

A Method for Generating a List of Commercial and Industrial  
Establishments for Annual Recycling Reports  
and a User's Guide for a MS Access Program to Track and  
Report Recycling Efforts

Clinton County



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## BACKGROUND

The Pennsylvania Department of Environmental Protection (PaDEP), the Governor's Center for Local Government Services, the Pennsylvania State Association of Township Supervisors (PSATS) and the Solid Waste Association of North America (SWANA) formed a training partnership for Pennsylvania local governments interested in achieving higher recycling rates. Through this partnership, Clinton County was awarded \$5,000 in technical assistance services from Gannett Fleming, Inc.

## INTRODUCTION

The Clinton County Solid Waste Authority (CCSWA) operates a countywide recycling program which utilizes both curbside and drop-off collection methods. The CCSWA also offers a bi-weekly curbside collection service to 12 municipalities within Clinton County. A nominal annual fee for the bi-weekly curbside collection service has been established to help offset the operational costs. For the residents who choose not to participate in the curbside collection program, recycling drop-off sites are provided throughout the county free of charge.

The CCSWA is under contract with the City of Lock Haven to provide curbside collection to all City residents. Curbside collection occurs bi-weekly and includes the following materials: aluminum and bi-metallic (tin) cans, clear, brown, green glass bottles, newspaper, magazines, and mixed paper.

The CCSWA has established 25 recycling drop-off sites throughout the county. The materials generally collected at these sites include: aluminum and bi-metallic (tin) cans, clear, green, and brown glass bottles, newspaper; and type 1 (PET) and 2 (HDPE) plastics. Several of the satellite sites also collect magazines, corrugated cardboard, and mixed paper. The CCSWA material recovery facility accepts corrugated cardboard, office paper, motor oil, and car batteries.

With the exception of the City of Lock Haven, the Authority is responsible for tracking recycling efforts in Clinton County. This information is used to generate an annual recycling report for the County as well as to request 904-performance grants. The recycling coordinator for the City of

Lock Haven accounts for recycling efforts within city boundaries and supplies the Authority with a report annually.

The Authority requested technical assistance with developing a complete list of establishments, and secondly for developing a database, preferably in Microsoft Access, for generating the County's annual recycling report and 904-performance grant applications.

### **SCOPE OF WORK**

In a meeting between Michael Crist, the Clinton County Recycling Coordinator, and Ray Regan of Gannett Fleming, Inc. on June 25, 2001, the following tasks were outlined:

- Task 1:** Develop a complete list of commercial and industrial establishments in Clinton County.
- Task 2:** Develop a database program in Microsoft Access to assist the Authority with tracking commercial and industrial recycling efforts.
- Task 3:** Produce a technical report and user's guide for County review.

### **TASK COMPLETION**

- Task 1: Develop a complete list of commercial and industrial establishments in Clinton County.**

A complete list of commercial and industrial (referred to simply as commercial) establishments allows for a more accurate account of the County recycling efforts. The CCSWA tracks 58 types of recyclables for its annual recycling report. In cases where a municipality is required under Act 101 to implement a recycling program, the responsibility for tracking commercial efforts is passed from the County to the mandated municipality. In Clinton County, Lock Haven is the only one of 29 municipalities with mandated recycling. An account of recycling efforts in the remaining 28 municipalities is assumed by the Authority.

Prior to the start of the SWANA technical assistance project, Mr. Crist had a list of 40 establishments to contact for commercial recycling reports. Developing a more extensive list involved the Clinton County Chamber of Commerce (the Chamber) membership list, a telephone directory, and a drive around the County. The Chamber list is helpful if the purpose is to locate only the larger commercial and corporate establishments. If a full list of establishments is desired, the Chamber list can provide a good starting point, but does not provide a complete directory. The drive through the County is important for locating the larger industries as well as establishments that have recently gone or plan to go out-of-business. It can also help to locate farms that are accepting newspaper for animal bedding.

To develop a full list of commercial establishments in Clinton County, a telephone directory search became necessary. Unfortunately, there are few, if any, alternatives to this approach. In Pennsylvania, not all businesses are required to register with a local authority. Therefore, there isn't one agency or government office with a full list of establishments. Tax assessment offices can provide a full list of property owners, but cannot provide information on leasing agreements. A telephone directory is the most likely source for a full list of establishments, but the challenges to this approach are the following:

**A telephone directory is not specific to a county:** Often a telephone directory either does not cover the region of interest completely (and more than one directory is needed) or more regions are covered than is desired, which adds to sorting time. If the telephone directory covers more than one county, a list of towns in the county is necessary prior to the directory search.

**A telephone directory does not provide mailing addresses for all establishments:** Normally, if an establishment is located within an urban area, a complete street address is provided. In Clinton County, many establishments are located on rural routes in which case the route number is provided but not the box number. Phone calls to these establishments are one way to generate a full list of mailing addresses. Another way is to look up the establishment on [www.switchboard.com](http://www.switchboard.com), which has mailing addresses for most of businesses in the United States.



**Table 1:** List of Very Small Quantity Generators of Recyclables

Establishment Type or Occupation	
Assisted Living Centers	Fire and Police Departments
Bowling Alleys, Theatres, and Arcades	Hair Saloons and Barbers
Cemeteries and Funeral Homes	Health Spas
Chiropractors	Service Agencies such as American Red Cross
Churches and Reverends	Radio and Television Stations
Country Clubs	Social Clubs and Societies
Daycare Centers	Support Groups
Doctors, Dentists, and Optometrists	Veterinarians

Establishments that are likely to generate a larger quantity of recyclables and are accounted for as a result of the telephone directory search are listed in **Table 2**. Most all of the establishments listed in **Table 2** are likely to generate cardboard and office paper waste. Other materials that are likely to be recycled depend on the establishment type.

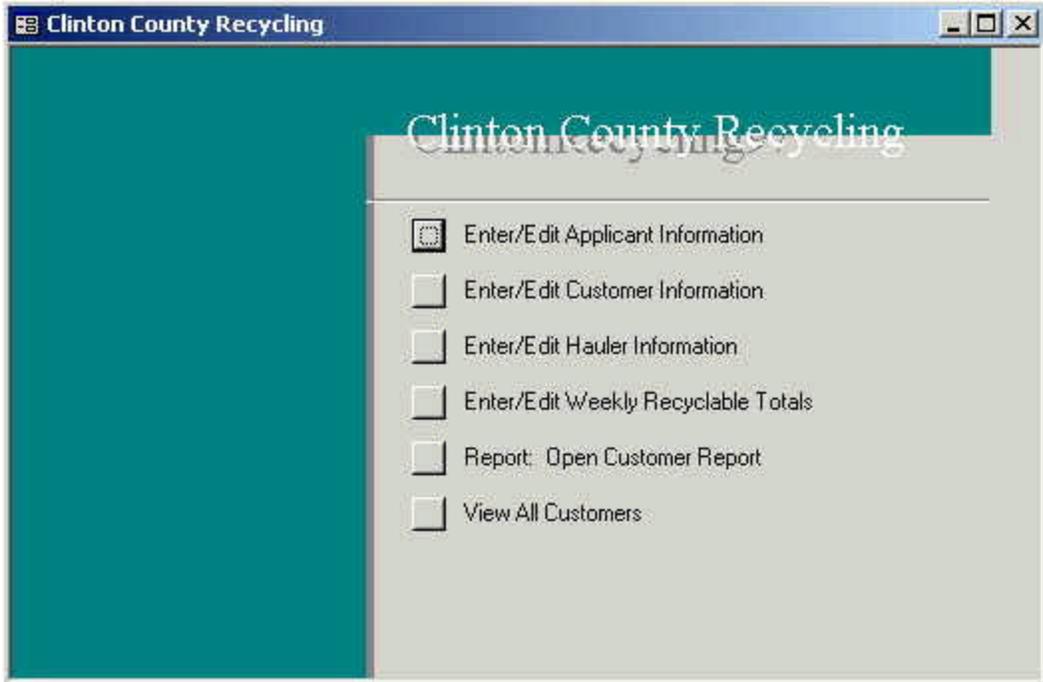
**Table 2:** List of Larger Quantity Generators of Recyclables

Establishment Type	
Architects and Consulting Groups	Hotels
Automobile Dealer	Insurance Agencies
Automobile Parts and Services	Laboratories
Banks and Credit Unions	Manufacturers
Business Services	Physicians
Computer Services	Printers
Construction	RV and Home Manufacturers
Government Agencies	Restaurants
Grocers	Retail Stores
Health Care Agencies	Utilities

The telephone directory search of larger quantity generators provided a list of 375 establishments to contact for annual commercial recycling reports. The full list is provided in the **Appendix**. At this time, Clinton County tracks 58 types of recyclable material for its annual recycling report. Mr. Crist adds materials to the list over time as he becomes more familiar with the recycling activities in the County. The list of 58 recyclable materials is also located in the **Appendix**.

**Task 2: Develop a database program in Microsoft Access to assist the Authority with tracking commercial and industrial recycling efforts.**

The Microsoft Access package created for Clinton County consists of a main screen, which provides several options for accessing the database. This screen appears when the application is first opened, and represents a launching pad for all tasks that can be done in this application. **Figure 2** shows the list of tasks that can be performed. These tasks include entering and editing information for the applicant (Clinton County in this case), the commercial customers, the haulers who serve commercial customers, and the quantity of materials collected. Summary sheets for each customer can be printed. If the user would like to view all of the customers in a spreadsheet format, this task can also be performed from the main screen. The database consists of 375 commercial establishments currently and 58 types recyclable of recyclable materials.

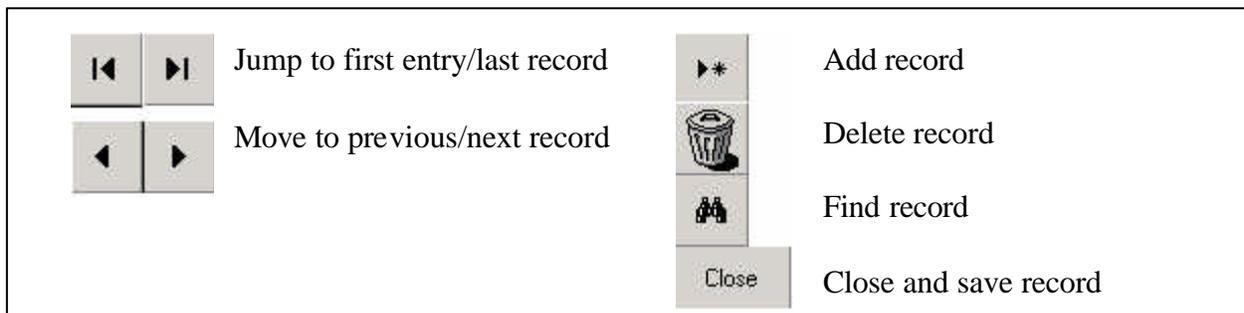


**Figure 2:** Main Screen for the Clinton County Recycling Database

## User Buttons

User buttons that are commonly used in this program are presented in **Figure 3**. These buttons allow the user to move back and forth between records as well as to add, delete, and find records. It should be noted that when the close button is used, the changes made to a record are saved. The screen does not clear the record after it is closed/saved.

The Find function offers a great deal of flexibility in locating the record of interest. When a keyword is entered, the find function allows the user to search for the start of the field, whole field, or any part of the field. For example, if the user is uncertain of how “Wal-Mart” is entered into the database (with or without the hyphen), the Find function can be asked to match only the start of the field for the keyword “Wal.” The Find function works properly when the cursor is located in the box of the field to be searched. So, for the Wal-Mart example, the cursor should be placed in the Business Name box prior to initiating the search.



**Figure 3:** User Buttons

## Applicant Information

One of the features of the Access package is that it generates reports for County use, such as a County recycling report and a 904-performance grant application. The applicant, in this case, refers to Clinton County as a 904-performance grant applicant. Information to be entered on this screen is consistent with the Applicant Information (Part 1) and the Program Information (Part 2) of the current 904-performance grant application. The Applicant Information screen is shown in **Figure 4**.

On the Applicant screen, Population refers to that as determined in the most recent decennial census. Clinton County uses the county population for its 904-grant applications. For Type of Program, the user can enter curbside, drop-off, or combination of curbside and drop-off. Method of Collection refers to the party who provides the recycling service, such as the municipality, private haulers, or a combination of the two. The Applicant screen does not provide much space to explain the details of program type or method of collection.

Applicant_ID	(AutoNumber)	Email	
Applicant		Population	0
StreetAddress		TypeOfProgram	
City		MethodOfCollection	
State			
ZIP	0		
FedIDNum	0		
Website			
Contact			
Telephone	0		
Fax	0		

**Figure 4:** Applicant Information Screen

### Commercial Customers

The Commercial Customers screen, as shown in **Figure 5**, allows the user to enter contact information for all commercial, industrial, educational, institutional, and government recyclers in the County. As part of this SWANA project, contact information for 375 commercial establishments who are likely to be recycling, was entered into the database. The Commercial Customer screen allows the user to enter new businesses as well as amend existing information as needed.

In Clinton County, many commercial establishments contract private vendors for recycling. Some of the commercial establishments, however, contract the Clinton County Solid Waste Authority for curbside services. For this reason, the screen includes a checkbox for CCSWA Customer, which will appear on printed data sheets as a flag to avoid double-accounting.

The Notes section can help the user keep a record of unusual situations that occur when tracking commercial recycling. For example, several branch offices of a bank might recycle office paper, but only the main office maintains the weight slips. A note that the branch offices are working through the main office to recycle office paper helps to avoid unnecessary correspondence.

The e-mail section is included to help the CCSWA progress toward the paperless exchanges of commercial recycler forms. Eventually, Mr. Crist hopes that the commercial recycler request forms and responses can be exchanged electronically. If electronic exchanges can be implemented, the next step could be to link the response forms directly to the database so that the manual entry of data becomes unnecessary.

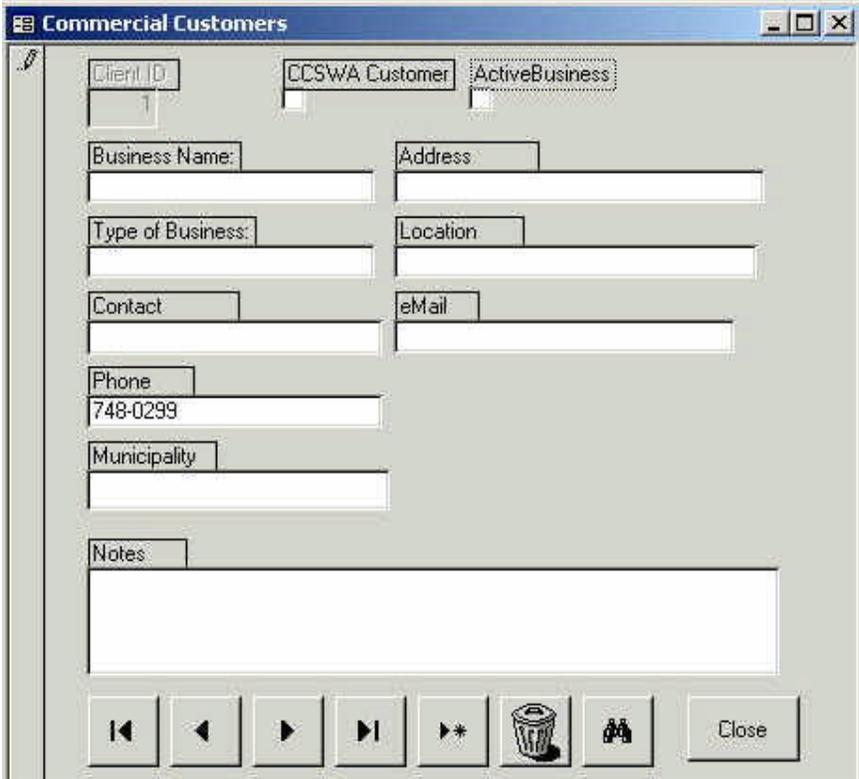
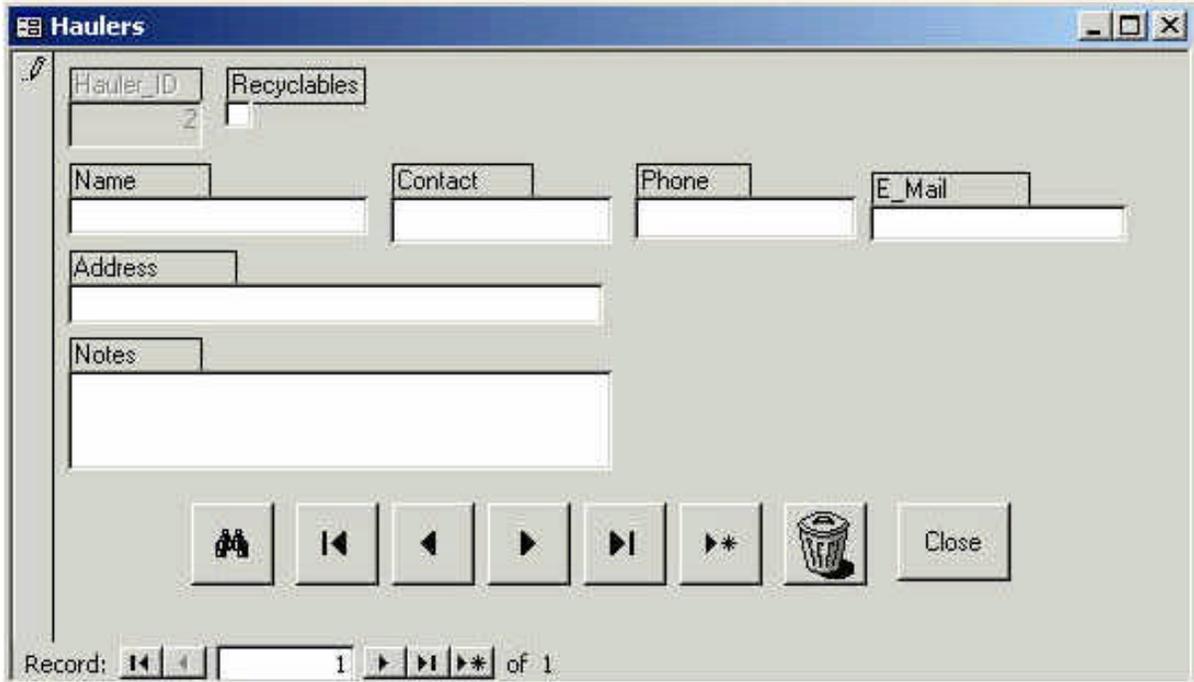


Figure 5: Commercial Customers Screen

**Haulers**

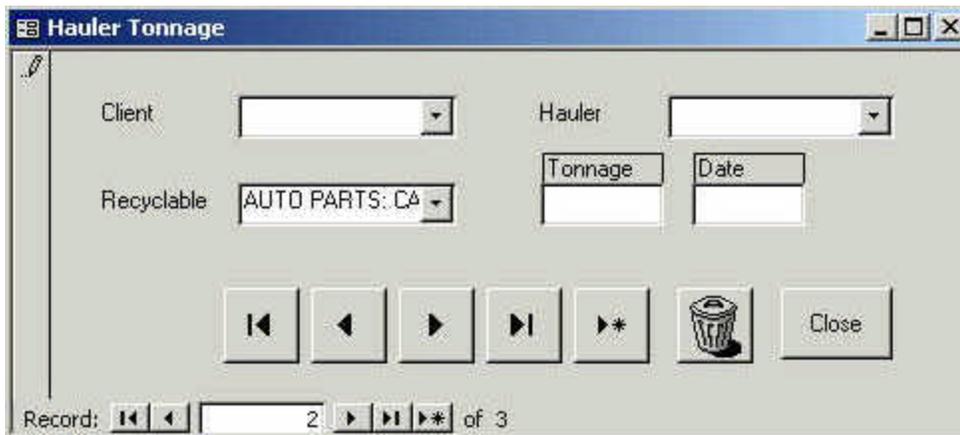
Several private recycling vendors serve commercial establishments in Clinton County. The Haulers screen, as shown in **Figure 6**, allows for contact information for the haulers to be entered as well as specific information that the County might want to note. Such notes could include the type of recyclables that the vendor collects and primary service regions.



**Figure 6:** Haulers Screen

**Hauler Tonnage**

The Hauler Tonnage screen (**Figure 7**) links the commercial recyclers (or Client) with the haulers and list of 58 recyclable materials that the County currently tracks. The 58 recyclable materials have been entered into the Access package, which allowed the data entry section to become a drop-down list. For entering the weight of material collected in the tonnage box, the Access package does not distinguish between weight, volume, counts, or other units of which the customer might return information. Therefore, all numbers should be converted to tons manually prior to data entry.



**Figure 7:** Hauler Tonnage Screen

## CONCLUSIONS AND RECOMMENDATIONS

The benefit of this SWANA technical assistance project is that it should help Clinton County to account for a greater amount of commercial recycling. At the start of this project, the CCSWA contacted approximately 40 businesses for commercial recycling reports annually. A telephone directory search increased the number to 375 businesses that are likely to generate a significant quantity of at least one of the 58 recyclable materials. All of the businesses from the telephone directory search were entered into a Microsoft Access database with as much contact information as was available.

The Access database allows the user to update the records manually and generates recycling reports automatically. The database components include all of the information required for submitting a 904-performance grant report and a County Recycling Report to the DEP. Within the database program, search engines are available for viewing specific businesses.

For requesting annual recycling reports from businesses, the CCSWA should work toward developing a full list of e-mail addresses. The advantages of electronic exchanges over postal deliveries are the following: greater chance of a response in many cases, easier to follow-up and resend reports if necessary, lower costs without the need for stamps, and less paper waste. It

may be possible in the future to link the electronic responses to the database, which would be a considerable timesaver for CCSWA staff.

The task of contacting 375 businesses for recycling information might be overwhelming for the CCSWA staff. Since we added businesses to the database on the basis of type without regard for the size of the operation, several of the businesses are likely to be too small to be worth the trouble of contacting annually. Accounting for a greater amount of cardboard is likely to help the County recycling rates more so than other materials. Therefore, we suggest that the CCSWA approach the list in phases with an emphasis on establishment types that are likely to generate cardboard waste. For example, CCSWA could start by contacting all restaurants, convenience stores and grocers. With greater familiarity with business operations in the County, the contact list can be reduced in size accordingly. Better reporting on commercial recycling rates is a fairly awesome task when you consider the fact that businesses and business staff change constantly. Hopefully, a database program can ease some of the burden.

# APPENDIX

List of 375 Commercial Establishments and 58 Recyclable Materials