existing contracting practices.
- The jurisdiction(s) issuing a RFP are aware of and open to more progressive ideas, such as risk-sharing and incentives.

- The jurisdiction is aware of neighboring communities' services and contract arrangements.
- Sufficient competition among potential service providers exists in the region.

### Steps to Implement

- 1) Identify services desired and consider means of improving economies of scale or bundling of services to attract prospective bidders.
- 2) Consider creating service zones to enable a diversity of service providers to bid, and to keep multiple service providers in the market.
- 3) Benchmark costs and services against those of other jurisdictions.
- 4) Consider joint contracting with other jurisdictions.
- 5) Evaluate current contract language, and identify desired changes. Consider:
  - Scope of services;
  - Costs;
  - Billing requirements;
  - Reporting requirements;
  - Equipment requirements;
  - Potential to issue RFP jointly with other jurisdictions; and
  - Potential for risk-sharing or incentive-building;
- 6) Make desired contract language changes.
- 7) Have your jurisdiction's attorney review the contract.
- 8) Monitor service provision and ensure compliance with contract terms.

### Potential Challenges and Suggested for Addressing Them

The following table describes some potential challenges to improving contracting practices, and some suggested solutions to those challenges.

Improving Contracting Practices	
Potential Challenges	Suggested Solutions
I don't have the time or the know-how to change my contract.	<ul style="list-style-type: none"> <li>▪ Network with other communities to find out how they are improving their contracts as well as explore cooperative contracting.</li> <li>▪ Solicit sample RFPs and contracts, and analyze them for improved language.</li> <li>▪ Consider applying for DEP recycling technical assistance. DEP can help provide resources for your contract to be analyzed.</li> </ul>

Improving Contracting Practices	
Potential Challenges	Suggested Solutions
I don't have the time or the know-how to change my contract.	<ul style="list-style-type: none"> <li>▪ Be sure your jurisdiction's solicitor reviews your RFP and contract. Ensure that he or she is involved in analyzing other jurisdictions' contracts/RFPs.</li> </ul>
I don't want to ruin my relationship with my hauler.	<ul style="list-style-type: none"> <li>▪ Improving contracting practices can be a win-win. If your jurisdiction has been requesting reports that are not really used, for example, and is burdensome to the hauler, removing this stipulation can improve your relationship, as well as your contract.</li> <li>▪ Explain your goals clearly to your hauler. Understand that the haulers know the pressures jurisdictions face. They appreciate and respect educated and pro-active jurisdictions. If your particular hauler does not, then consider building a new relationship with a more suitable hauler.</li> </ul>
Components of a Good RFP and Contract	Markets for processed materials
<ul style="list-style-type: none"> <li>▪ Clearly defined terms</li> <li>▪ Detailed description of service(s) to be provided</li> <li>▪ Adequate background information and data</li> <li>▪ Expectations regarding qualifications and experience</li> <li>▪ Detailed performance specifications addressing: <ul style="list-style-type: none"> <li>▪ Location</li> <li>▪ Regulatory compliance</li> <li>▪ Recyclables (initial &amp; provisions for future)</li> <li>▪ Capacity</li> <li>▪ Vehicle access/ operating hours weighing, record keeping &amp; reporting</li> <li>▪ Residue mgt. &amp; limits</li> <li>▪ Start up schedule</li> <li>▪ Handling of complaints</li> <li>▪ Record keeping and reporting</li> <li>▪ Equipment requirements</li> <li>▪ Public education requirements</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Incentives for increasing performance</li> <li>▪ Opportunities for amending scope to address changing circumstances</li> <li>▪ Avenues for resolving disagreements - mandatory 3rd party mediation clause</li> <li>▪ Clear financial/cost proposal instructions</li> <li>▪ Proposal submission instructions</li> <li>▪ Description of selection process and evaluation criteria</li> </ul>

**Consider Privatization and Managed Competition**

A strategy available to Pennsylvania jurisdictions that do not operate services, either directly or indirectly, is to develop a system where private entities compete for the ability to serve the jurisdiction. This strategy is

also available to jurisdictions that now operate their own services but are considering privatization. While this strategy is typically considered for hauling, similar principles apply for disposal and processing of recyclables. Private entities are often able to raise capital for developing waste facilities and purchase capital equipment, such as collection equipment. They are also, by nature, profit-seeking entities that have a “built-in” desire to maximize efficiency, minimize costs, and fully utilize equipment and facilities. Furthermore, they may have economies of scale, equipment, market leverage, and expertise that jurisdictions may not have. Critical to the success of this strategy however, is the need to ensure that competition exists among service providers and monopolies do not result.

With collection services, the number of haulers that may service a designated area can be limited from one to several, through franchised or contracted (managed competition) waste collection. Briefly, a franchise is an “exclusive right” that gives one or more haulers in a territory the right to provide collection services for one or more customers but does not usually specify a rate, whereas a contract requires an official bidding process with an associated rate.

If the area is currently served by several haulers, reducing the number of haulers serving the area can result in increased operational efficiencies, which can result in lower rates. Other benefits to reducing the number of haulers serving a jurisdiction include reduced traffic, reduced wear and tear on roads, and improved safety and aesthetics (as trash is only set curbside one day of the week in a neighborhood, for example). Similarly, organized collection can result in an improved level of service. Haulers can be required to provide separate collection of recyclables, for example, in order to receive the refuse collection contract or franchise. If a jurisdiction owns a disposal facility, it may indicate in the contract that the waste is to be delivered to that landfill. If a jurisdiction does not own a landfill, it may consider issuing a separate RFP for disposal before issuing a collection RFP, so that the disposal portion is “known.” This reduces the hauler’s risk, and therefore his costs, resulting in lower-priced bids.

### **Advantages and Disadvantages to Organized (Exclusive) Collection Services**

While organized waste collection does provide local government with more controls over waste collection services than an open (subscription) system where residents hire their own haulers, it may not be appropriate for every community. The following table highlights the advantages and disadvantages of a subscription-based system versus an organized collection system in which a single hauler receives the franchise or contract (Organized Exclusive).

#### **Comparison of Subscription and Organized Exclusive Waste Collection**

Service Delivery	Advantages	Disadvantages
Subscription-Based	<ul style="list-style-type: none"> <li>▪ Maximum customer choice</li> <li>▪ Very limited government involvement required</li> <li>▪ Provides opportunities for small haulers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased air quality and road impacts from multiple haulers serving a community</li> <li>▪ Neighborhood aesthetic impacts</li> <li>▪ Lack of uniformity in service levels</li> </ul>

Service Delivery	Advantages	Disadvantages
Subscription-Based	<ul style="list-style-type: none"> <li>▪ Competition encourages haulers to keep prices competitive (although costs may actually be higher than in “organized” systems)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Low ability for governmental entities to enforce policies and/or goals</li> <li>▪ Higher costs to ratepayers because of routing inefficiencies (Studies have shown that customers in “open” systems pay more than customers served by public crews, contract haulers, or franchised haulers.)</li> </ul>
Organized- Exclusive	<ul style="list-style-type: none"> <li>▪ Often results in low rates and provides some governmental control over rates</li> <li>▪ Service providers selected on the basis of technical and financial ability to provide the requested services</li> <li>▪ Jurisdiction has more control – contract items often include penalties/remedies for poor or non performance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Small haulers may not be able to compete with larger regional or national service providers</li> <li>▪ Governmental entities must invest resources in managing a procurement</li> <li>▪ Potential disruption to customers resulting from change in hauler</li> <li>▪ Transition costs (start-up time for learning new routes, etc.)</li> <li>▪ Potential quality of service issues due to “low-ball” pricing</li> <li>▪ Potential for reduced competition in the long-run</li> </ul>

**Franchise Agreements with Multiple Haulers**

Of all of the disadvantages associated with a competitively procured system, the one that generates the greatest concern is the potential for only one, most likely a relatively large hauler, to receive the franchise or contract, resulting in lost opportunity for small haulers.

However, a franchise system could be established that allows more than one hauler to serve the jurisdiction. This could be accomplished in two ways:

- Establish a limited number of franchises, which allow franchised haulers to serve in all regions of the municipality (a non-exclusive franchise); or
- Divide the municipality into distinct geographic regions or zones, and have each franchised hauler be the exclusive hauler in one or more zones. In this manner, the operational efficiencies and environmental and aesthetic benefits described above in Table 4-5 still result.

## Privatization/Managed Competition Works Best When ...

- There is not a large number of small service providers operating in the jurisdiction.
- Some competition exists.
- Customers are willing to switch service providers to reduce costs.

### Steps to Implement

- 1) Ensure that customers and stakeholders are aware of potential benefits from the beginning of discussions.
- 2) If the jurisdiction is considering competing for service provision, estimate and analyze all costs, including capital costs.
- 3) Include prospective service providers in discussions early-on.
- 4) Identify services desired, and develop RFP, considering:
  - Services desired;
  - Disposal options;
  - Reporting requirements;
  - Billing requirements;
  - Opportunities for creation of service zones;
  - Opportunities for joint contracting with other jurisdictions;
  - Opportunities to share risk with contractor;
  - Opportunities to share revenues.
- 5) Issue RFP.
- 6) Select service provider(s).
- 7) Monitor service provision and ensure compliance with agreement terms.

#### Managed Competition in Franklin County, Ohio

The Solid Waste Agency of Central Ohio (SWACO) has been working with their 42 member jurisdictions to encourage the implementation of managed competition. Before townships began contracting solid waste collection services, most residents received weekly collection of refuse and recyclables but not yard waste. Most townships that have contracted solid waste services (more than 2/3 of the communities) now also receive weekly collection of separated yard waste. A SWACO representative indicates that residents' fees have decrease by as much as two-thirds under the contracted scenario despite the fact that they are receiving more services.

## Potential Challenges and Suggestions for Addressing Them

The following table describes some potential challenges to implementing privatization/managed competition, and some suggested solutions to those challenges.

Implementing Privatization/Managed Competition	
Potential Challenges	Suggested Solutions
We currently provide services directly, and don't believe a private service provider can provide adequate customer service.	<ul style="list-style-type: none"> <li>▪ Develop a good rapport with the potential service providers in your area.</li> <li>▪ Talk to representatives of other jurisdictions to learn more about service providers' quality of service and responsiveness.</li> <li>▪ Build controls into your contract or franchise agreement to ensure that the service provider will provide adequate service.</li> <li>▪ Having just one service provider per service region improves accountability and enhances responsiveness.</li> </ul>
Customers want to select their own hauler.	<ul style="list-style-type: none"> <li>▪ Know that customers also want to save money.</li> <li>▪ Ensure that projected cost savings are estimated accurately, and that the information, along with service enhancements, is explained clearly.</li> <li>▪ If not implementing privatized or contracted service will mean rate increases, let them know what those increases would be.</li> <li>▪ Involve customers in early discussions.</li> </ul>
We don't want to see haulers go out of business.	<ul style="list-style-type: none"> <li>▪ Encourage large haulers to bid on a team with a smaller hauler or haulers.</li> <li>▪ Divide the jurisdiction into service zones, and let service providers bid on each zone.</li> <li>▪ Implement a franchise with each hauler having its own district, with the size of each hauler's customer base remaining as it currently is.</li> </ul>
We would like to privatize, but purchased equipment recently.	<ul style="list-style-type: none"> <li>▪ Consider selling the equipment through a competitive bid process. There is a strong market for used equipment. DEP offers assistance to local overnments wishing to move used equipment.</li> </ul>

# Financing Strategies

## Charge a Service Fee on Utility Bill

### Fee Paid By: Service Recipients

Service fees are charges collected directly from residential and/or businesses customers that utilize recycling services, generally included on a monthly or bimonthly utility bill. Some communities charge a service fee specifically for recycling, while others cover the recycling service costs through a solid waste management service fee that also covers solid waste collection and disposal. This approach is most consistent with the way that private companies charge for their solid waste and recycling services, as customers receive a bill reflecting the fee to provide the service over that time period. In addition, this approach can be structured so as not to discourage recycling, by having customers pay the same fee based on services provided regardless of whether or not they are used.

Service fees provide a stable funding source. They may vary based on customer type as well as type of service received. For example, single-family units may be charged a different rate than multi-family units. Businesses may be charged a rate based on the type of business or square footage of property. And customers can be charged different rates based on the specific services they receive (for example, for extra pick up days, or bulky item pickup).

When recycling service fees are included as a part of a monthly utility bill along with charges for water, solid waste and/or electricity, customers are more likely to pay for the services than in cases where only recycling or waste fees are charged since another utility (e.g. an electric cooperative) may discontinue service if customers do not pay for all services provided. Although another utility may charge an administrative fee to include recycling and solid waste fees on its bill, this administrative fee is likely to be less expensive than the cost of developing and administering a separate billing system for solid waste services.

#### Utility Bills in Hopkins, MN

The City of Hopkins, Minnesota collects refuse with automated trucks on a weekly basis.

A private contractor collects single-stream recyclables every other week. Hopkins includes a line item for recycling on their monthly utility bill. The bill includes a \$2.75 fee for “recycle/yard waste,” a refuse fee ranging from \$11 to \$14.45 based on the size of the container, a water and sewer fee, a storm sewer fee, a state solid waste management fee, a state health fee, and a county solid waste management fee.

Residents can pay by mail, in person, or through an automatic draft from a checking or savings account.

### Advantages and Disadvantages of Service Fees on the Utility Bill

#### Advantages

- Fee can be tied to type of service.
- Predictable source of revenue.
- Typically, more politically acceptable than a property assessment (which is viewed more like a tax).
- Perceived as more equitable than millage taxes since only payees are customers receiving service.

## Disadvantages

- Non-payment may be more likely than with a property assessment.
- Requires cooperation with another service provider (the utility).
- Can be more cumbersome to implement than property tax fees or millage, in the sense that utility bills are issued more frequently than property taxes.
- Isolates and draws attention to funds, thereby making them potentially more vulnerable to being used for other purposes.

## Service Fees on Utility Bill Work Best When ...

- A billing mechanism covering the same customers already exists.
- The cost of providing the service per customer type can be determined and conveyed to customers.
- The services charged on the utility bill are mandatory for all customers in a particular customer class and care has been taken to build customer support for the service provided and for paying the fee so that non users will not be motivated to opt out.
- There is an enterprise fund for solid waste management that includes refuse and recycling collection as well as disposal and processing.

## Steps to Implement

- 1) Determine costs for services to be covered by the service fee.
- 2) Determine how different types of customers will be billed for service (e.g., single-family, multi-family, mobile homes, etc.).
- 3) Determine the billing system that will be used and the frequency of billing.
- 4) Ensure enforcement mechanisms in the case of non-payment.
- 5) Determine how vacant units or seasonal units will be handled.
- 6) Involve stakeholders throughout the process to build understanding and support for a fee-based approach to funding.

## Potential Challenges and Suggestions for Addressing Them

The following table describes some potential challenges to charging a fee on a utility bill, and some suggested solutions to those challenges.

Charging a Service Fee on Utility Bill	
Potential Challenges	Suggested Solutions
We don't have the staff to deal with a billing system.	<ul style="list-style-type: none"> <li>▪ Incorporate on an existing utility bill, such as a water bill. In some cases one municipal department will pay another to bill for solid waste services</li> </ul>
What if people don't pay the bill; are we supposed to stop collecting their trash?	<ul style="list-style-type: none"> <li>▪ If you can combine with another utility, then non-payment can result in water or power being disconnected. This is usually a more acceptable response to non payment. Often a warning or two results in payment.</li> </ul>
We have a PAYT program involving the use of bags and stickers. How do we charge on a utility bill?	<ul style="list-style-type: none"> <li>▪ You might want to stick with simply having residents purchase stickers, tags, or bags. However, if a large portion of your residents use just one can/bag most weeks, then you could consider charging for a base service level on a utility bill, and having residents purchase additional bags, tags, or stickers for overflow waste. Most residents, then, would not have to worry about purchasing stickers, tags, bags, and funding would be more predictable.</li> </ul>
Most residents won't want to pay for recycling and may not recycle if they have to pay.	<ul style="list-style-type: none"> <li>▪ Charge one fee for both recycling and solid waste – a solid waste management fee. This is part of an integrated waste management approach.</li> </ul>

## Charge a Service Fee on Property Tax Bill

### Fees Paid By: Property Owners

In this option, the cost of recycling and/or solid waste services falls directly on the property owner. The local government assesses property owners a fixed service fee that appears on a property tax bill. Some local governments assess a fixed amount on different customer classes as defined by the property appraiser's office. Others label the assessment a "waste generation fee" and charge an amount based on estimates of waste generated by different categories of customers (e.g. single-family, multi-family, commercial, etc.).

Service fees on property tax bills should be updated periodically to reflect changes in the cost of providing the covered services. Unlike millage, payment of a service fee is less likely to be tax deductible for residents (although businesses can consider it as a business expense).

Because this fee is on the property tax bill, non-payment rates tend to be lower than for fees charged on a utility bill. However, collection of fees on tax bills is somewhat less successful than collection of revenues through a millage. As with service fees on utility bills, there is likely to be a cost associated with administering

this fee, which should be included in the assessment charged to customers.

Statewide, about 15 percent of local governments responding to R.W. Beck's survey reported using either a fixed or generation-based service fee assessed on property owners to fund a portion of recycling costs. On average, these funds accounted for about 17 percent of total recycling costs.

### **Advantages and Disadvantages of Charging a Service Fee on Property Tax Bill**

#### Advantages

- Can generate sufficient revenue to cover the cost of recycling services.
- Provides predictable amount of revenue, thereby minimizing financial risk.
- Allows fees to be set and varied by customer type, and linked to waste generation.
- Low non-payment rate.
- May be perceived as more equitable than a millage increase.
- Relatively low burden to administer vs. utility fee, as issued once or twice per year; vs. monthly.

#### Disadvantages

- May be perceived as a tax.
- Fee not directly tied to use of service.
- Does not provide incentive to recycle since fee is based on square footage versus amount of waste generated.
- Fees may not be tax deductible for residents although business can regard them as a business expense.
- Renters may not pay directly.
- May be cumbersome to manage unoccupied properties and changes in service levels, if applicable.
- Requires coordination with taxing entity or entities.

#### **Property Tax Bills in Montgomery County, PA**

Montgomery County, PA charges its residents and businesses a waste generation fee on property assessments in addition to a "market rate tipping fee" at the County's solid waste facilities. The Waste Generation Fee uses existing Montgomery County Board of Assessments land use codes (LUC) to broadly categorize non-vacant property as being either single family, multi-family or commercial properties. Single family and multi-family properties are assessed a flat fee and commercial properties are assessed a waste generation fee based on actual surveys of waste generators in the service area. The size of each commercial property is based on the square footage of net floor area established by reviewing the Montgomery County Board of Assessment's records. The Waste System Authority of Eastern Montgomery County asks all participating municipalities to put the waste generation fee on their tax bill. If they do not, the Authority issues a bill directly to the property owner.

## Property Assessments Work Best When ...

- Collection of recyclables and/or solid waste is provided by the jurisdiction or under managed contract.
- An addition to or itemization of the tax bill is likely to be accepted by the public.
- The local government already sends a tax bill to the same residents and businesses that would be charged the recycling and/or solid waste fee or can work with the local government that does.
- There is an enterprise fund for solid waste management that includes refuse and recycling collection as well as disposal and processing.

## Steps to Implement

- 1) Ensure political support for this funding approach.
- 2) Determine the type and amount of recycling costs that will be covered by the fee.
- 3) Determine who should pay assessment (businesses, residents, etc.) and whether assessment is based on services received or some other measure.
- 4) Determine whether assessments will be based on value of property, size of property, or flat rate across generator category.
- 5) Calculate rate for each customer.
- 6) Explain reason and determination of fee to affected stakeholders.
- 7) Utilize stakeholder feedback to fine tune fee structure, as appropriate.
- 8) Obtain elected official approval of final fee structure.
- 9) Monitor costs and fee revenues, and adjust fees periodically, as needed.

## Potential Challenges and Suggestions for Addressing Them

The following table describes some potential challenges to charging a service fee on property tax bills, and some suggested solutions to those challenges.

Charging a User Fee on Property Tax Bill	
Potential Challenges	Suggested Solutions
Payees will perceive this as “just another tax.”	<ul style="list-style-type: none"> <li>▪ Before implementing such a fee, analyze costs of services relative to other communities, implement cost-saving measures, and inform stakeholders of the results.</li> </ul>

## Charging a User Fee on Property Tax Bill

Potential Challenges	Suggested Solutions
Payees will perceive this as “just another tax.”	<ul style="list-style-type: none"> <li>▪ Involve all stakeholders, including residents, elected officials, and decision makers, in the process early on to alleviate later concerns. If the general public has been involved, or had the opportunity to be involved, in the process, they will be much more supportive.</li> </ul>
I don’t know if the funds would really end up supporting recycling programs.	<ul style="list-style-type: none"> <li>▪ Consider implementing an enterprise fund for solid waste management services to ensure that funds are used for their intended purpose.</li> </ul>

### Pay-As-You-Throw Service Fee (PAYT)

#### Fee Paid By: Customers Receiving Solid Waste Collection and/or Disposal Service

Over 200 local governments in Pennsylvania use some type of Pay-As-You-Throw (PAYT) fee system whereby residents (primarily) pay for solid waste collection and disposal based on the amount of waste set out. The cost of recycling services is often included in these PAYT fees.

Some PAYT programs bill customers on a utility bill (as described in the previous option), charging a variable rate depending on the size of the container that the customer has requested. Another alternative is to require residents to purchase a specialized bag to contain refuse, or a tag or sticker that must be affixed to a container of refuse before it will be collected. Many local governments implement PAYT fee systems to more equitably distribute the cost of solid waste collection and disposal and to encourage waste reduction and recycling. The cost of recycling is typically factored into the rates charged per container, bag, tag, or sticker. This approach can be used in curbside collection programs as well as when solid waste is collected directly from generators at convenience centers.

#### Advantages and Disadvantages of PAYT

##### Advantages

- Predictable revenue stream as long as a minimum, fixed level of service is required and enforced.
- Revenue is generated before the funds are expended.
- Typically more politically acceptable than an assessment (which is viewed more like a tax).
- PAYT viewed as an equitable fee system for solid waste collection and disposal.
- Proven to increase waste reduction and recycling, especially when receipt of collection service is not optional and good recycling and composting programs are in place.

## Disadvantages

- Revenue varies depending on waste disposed, and may be lower than anticipated when collection service is not mandatory and when no minimum level of service is required.
- Can be complicated to implement and administer especially if it requires a procurement and distribution system for bags, tags, or stickers and enforcement.
- Some local governments report increases in illegal disposal when implemented, except where garbage collection is mandatory and ample composting and recycling programs exist.
- Certain service providers may make PAYT an optional service that is more versus less expensive-even for regular recyclers.

### **Pay as You Throw in East Greenville, PA**

The Borough of East Greenville, Pennsylvania (population 3,100) covers the majority of its curbside recycling costs through a Pay As you Throw user fee. A private contractor collects residential refuse weekly while the Borough collects source-separated recyclables every other week. All refuse must be placed in specially identified bags, which are sold for \$2 each at three locations. Revenue, totaling approximately \$105,000 per year, pays for the solid waste collection contractor and the majority of the costs associated with the Borough's recycling program.

### **PAYT Fee Systems Work Best When ...**

- Public and political support for Pay-As-You-Throw exists.
- The community has recycling and yard waste collection.
- The jurisdiction has a way to procure and distribute bags, tags, or stickers.
- The local government has a way to ensure that all collectors enforce the use of standardized collection containers and/or pre-paid bags, tags, or stickers.
- Surrounding jurisdictions also have PAYT programs.
- Refuse collection is mandatory for all residents.

### **Steps to Implement**

- 1) Determine per customer costs of services to be covered by the PAYT fee system.
- 2) Ensure all service providers are on board.
- 3) Determine rate structure.
- 4) Develop ways to produce and distribute containers, bags, tags, or stickers.
- 5) Educate public about the justification for and reason for rate structure.
- 6) Provide for enforcement.
- 7) Provide ample time and information to ensure all customers know what to do and to get new

system in place.

- 8) Monitor costs and revenues and adjust fees periodically as appropriate.

### Potential Challenges and Suggestions for Addressing Them

The following table describes some potential challenges to implementing a PAYT fee system and some suggested ways of addressing them.

Implementing a PAYT Fee System	
Potential Challenges	Suggested Solutions
Residents will find it cumbersome and time consuming to purchase bags, tags, or stickers for their refuse.	<ul style="list-style-type: none"> <li>▪ Ensure that bags, tags or stickers are available for purchase at several retail outlets, such as grocery stores, the town hall, etc.</li> <li>▪ Allow residents to purchase a large number of bags at the start of the program.</li> </ul>
Large families and waste generators can derail support for adoption of PAYT.	<ul style="list-style-type: none"> <li>▪ Compare PAYT to costs and financing methods used for other utilities and the impact of consumer decisions on resource conservation.</li> </ul>
How can I enforce this?	<ul style="list-style-type: none"> <li>▪ Be sure that customers understand the program well in advance, and provide them ample opportunity before the program begins to purchase their bags, tags, and stickers.</li> <li>▪ Ensure that customers are involved in the decision making process from the start. This will improve cooperation.</li> <li>▪ Provide warning notices initially, then leave solid waste that is not properly containerized or showing a tag or sticker at the curb.</li> </ul>

### Revenue Sharing in Recycling Contracts

#### Fee Paid By: Recycling Processor (via Sales of Recyclables to End Users)

In this option, a local government receives a portion of the revenue obtained by the processor for the sale of recyclable material. This arrangement typically is found when a local government has an agreement with another entity (e.g., a private company, an authority, another local government) to process and market recyclables collected by or on that local government's behalf.

Some local governments have successfully negotiated revenue sharing agreements that significantly offset the costs of their recycling program. While revenue sharing can provide a welcome additional source of revenue, depending on these revenues can be risky, since the price for which materials can be sold varies significantly over time. Revenue sharing terms typically are based on the type of material, the tonnage, and the form in

which material is delivered. Revenue can be a fixed price per ton or vary based on a published market index, sometimes with fixed minimum (floor) or maximum (ceiling) levels negotiated into contracts. Statewide, about 31 percent of local governments responding to R.W. Beck's survey report that they have some type of revenue sharing agreement with recycling service providers.

### **Advantages and Disadvantages of Revenue Sharing**

#### Advantages

- Revenue is tied directly to recycling activity and thus provides an incentive for recycling
- Provides incentive for increased local government cooperation.
- In good market times, revenue can be significant.
- Most politically acceptable funding mechanism since no fee is levied.

#### Disadvantages

- Since the tonnage and price received for recyclables is not guaranteed, the amount of revenue is uncertain and will vary.
- Local governments with small amount of recyclables are limited in their negotiating power for good prices, unless they work with neighboring jurisdictions.
- A processor may increase processing fees if they participate in a revenue share arrangement.

### **Revenue Sharing in Philadelphia**

The City of Philadelphia has contracted with Blue Mountain Recycling through Smurfit Stone Recycling to process the City's residential recyclables. The contract is structured with the objective of creating a long term, mutually beneficial working partnership. City staff began the process by holding meetings with potential partners, asking for their input in advance of developing the Request for Bids. As a result of these meetings, staff developed a detailed strategic plan defining tonnage goals and performance measures to ensure the quality of the collected material. Staff shared the plan with potential partners, again asking for their input and eventual buy-in of the strategy. This relationship building process resulted in support for the City's approach and general agreement among the selected partners that it was in each party's interests to support one another to make the program the best it could be.

### **Revenue Sharing Works Best When ...**

- The local government generates a large amount of recyclables or cooperates with neighboring jurisdictions.
- The local government has the ability to enter into a long-term agreement for processing/marketing recyclables.
- The local government can provide high quality material.
- The recycling facility keeps accurate records regarding quantities delivered by jurisdiction.

- The market for recyclable materials is competitive.
- The local government has the knowledge and capability to negotiate a fair contract.
- The local funding system is not dependent upon a specified level of funding from revenue sharing.

### Steps to Implement

- 1) Evaluate marketplace to determine competitiveness.
- 2) Develop criteria for proposals based on local government's priorities.
- 3) Prepare and issue Request for Proposal to process and market recyclables with specified revenue sharing terms.
- 4) Evaluate responses based on established criteria.
- 5) Negotiate, negotiate, negotiate.
- 6) Keep up with market prices.

### Potential Challenges and Suggestions for Addressing Them

The following table describes some potential challenges to implementing revenue sharing, and some suggested ways of addressing them.

Implementing Revenue Sharing	
Potential Challenges	Suggested Solutions
Revenue sharing sounds risky.	<ul style="list-style-type: none"> <li>▪ It can be. Markets rise and fall. Ensure that your entire program is not dependant upon recycling revenues.</li> <li>▪ Be sure that you understand the markets, the history of the markets, and likely prices. Peers and marketing managers can help you understand them.</li> <li>▪ Know that the material recovery facility also has an incentive to find the best price and negotiate fair contracts.</li> </ul>
Processor may charge me more to tip if I want a revenue share.	<ul style="list-style-type: none"> <li>▪ Yes, they may; but the net costs are likely to be lower, for the contractor will build in contingencies to protect itself from market risk. Establish revenue share to share risks as well as provide the processor with sufficient incentive to pursue the best prices for the materials.</li> <li>▪ Stay up to date on market prices, estimate likely changes, and know the tonnages being processed from your community to evaluate this.</li> </ul>

## Add Millage Rate to Property Tax Bill

### Fee Paid By: Property Owners

In this option, the cost of recycling (and/or solid waste programs) is paid directly on the property tax bill either as a separate millage line item, or is embedded in the general millage rate. The local government establishes a millage rate that covers the annualized cost of recycling or other solid waste management services to be covered. All property owners pay these fees, with the premise being that all payees benefit from the services provided. A further premise is that these services should be available to all citizens, businesses, and institutions and that use of these services should be encouraged. If the millage rate is set appropriately, the revenues cover the costs associated with the services provided. One of the drawbacks of this funding approach is that the assessment is not based on the amount of services received, but rather, on the value of the owners' real property.

Statewide, about seven percent of local governments responding to R.W. Beck's survey reported using millage for a portion of recycling costs. On average, these funds accounted for about five percent of recycling budgets.

### Advantages and Disadvantages of Increase in Millage as a Funding Source for Recycling

#### Advantages

- Can generate sufficient revenue to cover the cost of services to be funded.
- Provides predictable amount of revenue, thereby minimizing financial risk.
- Millage can be set and varied by customer type.
- Property taxes (millage) are tax deductible.
- Easier to administer than user fees.
- Collection rate high.

#### Disadvantages

- Increase in tax rate can be politically difficult.
- The cost of providing refuse and recycling collection does not typically vary by residential property value, so wealthier residents tend to bear a higher burden.
- Rates may be difficult to set in a manner that equitably reflects various needs and services.
- Tourists and other renters do not pay millage directly but benefit from these services.
- If the refuse/recycling millage is embedded in the general fund millage, the true cost is obscured to residents.
- If the refuse/recycling millage is embedded in the general fund millage, the programs may have to compete with other programs and services to receive continued funding.

### **Millage Rates in Horry County, SC**

The Horry County, SC Solid Waste Authority (the Myrtle Beach area) operates a landfill, various composting and recycling services, and a network of convenience centers for the collection of solid waste and recyclables from unincorporated County residents. At the present time landfill and recycling services are paid for through tipping fees for MSW, C&D, and yard waste accepted at the landfill for recovery and processing or disposal. Operation and maintenance of the County convenience centers, however, are funded by a millage applied against the assessed value of commercial and residential property (real and personal), and vehicles in the unincorporated area of the County. Exempt from paying the millage are churches, schools, governments, and hospitals. This funding option is based on the premise that the convenience centers benefit all payees – both those that use the centers directly and those that benefit from reduced illegal dumping and littering that would result if these centers did not exist or charged fees that users were unwilling to pay.

### **Increase in Millage Works Best When ...**

- An addition to the property tax is politically feasible.
- The services to be covered by the millage are equally available to all property owners.
- Reassessment of property value is performed on a periodic basis.
- The value of the property is likely to increase with the cost of service.
- The taxing authority is willing to cooperate on billing and collection.
- A pre-determined portion of the millage is set aside in an enterprise fund for solid waste and recycling services.

### **Steps to Implement**

- 1) Test the political acceptability of adding to the current millage.
- 2) Determine the costs to be covered with the millage.
- 3) Determine how the increase in millage for different classes of property (residential, commercial, etc.) will be allocated to cover the costs.
- 4) Recognize that changing the millage rate can be politically difficult so set rate in a manner that will not require changes each year.
- 5) Obtain political support.
- 6) Work with the department that administers property taxes to determine how and when millage will be added and collected.
- 7) Implement mechanisms that enable collected funds to be allocated for the purpose intended (such as enterprise fund).
- 8) Monitor service costs and millage revenues and adjust millage rates periodically.

## Potential Challenges and Suggestions for Addressing Them

The following table describes some potential challenges to funding recycling and/or other solid waste management services by increasing millage, and some suggested ways of addressing them.

Funding Recycling and/or other Solid Waste Management Services by Increasing Millage	
Potential Challenges	Suggested Solutions
Tax increases do not go over well in my jurisdiction.	<ul style="list-style-type: none"> <li>▪ Tax increases are rarely popular, but when residents and political officials are informed about the jurisdiction’s solid waste management system needs and benefits, opposition can be minimized.</li> <li>▪ Ensure that costs and revenues are fully understood and can be clearly conveyed.</li> <li>▪ If possible, analyze programs and implement cost-saving and/or revenue-increasing measures to ensure stakeholders that the jurisdiction is being fiscally responsible with regards to solid waste management programs.</li> </ul>
I’m not sure these revenues will end up funding my programs instead of being pulled to other departments.	<ul style="list-style-type: none"> <li>▪ Consider implementing an enterprise fund to ensure that funds are utilized for their intended purpose.</li> <li>▪ Obtain advice from your jurisdiction’s tax solicitor.</li> </ul>

## Host Fee on Private Disposal Facilities

### Fee Paid By: Transfer or Disposal Facility Located within Jurisdiction’s Borders

Host fees are paid by a solid waste management facility operator to the county or local government within whose borders it operates. The purpose of a host fee is to offset the impact to a local government that results from having a waste management facility, usually a landfill or waste-to-energy facility, operating in its community. Some local governments have used host fee revenues to help support their own solid waste management and reduction programs, including recycling.

Pennsylvania Act 101, Chapter 13, stipulates that operators of municipal waste landfills and waste-to-energy facilities must pay a host municipality a \$1 per ton “municipality benefit fee.” (If waste is measured by volume, the fee is \$1 per three cubic yards). A host county may impose such a fee, if the host county and facility operator agree to this in writing. Host counties may negotiate higher host fees and/or other services or concessions. While not provided for by law, host fees may also be possible for transfer stations, if specified in the permitting requirements. Statewide, only about 4 percent of local governments responding to R.W. Beck’s survey reported using host fees to help fund recycling programs.

## Advantages and Disadvantages of Host Fee

### Advantages

- Relatively easy to implement.
- Reliable source of revenue.

### Disadvantages

- Source of funds not directly tied to recycling service.
- Can result in higher tip fee at facility when host fee is added.
- Available only where private solid waste facilities exist.

### Landfill and MRF Fees in Dalton-Whitfield, GA

The Dalton-Whitfield Regional Solid Waste Management Authority (Georgia) funds its entire solid waste management system through tip fees at its landfill and MRF. The City of Dalton delivers the materials it collects through its curbside collection program to the Authority's MRF located at the landfill site.

The City pays the Authority a flat monthly fee to process and market materials it delivers to the MRF.

In addition, the MRF accepts recyclable-heavy loads from local business and industry. When loads containing large amounts of recyclable material are delivered to the landfill, they are diverted to the MRF where recyclables are pulled out. The fee paid by the haulers delivering these loads support the MRF as well as other solid waste management costs of the Authority.

## Host Fees Work Best When ...

- A jurisdiction has a private landfill, waste-to-energy, or transfer station operating within its borders.
- Host agreement is in place or can be negotiated.
- Limited alternative disposal opportunities exist in the area.

## Steps to Implement

- 1) Determine costs to be covered by host fee.
- 2) Calculate per ton cost based on total costs and tons anticipated.
- 3) Negotiate agreement with facility.
- 4) Require that quantities delivered to facility are accurately documented.
- 5) Collect fees on a regular basis.
- 6) Renegotiate as needed.

## Potential Challenges and Suggestions for Addressing Them

The following table describes some potential challenges to funding recycling and/or other solid waste management services using host fees, and some suggested ways of addressing them.

Funding Recycling and/or other Solid Waste Management Services Using Host Fees	
Potential Challenges	Suggested Solutions
It's difficult to predict revenues from host fees.	<ul style="list-style-type: none"> <li>▪ Discuss your concerns with the facility operator, and review tons delivered to the facility over time. (This data is available from the DEP.)</li> <li>▪ Track tonnage trends and the forces that drive them.</li> <li>▪ Obtain information from your regional DEP representative about any disposal facility changes that might impact waste flow to the region.</li> </ul>

## Tip Fee on Users of Publicly Owned Disposal Facility

### Fee Paid By: All Users of Local Government Owned Solid Waste Facility

Many local governments use a portion of the fee charged at their landfill, waste-to-energy facility, or transfer station to fund costs associated with their solid waste management system, including recycling costs. In many cases, the tip fee supports many solid waste management services, including collection and/or processing of recyclables.

Statewide, about 20 percent of local governments responding to R.W. Beck's survey reported using tip fees (mainly at disposal facilities) as a revenue source for recycling programs. On average, these funds accounted for about 10 percent of recycling budgets.

Funding recycling programs with tip fees at a landfill is simpler to implement and administer than many other funding options, and is likely to increase revenues in the short term. The challenge with this strategy, however, is that as more costs are supported by the tip fee, the tip fee must increase, even when competition from neighboring facilities may exert pressure to reduce tip fees. Many landfills in Pennsylvania have experienced reduced tonnage deliveries due to competition from less expensive facilities. These landfills usually look for ways to cut costs and attract higher volumes of waste to make their facilities more competitive. Many landfills have developed rebate programs for reaching preset goals of waste delivery, set lower rates for trailer deliveries, and have enacted other programs to cut costs or enhance customer service. Some publicly owned landfills have chosen to make changes, even while existing recycling and other integrated waste management programs remain reliant on tip fee revenue. This downside can be mitigated by exercising a degree of control over where waste is delivered, for example through contractual agreements with service providers.

In areas strong competition by transfer and disposal facilities for waste deliveries, establishing tip fees high enough to cover both recycling and landfill costs may be counterproductive.

### **Advantages and Disadvantages of Public Disposal Facility Tip Fees**

#### **Advantages**

- Increases revenue in short term.
- Easier to implement and administer than other options.

#### **Disadvantages**

- Fees are not related to recycling service.
- May result in higher tip fees that may discourage the delivery of waste where competing facilities exist.
- As waste is reduced, through recycling and other programs, revenue from tipping fees decline.
- May be feasible only for publicly owned disposal facilities and transfer stations.

### **Disposal Facility Tip Fees Work Best When ...**

- A local government owns a solid waste management facility.
- The local government determines where waste will be delivered, either because they collect waste via a public operation or because they have contractual control with a private hauler.
- The amount of waste that will be delivered to the facility can be projected with reasonable accuracy.

### **Steps to Implement**

- 1) Determine whether current tipping fees could support recycling costs without an increase.
- 2) If not, determine the increase in fees necessary to support recycling services.
- 3) Compare proposed tip fees to fee schedules at competing facilities and other competition factors such as transportation costs.
- 4) Notify customers of the reason and amount of fee increase.
- 5) Develop mechanism to ensure that a portion of the fee for recycling is indeed allocated for the purpose it was intended.

### **Potential Challenges and Suggestions for Addressing Them**

The following table describes some potential challenges to funding recycling and/or other solid waste management services using tip fees levied at private facilities, and some suggested ways of addressing them.

## Levying Tip Fees at Private Facilities

Potential Challenges	Suggested Solutions
<p>Waste may not be delivered to my landfill if I raise the tip fee.</p>	<ul style="list-style-type: none"> <li>▪ Do your research. Find out what other local tip fees are paying, and from what distance the waste is traveling to your landfill. If your landfill is the only landfill in a 50-mile radius, you may have little reason to fear.</li> <li>▪ Explore contractual arrangements to manage the flow of waste to the landfill.</li> </ul>
<p>My landfill customers don't want to pay higher landfill costs to support services that they don't use.</p>	<ul style="list-style-type: none"> <li>▪ Explore means of providing recycling opportunities to all waste generators in your jurisdiction.</li> <li>▪ Inform your customers of any services available to them that they might not be aware of, as well as how they may benefit indirectly from supported programs, for example litter and illegal dumping abatement.</li> <li>▪ Provide opportunities for reduced tip fees at the landfill for customers bringing in source-separated materials such as clean wood waste for recycling.</li> </ul>

### Tip Fee on Users of Publicly Owned Recycling Facility

#### Fee Paid By: Haulers Delivering Recyclables to Local Government Facility

Private material recovery facilities (MRFs) often charge a tip fee to collectors delivering material to their facility. Some local governments are beginning to do the same. A tip fee at a recycling facility can be a flat fee (i.e., the City pays the Solid Waste Management Authority \$1,500 per month to accept all the materials it collects in its curbside program); but more often the fee is tied to the tons of material delivered. A per-ton fee often varies depending on the type of material delivered. Typically, materials that cost more to process or those for which market value is low are accepted at a higher fee. For example, many facilities around the country charge a fee for single-stream materials or commingled containers but do not charge a fee for mixed fibers or source-separated materials. This is the case at the Abington Township, Montgomery County Pennsylvania recycling facility.

Often, when MRFs charge processing fees, they also provide revenue sharing opportunities, as a means providing incentives for suppliers to bring in more material and to share both the risks and benefits associated with marketing recyclable materials. The Centre County Solid Waste Authority, for example, passes back a portion of the revenues received at the MRF to supplying haulers in good years.

## Advantages and Disadvantages of Recycling Facility Tip Fees as a Funding Source for Recycling

### Advantages

- Easier to implement and administer than other options.
- Fee is related to recycling service.
- Reduces risks associated with recyclable materials market volatility.

### Disadvantages

- May result in higher tip fees which may discourage the delivery of recyclables.
- Costs do not necessarily decrease with tonnage so reduced tonnage may result in higher per ton costs.

### Landfill and MRF Fees in Dalton-Whitfield, GA

The Dalton-Whitfield Regional Solid Waste Management Authority (Georgia) funds its entire solid waste management system through tip fees at its landfill and MRF. The City of Dalton delivers the materials it collects through its curbside collection program to the Authority's MRF located at the landfill site. The City pays the Authority a flat monthly fee to process and market materials it delivers to the MRF. In addition, the MRF accepts recyclable-heavy loads from local business and industry. When loads containing large amounts of recyclable material are delivered to the landfill, they are diverted to the MRF where recyclables are pulled out. The fee paid by the haulers delivering these loads support the MRF as well as other solid waste management costs of the Authority.

### Recycling Facility Tip Fees Work Best When ...

- A local government owns a materials recovery facility and has a degree of control over the flow of recyclables collected.
- The amount of recyclables that will be delivered to the MRF can be reasonably projected.
- Haulers are required, or have an incentive, to recycle despite a fee at the MRF.
- There is little competition to accept recyclables or the cost of using competing facilities is higher.

### Steps to Implement

- 1) Determine the fee necessary to support recycling costs to be covered.
- 2) Compare proposed fee schedules to those at competing facilities.
- 3) Notify customers of the reason and amount of fee.
- 4) Revisit costs and fees periodically and adjust accordingly.
- 5) Consider providing revenue sharing as a means of encouraging delivery of more recyclables.

## Potential Challenges and Suggestions for Addressing Them

The following table describes some potential challenges to funding recycling and/or other solid waste management services using tip fees levied at public MRFs, and some suggested ways of addressing them.

Funding Recycling and/or other Solid Waste Management Services using Tip Fees Levied at Public MRFs	
Potential Challenges	Suggested Solutions
If I charge a tip fee at my MRF, jurisdictions and haulers may deliver their materials elsewhere.	<ul style="list-style-type: none"> <li>▪ If the next nearest MRF is 50 miles or so away, you are probably not at risk of losing recyclables.</li> <li>▪ Consider implementing a revenue share with suppliers. This would help to offset their tip fee, and give them an incentive to deliver more materials to your MRF.</li> <li>▪ Be assured that you are not the only recycling service provider seeking revenue; other MRFs, if not already, may institute this funding strategy as well.</li> </ul>
If I charge a tip fee at my MRF, jurisdictions may just give up recycling altogether.	<ul style="list-style-type: none"> <li>▪ Many jurisdictions are mandated to provide recycling.</li> <li>▪ MRF tip fees are usually significantly lower than disposal tip fees, making it still a cost savings vs. the cost of landfilling.</li> <li>▪ Revenue sharing provides an incentive for suppliers to continue to recycle.</li> </ul>

## Administrative Fee on Private Disposal Facilities

### Fee Paid By: Disposal Facilities Accepting Waste from within County Borders

In Pennsylvania, as part of the solid waste management planning process, counties are required to obtain disposal capacity assurance from the landfills and/or waste-to-energy facilities that will be receiving all waste generated within their boundaries. The process is competitive. Facilities interested in receiving waste respond to a County-issued Facility Qualification Request (FQR). The County selects those facilities to which waste from the County will be delivered based on the responses.

Some counties enter into contracts with these disposal facilities requiring the facilities to remit an administrative fee on every ton of waste delivered to the facility that was generated in the county (generally on a quarterly basis) to help them pay for their solid waste management programs including, in some communities, recycling. The disposal facilities, in turn, collect this fee from the haulers that deliver waste to them.

In R.W. Beck's survey of Pennsylvania local governments, about 38 percent of authorities and 36 percent of counties reported using an administrative fee. Most of these funds are used for solid waste management

related costs. These funds accounted, on average, for about 13 percent of the recycling budgets.

While many communities that do not own landfills or waste-to-energy facilities rely on this funding mechanism to support recycling programs in Pennsylvania, there has been some controversy regarding the legality of such fees. Fees have been challenged on the basis that Act 101 does not specifically authorize, and preempts the collection of, county administrative fees. They also argue that the Municipal Authorities Act only authorizes fees to be collected by authorities with facilities. Counties argue that administrative fees are reasonable and are authorized by the broad planning responsibilities required of counties under Act 101. In most cases counties negotiate agreements with disposal facilities that are in the county plan. Many counties believe this avoids the disagreement regarding legislative authorization. Until the court challenges regarding the collection of administrative fees are resolved, the appropriateness of this funding mechanism will remain uncertain in Pennsylvania.

### Advantages and Disadvantages of Administrative Fees

#### Advantages

- Revenues are relatively predictable.
- Relatively simple to administer.

#### Disadvantages

- Must depend on disposal facility to accurately report amount of waste coming from within local government boundaries.
- Haulers may be required to take waste to a landfill that is more expensive.
- Legal challenges have been filed that may overrule county administration fees.

#### Administrative Fees in Combination with Other Funding Sources in Cambria County, PA

The Cambria County Solid Waste Authority uses an administrative fee to support its recycling program, which consists of 20 drop-off sites, an education coordinator, and an illegal dumping officer. The County has contracts with five private landfills and one transfer station that responded to its FQR and are included in its solid waste management plan. One landfill is located within Cambria County and the other five facilities are located in adjacent counties. According to the terms of the contracts between the facilities and the County, the facilities remit to the County \$2.00 for every ton of waste that is delivered from Cambria County. The facility located within Cambria County remits \$1.00 on every ton of Cambria County trash delivered to the facility as an administrative fee plus a \$1.00 host county fee for Cambria County waste or a \$2.00 per ton host fee from waste from outside the County. The administrative fees, totaling approximately \$250,000 per year, are used to support recycling programs.

The Authority also receives revenue from the sale of source separated recyclables it delivers to a processing facility owned and operated by a neighboring county. Since the revenue received varies based on market conditions, Cambria County does not depend on the revenues to support operating costs. Rather, revenues from the sale of recyclables are used to support capital costs.

### Administrative Fees Work Best When ...

- A solid waste authority or county contracts with private facilities for disposal capacity and clearly stipulates the terms of the administrative fee.
- The local government ensures that its waste is only disposed in facilities with which it has a contract.
- Legal challenges with respect to the fee have been resolved and the fee is determined to be legally permissible.

### Steps to Implement

- 1) The authority or county issues a Facility Qualifications Request for disposal facilities to accept waste generated within the County’s borders. Indicate in the FQR that the facility will pay an administrative fee.
- 2) The authority or county negotiates contracts that specifically identify the amount and payment terms of the administrative fee.
- 3) Ensure these facilities are included in the County’s solid waste management plan.
- 4) The authority or county monitors disposal records from disposal facilities to ensure that the facilities are paying the correct administrative fee.

### Potential Challenges and Suggestions for Addressing Them

The following table describes some potential challenges to funding recycling and/or other solid waste management services using administrative fees, and some suggested ways of addressing them.

Funding Recycling and/or other Solid Waste Management Services using Administrative Fees	
Potential Challenges	Suggested Solutions
I don’t know if my jurisdiction can implement an administrative fee that will sustain legal challenges.	<p>Unresolved court challenges make use of administrative fees risky. To improve opportunities for the use of this funding mechanism ensure the following:</p> <ul style="list-style-type: none"> <li>▪ You are a county or solid waste authority;</li> <li>▪ The administrative fee and target facilities must be specified in your County’s solid waste management plan;</li> <li>▪ Fees are specified through contractual agreements between the jurisdiction and the facility operator.</li> </ul>

## Additional Funding Options

### Commonwealth Recycling Grants

In R.W. Beck's recent survey of Pennsylvania local governments, nearly 80 percent of respondents indicated they have taken advantage of the Commonwealth's recycling grant programs. Among these grantees, Commonwealth funding accounted for about 42 percent of total recycling budgets. Fueled by a statewide tip fee surcharge of \$2 on all solid waste disposed in the Commonwealth, the Pennsylvania Department of Environmental Protection (DEP) has provided a four-part system of annual grants to help support and reward local recycling efforts for over 16 years. Section 901 grants fund County solid waste master plans, including strategies for recycling and composting programs. Section 902 grants reimburse 90 percent of qualifying recycling program development expenses. Section 903 grants fund half of the cost of County Recycling Coordinators. And section 904 performance grants provide a financial reward to local governments, based on the quantity of materials that are recycled. In recent years annual grants have annually exceeded \$65 million, and in FY 2003-2004 approximately \$76.5 million in grants were awarded. Act 175 of 2002 calls for the statewide tip fee surcharge to be discontinued in January 2009. DEP, along with local governments and other recycling stakeholders continue to support the continuation of Commonwealth recycling grants. However, their future beyond January 2009 is currently uncertain. Furthermore, funds available to support recycling programs are insufficient to cover all grant requests. Consequently, even some programs that may be worthy of funding may not receive the funding requested.

### Advantages and Disadvantages of Commonwealth Grants

#### Advantages

- Historically, revenues have contributed significantly to recycling programs.
- Section 902 grants have encouraged jurisdictions to expand their recycling and yard waste recovery programs.
- Section 904 grants are linked to the amount of Act 101 materials recovered, thereby encouraging recycling.
- Certain forms of assistance, such as recycling technical assistance, are relatively simple to obtain.

#### Disadvantages

- The future of this funding source is uncertain.
- Section 904 grants focus on tons of Act 101 recyclables only, so communities receive less or no funds for recycling lower-weight materials, recycling non-Act 101 materials, and implementing best management practices such as waste reduction and buy recycled measures.

### **Future of Commonwealth Recycling Grants in Question**

In 1988, Act 101 established a statewide solid waste disposal tip fee surcharge to support local recycling programs. In recent years, grants out of this funding source have annually exceeded \$65 million, and in fiscal year 2003-2004 approximately \$76.5 million in grants were awarded. However, many grant requests remain unfunded. Furthermore, decreasing in-state disposal, high grant demand, and diversion of funds to other purposes are impacting the availability of grant funding. DEP's latest projections indicate the fund will begin to show a deficit early in the 2006-2007 fiscal year, assuming grants continue at recent levels. And according to Act 175 of 2002, the tip fee surcharge will sunset altogether on January 1, 2009.

Recycling program stakeholders (including DEP) continue to strongly support the Commonwealth's recycling grant program, however its future is uncertain.

## **General Fund**

In R.W. Beck's survey, about 22 percent of local government respondents reporting using general funds for some portion of their recycling costs. On average, general funds accounted for about 10 percent of total recycling budgets. Relying on general fund for recycling and solid waste services is potentially problematic, since recycling services and programs must compete directly with other important local services like fire and water. Furthermore, because funding mechanisms (typically property tax assessments) are not directly linked to waste generation levels, this funding source provides no economic incentive for recycling.

### **Advantages and Disadvantages of General Funds**

#### **Advantages**

- Non-payment is low.
- Enforcement mechanisms are inherently in place.
- Funds can be significant.

#### **Disadvantages**

- Recycling (and other solid waste management programs) can be in competition with other municipal programs.
- Implementing or increasing millage rates can be politically difficult.
- Does not provide an incentive for recycling.

## **License Fee on Waste Haulers**

Many municipalities and counties in Pennsylvania have required that a solid waste license be issued as part of their enforcement program to ensure that solid waste haulers follow environmental health standards at the municipal and county level. An annual fee is typically charged in connection with this license to cover the costs of program administration. In 2002, the legislature passed Act 90, which requires haulers transporting waste to Pennsylvania disposal or processing facilities to have a valid authorization sticker issued by the DEP.

It also prohibits counties and municipalities from implementing licensing programs, although DEP has interpreted communities with licensing programs in place prior to August 29, 2002, are “grandfathered in.” Notwithstanding Act 90, it may be possible for recycling haulers to be licensed under laws and/or regulations that govern counties or municipalities. Counties and municipalities should consult their solicitor when exploring this option.

**Advantages and Disadvantages of Hauler Licensing Fees**

Advantages
<ul style="list-style-type: none"> <li>▪ Relatively easy for jurisdictions to administer.</li> </ul>
Disadvantages
<ul style="list-style-type: none"> <li>▪ New licensing programs for municipal solid waste haulers cannot be implemented in Pennsylvania, under Act 90.</li> <li>▪ Provides a limited amount of funding.</li> </ul>

**Franchise Fee on Waste Haulers**

Some states authorize local government to issue a franchise to private haulers to collect solid waste and/or recyclables. In these cases, a franchise fee is often paid to local government to offset the impacts to the local governments of the franchisees operating within their communities. Thus, the funds are typically directed to maintaining roads, bridges, and right-of-ways that are impacted by trucks operating on the road. However, depending on the state and local law guiding franchises and the way franchise agreements are written, local governments may use a franchise fee to support its solid waste infrastructure, including recycling. A franchise fee can be a flat rate, a fee per customer, a fee per cubic yards or tons collected, or a percent of revenues. R.W. Beck is not aware of any local government in Pennsylvania that has determined they are authorized to issue a franchise fee. Local government representatives should contact their solicitor before considering a franchise agreement or franchise fee as used in other states.

**Advantages and Disadvantages of Franchise Fees**

Advantages
<ul style="list-style-type: none"> <li>▪ Fairly simple program to administer.</li> </ul>
Disadvantages
<ul style="list-style-type: none"> <li>▪ Legality in Pennsylvania is uncertain.</li> </ul>

**PRACTICAL STEPS FOR MOVING FORWARD**

Where to start? Which approaches make the most sense in your community? What procedures can you adopt to ensure that your program continually improves over time?

Because of the many differences among communities, there is no single “cookie cutter” set of policies that will work best in every situation. This section describes proven, practical steps that jurisdictions of all types can use to build this long-term financial sustainability. As needed, these steps can be “cherry picked” to take advantage of specific opportunities in the short term. Or the steps can be implemented in full – as a comprehensive, systematic strategy for building financial sustainability over the long-term. It is important to obtain stakeholder input throughout the entire process (see Figure 3), and establish means of keeping the public informed. Stakeholder involvement methods include:

- Having open meetings with elected officials,
- Hosting special public meetings,
- Surveying stakeholders,
- Establishing telephone hotlines,
- Providing opportunities for submittal of written comments via e-mail and direct mail, and
- Creating citizen advisory groups.

It is also important for the jurisdiction to provide information to stakeholders on a regular basis, keeping them apprised of decision-making goals and progress.

Figure 3

**Example Stakeholder Involvement Process**

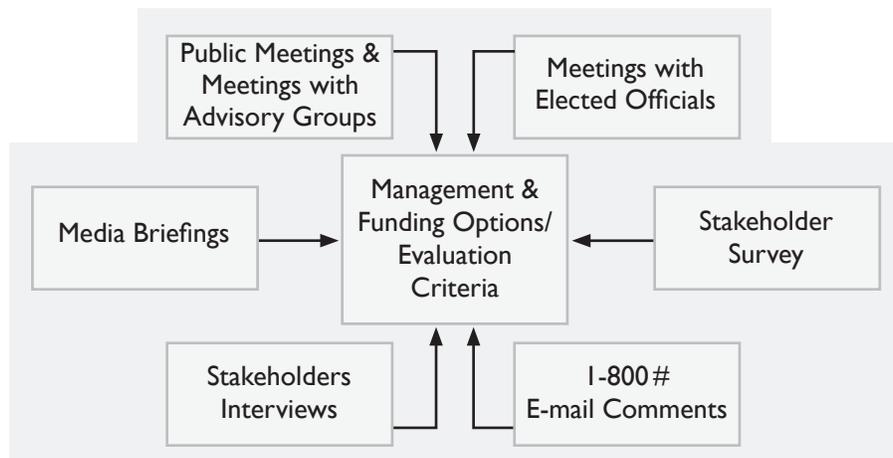
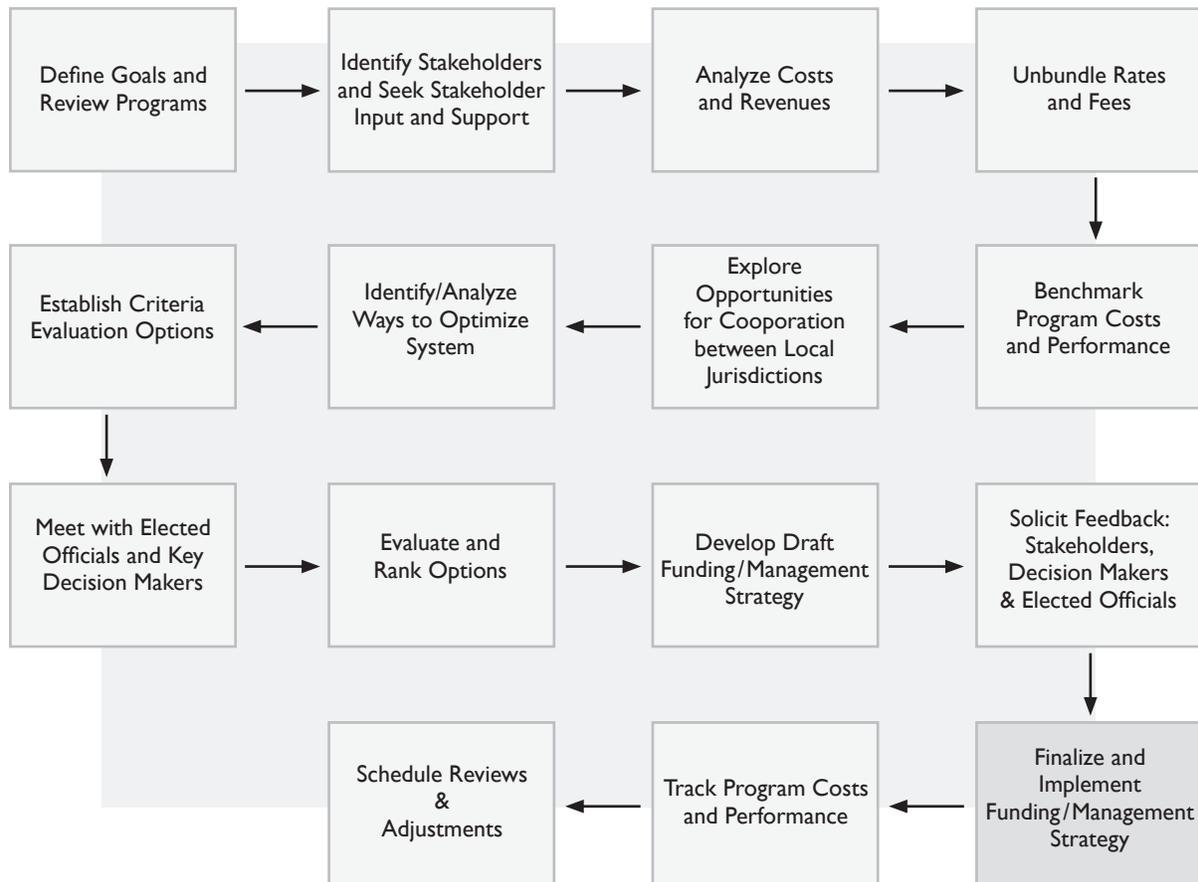


Figure 4 depicts the key steps involved in building financial sustainability. The steps may be implemented in a slightly different order, or may not always involve every step, depending on the strategy being implemented and the resources available. The steps are described in more detail on the next page.

Figure 4

**Framework for Building Financial Sustainability**



**Define Integrated Solid Waste Management Goals relative to Current Programs**

The best place to begin is for the jurisdiction to define its vision for integrated solid waste management and its needs associated with achieving that vision. Creating a formal written vision statement will help guide jurisdiction decision-makers in analyzing current program effectiveness and establishing future program priorities. Taking an integrated approach, jurisdiction leaders can then look for opportunities for programs and their staffs to work together, and for the jurisdiction to make their vision statement an important cornerstone for all future program development.

**Seek Stakeholder Input and Support**

It is important to identify all potential affected parties and involve stakeholders in both the vision setting process and defining need and priorities for achieving the vision. Stakeholder involvement early on is crucial for securing support and encouraging decision makers to make tough choices. Various ways to involve stakeholders are discussed above. To establish a vision and program priorities, often an advisory committee is formed with key representatives of concerned groups, such as residents, small businesses, waste haulers and recycling

service providers and local experts on recycling and solid waste management. In addition, holding a series of public workshops ensures that all concerned parties in the community have an opportunity to be involved.

### **Unbundle Rates and Fees**

Often, individual recycling program costs are not known because they are bundled together with other services and programs and indistinguishable in budgets, taxes, etc. For example, a driver may only spend 40 percent of his/her time collecting recyclables, thus only 40 percent of his/her salary and benefits should be allocated to the recycling program. Unbundling costs allows each program and service to be evaluated on its merits separately – an essential step for considering options to reduce costs and/or enhance services. This may require restructuring contracts so that costs are reported separately, and/or establishing systems to track staff time and operating costs in more detail. Usually, past costs for each service can be estimated based on educated estimates of managers and contractors. Providing transparency with respect to costs has the added benefit of serving as motivation to increase program efficiency and reduce costs.

### **Analyze Services, Projected Costs, and Revenues**

Analyzing program costs and program performance levels is critical to determining potential changes to programs (e.g., expansions, adjustments to materials accepted, need for new equipment, potential contracting or staffing changes, etc.). Also important is evaluating potential changes in market conditions, labor, operational expenses, or equipment costs that may affect future costs. By identifying the factors that may affect cost, even if they cannot be accurately predicted, decision makers and stakeholders will understand possible future funding requirements and the need for contingency plans. Analyzing revenues involves projecting funding available from each current funding mechanism, and again, identifying factors that may affect fund availability. As with costs, there are important areas of uncertainty in projecting revenues, such as how the market will respond to pricing decisions at facilities. It is again important to identify and, to the extent possible, quantify these sources of uncertainty.

### **Benchmark Program Costs and Performance**

Benchmarking entails comparing jurisdiction program costs and performance levels against similar programs of other jurisdictions. This technique is helpful for gauging whether one's programs are improving over time, and identifying reasonable goals based on performance of other comparable programs. Benchmark measures may include the per-ton cost of collecting and processing recyclables the total number of tons collected, recycling rate, dollars per household spent on education, participation rates and/or other factors. When benchmarking, it is essential to develop, as much as possible, "apples-to-apples" comparisons. For example when benchmarking curbside recycling costs, it is important define what the costs represent as some communities include support services, such as education and legal expenditures, while others limit their definition of costs to collection and processing costs.

## **Identify and Analyze Strategies to Optimize System Efficiency**

Taking the time to improve jurisdiction programs, and documenting the effort not only ensures scarce funds are used as efficiently as possible, but also builds confidence among stakeholders that is critical for continued support over time. Essentially, any action that reduces cost or increases recycled tonnages will improve the system efficiency. Options for reducing cost are discussed in detail in this guide, including adjusting collection and processing systems, contracting practices, and working cooperatively with neighboring jurisdictions. Options for increasing recycling volumes include public education and promotion, increasing convenience and building in financial incentives. While there is a cost involved in evaluating and adjusting programs, the cost of not doing so may very well be higher. When analyzing ways to improve efficiency, it is important to observe programs in action through actual field observations. It can also be helpful to obtain technical advice from outside technical experts or other jurisdictions known for their program efficiency and high performance. Most importantly, one's own staff and/ or contract service providers are valuable sources of input.

## **Establish Clear Criteria for Evaluating Options**

Establishing evaluation criteria before making decisions provides a common framework for evaluating options and builds stakeholders confidence that the process is fair and impartial – particularly when stakeholders are involved in criteria selection. Criteria may mirror the attributes of a sustainable financing system described above, or may focus on priority issues. Both qualitative and quantitative criteria may be established. Criteria might include:

- Ability to cover all anticipated costs,
- Legal and administrative feasibility,
- Ability to provide incentives to increase recycling,
- Allows for adjustments in revenue down the road.

## **Meet with Elected Officials and Key Decision Makers**

Perhaps the most critical set of stakeholders are the elected officials and others responsible for make decisions regarding the jurisdiction's recycling programs. These individuals sometimes are not able to participate in the options evaluation and public input process. Hence it is imperative that they be thoroughly briefed prior to public hearings in which they will be asked to make decisions to ensure that they support the evaluation and stakeholder involvement process to be followed. Generally, if a sound process for reaching conclusions is used, decision-makers will support the resultant recommendations.

## **Evaluate and Rank Options**

The established criteria should be used to evaluate and rank options. This can involve qualitative and/or quantitative means of evaluation. The main point is to attempt to objectively evaluate options and include stakeholder input prior to asking decision makers to choose among them.

## **Develop Draft Funding Plan**

The draft funding plan should contain:

- The vision and goals of the jurisdiction pertaining to integrated solid waste management;
- Needs to be addressed by the funding plan;
- The options evaluation methodology, including public notice and stakeholder involvement processes;
- Estimated program costs and revenues;
- Methods for implementing the proposed cost-cutting or revenue-generating strategies; and
- Implementations steps and time line.

## **Solicit Feedback from Stakeholders, Decision Makers, and Elected Officials**

Once the draft strategy is developed, provide all key stakeholders, decision makers, and elected officials an opportunity to review it and provide feedback. Because stakeholders have been involved in the process from the beginning, they will generally be accepting of the draft strategy, but may have some valuable input or concerns regarding details. Be sure the jurisdiction's solicitor is on board as well.

## **Finalize and Implement Funding Strategy**

Consider feedback from stakeholders, decision makers, elected officials, and the solicitor, finalize the funding strategy, and begin implementation. As some funding and/or cost-cutting strategies may take several months to implement, it is helpful to identify interim milestones to track progress, so that implementation of the Plan does not lose momentum.

## **Track Program Costs and Performance**

Tracking costs and performance on an ongoing basis may require adjustments to contracting, billing and other administrative functions. This step is necessary to evaluate how well the program is functioning and the need for adjustments. Having this information will make any adjustments to funding programs more acceptable, and may continue to help define opportunities for additional program enhancements.

## **Schedule Periodic Reviews and Program Adjustments**

These periodic reviews may be built in to the local planning process, or may be identified separately as your community develops its funding and management plan. The main point is to anticipate the inevitable changes in the market place and in local conditions that will impact program services, costs and revenues. By institutionalizing the steps laid out in this guide, your program will be able to continually improve its performance as efficiently as possible.



## GLOSSARY

**Act 101:** The Municipal Waste Planning, Recycling and Waste Reduction Act of 1988. Established a 25 percent recycling goal to be achieved by 1997 (since updated to 35 percent by 2002) and set in motion the expansion of local recycling infrastructure. Mandates that specified communities (based on size) provide specified recycling services.

**Act 175:** Adopted in 2002. Requires DEP to develop a plan to assist municipalities in making recycling programs financially self-sufficient. Establishes a sunset date of January 1, 2009 for the statewide disposal surcharge that funds Commonwealth recycling grant programs.

**Administrative Fee:** A fee charged to waste facilities for each ton of waste disposed that originated in the charging administration. The legality of administrative fees is currently under court review.

**Advanced Disposal Fee:** A fee charged on products or packaging at the time of sale, used to cover a portion of the costs of disposal and/or recycling.

**Commercial/industrial:** Non-residential generators of municipal solid waste (MSW) or recyclable materials - typically businesses, manufacturers, and institutions including schools, colleges, and universities.

**DEP:** Pennsylvania Department of Environmental Protection

**Enterprise Fund:** A fund for a specific purpose that is self-supporting from the revenues generated.

**Exclusive Franchise Agreement:** A franchise agreement that a local government awards to a single contractor, giving them exclusive rights to provide specified recycling and/or solid waste management related services in the community. (See franchise agreement below.)

**Financially Sustainable:** A local recycling program that is self-sufficient in terms of its ability to fund and operate highly effective recycling programs as part of a broad integrated waste management system.

**Fixed Fee:** A service fee of a fixed amount charged to waste generators or property owners to cover recycling or solid waste management costs. May be based on estimated waste generation by type of generator (e.g., residential or commercial).

**Franchising:** Authorization provided by a local government to one or more private enterprises that permits them to provide their service(s) to particular customer groups and/or territories.

**Franchise Agreement:** A contractual agreement in which a local government authorizes a private contractor to provide specified recycling and/or solid waste management services.

**Franchise Fee:** A fee charged to a firm entering a franchise agreement with a local government. May be charged once, monthly or annually, and is generally passed on to customers within service rates.

**General Fund:** A local government's discretionary funds used for a wide variety of programs and services, and derived from a wide range of sources that are not specifically dedicated to specified uses.

**Host Fee:** A fee charged to disposal facilities sited within a jurisdiction's boundaries. Usually assessed on a per-ton disposed basis, and may include other fixed payments or other concessions.

**License Fee:** A fee charged to recycling and/or solid waste service providers in return for the right to operate in a given jurisdiction.

**Managed Competition:** The process of evaluating public and private services based on cost and performance. Usually involves asking public agencies to compete against private firms in bidding processes.

**Material Recovery Facility (MRF):** A recycling facility that prepares at least three different material types for market. Preparation for market is the processing of materials through crushing, baling, shredding or other means of densification.

**Millage:** A fee charged to property owners based on a percentage of property value.

**Municipal Solid Waste (MSW):** Any garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material, resulting from operation of residential, municipal, commercial or institutional establishments and from community activities and any sludge not meeting the definition of residual or hazardous waste in the Pennsylvania Solid Waste Management Act from a municipal, commercial or institutional water supply treatment plant, wastewater treatment plant or air pollution control facility. The term does not include source-separated recyclable materials.

**Municipality:** A county, city, borough, incorporated town, township or home rule municipality.

**Ordinance:** A statute or law enacted by the governing body of a municipality or county.

**Pay-As-You-Throw:** See variable rate pricing.

**Property Assessment:** A fee charged to property owners. May be based on a percentage of property value (see millage above), based on estimated waste generation (see waste generation fee above) or a fixed fee determined in some other way (see fixed fee above).

**Recycling:** The collection, separation, recovery and sale or reuse of metals, glass, paper, leaf waste, plastics and other materials which would otherwise be disposed or processed as municipal solid waste. Includes the mechanized separation and treatment of municipal waste (other than through combustion).

**Revenue Sharing:** Agreements between a local agency and a recycling service provider to share the revenue from the sale of recyclables. Terms may include, for example, a flat percentage, a minimum (or “floor”) amount and/or a maximum amount to be shared.

**Self-haul:** To deliver self-generated MSW to a processing or disposal facility, for example, by a rural resident or business delivering MSW to a public container/convenience site, landfill, or transfer station.

**Service Fee:** A fee charged for the provision of recycling or other services. May be a user fee (see definition below) or charged indirectly, e.g., with property tax bill.

**Source Reduction:** Reducing or preventing the generation of waste materials at the point of origin. Examples: replacing single-use items with durable items, eliminating unnecessary packaging materials, and repairing items instead of replacing them.

**Tip Fee:** A fee charged to haulers delivering waste to a disposal facility, or recyclables to a processing facility. Usually charged on a per ton or per cubic meter basis.

**User Fee:** A fee charged to users of a given service or facility directly in relation to their use of the service or facility. Examples include tip fees and pay-as-you-throw pricing systems.

**Variable-Rate Pricing:** Also known as Pay-As-You-Throw (PAYT). A system under which residents pay for municipal waste management services per unit of waste collected rather than through a fixed fee.

**Waste Generation Fee:** When charged to waste generators – A type of fixed fee charged to waste generators or property owners that is determined based on their estimated waste generation. See fixed fee above.



## SUMMARY OF A SURVEY OF PENNSYLVANIA LOCAL GOVERNMENTS

### Introduction

To document local recycling funding programs and barriers, the Pennsylvania Department of Environmental Protection (DEP) tasked R.W. Beck to distribute a survey form (see Appendix B) to 105 Pennsylvania local governments. As shown in Table 1, the fifty-four responses include 8 of the State's 33 solid waste authorities (all but two of which constitute county boundaries), 31 counties that are not part of a solid waste authority, and 15 of the State's 2,500 municipalities (including cities, townships, boroughs and towns). The responses include a range of urban, suburban, rural and mixtures of these demographic types (as defined by respondents).

Table 1 Survey Respondents

	Urban	Suburban	Rural	Mixed	Total
Authority	0	1	5	2	8
County	2	0	15	14	31
Municipality	1	8	6	0	15
Total	3	9	26	16	54

### Degree of Accuracy

Local solid waste management, recycling and funding activities are extremely diverse and can be quite complex. Respondents had varying amounts of information available to them and may at times have relied on their best judgment or estimates. Respondents may also have interpreted certain terms and questions differently. Furthermore, the survey was not necessarily designed to be statistically significant. For these reasons, the results of this survey should be viewed as illustrative of the range of circumstances experienced by local governments throughout Pennsylvania, and not necessarily extrapolated to make definitive conclusions about the state as a whole.

### Responsibility for Facility Ownership and Operation

***Authorities are more likely to own a solid waste facility than other jurisdictions.***

Four of the eight responding authorities (50%) own a facility, compared to only 15% of all responding jurisdictions. (See Table 2.)

Table 2 Ownership of Waste Facility

Type	Own		Don't Own	
	Number	Percent Responses	Number	Percent Responses
Authority	4	50%	4	50%
County	3	10%	28	90%
Municipality	1	7.1%	13	92.9%
Urban	0	0%	3	100%
Suburban	2	22.2%	7	87.8%
Rural	2	7.7%	23	92.3%
Mixed	4	25%	12	75%
Statewide	8	15.1%	45	84.9%

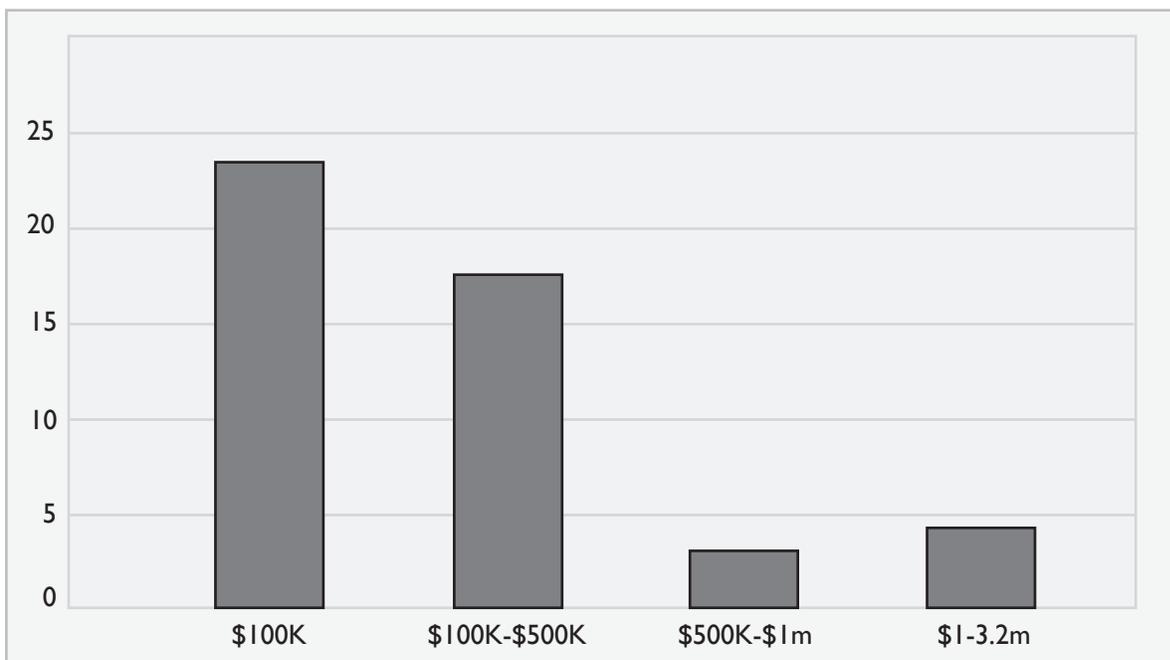
\*1 no response

### Solid Waste and Recycling Budgets

*The size of recycling budgets varies tremendously across the state.*

As shown in Figure 1, recycling budgets range very widely across the state, with 24 respondents (47%) showing a budget of less than \$100,000 and 42 respondents (83%) indicating a budget of less than \$500,000.

Figure 1 Size of Recycling Budgets



As shown in Table 3, the average authority’s recycling budget is \$608,246, compared to average budgets of less than \$335,000 for other types of jurisdictions. The average recycling budget among all respondents is \$338,719, and excluding the five largest recycling budgets (all over \$1 million), the average is \$223,653.

Table 3 Solid Waste and Recycling Average Budgets				
Type of Jurisdiction	All Solid Waste Management	Recycling	Recycling as % of Solid Waste	Track Costs Separately (% Responses)
Authority	\$11,123,322	\$608,246	5.5%	50.0%
County	\$4,674,680	\$334,117	7.1%	33.3%
Municipality	\$1,142,009	\$306,394	26.8%	14.3%
Statewide	\$4,618,258	\$338,719	7.3%	36.5%
Statewide less largest five	\$2,379,808	\$223,653	9.4%	
<b>Population/Housing Density</b>				
Urban	\$45,000,000	\$1,900,000	4.2%	33.3%
Suburban	\$4,095,717	\$483,861	11.8%	11.1%
Rural	\$516,907	\$133,376	25.8%	30.8%
Mixed	\$6,907,623	\$513,903	7.4%	60.0%
<b>Facility Ownership</b>				
Own a facility	\$15,543,322	\$588,002	3.8%	75.0%
Don't own a facility	\$2,616,490	\$328,213	12.5%	28.9%

***Municipalities and rural jurisdictions allocate a higher percentage of solid waste related funds to recycling.***

As shown in Table 3, the average share of total solid waste budgets allocated to recycling is significantly higher among municipalities (26.8% of funds) and among rural jurisdictions (25.8%) than in other types of jurisdictions. Overall, the average recycling budget is 7.3% of the average solid waste budget.

***Jurisdictions owning a facility are most likely to track costs by category.***

As shown in Table 3, jurisdictions owning a facility are significantly more likely to track costs by category than others. All four authorities that own a facility track costs separately. Seventy-five percent of jurisdictions that own a facility track their costs separately, compared to only 28.8 percent of jurisdictions that do not own a facility.

***Nearly half of respondents (48.8%) see a need to develop new or expanded recycling processing capacity.***

Nearly 32% said they did not and 21.3% said they did not know.

**Types of Funding Mechanisms Used for Solid Waste Management Programs**

A typical jurisdiction uses 2 or 3 different funding mechanisms for solid waste management programs, but types of mechanisms used vary widely.

As shown in Table 4, the average number of funding mechanisms used is 2.6, but a wide range of mechanisms are used. Any given jurisdiction might use any combination of mechanisms, and only a few clear trends stand out, for example:

- Jurisdictions owning a facility are most likely to use tip fees, and municipalities are least likely to use tip fees.
- Municipalities are most likely to use a monthly or annual fixed fees compared to counties and authorities.
- Millage is most likely in suburban jurisdictions and not used at all by counties.
- Municipalities are less likely to use administrative fees.
- Franchise fees are very uncommon, with only one jurisdiction reporting its use.
- Two jurisdictions report using an advanced disposal fee.
- Most jurisdictions use some state grants.
- Municipalities are nearly twice as likely to use general funds compared to counties.

***With the exception of Commonwealth recycling grants, typical uses for funds generated by each type of mechanism vary widely.***

As shown in Table 5, each type of funding mechanism is used to provide funds for a wide range of programs and services. The sole exceptions being state recycling grants, which must be used for specified types of activities related to waste diversion.

## **Funding Mechanisms Used for Recycling Programs**

***Nearly 80% of jurisdictions use at least one type of state grant for recycling programs.***

As shown in Table 6, authorities, urban jurisdictions and jurisdictions owning a facility are most likely to use state grants, and rural jurisdictions and municipalities are somewhat less likely to use state grants.

***Among state grant recipients, state grants account on average for 41.6% of their total recycling budget,***

Statewide, including all jurisdictions, state grants account on average for 33% of total recycling budgets.

***A wide range of funding mechanisms are used to cover the portion of recycling budgets not covered by state grants.***

After state grants, the next most common funding mechanisms used for recycling are: monthly or annual fixed fees (14.4%), administrative fees (13.2%), general fund (10.2%) and tip fees (10%). Only a few trends stand out:

- Municipalities are least likely to use a tip fee to fund recycling programs, and most likely to use monthly or annual fixed fees.
- About a quarter of municipalities and counties use general fund revenue for a portion of recycling budgets.

**Table 4 Types of Funding Mechanisms Used for All Solid Waste and Recycling Related Programs (% of respondents)**

	Tip Fees at Facility	Other Service-Specific User Fee	Monthly or Annual Fixed Fee	Millage	Generator Fee	Host Fee	Admin. Fee	Franchise Fee	Advanced Disposal Fee	State Grant	General Fund	Other	None Reported	Average # of Funding Mechanisms
Authority	57.1%	14.3%	0.0%	14.3%	0.0%	14.3%	42.9%	0.0%	0.0%	85.7%	0.0%	14.3%	14.3%	2.6
County	42.9%	3.6%	3.6%	0.0%	3.6%	7.1%	39.3%	3.6%	7.1%	75.0%	25.0%	17.9%	10.7%	2.4
Municipality	15.4%	30.8%	61.5%	15.4%	7.7%	15.4%	7.7%	0.0%	0.0%	53.8%	46.2%	23.1%	15.4%	2.9
Urban	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	66.7%	33.3%	0.0%	0.0%	1.7
Suburb	22.2%	11.1%	55.6%	33.3%	11.1%	33.3%	22.2%	0.0%	0.0%	66.7%	44.4%	11.1%	0.0%	3.1
Rural	36.4%	18.2%	13.6%	0.0%	4.5%	4.5%	36.4%	0.0%	0.0%	63.6%	22.7%	22.7%	18.2%	2.4
Mixed	57.1%	14.3%	7.1%	0.0%	0.0%	7.1%	28.6%	7.1%	14.3%	85.7%	21.4%	21.4%	14.3%	2.6
Own Facility	87.5%	12.5%	12.5%	12.5%	0.0%	12.5%	25.0%	0.0%	12.5%	87.5%	0.0%	25.0%	0.0%	2.9
Don't Own	24.4%	15.6%	17.8%	4.4%	4.4%	8.9%	28.9%	2.2%	2.2%	60.0%	28.9%	15.6%	11.1%	2.2
Statewide	37.5%	16.7%	18.8%	6.3%	4.2%	10.4%	31.3%	2.1%	4.2%	70.8%	27.1%	18.8%	12.5%	2.6

**Table 5 Types of Funding Mechanisms Used by Type of Service (% of respondents)**

		Tip Fees at Facility	Other Service-Specific User Fee	Monthly or Annual Fixed Fee	Millage	Generator Fee	Host Fee	Admin. Fee	Franchise Fee	Advanced Disposal Fee	State Grant	General Fund	Other
Waste Collection and Disposal	Residential	10.9%	13.0%	17.4%	6.5%	2.2%	4.3%	4.3%	0.0%	0.0%	4.3%	8.7%	6.5%
	Commercial Can/Cart Customers	8.7%	6.5%	8.7%	2.2%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	2.2%
	Commercial Dumpsters/Rolloffs	10.9%	4.3%	6.5%	2.2%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	2.2%	2.2%
Recycling Collection & Processing	Residential	10.9%	10.9%	13.0%	4.3%	2.2%	4.3%	9.6%	0.0%	0.0%	63.0%	17.4%	13.0%
	Commercial	4.3%	8.7%	4.3%	0.0%	0.0%	0.0%	8.7%	0.0%	0.0%	30.40%	6.5%	4.3%
Yard Waste Collection & Processing		15.2%	8.7%	6.5%	2.2%	2.2%	2.2%	6.5%	2.2%	0.0%	21.7%	15.2%	2.2%
Transfer Station		13.0%	4.3%	2.2%	0.0%	0.0%	2.2%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Landfill/Disposal		17.4%	2.2%	4.3%	0.0%	0.0%	4.3%	6.5%	0.0%	2.2%	2.2%	4.3%	0.0%
Other		4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	2.2%	2.2%	15.2%	4.3%	0.0%

**Table 6 Funding Mechanisms Used for Recycling Programs**  
 Percentage of Respondents Using Each Mechanism for Recycling Programs (n=54)

	902 Grants (Implementation)	903 Grants (Rec. Coord.)	904 Grants (Perform.)	At least one State Grant	Other Service-Specific User Fee	Tip Fees	Monthly/Annual Fixed Fee	Generation Fee	Millage	Host Fee	Admin. Franchise Fee	Advanced Disposal Fee	General Fund	Other
Authority	75.0%	75.0%	75.0%	87.5%	25.0%	0.0%	0.0%	0.0%	12.5%	0.0%	37.5%	0.0%	12.5%	50.0%
County	54.8%	67.7%	41.9%	80.6%	29.0%	6.5%	3.2%	3.2%	3.2%	6.5%	35.5%	0.0%	0.0%	25.8%
Municipality	40.0%	6.7%	66.7%	66.7%	0.0%	6.7%	40.0%	0.0%	13.3%	0.0%	0.0%	0.0%	0.0%	6.7%
Urban	100.0%	66.7%	66.7%	100.0%	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	33.3%	0.0%	0.0%	33.3%
Suburban	33.3%	11.1%	66.7%	77.8%	0.0%	0.0%	44.4%	0.0%	33.3%	0.0%	0.0%	0.0%	11.1%	0.0%
Rural	46.2%	46.2%	53.8%	69.2%	19.2%	3.8%	7.7%	3.8%	0.0%	3.8%	34.6%	0.0%	3.8%	30.8%
Mixed	68.8%	81.3%	43.8%	87.5%	37.5%	12.5%	6.3%	0.0%	0.0%	6.3%	25.0%	0.0%	0.0%	25.0%
Own	75.0%	62.5%	62.5%	100.0%	50.0%	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	25.0%
Don't Own	40.0%	51.1%	53.3%	73.3%	15.6%	6.7%	15.6%	2.2%	6.7%	4.4%	31.1%	0.0%	2.2%	24.4%
Total	53.7%	51.9%	53.7%	77.8%	20.4%	5.6%	13.0%	1.9%	7.4%	3.7%	25.9%	0.0%	1.9%	24.1%
Average Percentage of Recycling Budget Derived from Each Source (n=34)														
	14.6%	9.9%	8.5%	33.0%	10.0%	2.8%	14.4%	2.5%	5.1%	0.0%	13.2%	0.0%	0.0%	8.7%
Average Percentage of Recycling Budget for State Grant Recipients (n=27)														
	18.4%	12.4%	10.7%	41.6%										

**Just over half of respondents (53.7%) receive Section 904 recycling performance grants, and nearly 21% of these grantees divert these funds to non-waste reduction and recycling activities.**

Among those grantees that divert funds to other uses, just over 28% of grant funds are still retained for recycling and waste diversion efforts.

Table 7 Use of 904 Performance Grant Funds	
Percent of respondents receiving 904 Performance grants	53.7%
Percent of 904 grantees that divert funds to non waste reduction & recycling programs	20.7%
Average percent of funds diverted among those that divert	71.6%
Average percent of funds diverted among all 904 grantees	14.8%

**Nearly 20% of respondents use some type of pay-as-you-throw funding mechanism.**

As shown in Table 8, half of these use bag fees, which vary from \$0.30 to \$2.00 per bag. 40% use a tag fee, varying from \$1.10 to \$5.00, and one program cited a \$4.75 per pound fee at transfer stations as a PAYT program.

Table 8 Use of Pay-As-You-Throw Pricing		Notes
Percentage of respondents with PAYT	18.5%	n=10
Percent of PAYT with Bag Fees	50.0%	n=5
Average Bag Fee	\$1.33	Range: \$0.30 to \$2.00
Percent of PAYT with Tag Fee	40.0%	n=4
Average Tag Fee	\$3.27	Range: \$1.10 to \$5.00
Percent with Per Pound Fee at Transfer Stn.	10.0%	n=1
Other - Per Pound at Transfer Stn.	\$4.75	

**Just over 31% of respondents say they have a revenue sharing agreement with their recyclables processing facility or hauler.**

The terms of the revenue sharing agreements vary widely. Following is a small sample of the diverse terms used:

- 50% of value with a minimum floor price,
- \$13 per ton collected
- \$0.85 on every dollar of sales value,
- Per pound payment amount for clean, marketed recyclables,
- Amount rebated to municipality negotiated annually,
- Amount tied to market index,
- Tied to market values with a minimum floor value and a maximum ceiling value.

### **Barriers to Using Funding Mechanisms and Increasing Efficiency**

**Many alternative funding mechanisms are viewed by respondents as not viable.**

As shown in Table 9, a sizable percentage of respondents view each alternative funding mechanism as not viable. The most commonly rated as not viable are property assessments not based on property value (38.9%), fixed generation fees and tipping fees (each at 35.2%) and franchise fees (31.5%). Section 902 recycling implementation grants was the only mechanism that no respondent rated as not viable.

**Table 9 Perceptions regarding Funding Mechanism Viability**

Funding Mechanism	Potentially Viable	Not Viable
902 Implementation Grants	87.0%	0.0%
903 Recycling Coordinator Grants	51.9%	11.1%
904 Performance Grants	64.8%	5.6%
Service Specific User Fees	31.5%	18.5%
Monthly or Annual Fixed Fees	16.7%	25.9%
Generation Fee	1.9%	35.2%
Non Property Value Based Assessments	7.4%	38.9%
Millage (Assessment based on property value)	27.8%	22.2%
Tipping Fees	1.9%	35.2%
Franchise Fees	11.1%	31.5%
Advanced Disposal Fees	20.4%	24.1%
General Fund	9.3%	1.9%

**Public perception is the most commonly cited reason for not implementing particular funding mechanisms.**

As shown in Table 10, the second most commonly cited barrier varies by type of funding mechanism. For user fees, the second most commonly cited barrier is the potential for decreased participation, for fixed fees it is an inadequate billing system and for generation fees it is legality concerns.

	Public Perception	Inadequate Billing System	Inability to monitor program costs	Legality concerns	Potential for Decreased Participation
Tip Fees	3.7%	0.0%	0.0%	3.7%	1.9%
Other Service-Specific User Fee	11.1%	1.9%	0.0%	0.0%	7.4%
Monthly or Annual Fixed Fee	13.0%	5.6%	0.0%	1.9%	3.7%
Generation fee	3.7%	0.0%	1.9%	3.7%	1.9%
Millage	13.0%	0.0%	0.0%	1.9%	1.9%
Franchise fee	3.7%	0.0%	0.0%	1.9%	0.0%
Advanced Disposal Fee	3.7%	1.9%	0.0%	0.0%	1.9%

**A range of factors limit jurisdictions' ability to increase their revenue from recyclables sales.**

The most commonly cited factor is limited negotiating power due to the small quantity of recyclables collected, followed by a lack of equipment to prepare material for higher value markets. (See Table 11.)

37.0%	Limited negotiating power due to volumes of recyclables collected
35.2%	Lack of equipment to prepare material for higher markets
18.5%	Limited personnel resources available to monitor and assess end market activity
14.8%	Lack of established relationships with buyers
9.3%	Insufficient knowledge of end-use markets and product specifications.

**Respondents cite a wide range of barriers to improving efficiency or lowering waste diversion costs.**

As shown in Table 12, the most commonly cited barrier was small community size, followed by distance to facilities, low participation rates, contamination of diverted streams and labor costs.

**Table 12 Barriers to Improving Efficiency and/or Lowering Cost of Recyclables and Yard Waste Collection**

50.0%	Lack of economies of scale due to small community size
44.4%	Distance and travel time to processing facility
44.4%	Low participation rates
40.7%	Garbage included in recycling or yard waste stream
40.7%	Labor costs and availability
31.5%	Contractor costs and performance
27.8%	Improper collection vehicles
22.2%	Lack of competition to provide collection services
14.8%	Other

**The two most common reasons for not using private haulers are satisfaction with municipal services and political constraints.**

Other reasons cited include limited procurement and contracting expertise, lack of firms to compete, and quality concerns. (See Table 13.) Just over 20% of respondents say they already use private haulers.

**Table 13 Reasons for Not Using Contracted Private Haulers for Collection Services**

31.5%	Satisfied with current system and no motivation to change
27.8%	Political constraints
20.4%	Not applicable, already contract with private hauler
14.8%	Lack of control
14.8%	Lack of sufficient number of private firms to compete
14.8%	Other
13.0%	Limited expertise on procuring integrated solid waste and recycling collection services
11.1%	Experienced poor quality of service when used contractors in prior years
9.3%	Concerns regarding how to deal with existing personnel and equipment

**Over 40% of respondents say their recycling and yard waste processing facility is not operating at maximum capacity.**

Nearly 40% of respondents said they didn't know, and only 20% indicated their facilities were operating at maximum capacity.

**The two most common reasons for not partnering with neighboring jurisdictions are cost sharing concerns and political constraints.**

Additional reasons include quality concerns, loss of control, distance to other communities and coordination concerns. Just over 20% of respondents say they already use cooperative marketing and private hauler contracts. (See Table 14.)

Table 14 Barriers to Partnering with Neighboring Jurisdictions to Cooperatively Bid Private Collection Contracts

35.2%	Concerns regarding cost sharing
29.6%	Political constraints
24.1%	Concerns regarding quality of service
24.1%	Lack of control
22.2%	Legal issues
20.4%	Not applicable: currently use cooperative marketing and private hauler
18.5%	Distance to other communities
16.7%	Concerns regarding use of existing personnel and equipment
13.0%	Operational complexity and difficulty in aligning existing contracts
13.0%	Other

***Just over 30% of respondents cooperatively market recyclables with other jurisdictions.***

In nearly 53% of those with joint marketing efforts, a local government agency is responsible for marketing materials, 35% use a regional entity and 12% use a private company.

***Nearly 30% of respondents say they have some type of local recycling market development program in place to help expand or improve the markets for certain recyclable materials, but respondents interpreted the question in different ways.***

Examples of responses include:

- Newsprint as animal bedding;
- Assist existing and developing markets at their request;
- Developing a processing facility for UBCs and glass;
- Developing markets for electronics and used textiles;
- Recycle inkjet and laser cartridges, cell phones, rechargeable and lead acid batteries;
- Always working on sales;
- Continually looking for new and better outlets for materials;
- Crushed glass cullet programs with PENNDOT and local contractors;
- Woody yard waste collection and processing;
- Educational programs to increase compost use;
- Replacing all park tables with recycled plastic tables;
- Currently in planning stages;
- Involvement with PA DEP's Market Development Center;
- Advertising in newsletter;
- Market compost to landscapers.

**SURVEY OF PENNSYLVANIA RECYCLING PROGRAMS**

**APPENDIX C**

**SURVEY OF PENNSYLVANIA RECYCLING PROGRAMS**

Name of Your Jurisdiction: \_\_\_\_\_

Your Name and Title: \_\_\_\_\_

Phone Number: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

1. Please identify the type of community(ies) that your jurisdiction serves (check all that apply):

\_\_\_\_\_ Urban: Large cities and counties

\_\_\_\_\_ Suburban: Cities and towns located on the outskirts of a major metropolitan area.

\_\_\_\_\_ Rural: Smaller towns/counties located in the country or less populated or developed areas.

2. Please estimate your current annual budget for all solid waste management and recycling programs (excluding HHW) that are provided by your jurisdiction either directly or through contracts, including administrative and overhead expenses:

\_\_\_\_\_

3. Approximately what percentage of this budget is for recycling (including yard waste collection and processing, waste prevention, and education)? \_\_\_\_\_%

4. Does your jurisdiction have dedicated cost centers to track the cost of providing each type of solid waste service?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

5. Does your jurisdiction currently own and operate a landfill or waste-to-energy facility (either directly or via contracting with a private operator)?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

**SURVEY OF PENNSYLVANIA RECYCLING PROGRAMS**

6. Please specify how your jurisdiction funds the major solid waste services listed in the table below. (Check all that apply. Leave blank any services that your jurisdiction does not provide either **directly**, or **indirectly** via contract with another entity that provides the service.)” Definitions of the user fee terms are provided as an attachment to the survey.

Funding Mechanism	Garbage Collection and Disposal				Recycling Collection and Processing		Yard Waste Collection and Processing	Transfer Station	Landfill/ Disposal	Other
	Residential	Commercial Can/ Cart Customers	Commercial Dumpsters and/ or Roll-offs	Residential	Commercial					
Tipping fees										
Other service-specific user fees (e.g. Pay-as-you-throw or other collection fees)										
Monthly or annual fixed fees (e.g., annual flat solid waste fees)										
Millage (based on property values)										
Per-ton generator based fees (e.g., a fee charged to generators, regardless of where waste is disposed)										
Host fees										
Administrative fees										
Franchise fees										
Advance disposal fees (i.e., fees on tires)										
Commonwealth recycling grants										
General Fund transfers										
Other: _____										

## SURVEY OF PENNSYLVANIA RECYCLING PROGRAMS

7. Please estimate the percentage of your jurisdiction's total **recycling program budget** (including waste reduction and recycling education, recyclables and yard waste collection and processing, but excluding HHW) that is funded by the following (definitions of each of the funding sources is provided as an attachment to the survey)

<b>Funding Source:</b>	<b>Percentage of Recycling Budget:</b>
902 Grants (program implementation)	_____ %
903 Grants (recycling coordinators)	_____ %
904 Grants (performance grants)	_____ %
Tipping fees	_____ %
Other service-specific user fees	_____ %
Monthly or annual fixed fees	_____ %
Per-ton generator based fees	_____ %
Millage (assessments based on property values)	_____ %
Host fees	_____ %
Administrative fees	_____ %
Franchise fees	_____ %
Advance disposal fees (i.e., fees on tires)	_____ %
General fund transfers	_____ %
Other (please describe below)	_____ %

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8. If you receive 904 Performance Grant funds, what percentage of this funding is used to pay for services and activities that are not waste reduction or recycling related? \_\_\_\_\_%
9. Please identify whether your jurisdiction now uses or has considered implementing any of the following user fees (*check all that apply*). Please indicate the primary factors in your jurisdiction's decision against implementing the user fee (*check all that apply*) (*Note: The examples provided are not necessarily the only options available under each category. For clarification, see the enclosed definition sheet.*)



## SURVEY OF PENNSYLVANIA RECYCLING PROGRAMS

11. How long has the PAYT program been in place? \_\_\_\_\_
12. How is this PAYT program implemented?  
 \_\_\_\_\_ Bags      \_\_\_\_\_ Stickers or tags      \_\_\_\_\_ Variable rates for different size  
 garbage containers      \_\_\_\_\_ Standard base rate plus extra charges for additional  
 service
13. What are the current rates for this PAYT program?  
 Bags: \_\_\_\_\_  
 Stickers or tags: \_\_\_\_\_  
 Variable rates: \_\_\_\_\_
14. Does the PAYT fee cover the full cost of providing residential garbage collection  
 and disposal services?  
 \_\_\_\_\_ Yes                      \_\_\_\_\_ No
15. If your jurisdiction were interested in expanding your waste reduction and  
 recycling program, which of the following funding sources would you consider as  
 potentially viable options (*check all that apply*)?

Funding Source	Potentially Viable	Not Viable
902 Grants		
903 Grants		
904 Grants		
Service specific user fees		
Monthly or annual fixed fees		
Per ton generator-based fees		
Non property-value based assessments		
Millage (based on property values)		
Tipping and processor fees		
Franchise fees		
Advance disposal fees		
General fund transfers		
Other: _____		

## SURVEY OF PENNSYLVANIA RECYCLING PROGRAMS

16. Please identify the entity(ies) that perform the following recycling and solid waste management services in your jurisdiction as outlined below (*check all that apply*):

Collection Service	Your Jurisdiction	Regional Solid Waste Authority	Another Public Entity via Interlocal Agreement	Private Hauler via Contract with this Jurisdiction	Private Hauler via Contract with other jurisdiction	Private Hauler hired Directly by Customer	Other
Residential Waste Collection							
Commercial Waste Collection							
Curbside Recycling Collection							
Processing of Collected Recyclables							
Residential Yard Waste Collection							
Yard Waste Processing							
Commercial Recycling Collection							
Drop-Off Recycling Center							
Solid Waste Convenience Center							
Waste Reduction and Recycling Education and Technical Assistance							
Other: _____							

17. Which of the following barriers would need to be addressed to improve the efficiency and/or lower the cost of yard waste and recyclables collection in your jurisdiction (*check all that apply*)?

- \_\_\_\_\_ Lack of economies of scale due to small community size
- \_\_\_\_\_ Distance/travel time to processing facility
- \_\_\_\_\_ Low participation rates
- \_\_\_\_\_ Improper collection vehicles
- \_\_\_\_\_ Garbage included in recycling/yard waste stream
- \_\_\_\_\_ Labor costs and availability
- \_\_\_\_\_ Lack of competition to provide collection services
- \_\_\_\_\_ Contractor costs and performance
- \_\_\_\_\_ Other (please specify) \_\_\_\_\_

## SURVEY OF PENNSYLVANIA RECYCLING PROGRAMS

18. Please identify the primary barriers (if any) that limit the use of contracts with private haulers for collection services (*check all that apply*):
- Not applicable, already contract with a private hauler
  - Satisfied with current system and no motivation to make a change
  - Limited expertise on procuring integrated solid waste & recycling collection services
  - Lack of sufficient number of private firms to compete
  - Experienced poor quality of service when used contractors in prior years
  - Lack of control
  - Concerns regarding how to deal with existing personnel/equipment
  - Political constraints
  - Other (please describe) \_\_\_\_\_
19. Some communities find it beneficial to join with other jurisdictions to cooperatively bid and contract for collection services with a private hauler(s). Please identify the primary challenges that might prohibit your jurisdiction from doing this (*check all that apply*):
- Not applicable: currently coordinate with other communities to cooperatively bid and contract for collection services with a private hauler.
  - Legal issues
  - Distance to other communities
  - Concerns regarding cost sharing
  - Concerns regarding quality of service
  - Lack of control
  - Concerns regarding use of existing personnel/equipment
  - Political constraints
  - Operational complexity/difficulty in aligning duration of existing contracts
  - Other (please describe) \_\_\_\_\_
20. If your jurisdiction operates a yard waste or recyclables processing facility, do you currently process any materials from other jurisdictions?
- \_\_\_\_\_ Yes (\_\_\_ yard waste; \_\_\_ recyclables)      \_\_\_\_\_ No
21. If not, please identify the primary reasons you do not accept recyclables from other local communities (*check all that apply*).
- Nearby communities have their own materials recovery facility (MRF)
  - Nearby communities do not have recycling programs
  - Nearby communities are served by private haulers who take materials to their own MRF(s)
  - Concerns regarding increased levels of contamination
  - Other (please describe) \_\_\_\_\_

**SURVEY OF PENNSYLVANIA RECYCLING PROGRAMS**

22. To the best of your knowledge, is the facility processing (or preparing for market) your recyclable materials operating at maximum capacity?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No                      \_\_\_\_\_ Don't Know

23. Does your jurisdiction have a revenue sharing agreement with your recyclables processing facility or hauler?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

24. If yes, what are the basic terms of the agreement? \_\_\_\_\_

\_\_\_\_\_

25. Does your jurisdiction see a need to develop a new or expand an existing recyclables processing facility?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No                      \_\_\_\_\_ Don't Know

26. Which of the following limit the revenues your jurisdiction receives from the sale of recyclable materials (*check all that apply*)?

- \_\_\_\_\_ Insufficient knowledge of end-use markets and product specifications
- \_\_\_\_\_ Lack of established relationships with a network of buyers
- \_\_\_\_\_ Limited negotiating power due to volumes of recyclables collected
- \_\_\_\_\_ Limited personnel resources available to monitor and assess end-market activity
- \_\_\_\_\_ Lack of equipment to prepare material for higher markets
- \_\_\_\_\_ Other (please describe) \_\_\_\_\_

27. Does your jurisdiction currently have a cooperative agreement with any other communities to collectively market materials to the end market?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

If not, why not? \_\_\_\_\_

\_\_\_\_\_

28. If so, does your jurisdiction market materials with other local governments directly, or through a regional entity, or through some other entity?

\_\_\_\_\_ Local Governments                      \_\_\_\_\_ Regional Entity

\_\_\_\_\_ Other \_\_\_\_\_

29. Does your jurisdiction have any local recycling market development programs currently in place to help expand or improve the markets for certain recyclable materials

\_\_\_\_\_ Yes                      \_\_\_\_\_ No                      If yes, please describe:

\_\_\_\_\_