

APPENDIX B. A REVIEW OF POTENTIAL SOURCES OF RECYCLING ECONOMIC INFORMATION

This appendix reviews the potential for various organizations to assist in obtaining economic information on the recycling and reuse industries. The review is focused primarily on sources for obtaining the top priority data types discussed in Chapter 4 — number of companies, annual throughput, employment, wages and sales. The appendix is organized as follows:

- Section B.1. U.S. Department of Commerce, Bureau of Census;
- Section B.2. Other Federal Agencies;
- Section B.3. State Economic Data Agencies;
- Section B.4. State Recycling Agencies;
- Section B.5. Industry Associations;
- Section B.6. Non-Profit Organizations and Universities;
- Section B.7. Periodicals and Regularly Published Reports;
- Section B.8. Private Financial Data Companies; and
- Section B.9. Additional References and Bibliographies.

B.1. U.S. DEPARTMENT OF COMMERCE, BUREAU OF CENSUS

Main Phone Number: 301-457-4100

Web site: www.census.gov

The U.S. Department of Commerce, Bureau of Census is the federal agency responsible for compiling and reporting the widest range of economic statistics on U.S. industrial activity. While several Census Bureau programs could *potentially* provide data on recycling and reuse businesses, their current reliance on the *Standard Industrial Classification* (SIC) system impedes their use in the short-term. (See Appendix A for a discussion of SIC codes and the new *North American Industry Classification* (NAIC) system). Following are the programs most directly relevant to the recycling and reuse industries.

Standard Statistical Establishment List (SSEL)

Michael Mashburn, 301-457-2562

The SSEL is the most comprehensive database of business establishments maintained by the Federal government. It includes, for each business establishment in the country, contact information, SIC code, and estimates of employment and wages (sales data are also available, estimated through payroll ratios). In principle, the Census Bureau can be contracted to provide aggregate data for a list of recycling businesses provided to them. However, in practice this is likely to be extremely difficult for very large lists and the resulting data on different industry categories and/or geographic regions may need to be lumped together to comply with the Census Bureau's strict disclosure policies. Matching businesses on a list with the businesses on the SSEL may be difficult because many may be listed differently on different lists. For example, some may

be listed by head office while others are listed separately by production facility. The Census Bureau estimates the cost of a tabulation for 1,000 records at approximately \$6,250, and for 10,000 records at \$25,000. A recent Census Bureau project attempted to match 9,500 business establishments for another federal agency, but was able to match only 52% of records. Obtaining the employment identification number (EIN) assigned to each business would greatly enhance use of the SSEL, but this information is maintained by state employment agencies and is considered confidential. Because a national recycling and reuse study is likely to include over 20,000 business establishments, the SSEL is likely not a feasible alternative for collecting data on all business establishments. However, for compiling national level statistics on some relatively small categories it might be useful.

County Business Patterns

Paul Hanczaryk, 301-457-2594

County Business Patterns reports are prepared annually and are based on the SSEL and provide employment, wages and number of firms in each SIC by county and state, and for the U.S. as a whole. County Business Patterns offers the most convenient way to get data by SIC code for any county, state or for the entire nation. The entire data set is available on the Census Bureau's web site. By special order to the Census Bureau, sales estimates for each SIC are also available.

Economic Census

Paul Zeisset, 301-457-4151

The *Economic Census*, conducted every five years in years ending in "2" and "7," is the federal government's most comprehensive survey of business activity, in principle including all business establishments in the country, and obtaining a wide range of economic data. With substantial lead time, it is possible that additional questions could be added to the economic census to provide recycling and reuse data; however, the next opportunity to do so will be with the 2002 census. The 1992 Economic Census did collect some data on use of recycled materials by manufacturers, but these data were never tabulated.

Annual Survey of Manufacturers

301-457-4769

The *Annual Survey of Manufacturers* is based on sample surveys and other tabulated data on each SIC category within the manufacturing division. The data collected include total employment, production employment, wages, total compensation, sales, capital investment and others. Census Bureau staff have indicated that it may be possible to adjust the survey, under contract, to obtain additional information on recycling and reuse activities. Adjusting any existing federal survey is likely to be a long term process, since approval must be secured both within the Census Bureau and from the Office of Management and Budget.

Export and Import Data

Reba Higbee, 301-457-2242

The U.S. Bureau of Census compiles import and export data, including tons and value of shipment, for many grades of scrap materials and used products. The data is tabulated at the state level and by port, and published monthly. It is available at Federal repository libraries.

Survey of Wholesale Trade

Ronald Piencykoski, 301-457-2713

This survey is conducted monthly, quarterly and annually, and includes estimates for shipments from the entire wholesale trade division, including limited sample data from SIC 5093, scrap and waste materials. Data on SIC 5093 can be separated out, but is not statistically representative and Census does not allow it to be quoted as a source.

Current Industrial Reports

Renee Coley, 301-457-4742

These reports provide price, production and other statistics on select commodities. Many of the reports have been discontinued. Most that continue are prepared under contract and with assistance by private industry associations (e.g., the Aluminum Association).

B.2. Other Federal Agencies

The ***U.S. Environmental Protection Agency*** (www.epa.gov) has published a wide variety of reports covering all aspects of recycling and solid waste management, and has funded a significant amount of work undertaken by state recycling agencies, economic development agencies and other organizations (including this report). EPA's web site is an excellent starting point for identifying available information, and many reports are available online. The primary EPA source for the top priority data sought in this report is ***Characterization of Municipal Solid Waste in the U.S.*** This annual report estimates solid waste generation, recovery, landfill and incineration by material type and product type, and provides a data series going back to 1965. It provides the only national level estimates for overall scrap materials recovery. A new companion report will be published for the first time in 1998 covering construction & demolition debris. The EPA's ***Jobs Through Recycling*** web site is a good starting point for finding contacts and a wide variety of online information on state recycling programs (<http://www.epa.gov/epaoswer/non-hw/recycle/jtr/index.htm>).

The ***U.S. Geological Survey*** (www.usgs.gov) began an aggressive program of research and data collection on secondary materials production in the early 1990s, including a series of reports entitled, ***The New Materials Society***. After a reorganization of the Bureau of Mines, USGS significantly scaled back this research. The ***Mineral Commodity Reports*** (Michael McKinley, 703-648-4968) are only published reports remaining which cover recycling activity. Published monthly, quarterly and annually, these reports include estimates of consumption of recovered metals by U.S. producers, including ferrous metals and several categories of nonferrous metals.

The reports also include rough estimates of employment in production of recovered materials, export data and brief analyses of market trends. The reports are available on USGS's web site.

The ***Bureau of Labor Statistics*** (www.bls.gov) collects and reports current employment and wage data from state agencies (see below), and ultimately provides the data to the Department of Labor, the Bureau of Census and other agencies. Strict confidentiality rules apparently restrict the ability to segregate data on particular firms, such as recycling businesses, from the Bureau of Labor. As discussed above, the data may be available through the Census Bureau, subject also to complicating factors.

The ***Bureau of Economic Analysis*** (www.bea.gov) is an agency of the Department of Commerce. Along with the Census Bureau and STAT-USA, BEA is part of the Department's Economics and Statistics Administration. BEA is the Nation's accountant, integrating and interpreting a tremendous volume of data to draw a complete and consistent picture of the U.S. economy. BEA's economic accounts—national, regional, and international—provide information on such key issues as economic growth, regional development, and the Nation's position in the world economy. BEA is responsible for providing data used in economic modeling programs, as recommended for use in this report. An excellent source for understanding and using economic input-output models is *Regional Multipliers: A User Handbook for the Regional Input-Output System (RIMS II); Third Edition (1997)*.

The ***Internal Revenue Service*** collects detailed financial data on all individuals and businesses in the nation. It's data is held strictly confidential, but is accessed by other federal programs such as the Census Bureau's *SSEL* (discussed above).

The ***Securities and Exchange Commission*** (www.sec.gov) is an independent, nonpartisan, quasijudicial regulatory agency with responsibility for administering the federal securities laws. The SEC maintains select data on private and public companies seeking investments. Private companies issuing securities in multiple states must file information including business production data, investments sought, terms and intended use of funds. Public companies must file periodic reports, while private companies do not. To use this source, specific recycling and reuse companies must be identified in advance through other means. Data can be obtained through the SEC's Electronic Data Gathering, Analysis, and Retrieval system (EDGAR), available through their web site.

The ***U.S. Department of Transportation*** prepares the Commodity Flow Survey in conjunction with the economic census every five years. This survey seeks to estimate flows of various materials and products and method of shipments. The report includes limited data on recovered materials shipped from various business establishments.

B.3. State Economic Data Agencies

State economic data agencies are primarily responsible for compiling employment and wage data and for transmitting the data to the federal Bureau of Labor. Many states also collect other data,

and conduct ad hoc surveys from time to time on particular industries. Each state operates an official state data center which can be used as a first point of contact.

ES 202 Employment Data Program

The ES 202 Employment Data Program is jointly administered by state agencies, the U.S. Bureau of Labor Statistics (BLS), and the U.S. Department of Commerce, Bureau of Census. In this program, State agencies collect employment and wage data on businesses, aggregate the data and pass it on to BLS. Ultimately, the data becomes part of the SSEL database and County Business Patterns reports published by the Census Bureau (see above). While no formal program exists for accessing this database, other than through published reports by SIC code, at least two recycling studies (prepared by NERC and the Southern States Waste Management Coalition) have been able to obtain aggregate employment data for a list of recycling companies from state employment agencies by special arrangement. Obtaining this data at the national level from all 50 states would be extremely difficult, time consuming and costly.

State Data Centers and Business Industry Data Centers

The following is reprinted from a Bureau of Census brochure. State data centers are government agencies, universities and libraries that head up a network of affiliate centers. The phone numbers for these centers are listed below. Some states also have Business Industry Data Centers (BIDCs). States in which the State Data Center also acts as a BIDC are indicated with an asterisk.

Alabama, 205-348-6191
Alaska, 907-465-2437
*Arizona, 602-542-5984
Arkansas, 501-569-8530
California, 916-322-4651
Colorado, 303-866-2156
Connecticut, 860-418-6230
*Delaware, 302-739-4271
District of Columbia, 202-727-6533
*Florida, 904-488-1048
Georgia, 404-656-0911
Guam, 671-475-0325
Hawaii, 808-586-2493
Idaho, 208-334-2470
Illinois, 217-782-1381
*Indiana, 317-232-3733
Indiana BIDC, 317-274-2205
Iowa, 515-281-4350
Kansas, 913-296-3296
*Kentucky, 502-852-7990
Louisiana, 504-342-7410
Maine, N/A
*Maryland, 410-767-4450
*Massachusetts, 413-545-3460

Michigan, 517-373-7910
Minnesota, 612-296-2557
Minnesota BIDC, 612-297-3255
Mississippi, 601-232-7288
Mississippi BIDC, 601-359-3593
Missouri, 573-526-7648
Missouri BIDC, 573-882-0344
*Montana, 406-444-2896
Nebraska, 402-595-2311
Nevada, 702-687-8326
New Hampshire, 603-271-2155
*New Jersey, 609-984-2595

*New Mexico, 505-277-6626
*New York, 518-474-1141
*North Carolina, 919-733-3270
North Dakota, 701-231-8621
*Ohio, 614-466-2115
*Oklahoma, 405-815-5184
Oregon, 503-725-5159
*Pennsylvania, 717-948-6336
Rhode Island, 401-277-6493
South Carolina, 803-734-3780
*South Dakota, 605-677-5287

Tennessee, 615-741-1676
Texas, 409-845-5115
*Utah, 801-538-1036
Vermont, 802-828-3261
*Virginia, 804-786-8026
*Washington, 360-586-2504
West Virginia, 304-558-4010
West Virginia BIDD, 304-293-7832
Wisconsin, 608-266-1927
Wisconsin BIDD, 608-262-3097
Wyoming, 307-777-7504

B.4. State Recycling Agencies

State recycling organizations have published a wide variety of reports on virtually every aspect of recycling and recycling market development. Many states maintain up-to-date lists of recycling collection programs and/or processors and manufacturers, and generally collect tonnage data from municipalities and/or private collectors and processors. Several states have also published recycling economic impact studies which were a major motivation for this report (listed below).

Contacts for State Recycling Agencies

Several sources list up-to-date contact information for state recycling agencies. The National Recycling Coalition's *1997 Market Development Directory* is currently being updated (703-683-9025). Resource Recycling Magazine's *Directory of Key Recycling Contacts* also includes state contacts (503-227-1319). The U.S. EPA's *Jobs Through Recycling* website is an excellent source of contact information on many state recycling programs, and also includes web links and overviews (<http://www.epa.gov/epaoswer/non-hw/recycle/jtr/index.htm>).

State Recycling Economic Information Studies

The studies listed below, all published by state or multi-state recycling organizations, provide economic information on the entire recycling industry in a given geographic area. They all include estimates of total employment, and most also include industry size estimates such as annual sales or value-added. In addition, several of the studies also include data on investment trends, material supply, total demand, etc. The studies generally used different definitions and methodologies to obtain the information. State recycling organizations have also published a wide variety of specialized reports on many aspects of recycling economics and markets.

Economic Benefits of Recycling in the Southern States, conducted by Roy F. Weston, Inc. for the Southern States Waste Management Coalition, 1996. Contact: Matt Goldman at Weston 508-988-7000 or Craig Sealy at Southern States Energy Board 904-246-9655.

Arizona Recycling Market Development Study, conducted by R.W. Beck for the Arizona Department of Commerce, 1997. Contact: Gregg Fischer at AZ Dept. Of Commerce 800-528-8421 or Richard Tagore-Erwin at RW Beck 602-957-2888.

Recycling Creates Jobs in Florida, prepared by the Division of Economic Development, Florida Department of Commerce, 1996. Michael Olhsson at FL DEP 904-487-4937.

North Carolina Recycling Business Study, prepared by KirkWorks for the North Carolina Office of Waste Reduction, 1996. Contact David Kirkpatrick at KirkWorks 919-220-8065.

Impact of Recycling on Jobs in North Carolina. North Carolina Office of Waste Reduction, 1995. (919) 571-4100, OWR-95-19.

Recycling and the Maine Economy, prepared by Land & Water Associates and Market Decisions, Inc. for the Maine Waste Management Agency, 1993. Frank O'Hara was the consultant who did study 207-621-2623.

Value Added to Recyclable Materials in the Northeast, prepared by Roy F. Weston, Inc. for the Northeast Recycling Council, 1994. Contact Michael Alexander at NERC.

Assessment of Economic Impacts of Recycling in Iowa, prepared by R.W. Beck for the Iowa Department of Economic Development and the Iowa Department of Natural Resources. Contact Bob Craggs at RW Beck 612-835-6120 or Margo Underwood at Recycle Iowa 515-242-4755.

Value Added by Recycling Industries in Massachusetts, prepared by the Massachusetts Department of Environmental Protection, 1992. Contact Robin Ingenthron, Director of Recycling, MA DEP 617-292-5962.

Surveys of Washington State Recycled Material Collectors and Haulers, Transporters, Processors and End-Users, prepared by the King County Department of Natural Resources, Solid Waste Division, 1996. Jeff Gaisford at King County (WA) Dept of Natural Resources 206-296-4484.

Recycling Economic Impacts in Nebraska (not the exact title), 1997. Patrick Langan, Nebraska Department of Economic Development, P.O. Box 94666, Lincoln, NE 68509-4666, 406-471-3766.

Minnesota's Value-Added Recycling Manufacturing Industries: An Economic and Environmental Profile, prepared by the Minnesota Office of Environmental Assistance, 1997. Wayne Gjerde, Minn. Office of Environmental Assistance, 520 Lafayette Road North, Second Floor, Saint Paul, MN 55155-4100, 800-657-3843.

B.5. Industry Associations

NERC contacted over 40 industry trade associations in the course of the *Recycling Economic Information Project*. These organizations represent a wide variety of companies, some of which

are dedicated entirely to recycling or reuse, and many of which have a broader membership, only some of whom are recycling or reuse businesses. Industry trade associations can provide a wide range of information on their members and the industries in which they operate. This section provides contact information, but does not attempt to summarize the vast amount of information available through each organization. Industry associations with the potential to provide the priority information sought in this report are identified in Chapter 6, Section 6.7. In addition, Appendix C lists sources for compiling lists of recycling and reuse businesses, including many industry associations.

Industry Associations Contacted

Agricultural Composting Association
P.O. Box 608
Belchertown, MA 01007
Tel: (413) 323-4531

Aluminum Association
Nick Adams, Director of Statistics and Economics
919th Street Street Northwest
Washington, DC 20006
Tel: (202) 862-5100

American Forest & Paper Association
Elizabeth Seiler, Senior Director
Fiber Recovery & Utilization
1111 Nineteenth Street, NW, Suite 800
Washington, DC 20036
Tel: (202) 463-2761
Fax: (202) 463-2783

American Iron and Steel Institute
Mary Ann Gunselman
1101 17th Street, N.W.
Suite 1300
Washington, DC 20036
Tel: (202) 452-7178

American Petroleum Institute
Reed Engdahl, Used Oil Coordinator
STEP
1220 L Street, N.W.
Washington, DC 20005-4070
Tel: (202) 682-8490

American Plastics Council
Amelia Molloy
1801 K Street, NW, Suite 600K
Washington, DC 20006-1301
Tel: (202) 974-5200
Fax: (202) 296-7005

American Iron and Steel Institute
Bruce Steiner, Environmental Vice-President
1101 17th Street N.W.
Suite 1300
Washington, DC 20036

American Iron and Steel Engineers
Tom Sloan
3 Gateway Center, Suite 1900
Pittsburgh, PA 15222-1004
Tel: (412) 281-6326 ext.150

Appliance Recycling Information Center
Wayne Morris, Executive Director
701 Pennsylvania Avenue, N.W., #900
Washington, DC 20004
Tel: (202) 434-7492
Fax: (202) 434-7400

Association of Battery Recyclers
Earl Cornette, President
2463 Cobb's Way
Palm Harbor, FL 34684
Tel: (813) 787-1837

Association of Postconsumer Plastic Recyclers
Robin Cotchan, Manager
1801 K Street , Suite 701-L
Washington, DC 20006
Tel: (202) 974-5419
Fax: (202) 296-7154
Email: rcotchan@ameriplas.org

Automotive Recyclers Association
Tracey Mattson, Governmental Affairs Manager
3975 Fair Ridge Drive, Suite 20
Fairfax, VA 22033-2906
Tel: (703) 385-1001
Fax: (703) 385-1404

Asphalt Recycling and Reclaiming Association
Michael R. Krissoff, Executive Director
#3 Church Circle, Suite 250
Annapolis, MD 21401
Tel: (410) 267-0023
Fax: (410) 267-7546

Battery Council International
Amy Knowl
401 N. Michigan Avenue
Chicago, IL 60611
Tel: (312) 644-6610
Fax: (312) 321-6869

Cellulose Insulation Manufacturers Association
Dan Ley, Executive Director
136 South Keowee Street
Dayton, OH 45402
Tel: (513) 222-2462
Fax: (513) 222-5794

Center for Remanufacturing and Resource Recovery
Rochester Institute of Technology
Nabil Nasr
133 Lomb Memorial Drive
Rochester, NY 14623
Tel: (716) 475-5106

Composting Council
Randy Monk
114 South Pitt Street
Alexandria, VA 22314
Tel: (703) 739-2401
Fax: (703) 739-2407

International Association of Pallet Recyclers
Tera Hagenbrock

Construction Materials Recycling Association William
Turley, Association President
29 N. Wacker Drive
Chicago, IL 60606
Tel: (312) 726-2802
Fax: (312) 726-2574
Email: BillTurley@aol.com

Carpet and Rug Institute
Carroll Turner
P.O. Box 2048
Dalton, GA 30722
Tel: (706) 226-2477
Fax: (706) 278-8835

Can Manufacturer's Institute
Jennifer Day
1625 Massachusetts Avenue, N.W.
Washington, DC 20036
Tel: (202) 232-4677

Council for Textile Recycling
Bernard Brill, Director
7910 Woodmont Avenue
Suite 1212
Bethesda, MD 20814
Tel: (301) 718-0671
Fax: (301) 656-1079

Glass Packaging Institute
Joseph B. Cattaneo, Executive Vice President and
Corporate Secretary
1627 K Street N.W.
Suite 800
Washington, DC 20006
Tel: (202) 887-4850
Fax: (202) 785-5377

Institute of Scrap Recycling Industries
Tracy Mattson
1325 G Street, N.W., Suite 1000
Washington, DC 20005-3104
Tel: (202) 737-1770
Fax: (703) 626-0935

1800 N. Kent Street, #911
Arlington, VA 22209-2104

Tel: (703) 908-4880
Fax: (703) 908-4881

International Tire and Rubber Association
Jean Murphy
P.O. Box 37203
Louisville, KY 40233
Tel: (502) 968-8900
Fax: (502) 964-7859

Lead Industries Association
Jeff Miller, Executive Director
295 Madison Avenue
New York, NY 10017
Tel: (212) 578-4750
Fax: (212) 684-7714

Molded Pulp Environmental Packaging Association
Joseph Grygny
1425 W. Mequon Road
Mequon, WI 53092
Tel: (414) 527-4829
Fax: (414) 466-9277

National Wooden Pallet & Container Association
Judy Peck
1800 N. Kent Street, Suite 911
Arlington, VA 22209-2104
Tel: (703) 527-7667
Fax: (703) 527-7717

National Oil Recyclers Association
Kathy Clancy, Governmental Affairs Coordinator
1415 South Ninth Street
St. Charles, IL 60174
Tel: (630) 377-0474

National Oil Recyclers Association
Kitty McWilliams, Executive Director
12429 Cedar Road, #26
Cleveland, OK 44106
Tel: (216) 791-7316
Fax: (216) 791-6047

National Solid Waste Management Association
Michelle Kunz
4301 Connecticut Avenue N.W., #300
Washington, DC 20008
Tel: (202) 244-4700
Fax: (202) 966-4841

National Association for Plastic Container Recovery
Michael Schedler, Technical Director
100 North Tyron Street, Suite 3770
Charlotte, NC 28202
Tel: (704) 358-8882
Fax: (704) 358-8769

Plastic Loosefill Council
Virginia Lyle
c/o Free Flow Packaging
1093 Charter Street
Redwood City, CA 94063
Tel: (800) 828-2214, (415) 364-1145
Fax: (415) 361-1713

Plastic Lumber Trade Association
Alan Robbins
540 South Main Street, Building 7
Akron, OH 44311-1023
Tel: (800) 886-8990 (216) 762-8989

Rechargeable Battery Recycling Corporation
J. Bagby, Vice President
2046-A Jefferson Davis Highway
Stafford, VA 22554
Tel: (540) 720-3668

Reuse Development Organization
Hope Cucina
3220 Western Pike
Hancock, MD 21750
Tel: (301) 678-5503

Scrap Tire Management Council
Mary Sikora, Editor
133 Mountain Road, P.O. Box 714
Suffield, CT 06078
Tel: (860) 668-5422

Steel Manufacturers Association
Christina Bechak, Vice-President

1730 Rhode Island Avenue, N.W.
Suite 907
Washington, DC 20036
Tel: (202) 296-1515

Steel Recycling Institute
Greg Crawford
680 Andersen Drive, Foster Plaza 10
Pittsburgh, PA 15220
Tel: (800) 876-7274

Solid Waste Association of North America
Rob Duncan
P.O. Box 7219
Silver Spring, MD 20910-7219
Tel: (301) 585-2898
Fax: (301) 589-7068

Vehicle Recycling Partnership
Ken Schram
12000 Oakland Avenue, M.C. 418-4100
Highland Park, MI 48288-1001
Tel: (313) 956-1032
Fax: (313) 956-0691

Waste Equipment Technology Association
Jack Legler, Executive Vice President
4301 Connecticut Avenue N.W., Suite 300
Washington, DC 20008
Tel: (202) 244-4700
Fax: (202) 966-4818

B.6. Non-Profit Organizations and Universities

While a large number of non-profit organizations are involved in various aspects of recycling and solid waste management, only a few have specialized in researching economic characteristics of the industry. Following is a brief list of organizations and specific documents which are most relevant to obtaining the top priority economic information examined in this report.

Mergers & Acquisitions Report. Prepared annually by KirkWorks for the Northeast Recycling Council (802-254-3636) and the National Recycling Coalition (703-683-9025), this report provides information and statistics on mergers and acquisitions involving public and private recycling companies. A similar study, focused on waste management companies, is prepared by Environmental Business International.

The Remanufacturing Industry: Hidden Giant. 1996. Prepared by Professor Robert T. Lund, Boston University, Boston Massachusetts. Estimates industry size data for the remanufacturing industry, with an emphasis on businesses which remanufacture industrial equipment.

Recycling in the U.S. Pallet Industry. Robert J. Bush, Associate Professor Virginia Polytechnic Institute (540-231-5876). A periodically updated study of businesses involved in recycling wooden pallets, including employment and sales data.

Institute for Local Self-Reliance (202-232-4108) has prepared several publications providing detailed case studies of recycling collection, processing and manufacturing, and of reuse businesses, including employment and financial data.

B.7. Periodicals and Regularly Published Reports

A wide range of periodicals and regularly published reports provide a wealth of up-to-date

information on many segments of the recycling and reuse industries. These sources are strongest on market information and trends, such as pricing, mergers, acquisitions, new technologies, etc. A few regularly published reports seek to provide comprehensive coverage of particular industry segments, typically on an annual basis.

Regularly Published Reports

American Recycling Markets and Recycled Products Guide (315) 471-0707

A directory of recycling businesses and recycled content products produced nationwide, with information on market trends and state procurement programs.

Environmental Business International (619-295-7685)

EBI publishes the *Environmental Business Journal*, covering environmental industry trends. EBI also publishes an annual survey of the environmental technologies and services industry which includes sales estimates for recovery of waste materials, based on EPA's total recovery estimates and average market prices by material. The survey also quantifies recycling equipment sales and consulting services. Regularly published reports include the *Solid Waste Management Briefing*, *Environmental Industry and Global Markets*, and *Environmental Instrumentation* and *"Environmental Consulting & Engineering: Markets & Competition*.

Miller Freeman, Inc. (415-278-5370)

Miller Freeman publishes a wide range of industry specific reports and directories, including *Pulp & Paper Company Profiles* and the *Pulp & Paper Factbook*. These publications include financial and statistical information on publicly and privately owned pulp, paper and paper board producers worldwide.

Resource Information Systems, Inc. (617-271-0030)

Publishes several regular reports including the *North American Pulp and Paper Review*, *U.S. Recovered Materials Review*, *Wood Products Review*, and the *World Pulp Review*. The reports provide economic outlook, market trends by product grade and forecasts.

Leading Edge Reports (800-866-4648)

Publishes *Recycling Opportunities*, a broad overview of the recycling industry including market trends, size and growth, forecasts, demand and case studies.

The Materials Recycling and Processing Industry in the United States: Annual Yearbook, Atlas and Directory. Published annually by Governmental Advisory Associates (203-226-3239).

Provides a range of data on material recovery facilities throughout the nation.

Solid Waste Digest. Published by Chartwell Information Publishers (703-519-7881). A monthly survey of landfills to determine tip fees and other information.

Recycling and Reuse Industry Periodicals

BioCycle Magazine
JG Press
419 State Ave.
Ammaus, PA 18049
(610-967-4135).

Composting News
McEntee Media Corporation
13727 Holland Road
Cleveland, OH 44142-3920
(216)362-4624

C&D Debris Recycling Magazine
29 North Wacker Drive
Chicago, IL 60606
(312)726-2802
fax:(312)726-2574.

Container Recycling Report
P.O. Box 10540
Portland, OR 97296-0540
(503)227-1319
fax: (503) 227-6135

Demolition Age
330 W. Frontage Rd.
Northfield, IL 60093-3410

Environmental Business Journal
P.O. Box 371769
San Diego, CA 92137-1769
(619) 295-7685

Glass Digest
18 East 41st Street, 20th floor
New York, NY 10017
(212) 682-7681
fax: (212) 697-8331.

Glass Industry

310 Madison Avenue
New York, NY10017
(212) 682-7681.

Glass Magazine
8200 Greensboro Drive, #302
McLean, VA 22102
(703) 442-4890
fax:(703) 442-0630

MSW Management
Forester Communications

5638 Hollister Avenue, Suite 301
Santa Barbara, CA 93117
(805) 681-1300

Recharger Magazine
4218 W. Charleston Blvd.
Las Vegas, NV 89102
(702) 438-5557

Resource Recycling Magazine
P.O. Box 10540
Portland, OR
97296-0540
(503) 227-6135

Paper Recycler
(415) 905-2263.

Paper Stock Report
McEntee Media Corporation, 13727 Holland
Road, Cleveland, OH 44142-3920
(216)362-4623

Pallet Enterprise
1893-D Billingsgate Circle
Richmond, VA 23233
(804) 740-1567

Plastics News
1725 Merriman Rd.
Akron, OH 44313
(330) 836-9180

Plastics Business News
2727 Holland Sylvania Road, Suite A
Toledo, OH 43615
(419) 535-7899

Plastics Recycling Update
(503)227-1319
fax: (503) 227-6135

Recycling Today
4012 Bridge Avenue
Cleveland, OH 44113
(216) 961-4130

Scrap Magazine
Published by the Institute of Scrap Recycling
Industries
(202) 626-0900

Scrap Tire News
Recycling Research Institute
133 Mountain Rd.
P.O. Box 714
Suffield, CT 06078
(860)668-5422
Fax:(860)668-5651.

Recycling Today
4012 Bridge Ave.
Cleveland, OH 44113
(216) 961-4130

*Recycling Laws International and State
Recycling Laws*
6429 Auburn Ave.
Riverdale, MD 20737-1614
(301) 345-4237

Textile World
4170 Ashford Dunwoody Road, #420
Atlanta, GA 30319

Walden's Fiber & Board Report
Walden-Mott Corporation
225 North Franklin Turnpike
Ramsey, NJ 07446.
(201)818-8630

Waste News
Crane Communications, Inc.
1725 Merriman Road
Akron, OH 44313-5251
(330) 865-6166

Waste Age's Recycling Times
Environmental Industry Association
Suite 300, 4301 Connecticut Avenue, N.W.
Washington, DC 20008
(202) 244-4700

World Wastes
Intertec Publishing Corp.
6151 Powers Ferry Road
Atlanta, GA 30339-2941
(770) 618-0112

B.8. Private Financial Data Companies

Private financial data firms such as Dunn & Bradstreet and American Business Statistics collect and report a wide range of financial data on U.S. businesses. Databases from such firms can be purchased, and are often used to verify credit reporting information or to create mailing lists for marketing purposes. These sources provide an excellent means for filling data gaps during surveys, for compiling lists of businesses by SIC or geographic region, and for verifying information obtained elsewhere. Some of these firms specialize in tracking publicly traded firms, such as Moody's and Standard & Poor's. These sources can provide a wide range of data on public companies. Appendix F provides a brief report prepared by KirkWorks summarizing these sources.

B.9. Additional References and Bibliographies

Several sources are available for additional reference information, or for obtaining the most up-to-date contacts for the organizations listed in the above section. These sources include:

Directory of Key Recycling Contacts

Published by Resource Recycling Magazine, 503-227-1319.

State Market Development Directory

Published by the National Recycling Coalition, 703-683-9025

Investor's Research Guide to the Recycling Industry

Revised April, 1998. Prepared by KirkWorks for the Northeast Recycling Council and the National Recycling Coalition. Lists sources of financial and market information most useful to investors evaluating deals involving recycling and reuse businesses.

Bibliography of State Recycling Economic Development Financing Materials

University of Iowa 1997.

U.S. EPA , Jobs Through Recycling Web Site (www.epa.gov)

Includes extensive contact information and links for state market development officials and access to EPA recycling-related documents. Also includes a bibliography of market development information sources.

EPA Region I RCRA Library, Fred Friedman, 617-565-3282

Recyclers' World Web Site (www.recycle.net)

Extensive links to online resources and contact information for recycling organizations.

Global Recycling Network (www.grn.com)

Extensive links and contact information as well as recycling stock and commodities prices.