REUSE OPERATIONS

COMMUNITY DEVELOPMENT THROUGH REDISTRIBUTION OF USED GOODS

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INSTITUTE FOR LOCAL SELF-RELIANCE
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Since 1974, ILSR has researched the technical feasibility and commercial viability of environmentally sound, state-of-the-art technologies with a view to strengthening local economies. ILSR works to involve citizens, government, and private enterprise in the development of a comprehensive materials policy oriented towards efficiency, recycling, and maximum utilization of renewable energy sources.

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EXECUTIVE SUMMARY

Reuse of second-hand durable goods is a concept gaining in popularity. Although it ranks ahead of recycling in the solid waste management hierarchy — reduce, reuse, recycle — reuse has kept to the shadows as recycling has monopolized the national spotlight in recent years. But now an extensive survey study of 67 reuse operations conducted by the Institute for Local Self-Reliance shows that reuse is gaining ground.

For the purposes of the study, reuse operations are those organizations that accept used, overstocked, outdated, and below-standard materials (such as furniture, building materials, appliances, office equipment, and other durable goods), and make them available to recipients — who often include the public-interest sector, government, the general public, and low-income individuals. Reuse operations often utilize a warehouse for temporary storage of reusables, although many simply broker materials or print listings of available goods. Reuse operations are usually not-for-profit, and include such long-standing national organizations as Goodwill Industries and the Salvation Army, whose thrift stores raise funds for their social/religious missions. More recent arrivals on the reuse scene often list the environment as their primary mission.

The potential for reuse operations has never been greater, as the U.S. waste stream continues to grow in size. In 1993, the U.S. Environmental Protection Agency estimated that 13 percent by weight of municipal waste was appliances, furniture, carpets, and miscellaneous durables (not including construction and demolition debris) — all candidates for recovery and reuse. Only 7.5 percent of those materials were recovered in 1993. In fact, most of the reuse centers surveyed began their operations after 1990.

Reuse operations benefit the communities in which they are located economically, environmentally, and socially. For example, respondents to the ILSR survey reported employing the full-time equivalent of five people at an average wage of $9.75 per hour, while saving recipients of goods about $250,000 in avoided-purchasing costs and donors about $100,000 in avoided-disposal costs each year. Donors often enjoy a reduced tax burden as well.

The number one obstacle the respondents reported was securing funding for start-up, operation, and expansion of their reuse centers. Capital costs averaged about $100,000, while annual operating costs fell in the $200,000 range. The most popular sources of funding include product sales (although products that are sold are priced low), plus private and public grants and donations. (The fair market value of materials handled by the average reuse operation was reported to be $700,000.)

This publication includes 30 graphs, tables and photographs that detail the findings, in addition to a list of valuable reuse resources in the bibliography, and all of the actual survey material, including methodology, instrument and data.

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INTRODUCTION

Reuse is a concept whose day seems to finally be dawning. Although it ranks ahead of recycling in the widely accepted solid-waste hierarchy (Reduce, Reuse, Recycle, and when all else fails, Dispose), it has been eclipsed by its later sibling. Recycling is the process by which materials otherwise destined for disposal are collected, reprocessed, re-manufactured, and reused. Recycling has set its grassroots deep, and grown into the mainstream U.S. economy over the past decade.

Now another of the "Three-R" seedlings is emerging from the fertile soil of local waste streams. Reuse involves diverting a component of the waste stream — whether municipal, commercial, or industrial waste — and using it again for its original purpose. Unlike recycling, reusing does not entail extensive reprocessing or re-manufacturing.

Reuse takes many forms, and is not a new idea. Steel drums, shipping pallets, retread tires, and refillable bottles were standard long before the "Three R" sentiment was formalized. And in recent years, such reusable goods as cotton diapers, refillable detergent jugs and toner cartridges for computer printers have become common.

However, most of these products are designed for reuse, have a specific route of reuse, and are tended to by businesses that handle that product alone. There are innumerable products that simply do not fit into these narrow reuse structures, and so go to waste. Now, a new kind of reuse operation is emerging across North America. These operations are often community-based and they collect broad categories of reusable products, including furniture, building materials, appliances, office equipment, and other items that are second-hand, overstocked, outdated, "off-spec," or below standard. In turn, these materials are made available to recipients who are in need of them — typically, low-income people and the public-interest sector. It is this sort of reuse operation this publication will explore.

The finer points of reprocessing and repair of used materials are not within the scope of this publication. These activities are certainly a valuable part of the economy, and are great ways for a reuse operation to expand the quantity of materials it redistributes. They also generate unique employment and training opportunities for a community. But to do justice to such an important aspect of reuse, a separate study is needed.

The purpose of this study is to present the universe of ways in which people have addressed the key questions encountered in starting or running a reuse operation. The study is not meant to be a "how to" manual. "How to" manuals have been written by the operators of various kinds of reuse operations, and these are listed in the bibliography. Together with this document, they provide a foundation for starting and maintaining a successful reuse operation. The data offered here will offer much insight into the basic decisions a reuse operation must make, and should provide a comprehensive map of the paths that others have taken through these questions. The intended audience includes people at

existing reuse operations, community development organizations, and individuals interested in starting a reuse operation.

The information reported here is the result of a survey study of 67 multi-material reuse operations across North America (mainly the United States), undertaken by the Institute for Local Self-Reliance (ILSR) in 1995.

This publication opens with a discussion of the ways that reuse operations structure themselves, how they operate, and how they are financed, supplemented with graphic presentations of the actual data. This is followed by analysis of the data and conclusions. The survey methodology, 85-question survey instrument, and the actual responses to it, are listed in the Appendix.

DEVELOPMENT OF REUSE

Throughout history, the economic and social needs of individuals, families, communities, and nations have driven varying degrees of reuse. More recently, an environmental component has been added to the pressures to reuse resources. Along with recent economic and social pressures, this environmental motivation has spurred the formation of a new generation of reuse operations with a dual environment/community focus.

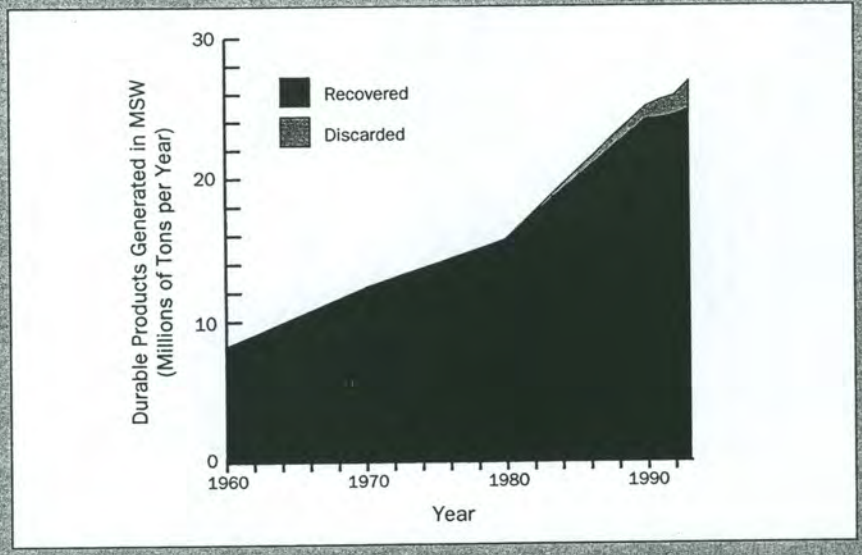
Also driving reuse is a continuing upward trend in consumption (or partial consumption) of goods. Traditional discount stores and the new warehouse-style retailers continue to offer a staggering variety of new goods at low prices, and as a result, people can afford to replace aging items more frequently.

In fact, developed societies are generating more waste per person than ever before. Included in this waste is an ever-growing stream of materials whose useful lives have not been exhausted — hence reusable goods. According to the U.S. Environmental Protection Agency (EPA), 24.8 million tons of appliances, furniture, carpets, and miscellaneous durables were discarded in 1993, while 2 million tons were recovered. Figure 1 makes evident the ample potential for increased reuse efforts. These material categories accounted for 13 percent by weight of the total amount of municipal waste generated in 1993,[1] but do not include construction and demolition debris — an area ripe with reuse opportunity. An additional source estimates that five percent of the total waste stream can be recovered by reuse enterprises.[2]

The flood of discarded-but-reusable goods easily swamps the traditional infrastructure for redistributing them. This infrastructure consists mainly of the salvage industry and the goodwill operations that have been skimming reusable goods from the waste stream for some time.

Landfills and solid waste incinerators have been absorbing the oversupply. However, landfill space is now becoming increasingly scarce and expensive, and this has added a new economic and environmental urgency to the need to reuse. Simultaneously, it has been reported that the demand for social services is increasing as well. Sources of financing for these social services are likewise feeling an increased demand, but government budgets are becoming increasingly strained. There is less money to fund new programs, and even the budgets of existing programs are in jeopardy. In these times of money shortage and material surplus, reuse makes an excellent community-development tool — addressing not just economics, but social and environmental problems as well.

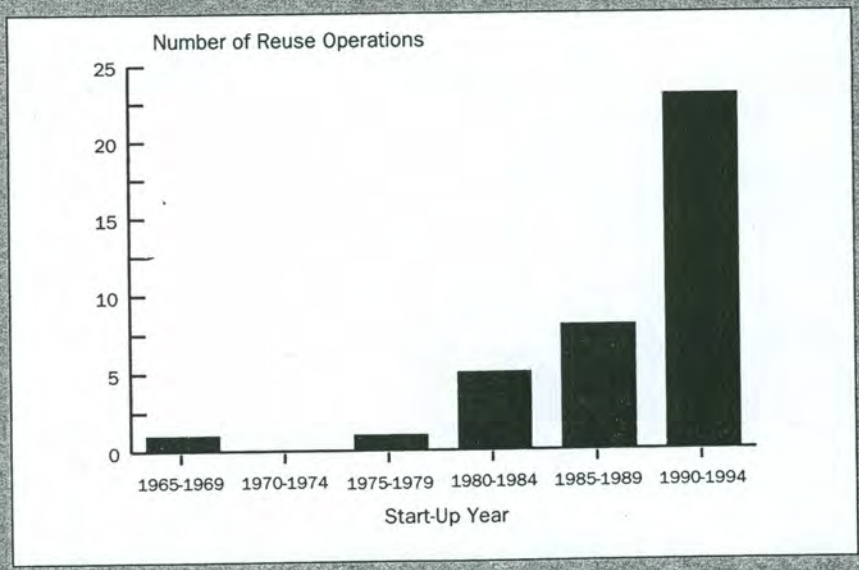
Figure 1 **Amount of Reusable Goods Discarded and Recovered in the U.S. Municipal Waste Stream, 1960-93**



Note: *Durable goods, in this case, include major and small appliances, furniture and furnishings, carpets and rugs, and miscellaneous durables.*
Source: *U.S. Environmental Protection Agency, Washington, DC, 1994.*

Although a few individuals and organizations saw these opportunities and started reuse operations in the years following World War II, reuse development was slow and sporadic until the mid-1980s. Since then, the concept has flourished. See Figure 2.

Figure 2 **Start-Up Year of 39 Surveyed Reuse Operations**



Note: *Figure based on responses of 39 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

EXISTING REUSE ORGANIZATIONS

Reuse, in various forms, has been practiced by a number of organizations for decades. Reuse has routinely occurred through shops that perform a maintenance, repair, rental, or re-manufacturing function, or that resell surplus or used goods. (Less formally, garage sales, flea markets, auctions, etc., also redistribute used items.) Many of these operations are small and locally owned, while others are large and maintain a national presence (e.g., Goodwill, Salvation Army).

However, reuse proper is not usually the true focus of these organization. It is rather the vehicle they use to raise money for their real mission, which is often to provide a social service. The reuse vehicle usually takes the form of a thrift store. Because their focus is not the conservation of resources, they are designed to handle and redistribute only a small percentage of the discarded materials that are potentially reusable.

A bit of an anomaly among socially-oriented organizations is Gifts in Kind America (GIKA), a national not-for-profit founded in 1983. GIKA solicits and redistributes new product donations rather than used goods. But this organization has recently added a program known as Recycle Technology, which distributes used-but-functional technological gifts, such as computers. The donated goods are used by member not-for-profit organizations that address such social needs as housing, health care, education, youth development, and emergency relief.

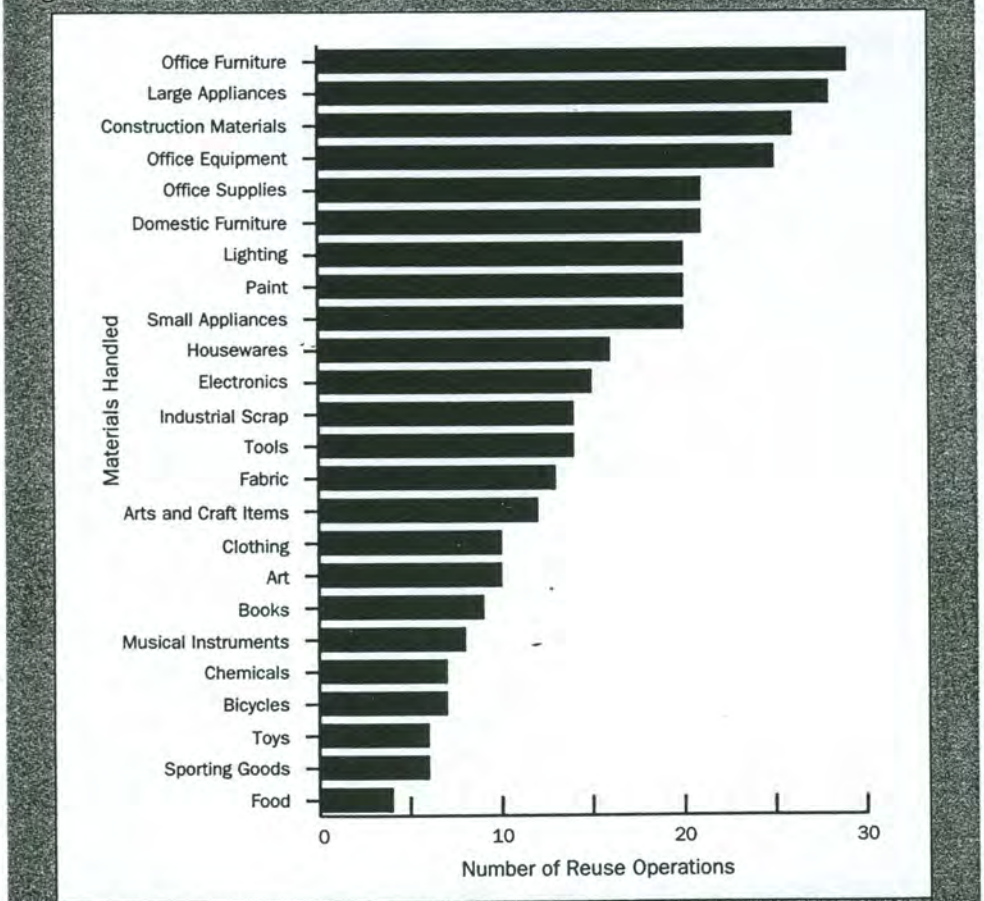
The most notable difference between the new generation of reuse operations is in their motivation for starting and running these organizations. Typically, the goals and objectives of the new operations are closely linked to the community, and an environmental and/or social mission guides their activities. They also tend to be more proactive about capturing and redistributing materials that would otherwise go to waste.

The older generation of reuse organizations — whether locally owned or nationally coordinated — will continue to play an important role in reuse, and will continue to serve their niches. The new generation of community-based operations can be expected to pick up where they leave off, filling the copious gaps.

RESULTS OF SURVEY STUDY

To gather the data presented here, the Institute for Local Self-Reliance surveyed 67 North American reuse operations of various types. The data proved rich in information about how the reuse organizations structure themselves, what processes they use to handle materials, and how they finance their efforts. The information contained herein is based solely on the partial responses of the 67 reuse operations surveyed. Because some operations failed to respond to some questions, the total number of responses varies with each question — this is noted in data figures and tables. Due to the fact that this information has not been independently verified, ILSR does not testify to its accuracy, nor can ILSR draw conclusions about the relative success of these operations. ILSR provides this data as an illustration of the universe of options available to those starting or running a reuse operation.

Figure 3 MATERIALS COMMONLY HANDLED BY REUSE OPERATIONS



Note: Figure based on responses of 40 reuse operations.
Source: Institute for Local Self-Reliance, 1995.

STRUCTURE OF REUSE OPERATIONS

The major considerations in planning a reuse operation include: which materials to target; whether to collect goods in a warehouse or simply act as a broker or listing service; whether to organize as a for-profit or not-for-profit; and whether to address a specialized niche of the reuse market. The following sections reports how the various survey respondents have dealt with these considerations.

Materials Targeted by Reuse Operations

The goal of reuse is to extend the useful life of materials or goods by diverting them from disposal. These materials fall into two categories. The first consists of new materials that have never been used, but are either unneeded, outdated, slightly damaged, or overstocked. The second category includes used materials that are no longer needed or wanted by their owners, but could still be used by others. For the purposes of this document, both categories are considered reuse.

Materials most commonly handled by reuse operations are furniture, appliances, construction materials, and office equipment. See Figure 3 for a breakdown of these and other materials handled by reuse operations.

Building Materials for Kitchens and Bathrooms at The Loading Dock.

Source: *Institute for Local Self-Reliance, 1995.*

An important consideration for any reuse operation is whether or not to deal with hazardous materials. When an operation decides to handle hazardous materials, many regulatory, health, safety, and liability issues come into play, and those issues will be different for each type of operation. A brokering or listing operation will have the least to be concerned about because exchanges will usually take place directly between the donor and recipient. By contrast, a warehouse operation must consider the dangers and regulatory ramifications of storing hazardous materials. If the operation offers pick-up or delivery services for donated material, it needs to consider the added complications of transporting hazardous materials.

For the purposes of this report, reuse will not include the repair and/or processing of the following items: refillable bottles, reusable shipping pallets, cloth diapers, automobile batteries, toner cartridges, video tapes, steel drums, and tires (retreading).

Warehouse vs. Brokering vs. Listing Services

There are three basic services that a reuse operation may provide to match wastes with wants: warehousing, brokering, and listing services. A warehousing service gathers used goods (via collection or drop-off) at a central location, where they are stored pending some manner of redistribution. A brokering service matches donors of unwanted goods directly with needy recipients. The goods are transported straight from the donor to the recipient, eliminating the need for warehousing. A listing service may be used in either arrangement. It is akin to a catalog of donated items. It is updated and circulated periodically, either via mail or an electronic database. Potential recipients search the listings, then contact the donor or listing service to make arrangements for any materials they want. Many reuse operations offer a combination of these basic services.

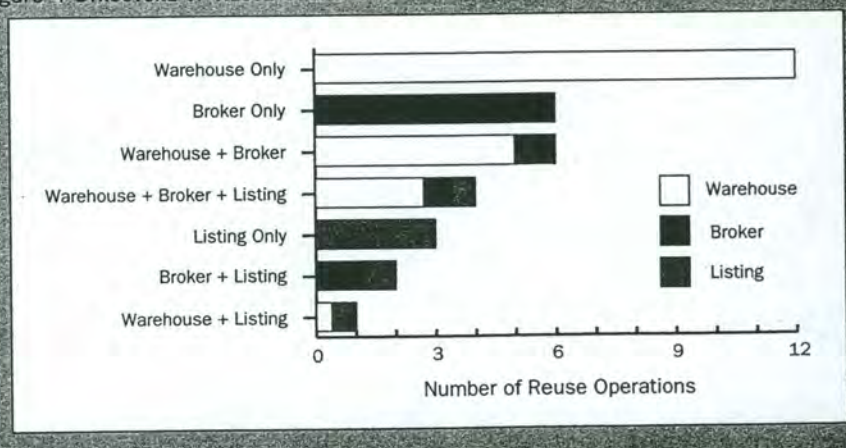
Thirty-nine survey respondents indicated that they participate at least minimally in the three structure areas, as follows: 25 operate at least one warehouse, 22 broker materials, and 17 publish a listing. See Figure 4.

Warehouse and Truck Parameters

Most reuse operations that warehouse materials have one warehouse. Most of those that have more than one within a given geographical area comment that they would prefer to have all of their warehouse operations under one roof. Warehouse sizes range from 300 to 300,000 square feet, with most falling between 10,000 and 40,000 square feet. Few reuse operations have or use outside storage areas, but of those that do, 10,000 to 20,000 square feet is the average size of the space. Important considerations besides overall space are ceiling height, loading docks, door sizes, number of floors and the presence of elevators.

Roughly twice as many reuse operations use trucks in some capacity as do not. Among the ones that use trucks to transport reusable materials, a fleet of just one or two trucks is the norm. On average, the reuse operations surveyed are open 260 days per year, and run one shift per day.

Figure 4 **Structure of Reuse Operations**



Note: *Figure based on responses of 34 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Brokering and Listing Services

Brokering and listing services (also known as material exchanges) enable materials to be exchanged directly between donors and recipients with varying levels of assistance from the operation. The majority publish a listing, and some have databases that can be searched via a distant computer. Increasingly common now are "industrial" waste exchanges, which facilitate the use of reusable wastes or leftovers among businesses. A list of all the exchanges known to exist as of September of 1994 can be found in an EPA document called Review of Industrial Waste Exchanges. See the bibliography for the full citation for this publication.

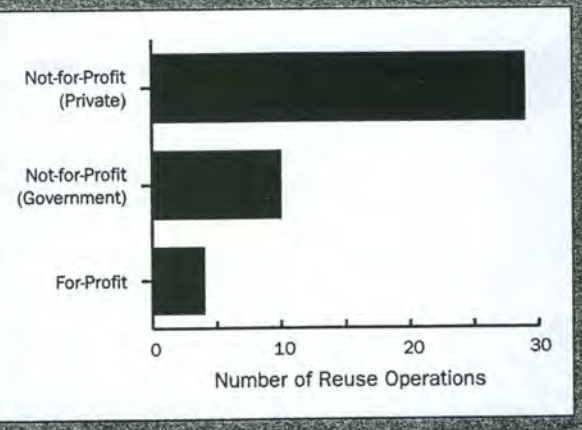
By virtue of its name, a brokering service plays an active role in each exchange. The staff of a brokering service act as intermediaries, knowledgeable about the donors' surpluses and the recipients' needs. Once a match is made, brokering service staff may coordinate the exchange by arranging transportation. Or a broker may simply provide the donor and recipient with each other's phone numbers, and let them work out the rest. A brokering service may have a small warehouse to store materials that cannot be exchanged immediately. Some degree of brokering services are offered by almost half of the reuse operations surveyed.

One-third of the survey respondents publish a listing of materials. Listing services usually produce lists of both the donations and the wants of businesses, individuals, or organizations. Recipients of the published listings must identify a match themselves and make all contacts and exchange arrangements. Listings are updated and circulated by these operations in periods ranging from once per week to once per year, but most are updated quarterly. Four operations publish their listings in an electronic format accessible by modem. The average number of recipients of a listings service is 5,000 businesses/organizations, with an average of 300 businesses "advertising" in each catalog. One-third of the survey respondents keep track of the exchanges made as a result of their listing and/or brokering services.

For-Profit vs. Not-for-Profit Orientations

Most reuse operations are not-for-profit organizations, although some highly successful for-profit ones do exist. Four out of 43 survey respondents were structured as for-profits. The remaining 39 fell into two categories of not-for-profits: There were 29 private and 10 government-affiliated not-for-profit reuse operations. See Figure 5.

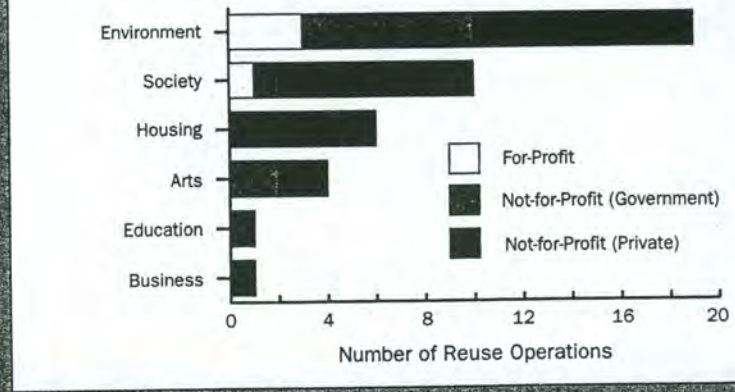
Figure 5 FOR-PROFIT/NOT-FOR-PROFIT STRUCTURE OF REUSE OPERATIONS



Note: Figure based on responses of 43 reuse operations.
Source: Institute for Local Self-Reliance, 1995.

The mission and the desire for self-sufficiency are two key considerations in the decision to be for-profit or not-for-profit. Self-sufficiency is the ability to earn an excess of revenues over expenses using a minimum of grant support. Figure 6 supplies a breakdown of the primary missions reported by 39 reuse operations.

Figure 6 PRIMARY MISSION OF EACH OPERATION



Note: Figure based on responses of 39 reuse operations.
Source: Institute for Local Self-Reliance, 1995.

Reuse Niches

As the reuse industry expands, some operations are targeting specialized segments of the market, known as niches. A niche may be defined by the materials that the operation handles, or by its particular donors, or by a special group of recipients — or a combination of these. Certain conditions encourage certain niches. A rich cultural environment might, for instance, invite an operation that targets reusable art supplies.

Individual reuse operations that share a niche are slowly beginning to join together and form networks. This cooperation can be expected to produce more efficiency, more information sharing, and the potential for business dealmaking. Ultimately, it may increase the total amount of waste diverted for reuse. The niches ILSR encountered in the survey data are described below.

Building Materials Niche

The building-materials niche is expanding rapidly to absorb the reusable portion of the tremendous waste stream generated by new construction, renovation work, and demolition. Some specialized operations have existed for some time, such as those that recover and sell antique materials salvaged from historic houses. The new operations that have formed over the past five years, however, are capturing a much wider range of materials.

Building Insulation and Carpet at The Loading Dock

Source: *Institute for Local Self-Reliance, 1995.*

According to a report by EarthWorks Environmental, at least 50 Canadian and 130 U.S. operations take some part in the capture, processing or resale of building materials. Of them, 33 are retail-type reuse operations like those treated in this report. Nineteen of them are in the U.S. and 14 are in Canada.[3]

This niche appears to be the most organized. A conference of North American building materials reuse operations was recently held in Canada as a first step towards unifying the industry.

Low-Income Housing Niche

A related niche is developing to promote the construction and renovation of affordable housing for low-income people. Numerous operations already inhabit this niche, including the successful Habitat for Humanity (HfH) ReStores. These stores are being set up by HfH affiliates around the United States and Canada as a source of revenue to fund building projects. Thus far, the ReStores have been established without coordination from HfH headquarters, and communication between the various affiliates has been limited and informal. But while they formed independently of each other, the basic purpose and structure of the operations has been generally consistent. Their purpose is to receive donated materials, and resell them at reduced prices to the general public and builders. The materials they deal in include appliances, cabinets and countertops, decor, blinds, rods, doors, electrical and lighting supplies, fans, flooring, carpet, furniture, hardware, lumber, plywood, siding, trim, and tools. As donations arrive, the affiliate may set aside any building materials useful to their own low-income building projects.

Existing ReStores have recently been inundated with requests from other HfH affiliates for assistance in the development of their own ReStores. Informal communication between existing ReStores about their shared experience has led them to the conclusion that a centralized source of information within the HfH organization is needed to coordinate the development of future ReStores. An effort is now underway to locate a central coordinator at HfH headquarters in Americus, Georgia, and to designate regional coordinators around North America who would be available to provide technical assistance in the development of new stores.

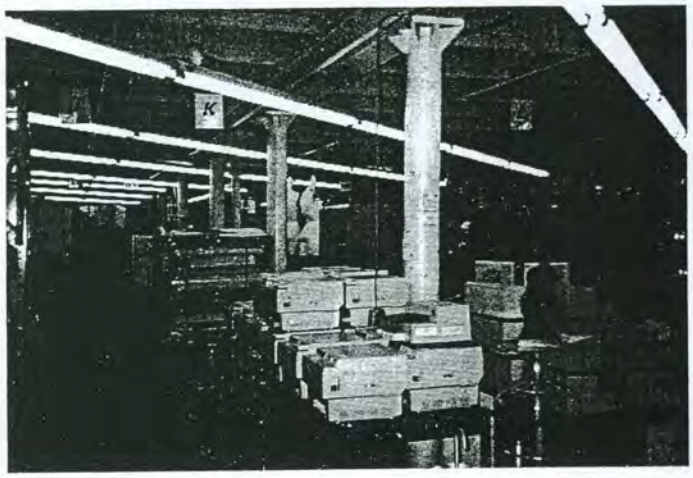
Arts Niche

Arts-related reuse operations take in graphic-arts supplies, musical instruments, computer equipment, office furniture, bolts of fabric, film and video equipment, lighting fixtures, and building materials that would otherwise go to the landfill. They redistribute them to not-for-profit arts and cultural organizations and programs. The major operations are known as Materials for the Arts, and are most prominent in New York City, Los Angeles, and Atlanta. But local arts councils in smaller communities are running similar programs as well.

PAINT AND LIGHTING AT MATERIALS FOR THE ARTS IN NEW YORK CITY

Source: *Institute for Local Self-Reliance, 1995.*

COMPUTER EQUIPMENT AT MATERIALS FOR THE ARTS IN NEW YORK CITY



Source: *Institute for Local Self-Reliance, 1995.*

Educational Niche

An educational niche is also emerging. In this niche, groups of enterprising educators and artists are reclaiming industrial discards and using them in the classroom. In the process, students learn about reclaiming, recycling, and reusing materials that are conventionally viewed as waste, and they put their creativity to work finding ways to incorporate the materials in their arts and crafts projects. The Institute for Self-Active Education has developed a particularly successful program known as the National Schools Recycle Center Network.[4] The network started as a recycling program in the Boston Public Schools. Currently, affiliate programs are operating in St. Louis, Albuquerque, and Chicago, as well as in cities in Rhode Island, Florida and California.

Computer Niche

Reuse operations that make up the computer niche collect computers, parts, and related equipment that their owners no longer want. In some of these operations, rehabilitation of the computers plays a major role. Many cities and communities across the country are benefiting from these locally-initiated operations, but, to date, little communication or coordination has occurred between the disparate operations.

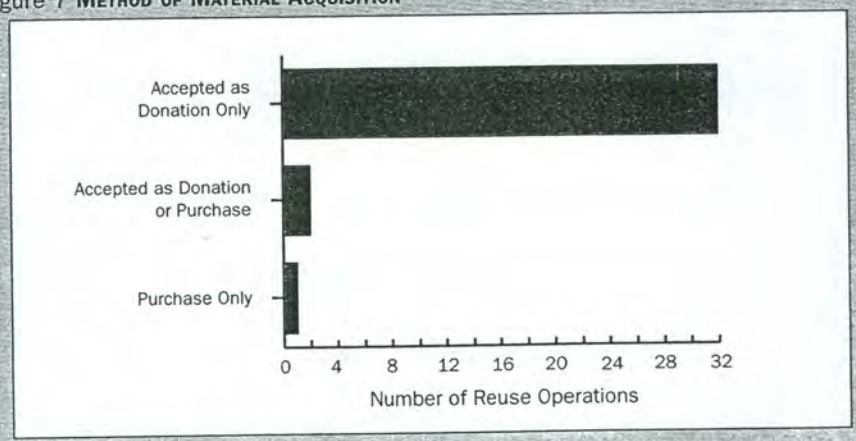
PROCESSES OF REUSE OPERATIONS

Reuse centers face some basic questions regarding their day-to-day operations. These include: how to control the flow of materials; how to staff the center; how much to computerize; and how to market their services. The ways in which survey respondents handled these questions are discussed in the following sections.

Methods of Controlling Flow of Materials

Of the 35 reuse operations that discussed their handling of incoming materials, all but three accept them as donations. (Of those three, two both accept donations and pay for materials, and the third always pays for incoming materials.) Twenty-four operations pick up materials from donors, and only a few charge a fee for that service. Figure 7 illustrates the handling of incoming materials.

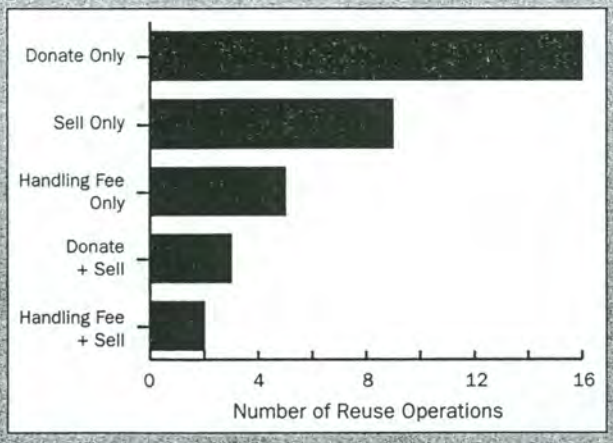
Figure 7 METHOD OF MATERIAL ACQUISITION



Note: *Figure based on responses of 35 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Only ten operations deliver outgoing materials to their recipients, and half charge a delivery fee. Figure 8 illustrates the handling of outgoing materials.

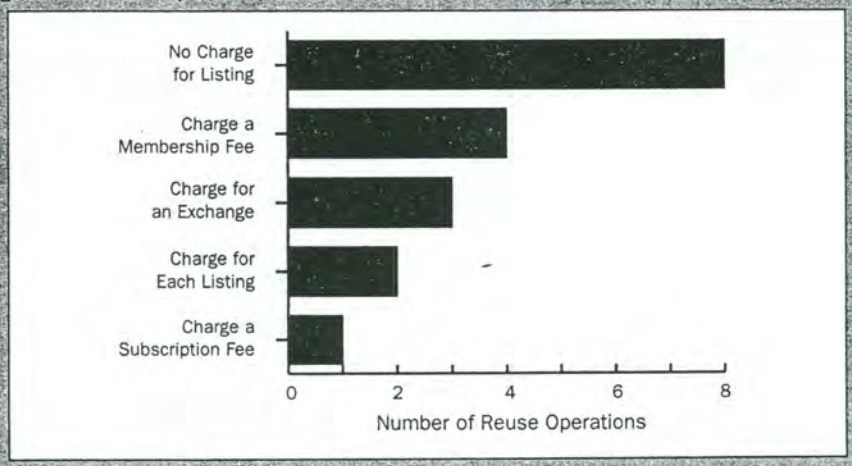
Figure 8 **Method of Material Distribution**



Note: *Figure based on responses of 35 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

As for brokering and listing services, some reuse operations charge some type of fee for the service, while others do not. This seems to depend on the amount of income generated in other aspects of the operation, or on the amount of outside funding the operation receives. The relative popularity of the various fee structures is illustrated in Figure 9.

Figure 9 **Brokering/Listing Exchange Fee Structures**

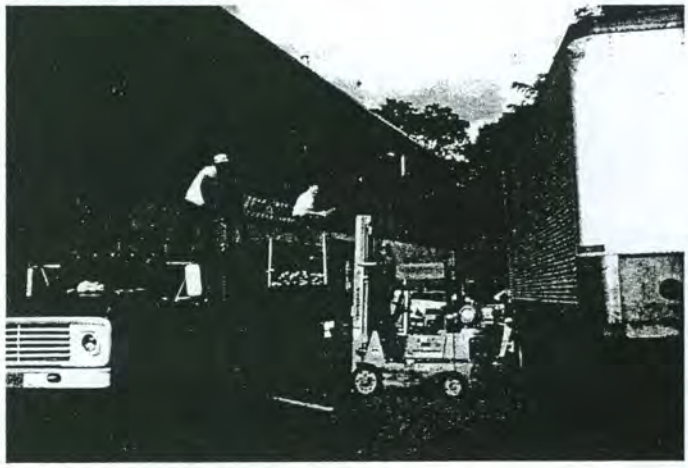


Note: *Figure based on responses of 18 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Employment Practices

Any new industry will create some direct and indirect employment in the community, but the job-creation potential of a reuse organization depends on its structure and mission. A simple brokering or listing service, for instance, may require only one part-time employee, with some indirect support from the local printing industry. A warehouse operation, on the other hand, perhaps with a pick-up and delivery component, requires more staff, both skilled and unskilled. A warehouse component may also provide a setting for training unskilled or hard-to-employ workers, and to provide transferable skills.

Employees Load Building Materials on a Truck at the Loading Dock

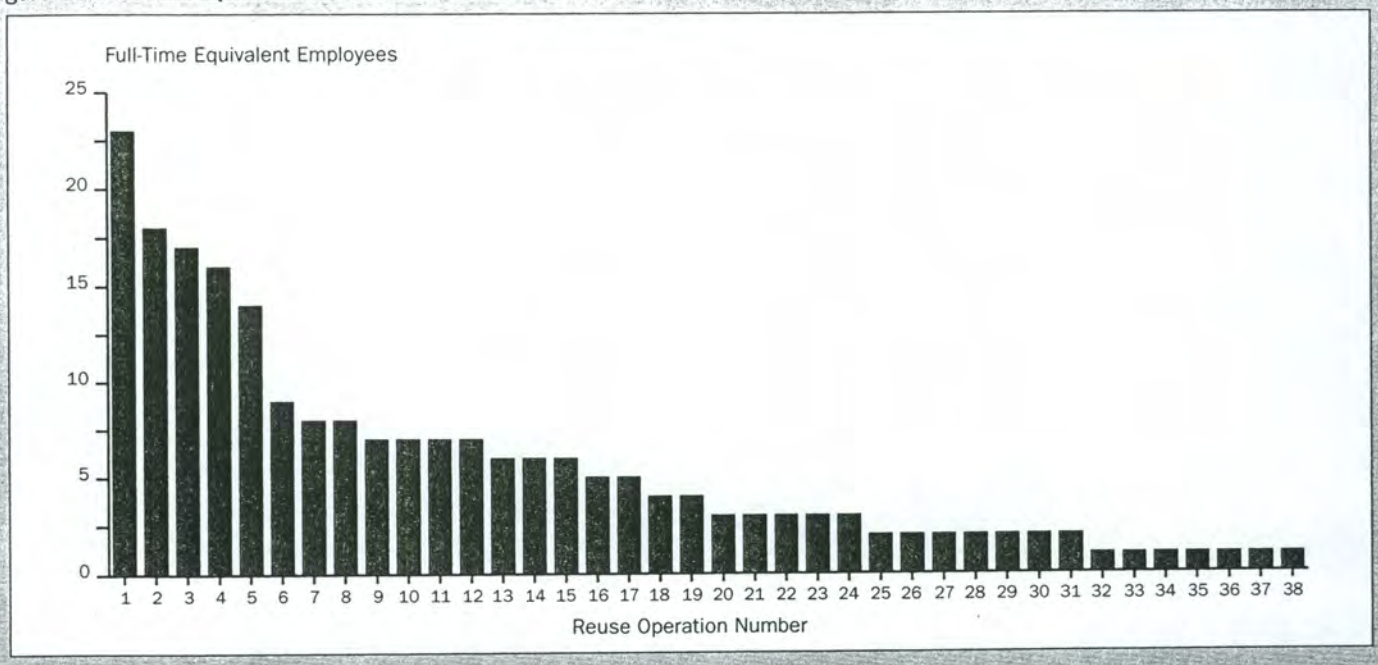


Source: *Institute for Local Self-Reliance, 1995.*

Employees

On average, the respondents to this survey employ the full-time equivalent of five people, and most employ between one and seven. (See Figure 10.) They employ a combination of skilled and unskilled laborers, paying an average wage, according to the 18 operations that responded to the question, of $9.75 an hour.

Figure 10 **Full-Time-Equivalent Employees of Reuse Operations**

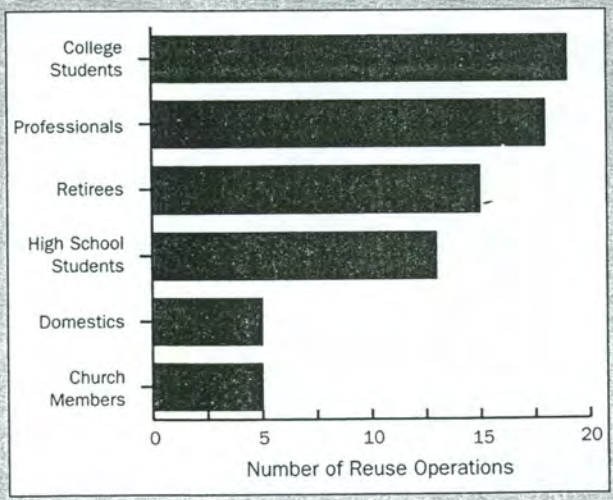


Note: *Figure based on responses of 38 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Volunteers

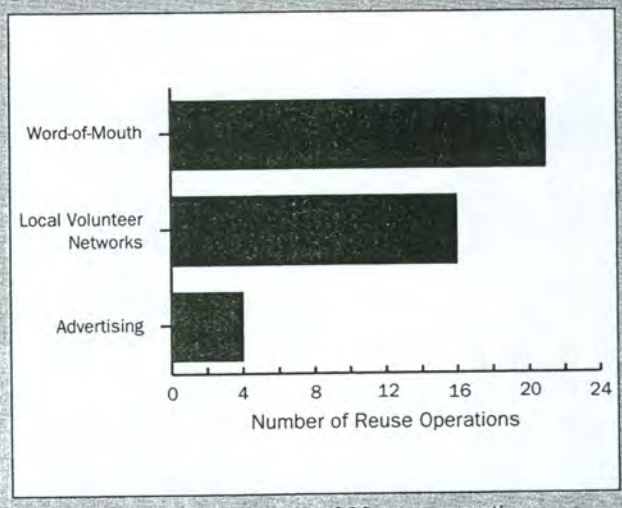
Volunteers from a variety of sources often supplement the paid staff at reuse operations, particularly in those running a warehouse. The most common backgrounds of volunteers are students, professionals, and retirees, as depicted in Figure 11. Volunteers are integral to the success of many of the not-for-profit reuse operations, and are commonly obtained through word-of-mouth. The other methods of soliciting volunteers are represented in Figure 12.

Figure 11 **Sources of Volunteers**



Note: *Figure based on responses of 24 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Figure 12 **Methods of Obtaining Volunteers**

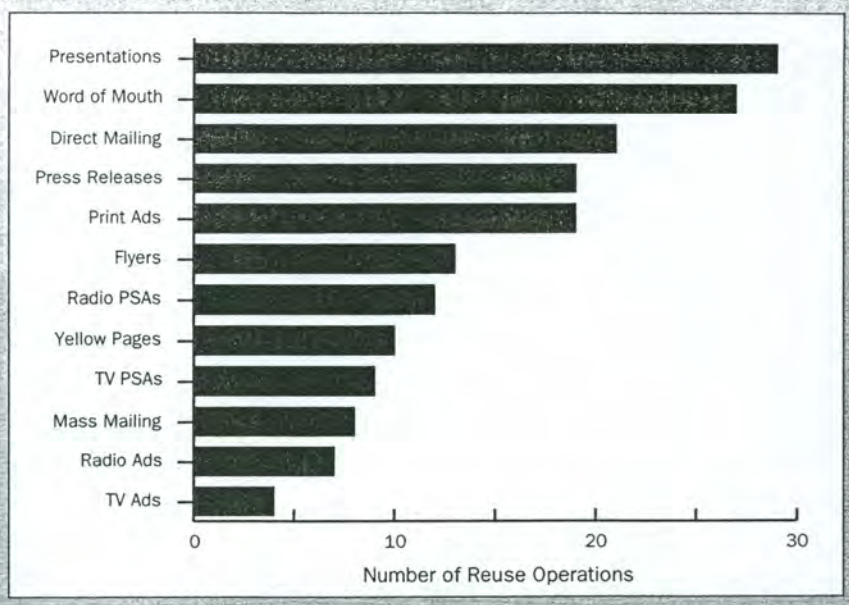


Note: *Figure based on responses of 26 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Job Training

Although reuse operations seem like an excellent opportunity to provide job training to citizens of a community, in reality, job training requires considerable staff time and money. Unfortunately, many operations are short on funds, especially in their early years, and thus few report offering any kind of formalized job training besides on-the-job training. In fact, survey respondents often noted that they lack adequate paid staff as it is, necessitating that all staff be up to speed and efficient in their duties. When an operation is well staffed and funded, the chances for the development and survival of a job-training program increase.

Figure 14 **Successful Advertising Strategies Employed by Reuse Operations**



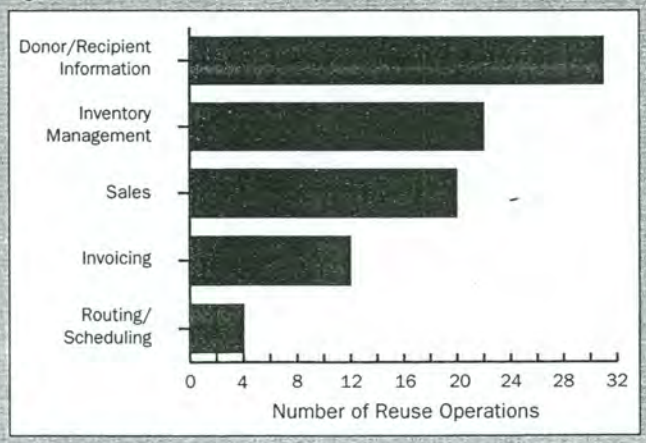
Note: *Figure based on responses of 38 reuse operations.*
PSA: *Public Service Announcement.*
Source: *Institute for Local Self-Reliance, 1995.*

Computerization

Computerization can lend a great deal of efficiency to a reuse operation, although choosing the right software for each task is critical. In particular, computerization holds the promise of catalyzing a national network of reuse organizations. There is much information to be shared in the reuse business — not least of all, inventories of available materials.

All the surveyed operations expressed the desire to computerize at least some aspects of their operation, and 37 indicated they already use computers. The most frequently reported use of computers was for storing information about donors and recipients. Six of the respondents use Macintosh systems, while 27 use DOS. Figure 13 depicts other reported uses of computerization, too.

Figure 13 **Computerized Operations at Reuse Operations**



Note: *Figure based on responses of 38 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Beyond routine computerization, a reuse operation with a warehousing component can vastly increase its efficiency by investing in a bar-coding system. This allows materials to be tracked through each stage of the system. The major drawback to a bar-coding system is its initial expense. But once purchased, the benefits are far-reaching. A bar-coding system makes immediately available such information as what is in inventory, how long each item has been in storage, which materials move quickly, and which languish for longer periods. This can be invaluable in the day-to-day workings of a warehouse, and for long-term planning as well.

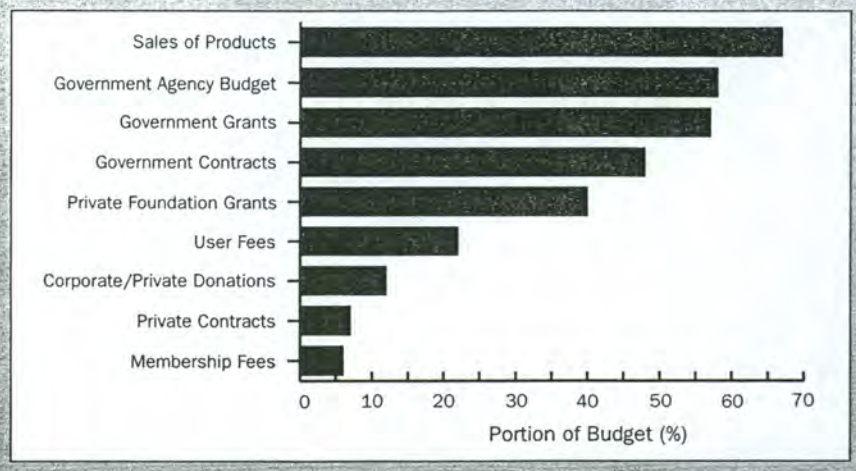
Advertising Methods

The structure of an operation will influence the methods of advertising its services. The survey listed 12 advertising methods and asked reuse operators to identify those that worked well for them. The following five were used frequently and reported to be effective: presentations, word-of-mouth, direct mailings, press releases, and print ads. Figure 14 ranks the reported effectiveness of all the advertising strategies. The cost-effectiveness of these advertising methods is not considered in this study.

FINANCING REUSE OPERATIONS

The need for financing may arise in many forms — as capital requirements for start-up or expansion, or as working capital to cover operating expenses. Preparation of a professional business plan is an essential first step in the quest for funding, and the issues raised in this report should aid in the development of a sound plan.[5]

Figure 16 **Portion of Average Budget Met by Sources of Income/Funding**



Note: *Figure based on responses of 33 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Generally, the not-for-profits respondents report that they are unable to wholly achieve their mission because securing consistent funds to maintain or expand their operations is so difficult. Most government-affiliated, or "public" not-for-profits depend on city funding, which is evaporating nationwide, leaving them in a precarious position. Private not-for-profits also depend largely on inconsistent sources of funding, such as foundation and government grants. A few not-for-profits and all of the for-profits surveyed seem to be successful in bringing in at least enough revenue to cover costs and remain self-sufficient.[6]

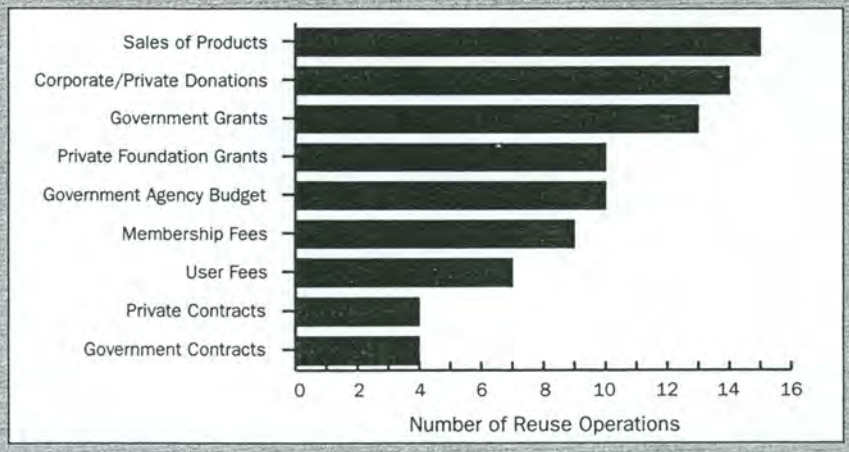
Sources of Income and Funding

Reuse operations can meet some needs with income they generate themselves, from such sources as sales of products, membership fees, user fees, private contracts, and government contracts. For outside funding, these organizations generally look to corporate and private donations, government and private foundation grants, and government agency budgets. Figure 15 shows the frequency with which 33 reuse operations use the various sources.

Note that the popularity of any given fund-raising mechanism should not imply that the mechanism is especially lucrative. Most operations patch together dollars from a variety of sources. Contrast Figure 15 with Figure 16 to see how each fundraising activity actually pays off in the budget of those operations that subscribe to it. For example, Figure 15 shows that 14 of the 33 respondents seek corporate or private donations; but Figure 16 shows that for those 14 respondents, corporate and private donations contribute less than 15 percent of their budgets, on average.

On the opposite trend, those who are funded through government agency budgets are few — 10, according to Figure 15; but Figure 16 shows that those 10 operations get an average of 60 percent of their funding from that one source. Thus it becomes evident that the few operations using government-budget money depend on it for a hefty slice of their budget. Likewise, operations that cited "Government Contracts" as a source of income depend heavily on it, although they, too, are few in number.

Figure 15 **Sources of Income and Funding**

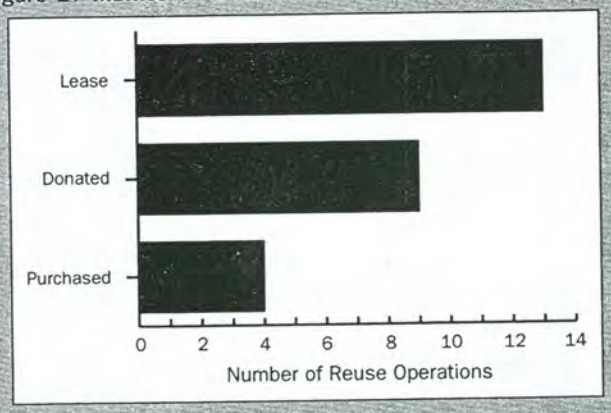


Note: *Figure based on responses of 33 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Warehouse and Truck Acquisition

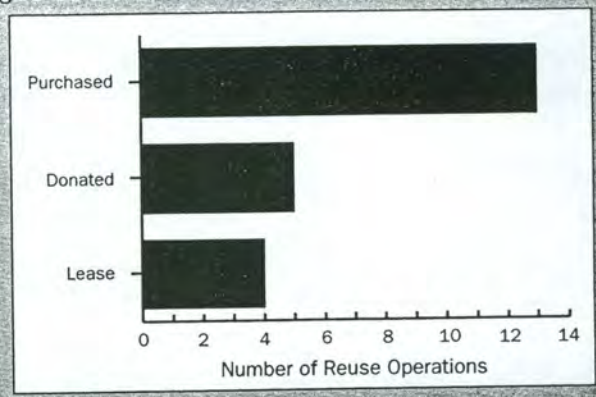
Securing capital for real estate and operating expenses is one of the highest hurdles for a start-up operation to clear. This is especially true for an endeavor that requires warehouse space and trucks. The ideal way to acquire space, trucks, or capital is as a donation, although purchasing is preferable to leasing. (Leasing leaves a reuse operation vulnerable to lease termination, which could leave the operation homeless or without means to transport materials.) The methods that survey respondents used to procure warehouses and trucks are shown in Figures 17 and 18.

Figure 17 **Method of Warehouse Acquisition**



Note: *Figure based on responses of 26 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Figure 18 **Method of Truck Acquisition**



Note: *Figure based on responses of 22 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Analysis and Conclusions of Survey Study

Reuse operations benefit the communities in which they are located economically, environmentally, and socially. Recipients of these benefits include the general public, the disadvantaged, government, and business. If these benefits are to be realized, reuse operations must be run efficiently, and the value of their impact on their communities must be measured and promoted. Presented in these final pages is an analysis of the choices an operation must consider in its pursuit of efficiency and success. A discussion of design considerations will be followed by a look at the community-development opportunities that await the expanding field of reuse, as well as a weighing of the obstacles.

In this analysis, ILSR draws conclusions from the survey data and its 21 years of experience in working with recycling and reuse operations to promote community development.

CONSIDERATIONS FOR THE DESIGN OF REUSE OPERATIONS

Mission

A clear understanding of mission from the outset will smooth the critical process of designing a successful program. Nearly half of the reuse operations that responded to the survey name environmental protection as their primary mission. Other stated missions are: community development, housing, arts, education, and business development. Clarity of mission allows the next design steps to be taken efficiently.

For-Profit vs. Not-for-Profit Status

With a clearly stated mission in hand, a reuse entrepreneur can settle the question of for-profit or not-for-profit status. The primary mission of a for-profit business is to make a profit (although it may have secondary goals), while the mission of a not-for-profit is typically to promote a cause (e.g., adequate low-income housing).

Depending on its mission, a not-for-profit may decide to seek subsidies from outside funders, like private foundations, government entities, and individuals. For example, if a not-for-profit's mission is to provide no-cost furniture to low-income residents of public housing, then it may decide to be subsidized. (For-profits typically cannot depend on subsidy.) Not-for-profits may also decide to charge fees (e.g., membership fees) or sell services (e.g., material pick-up with trucks) at a rate calculated to cover all their other expenses. It is critical to determine ahead of time, however, whether the community will pay the fees or buy services in adequate quantity to generate sufficient income.

Design Trade-Offs

The decision of whether to provide a warehouse service or rely on brokering and listing services to move materials is a big one. In cases where the donor wants to be rid of used or surplus materials quickly, a warehouse can provide the broker or listing service with the time that is often necessary to locate a suitable recipient. A warehouse may make the difference between putting reusable materials back in service, and watching the donor grow impatient and dispose of them.

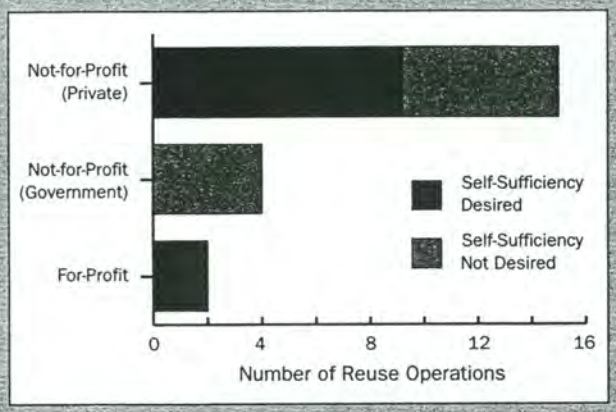
On the other hand, a warehouse operation generally requires the greatest amount of capital to start and operate. Financing a large warehouse and the staff it requires may be a challenging prospect for a not-for-profit operation that wants to concentrate all its energies on redistributing goods to needy individuals or organizations. The challenge may arise from serving a sector of the population that cannot pay full price for these services.

In contrast, a brokering service usually requires less capital than a warehouse operation, but more than a listing service (when comparing operations that redistribute similar quantities of materials). A listing service may require as little as one part-time person who adds and deletes listings from a catalog that is distributed periodically. For the socially motivated not-for-profit that prefers a simple operation with low overhead, a brokering or listing service might be satisfactory.

Self-Sufficiency

Financial self-sufficiency is an enticing goal for any not-for-profit operation that wants maximum control over its destiny and its ability to deliver services. Half of the respondents to the survey expressed interest in achieving self-sufficiency by becoming independent of outside, annual funding sources. (Self sufficiency should, by definition, be the goal of all for-profit operations.) See Figure 19.

Figure 19 **Goal of Self-Sufficiency**



Note: *Figure based on responses of 21 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Public, not-for-profit operations are funded through government budget appropriations. The local government is most often the supporter of a reuse operation, although state and federal grants are not uncommon. Although the government is paying for the reuse operation, it could not afford to invest the money there if it were not receiving some form of return (not necessarily direct financial return) for its community. For example, a city pays for the pick-up, transfer, and disposal of wastes. But a reuse operation removes a certain volume of materials from the waste stream. So if funding a reuse operation costs less than disposing of an equivalent volume of waste, the city will save money by supporting reuse. Government funding reduces the need to actively seek other outside funding, freeing staff to focus their time on the mission.

On the other hand, government budget limitations can deny a reuse operation the opportunity to expand, and the current trend of budget cutbacks present an increasing threat even to existing programs. These factors are good arguments for financial self-sufficiency.

Even less secure are the private not-for-profit operations, which must continuously stitch together bits of funding from a variety of sources until self-sufficiency is achieved. This can take a great deal of time. Furthermore, a reuse operation with only a few sources of funding runs the risk of collapsing if one or more of the sources unexpectedly fails.

But self-sufficiency has its price, too. Both for-profit and not-for-profit operations may have a difficult time carrying out a social-service mission while trying to reach self-sufficiency. The mission of a social service organization is often to provide services or products to those who need them most, at low or no cost. Therefore, raising the prices it charges recipients runs counter to the goal. A reuse organization may be able to approach self-sufficiency by charging donors a fee, however. This is not unreasonable so long as the fee is comparable or less than the alternative the donor would face — usually paying to dispose of the material as waste. Regardless of the approach taken, the issues of pricing and subsidy are conscious strategic choices that must be addressed in the business plan.

Design Parameters

Once the mission, profit status, and funding decisions are tentatively settled, many decisions remain: location of the operation, materials to be targeted, target donors and recipients, financing options, and structure (i.e., warehouse, brokering, listing, or some combination). Table 1 lists reported expense ranges and estimates in several business-planning ratios.

Sales revenue is a key parameter for conventional business planning. However, for the many reuse operations that charge only a handling fee or donate their products to "customers," a substitute parameter is required. Often this is "fair market value." Fair market value is the donor's estimate of what his or her donated item is worth on the open market. Therefore, reuse operations often track the fair market value of the materials they handle in a year. Among the 14 operations responding to the survey, this averaged approximately $700,000. Like sales revenue, the annual fair market value of materials an operation handles can be used to enhance planning. See Table 1.

Reuse operations have low annual operating costs, relative to many other businesses. Of the 19 operations that responded to the survey, one reported $5,000, while the average was $210,000. This translates to $980 in operating costs per ton of material handled, and $20 per square foot of warehouse space. The average number of tons handled by 13 respondents was 1,000 per year. See Table 1.

Table 1 **Business Planning Ratios for Reuse Operations**

	Reported Range		Estimated Average	Survey Size
	Low	High		
Annual Fair Market Value of Mtls. Handled/Reuse Op.	$25,000	$2,500,000	$700,000	14
Annual Fair Market Value/Sq.Ft. of Warehouse	$13	$100	$50	11
Annual Fair Market Value/FTE Employee	$15,000	$275,000	$71,000	13
Fair Market Value/Days of Op.	$120	$9,615	$2,900	12
Fair Market Value/Days of Op./Sq.Ft. of Warehouse	$0.05	$0.85	$0.32	11
Annual Operating Costs/Reuse Op.	$5,000	$708,000	$210,000	19
Operating Costs/Ton	$71	$2,500	$980	9
Annual Operating Costs/Sq.Ft. of Warehouse	$1	$35	$20	11
Capital Costs: Initial/Reuse Op.	$100	$850,000	$95,000	12
Major Modifications/Reuse Op.	$2,000	$200,000	$58,000	7
Total Capital Costs/Ton per Year Capacity	$10	$1,875	$580	6
Total Capital Costs/Square Foot of Warehouse	$1	$20	$6	9
Direct FTE Employees/Reuse Op.	1	23	5	36
Direct + Indirect FTE Employees/Reuse Op.	2	46	10	NA
Annual Quantity of Mtls. Handled (tons)/Reuse Op.	10	7,000	1,000	13

FTE: *Full-Time-Equivalent.*

NA: *Not applicable.*

Note: *Outliers were excluded from the data in this table. A number of variables will affect the values of the ratios. Different reuse operations deal with differing sets of materials. Each material or composition of materials will have a different fair market value. Geographic location, whether urban or rural, will affect many business decisions, including operating costs and supply of and demand for materials. Therefore, when directly comparing one operation to another, it is helpful to identify operations that deal in similar materials and work in similar geographical areas. These variable factors were not taken into account in the general analysis presented herein and are partly responsible for the wide ranges in the data.*

Source: *Institute for Local Self-Reliance, 1995.*

Capital costs vary greatly, as discussed above. However, many operations have begun with a $100,000 investment. Nine survey respondents reported an average of $6 in capital costs per square foot of warehouse space. See Table 1.

There is no one "ideal" or "right" design or approach to starting and running a reuse operation. Each element in the universe of options presented in this study can be considered for its potential role. Readers who would like to discuss these options further can search the Appendix for an existing reuse operation that is appropriate to their interests.

COMMUNITY BENEFITS OF REUSE OPERATIONS

Three types of parties benefit from a reuse operation's activities: (1) recipients of goods, (2) donors of goods, and (3) those who typically benefit from the operation of local businesses: the surrounding community, employees, other businesses that interact with the business in question, and the government, via taxation. Table 2 gives an indication of the financial benefits enjoyed by donors and recipients, with reported ranges and estimated averages drawn from the survey data.

Generally, businesses donate more than they receive. The general public and government receive about as many goods as they donate. The not-for-profit organizations receive the excess.

Recipient Benefits

Reusable goods often are directed to low-income people, public-interest entities, and government agencies who pay a small fee or nothing for them. Recipients therefore save money they would otherwise have had to spend on new, full-price goods. This avoided purchasing cost averaged $250 per ton of goods handled by seven responding reuse operations. Annually, the reuse organizations delivered an average of $250,000 in avoided purchase costs for their recipients. See Table 2.

Table 2 **Recipient and Donor Benefits of Reuse Operations**

	Reported Range		Estimated Average	Survey Size
	Low	High		
Recipients of Goods from Reuse Operations				
Avoided Purchasing Costs/Ton	$24	$769	$250	7
Annual Avoided Purchasing Costs/Reuse Operation	$3,000	$1,000,000	$250,000	11
Donors of Goods to Reuse Operations				
Avoided Disposal Costs/Ton	$57	$750	$250	6
Annual Avoided Disposal Costs/Reuse Operation	$7,500	$100,000	$63,000	5
Fair Market Value/Ton	$80	$5,000	$1,900	9

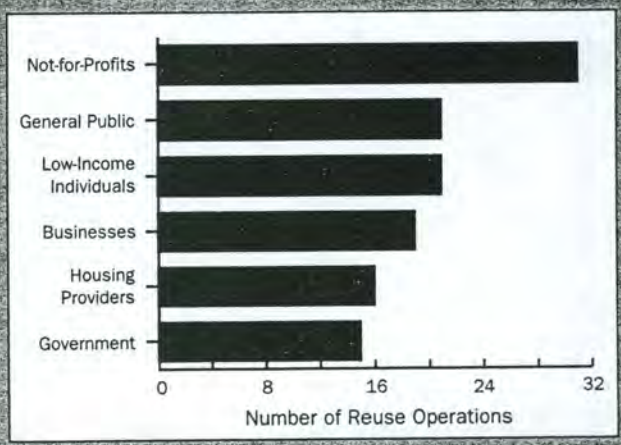
Note: *Outliers were excluded from the data in this table. A number of variables will affect the values in this table. Different reuse operations deal with differing sets of materials. Each material or composition of materials will have a different fair market value. Geographic location, whether urban or rural, will affect many business decisions including operating costs and supply and demand of materials. Therefore, when directly comparing one operation to another, it is helpful to identify operations that deal in similar materials and work in similar geographical areas. These variable factors were not taken into account in the general analysis presented herein and are partly responsible for the wide ranges in the data.*

Source: *Institute for Local Self-Reliance, 1995.*

A Recipient of Reusable Goods at The Loading Dock

Source: *Institute for Local Self-Reliance, 1995.*

Figure 20 **Recipients of Outgoing Materials from Reuse Operations**



Note: *Figure based on responses of 33 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

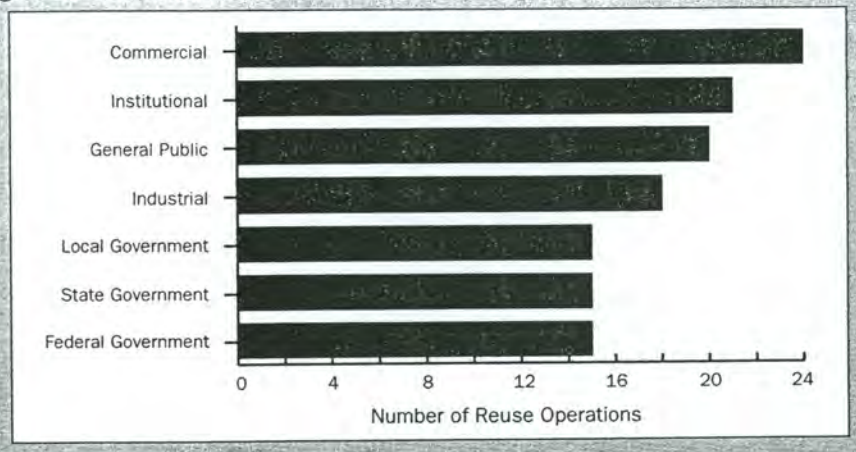
Materials distributed by the surveyed reuse operations go predominantly to not-for-profit organizations, while low-income individuals, the general public, businesses, and government also receive materials. Figure 20 illustrates these trends.

Donor Benefits

Reuse operations receive materials from a variety of sources, including businesses, institutions, the general public, and government agencies. Figure 21 illustrates these trends.

Donors commonly benefit from avoided disposal costs, tax write-offs, and positive public relations. The cost of sending "garbage" to the landfill or incinerator has increased dramatically over the past decade, figuring significantly in the typical corporation's bottom line. Whenever a disposal cost can be avoided, a savings will be realized. Four reuse operations reported that their donors avoided an average disposal cost of $100 per ton of donated goods, although this figure varies with geographic location and calculation method. On an annual basis, the surveyed respondents reported that average avoided-disposal savings in the range of $7,500 to $100,000. See Table 2.

Figure 21 **Sources of Materials Coming into Reuse Operations**



Note: *Figure based on responses of 25 reuse operations.*
Source: *Institute for Local Self-Reliance, 1995.*

Furthermore, most donations made to not-for-profit reuse operations are tax-deductible, generating a direct federal-tax savings for the donor. The amount of the deduction is based on the fair market value (the price the goods would bring on the open market) of the items at the time of the donation. A donor will usually provide his/her best assessment of the fair market value along with a donation. Nine reuse operations reported a range of $80 to $5,000 of fair market value for each ton of goods handled. The wide range of responses corresponds to the range in value of materials (e.g., lumber versus computers) handled by reuse operations serving disparate niches. See Table 2.

General Community Benefits

The community reaps a number of benefits from hosting a reuse organization. First, local people are employed at decent wages (see "Employment Practices" section). One reuse operation reports employing 23 people per year. Further employment is generated indirectly, in the entities that do business with reuse operations. In fact, for every person working at a reuse operation, approximately one more is employed indirectly. These indirect jobs include food services, cleaning and maintenance, administrative services, and many others types.[7] See Table 1.

Second, businesses — reuse operations included — are a vital link in circulating money through local economies. The capital costs of starting or expanding an operation vary greatly, but both can be expected to pump money into the local economy through the rental or direct purchase of warehouse space, equipment, materials, and services. Six survey respondents reported spending between $10 and $1,875 in capital outlay for every ton-per-year of materials they handle. Operating costs of a reuse operation may also provide a flow of cash through the community. Nine survey respondents reported an average of nearly $1,000 in operating costs for each ton of material handled.

Social services are often a third major benefit for communities, depending on the operation's structure and mission. A few examples: A social service organization may run a for-profit reuse operation, using the profits to support its social service mission in the community. An operation may offer a direct social service by employing and training low-skilled or unskilled people, or people who are homeless, on welfare, or at risk in some other way. And a reuse operation with an environmental mission may provide an affordable supply of high-quality goods to needy individuals and organizations that could not otherwise afford them.

Finally, all reuse operations by their nature benefit the environment. Materials and goods whose useful lives have not been fully exhausted are diverted from the landfill, saving space for the unrecoverable portions of the waste stream. Reuse also reduces the need for the production of new products, averting the extraction, processing, and transportation of additional natural resources. The land and habitat destruction and pollution that result from new production are all avoided when an item is reused.

CONSIDERATIONS FOR THE FUTURE EXPANSION OF REUSE

As shown in Figure 2, the proliferation of reuse operations in North America is accelerating, and many operators say their projects have barely scratched the surface of opportunity. See Figure 1. Growth will continue in the reuse field, producing rich opportunities for community development. However, certain barriers and weaknesses must be overcome.

Barriers Limiting the Immediate Success of Reuse Operations

A reuse operation shares many concerns with a small or medium-size business. The right location, access to sufficient capital or funding, good public relations, and quality employees are all important to the success of a venture. When survey respondents were asked to comment on the internal weaknesses and outside obstacles they have encountered, many mentioned shortages of capital, warehouse space, staff, and knowledge of other charities. Many also noted the general difficulty of business development, especially regarding financing and fundraising. An underdeveloped board of directors led to many problems for one operation. With another, a rural location limited demand for its materials.

Reuse operations that are run as a supplemental program to a larger organization also commented on problems caused by conflicts between the parent organization's mission and the reuse operation's. Evidently, this is especially common with not-for-profit operations funded and/or run by a branch of the local government. Association with a slow-moving government bureaucracy imposes heavy time burdens for those seeking general or financial support. Furthermore, some government agencies labor under laws that require their surplus materials to be auctioned, rather than donated. Thus an agency that lacks the time or inclination to hold an auction may simply dispose of the materials.

These barriers and weaknesses need only be temporary. Networking among similar reuse operations that may have encountered and solved similar problems can be very productive. Plain old persistence, according to respondents, can — and in most existing operations, has — surmounted remaining hurdles.

Liability Issues

Liability is a concern for some donors of materials, particularly businesses. This is particularly true in the case of hazardous materials such as paints and other chemicals with which a recipient might have a mishap. A donor who does not feel protected against being sued will either not donate materials at all, or may withhold donations that he/she perceive as risky. State-level passage of some form of "Good Samaritan" liability legislation would protect donors, and reduce the impact of this barrier. Consequently, the quantity of donations might increase, diverting more materials from disposal.[8]

Need for Improved Information Exchange

Those reuse operations now in business report that they are fielding an ever-growing number of inquiries from individuals and organizations interested in starting reuse projects. The better-known reuse operations have been so overwhelmed with calls that they have designated special staff to provide technical assistance, adopting that as part of their mission.

But existing operations could also use a more formal network among themselves, so that each would not have to reinvent the wheel when a problem arises. For instance, an operation that is computerizing its warehouse inventory ought to be able to get quick and easy feedback from peers on what software works best. The efficiency of the whole industry stands to improve with the formation a formalized national network.

Organizing Efforts Within the Reuse Industry

As a result of this exploding interest in reuse, efforts to organize and unite reuse operations are occurring on many levels. The most comprehensive step in this direction came out of the Conference on Reuse sponsored by Chemical Bank in New York City in February, 1995. Attendees, hailing predominantly from reuse operations in the northeastern United States, agreed that the time is right to form an industry trade association. People from a few of the larger and longer-running operations formed a steering committee to lead this effort, and are talking and meeting regularly.[9] This not-for-profit association is tentatively named the North American Reuse Association (NARA), and membership will likely include both U.S. and Canadian operations. The association will provide its members with a way to exchange information on materials and methods, and will also represent the industry's interests before legislatures and regulators. The committee is working on a mission statement, organizational form, networking system, and other facets of set-up. Membership will be open to all organizations whose primary business is the recovery and redistribution of any sort of unwanted materials without significant reprocessing. Individuals, consultants, and governmental oversight staff will be welcomed as associate members, but only operators will be eligible for full membership.

As the Conference on Reuse got underway, a group of North American building-materials reuse operations was holding a similar gathering in Winnipeg, coordinated by Environment Canada. Discussions there also led to the decision to form an industry trade association, but one specifically for building materials reuse, to be known as the Used Building Material Industry Association (UBMIA).[10] The proposed association would represent U.S. and Canadian com-

panies, both for-profit and not-for-profit, that gather and redistribute used building materials.

Organizers from both NARA and the proposed UBMIA have had one telephone conference to discuss a possible merger, but have tentatively decided against it. The primary reason is that the UBMIA group wishes to retain a tight focus on building materials. A UBMIA conference is tentatively scheduled for September 1996.[11]

Outside the building-materials niche, other specialized operations have made little progress toward even local coordination. But that may soon change. Habitat for Humanity ReStores, for instance, are spreading rapidly, and those in existence are initiating efforts to organize. These individual niches and their networking efforts are discussed in more detail in the "Reuse Niches" section.

National Reuse Network Opportunities and Efforts

A few reuse operations with unique operating formulas or specific missions have plans to replicate nationally or internationally. These include The National Surplus Exchange Program, Movement and Acquisition of Gifts in Kind (MAGIK), LA Shares, and The National Schools Recycle Center Network, each of which is in various stages of development and operation. See Table A1 in the Appendix. The general concept is that once the kinks are worked out and a project is successful in one city, that formula can then be applied to other cities or communities. (The formula, of course, must be flexible enough to account for the varying size of each new location, the supply and demand for materials, and other differences.) The strategy for replication may take a number of forms, including a variety of partnerships, joint-ventures, and franchises.[12] The National Surplus Exchange Program has developed a training course on how to start and run a surplus exchange program and is available to anyone interested.[13]

Maintaining a Community Orientation

If reuse follows the path of recycling, local operations could suddenly find themselves swimming with some very big fish — multi-national companies and various government agencies. It would have been difficult for a recycling activist in the early 1970s to imagine the degree to which recycling has been commercialized, but it may behoove reuse activists to prepare for that same eventuality. In fact, one state official at the Conference on Reuse in New York City noted that he had already been approached by a large corporation regarding reuse. And the executive director of a large reuse operation in California has been approached by Waste Management, Inc., to discuss the viability of a program to capture reusables from haulers at landfills and transfer stations. Now is the time to consider this issue, and build an infrastructure to assure that those who depend on the benefits of reuse programs will continue to do so.

It is especially important that community-based reuse operations maintain vigilance over their community's material needs and the sources of those materials, and that they secure access to them. Landfills and transfer stations are, indeed, great sources of materials that reuse operations should consider targeting. Coordinating with local haulers will enhance the success of programs of this type — offering haulers an incentive to bring in the materials undamaged will increase the quality and quantity of captured goods.

Building a relationship with the local government is important, too. Reuse operators should encourage local officials to integrate reuse into their existing solid-waste infrastructure. One way to demonstrate reuse's potential is to propose a waste-diversion credit system. Thus, the reuse program would be credited with some percentage of the disposal costs it saves a community when it diverts materials from the waste stream.

Viability of Future Supply of Reusable Goods

Reuse operations depend upon the inefficient use of material resources by a relatively affluent society. One day, if the promoters of ecological and economic efficiency are successful, this stream of goods could shrink. People may choose to use resources more efficiently.

But the reuse stream is also at the mercy of economic trends. Currently, the upper and middle classes cast off their goods prematurely, making them available for redistribution to the needy and to those who simply want to use resources more wisely. But as an increasing proportion of the nation's wealth is accumulated by a decreasing number of very wealthy people, the middle class may find itself forced to hold onto older items, instead of replacing and donating them. They may be forced to use resources more efficiently.

However, given the current magnitude of material wastefulness, and the frantic rate at which consumer goods and business equipment becomes obsolete in our society, the current and near-term supply of reusable goods is in no danger of disappearing.

APPENDIX: SURVEY METHODOLOGY, INSTRUMENT, AND DATA

SURVEY METHODOLOGY

Attendees of the Conference on Reuse sponsored by Chemical Bank in New York City in February, 1995 were surveyed by the organizers of that conference. The Institute for Local Self-Reliance (ILSR) expanded on that survey and then sent it back to the conference attendees to obtain answers to additional questions. ILSR proceeded to identify and send surveys to reuse operations throughout North America. These operations were identified through a number of methods. ILSR staff knowledge of existing reuse operations contributed many. Current periodicals and newsletters were reviewed for references to reuse operations. Follow-up calls were made to most of the reuse operations surveyed in an attempt to increase the number of respondents. Additional operations were identified through conversations with reuse operation staff during those follow-up calls.

The data in the survey was not confirmed in any way. The data is presented and analyzed in the form in which it was received.

When comparing data from one operation to another, it is important to choose operations that deal with similar materials and have a similar geographic and demographic profile.

SURVEY INSTRUMENT

The five-page survey instrument used to collect the survey data follows.

SURVEY DATA

All of the survey data collected for use in this study is listed in Table A1.

Reuse Operation Survey

The Institute for Local Self-Reliance is conducting a study of reuse operations to better understand and promote this quickly emerging sector of local economies. Thank you for your cooperation.

Instructions

- All answers provided should be applicable to your reuse operation only and not to a parent organization.
- For multiple choice questions, please circle only one response.
- Please clearly specify units wherever applicable.
- Please complete only those parts of the survey that apply to your type of operation: warehouse-based, broker, or listing service.

Contact Information

1. Reuse Operation Name:
   Address: Country:
   City: State: Zip:
   Phone: Fax: E-Mail:
   Contact 1: Title:
   Contact 2: Title:
   Parent Organization Name:

Reuse Operation

2. What is your operation's primary mission?
   Circle one: - environmental - social - housing - arts - other:
3. Please explain:
4. How is your operation structured?
   Circle one: - for profit - not-for-profit (private) - not-for-profit (government) - other:
5. Is your reuse operation currently operating? ○ *Yes* ○ *No*
6. What is the annual quantity of materials your reuse operation handles? (tons/year)
7. What is the annual fair market value of these materials?
8. Do you calculate cost savings for program participants? ○ *Yes* ○ *No*
9. How much have you been able to save other organizations in avoided purchasing costs?
10. How much have you been able to save other organizations in avoided disposal costs?
11. What was the start-up date of your reuse operation?
12. Please specify the source year for the data you will be providing in this survey (most recent preferred):
13. Does your reuse operation operate a warehouse? ○ *Yes* ○ *No*
14. Does your reuse operation broker materials? ○ *Yes* ○ *No*
15. Does your reuse operation provide a listing of materials? ○ *Yes* ○ *No*
16. What percentage of your operation relies on the warehouse?
17. What percentage of your operation involves brokering materials?
18. What percentage of your operation involves publishing a listing?

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Materials

19. Complete the list below or attach your own separate list. Check the categories of materials that your reuse operation warehouses, brokers, or lists:

	Yes/No		Yes/No		Yes/No		Yes/No
Art	○○	Bicycles	○○	Small Appliances	○○	Construction Materials	○○
Books	○○	Chemicals	○○	Large Appliances	○○	Musical Instruments	○○
Food	○○	Clothing	○○	Domestic Furniture	○○	Sporting Goods	○○
Paint	○○	Electronics	○○	Office Supplies	○○	Arts and Craft Items	○○
Tools	○○	Lighting	○○	Office Equipment	○○	Industrial Scrap	○○
Toys	○○	Housewares	○○	Office Furniture	○○	Fabric	○○

Other:

20. Does your reuse operation deal in any way with hazardous materials? ○ *Yes* ○ *No*
21. Check the sources from which you receive materials:

	Yes/No		Yes/No		Yes/No
Business-Commercial	○○	Gov't.-Federal	○○	General Public	○○
Business-Industrial	○○	Gov't-State	○○	Other:	
Business-Institutional	○○	Gov't-Local	○○		

22. Check the categories for those that receive materials from your organization:

	Yes/No		Yes/No		Yes/No	
Housing Providers	○○	Not-for-Profits	○○	Government	○○	Other:
Low-Income Individuals	○○	General Public	○○	Businesses	○○	

Warehouse Operations

23. How many warehouses does your organization run?
24. What is the total area of your warehouse(s)? (sq. ft.)
25. Is your organization planning to acquire a warehouse? ○ *Yes* ○ *No* 26. When?
27. What is the total area of any outdoor storage space that you have? (sq. ft.)
28. How many trucks does your organization use in its operations?
29. What is your schedule of operation? (days/year)
30. How many shifts operate each day?
31. How was your warehouse(s) acquired? *Circle one: - purchased - donated - lease*
32. What are the terms of your warehouse(s) acquisition? ($/sq. ft./year)
33. What is the source of your donated warehouse(s)?
    Circle one: - commercial business - individual - industrial business - local gov't - state gov't - other:
34. What is the source of funding for your warehouse(s)?
    Circle one: - bank - federal gov't - foundations - local gov't - private investors - state gov't - other:
35. How were your truck(s) acquired? *Circle one: - purchased - donated - lease*
36. What are the terms of your truck(s) acquisition? ($, $/year)
37. What is the source of your donated truck(s)?
    Circle one: - commercial business - individual - industrial business - local gov't - state gov't - other:

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38.. What is the source of funding for your truck(s)?
Circle one: - bank - federal gov't - foundations - local gov't - private investors - state gov't - other:

• Incoming Materials

39. How does your warehouse receive materials?
Circle one: - purchase - charge a fee - accept as donation - other:
40. Please explain:
41. If you purchase or charge for the materials you receive, how is the amount determined?
Circle one: - by item - by volume - by weight - handling - other:
42. Please explain:
43. Do you pick-up materials from suppliers? ○○
44. If a pick-up fee is charged, what is it? *($/cu. yd., $/item, $/ton, $/trip)*

• Outgoing Materials

45. How does your warehouse distribute outgoing materials?
Circle one: - sell - donate - handling fee other:
46. Please explain:
47. If you sell outgoing materials, how is the selling price determined?
Circle one: - fair market value - handling fee - other:
48. Please explain:
49. Do you deliver materials to the recipients? ○○
50. If a delivery fee is charged, what is it? *($/cu. yd., $/item, $/ton, $/trip)*

Brokering/Listing

51. Do you publish a catalog or listing of desired or available materials? ○ *Yes* ○ *No*
52. How many issues per year?
53. Is an electronic copy available? ○ *Yes* ○ *No*
54. How does a user access the electronic copy?
55. Check the materials exchange fee structure categories below that are used in your reuse operation.

○ *Yes* ○ *No*	*No charge for listing or catalog.*	
○ *Yes* ○ *No*	*Charge for each listing.*	56. Amount?
○ *Yes* ○ *No*	*Charge a subscription for listings catalog.*	57. Amount?
○ *Yes* ○ *No*	*Charge a membership fee with unlimited listings.*	58. Amount?
○ *Yes* ○ *No*	*Charge only when an exchange is made.*	59. Amount?
	60. *Other (please explain):*	

61. How many businesses receive a catalog or a listings annually?
62. How many businesses who received a catalog or listing entered at least one listing?
63. Do you track material exchanges that result from your efforts? ○ *Yes* ○ *No*
64. How?

Employment

65. How many full-time-equivalent employees does your reuse operation employ?
66. How many entry-level employees?
67. How many skilled employees?
68. What is the average hourly wage of your employees?
69. How many full-time-equivalent volunteers are used by your reuse operation?
70. Check the sources from which you access volunteers:

	Yes/No		Yes/No		Yes/No	
Advertising	○○	Word-of-Mouth	○○	Local Volunteer Networks	○○	Other:

71. Check the categories of the volunteers your reuse operation uses:

	Yes/No		Yes/No		Yes/No	
High School Students	○○	Homemakers	○○	Church Members	○○	Other:
College Students	○○	Professionals	○○	Retirees	○○	

72. Does your reuse operation provide job training of any kind? ○ *Yes* ○ *No*
73. If you do provide training, please describe how it is set up?

Economics

74. What were the initial capital costs of setting up your reuse operation?
75. What, if any, were the capital costs of later modifications?
76. What are your annual operating costs?
77. Does your organization desire to be independent of all sources of funding assistance? ○ *Yes* ○ *No*
78. Please fill in the amounts and percentages for each income/funding source category listed below.

Categories	Yes/No	Amount	Percentage
Government Agency - Operational Budget	○○		
Government Grants (Federal, State, Local)	○○		
Government Contracts	○○		
Private Foundation Grants	○○		
Corporate/Private Sector Donations	○○		
Private Contracts	○○		
Membership Fees	○○		
User Fees for Services	○○		
Sales of Products	○○		
Other:	○○		
Total Annual Income/Funding			*100%*

Marketing

79. Check those marketing mechanisms that your organization uses that WORK WELL?

	Yes/No		Yes/No		Yes/No	
Direct Mailings	○○	Radio Ads	○○	Flyers	○○	Other:
Mass Mailings	○○	TV Ads	○○	Print Ads	○○	
Press Releases	○○	Radio PSAs	○○	Presentations	○○	
Yellow Pages	○○	TV PSAs	○○	Word of Mouth	○○	

Information Management

80. Which components of your reuse operation are computerized and what hardware/software are used for each?

Computerized Operation	Yes/No	Hardware Used	Software Used
Inventory Management/Reporting	○○		
Donor/Recipient Information (mailing)	○○		
Routing/Scheduling	○○		
Invoicing	○○		
Sales Tracking/Reporting	○○		
Other:	○○		

Other Information

81. Is your organization interested in participating in a new venture? ○ *Yes* ○ *No*
82. Please describe the strengths of your reuse operation.

83. Please describe the weaknesses of your reuse operation.

84. What barriers/obstacles have you encountered in the start-up or operation of your reuse operation?

85. Additional comments (if more space is needed, please attach additional pages):

Table A1 **Survey Data**

	Survey Question Number 1	1	1	1	1	1	1
	"Yes" = 1 "No" = 0						
	Organization Name	**Address**	**Country**	**City**	**State**	**Zip**	**Phone**
1	Adirondack North Country Association	183 Broadway	USA	Saranac Lake	NY	12983	518-891-6200
2	Albany County Opportunity	35 Clinton Avenue	USA	Albany	NY	12207	518-463-3175
3	AMVETS	6101 Georgia Avenue NW	USA	Washington	DC	20011	301-953-0090
4	Appliance Recycling Centers of America, Inc.	7400 Excelsior Boulevard	USA	Minneapolis	MN	55426	612-930-1753
5	Berkshire Materials Exchange	112 Elm Street	USA	Pittsfield	MA	1201	413-445-4556
6	Builder's Resource Center	2004 Yonkers Road	USA	Raleigh	NC	27604	919-833-1999
7	Building Materials Bank	169 Lewiston Road	USA	Gray	ME	4039	207-657-2957
8	California Materials Exchange (CALMAX)	8800 Cal Center Drive	USA	Sacramento	CA	95826	916-255-2369
9	Chicago Schools Recycle Center	PO Box 148204	USA	Chicago	IL	60614	
10	Community Housing Resource Center	Tower Building 8th Floor PO Box 4545	USA	Atlanta	GA	30339	404-526-3116
11	Community Redevelopment, Inc.	1207 Highland Bluff Drive, NW	USA	Atlanta	GA	30339	404-880-0054
12	Community Resource Center	PO Box 158520	USA	Nashville	TN	37215-8520	615-320-7201
13	Community Warehouse	227 South Pearl Street	USA	Albany	NY	12202	518-462-0139
14	Computers for Classrooms	1685 Briarcliff, NE #1	USA	Atlanta	GA	30307-5317	404-724-0380
15	Contract Manufacturers Group	40 Loudonville Road	USA	Albany	NY	12204	518-449-2040
16	Corporate Resources Service	61 Chambers Street	USA	New York	NY	10007	212-788-7550
17	ERCSWMA	272 Main Street, PO Box 267	USA	Stephentown	NY	12168	518-733-6224
18	FACE	75 Day Street	USA	Fitchburg	MA	1420	508-345-5385
19	Furnish a Future	20 Jay Street	USA	Brooklyn	NY	11201	718-875-5353
20	Gifts In Kind America	700 North Fairfax Street, Suite 300	USA	Alexandria	VA	22314	703-836-2121
21	Goodwill Industries	4-21 27th Avenue	USA	Astoria	NY	11102	718-728-5400
22	Home Resource and Furniture Center	7500 Glenwood Avenue, SE	USA	Atlanta	GA	30316	404-624-4434
23	Hudson Valley Materials Exchange	PO Box 550	USA	New Paltz	NY	12561	914-255-3749
24	Huntington Arts Council	213 Main Street	USA	Huntington	NY	11743	516-271-8423
25	Indiana Materials Exchange	PO Box 454	USA	Carmel	IN	46032	317-574-6505
26	Industrial Materials Exchange (IMEX)	506 2nd Avenue, Room 201	USA	Seattle	WA	98104	206-296-3968
27	INWRAP Materials Exchange Program (MEP)	29-11 Queens Plaza North, 2nd Floor	USA	Long Island City	NY	11101	718-786-5300
28	ITAC/NY MEP	253 Broadway, Room 302	USA	New York	NY	10007	212-240-6920
29	LA Shares	3224 Riverside Drive	USA	Los Angeles	CA	90027	213-485-1097
30	Loading Dock	2523 Gwynns Falls Parkway	USA	Baltimore	MD	21216	410-728-3625
31	Long Island Arts Council at Freeport	130 East Merrick Road	USA	Freeport	NY	11520	516-223-2522
32	Material Exchange	1037 State Street	USA	Bridgeport	CT	6605	203-335-3452
33	Materials for the Arts	410 West 16th Street	USA	New York	NY	10011	212-255-5924
34	Materials for the Arts, Arts Clearinghouse	887 W. Marietta Street , NW	USA	Atlanta	GA	30318	404-853-3261
35	Mayor's Voluntary Action Center	61 Chambers Street	USA	New York	N Y	10007	212-788-7550
36	Minnesota Technical Assistance Program (MNTAP)	1313 5th Street, Suite 207	USA	Minneapolis	MN	55414	612-627-4555
37	Movement and Acquisition of Gifts In Kind (MAGIK)	5510 Nevada Avenue NW	USA	Washington	DC	20015	415-355-5249
38	National Surplus Exchange Program	PO Box 105	USA	Norwood	MO	65717	417-746-4068
39	Northeast Industrial Waste Exchange, Inc.	PO Box 2171	USA	Annapolis	MD	21404	410-280-2080
40	Office Furniture Renewal	222 Pitkin Street, PO Box 8800	USA	East Hartford	CT	6108	203-528-9981
41	Performing Arts Resources	88 East 3rd Street #19	USA	New York	NY	10003	212-966-8658
42	Prevention of Blindness Society	942 Wayne Avenue	USA	Silver Spring	MD	20910	301-585-0331
43	Re Store	4229 Meridian	USA	Bellingham	WA	98226	206-733-8307
44	Recycle Ann Arbor	2950 East Ellsworth Road	USA	Ann Arbor	MI	48108	313-971-9676
45	ReCycle North	316 Pine Street	USA	Burlington	VT	5402	802-658-4143
46	Recycle-A-Bicycle	92 Street and Marks Place	USA	New York	NY	10009	212-475-4600
47	Recycletown	PO Box 175	USA	Rio Nido	CA	95471	707-584-8666
48	Rehab Resource, Inc.	243 West Merrill Street	USA	Indianapolis	IN	46225	317-637-3701
49	Resource Connections	700 River Avenue	USA	Pittsburgh	PA	15212-5936	
50	ReStore — Austin	310 Comal, Suite 101	USA	Austin	TX	78702	512-478-2165
51	Restore — Winnipeg	75 Archibald	CAN	Winnipeg	MAN	R2J 0V7	204-233-5160
52	ReUze Building Center	1210 Birchmount Road #1A	CAN	Scarborough	ONT	M1P 2C3	416-750-4000
53	Rhode Island Donation Exchange Program	25 Acorn Street	USA	Providence	RI	2903	401-831-5511
54	Rocky Mountain Materials Exchange (RMME)	1445 Market Street	USA	Denver	CO	80202	303-744-2153
55	Salvation Army	4133 Park Avenue	USA	Bronx	NY	10457	718-583-3500
56	Southeast Waste Exchange (SEWE)	University of North Carolina, Charlotte	USA	Charlotte	NC	28223	704-547-4289
57	The Building Block	100 Terrace Street	USA	Roxbury	MA	2120	617-442-8917
58	The Furniture Bank	538 Permalume Place	USA	Atlanta	GA	30318	404-355-8530
59	The Renovators Resources	PO Box 36032	CAN	Halifax	NS	B3J 3S9	402-429-3889
60	The ReStore	PO Box 885	USA	Montpelier	VT	5601	802-223-6840
61	The Reuse Center	2845 16th Avenue South	USA	Minneapolis	MN	55407-1401	612-724-2608
62	The Surplus Exchange	1107 Hickory	USA	Kansas City	MO	64101	816-472-0444
63	United Way of NYC	99 Park Avenue, 2nd floor	USA	New York	NY	10026-1558	212-973-3912
64	Upstate New York Materials Exchange	2525 Route 332	USA	Canandaiguia	NY	14425	800-836-7678
65	Urban Ore, Inc.	1333 6th Street	USA	Berkeley	CA	94710	510-559-4454
66	Vermont Business Materials Exchange	PO Box 935	USA	Brattleboro	VT	5302	800-895-1930
67	Westchester County	270 North Avenue	USA	New Rochelle	NY	10801	914-637-3057
	Number of Respondents "Yes" Answers (where applicable)	**67**					

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	1	1	1	1	1	1
	Fax	**E-Mail**	**Contact 1**	**Contact 1 Title**	**Contact 2**	**Contact 2 Title**
1	518-891-6208		Janet Sawyer-Kibbon			
2	518-436-3509	AH750@freenet.buffalo.edu	Paul Stewart			
3			Linda Williams			
4	612-930-9000		Sara Dammann	Corporate Planning		
5	413-443-8123		Nancy Nylen	Associate Director	Kimball Cartwright	Solid Waste Specialist
6			Wayne Mariano	Warehouse Manager		
7			Kathleen Scott			
8			Joyce Mason			
9			Amy Peterson			
10			Jim Beaty			
11			Jeff Woodward	Executive Director		
12	615-320-9858		Kate Monaghan	Executive Director		
13	518-462-0264		Diana Slattery	President-BRI	Mike Whalen	General Mngr.
14			Tip Kilby			
15	518-449-4036		William Davies	President		
16	212-788-7570		Barbara Cooper			
17	518-766-9180		Margretta Morris			
18		facebill@face1.iii.net	Robert Beaudoin	Assistant Director		
19			Marjory Rice	Director		
20	703-549-1481	susan_corrigan@gika.cais.com	Susan Corrigan	President and CEO		
21			William Forrester			
22			James Brown	Director	Betty Palmer	Executive Director
23	914-255-4084		Jill Gruber	Director		
24	516-271-8428		Cindy Clair		Liz Gardner	
25			Jim Britt			
26			Bill Lawrence	Sr. Environmental Health Specialist		
27	718-937-1799		John Okun	Dir. Waste Prevention & Recycling	Gerald Bush	Engineering Services Mngr.
28	212-240-4889		Kevin Kelly			
29			Bert Ball	Executive Director	Tim Ney	General Manager
30	410-728-3633		Hope Cucina	Coordinator	Leslie Kirkland	Director
31	516-223-6991		Grace Shen	Executive Director	Elizabeth Gardner	Reused Goods Coordinator
32			Dianne Patterson	Operations Manager	Bonnie Zipeto	President
33	212-924-1925		Susan Glass	Director	Tim Doyle	Assistant Director
34	404-853-3262		Laura Lieberman	Director		
35			Barbara Cooper			
36			Fran Kurk			
37			Tamar Lasky	D.C. Coordinator	Laura Adkins	President
38			Bruce Holland	President		
39	410-280-0025		William Sloan			
40			Drew Gall	General Manager		
41	212-966-8658		Donna Brady			
42			Arvella Pratt			
43			Carl Weimer	Executive Director	Bruce Odum	Store Mngr.
44	313-971-1444		Tim Brownell			
45	802-658-0543	sdbuck@aol.com	Scott Buckingham	Executive Director		
46	212-475-4553		Karen Overton			
47		precycle@aol.com	Pavitra Crimmel	Project Director	Linda Christopher	Education Coordinator
48	317-637-3835		Bev Phillips	Resource Dev. Mgr.		
49			Diane Roth-Cohen			
50			Diane Beaver			
51		davidmcnicholl@habitat.org	Dave McNicholl	Manager		
52			Bob Sawatsky			
53			Donald Miller	Marketing Director	David McCreadte, Jr.	Executive Director
54			John Wright			
55			Dennis Gensler		Lynn Gensler	
56			Maxie May			
57	617-427-2491		John Rowse			
58			Tom Polk	Executive Director		
59		ae266@cfn.cs.dal.ca	Jennifer Carson	President	Susan Helliwell	Vice President
60	802-229-1930		Connie Leach Bisson	Executive Director		
61			Susan Gust			
62	816-472-8105		Rick Caplan		Bruce Holland	
63	212-661-1990		Rosalind Wilson			
64	716-396-4250		Kevin Spillane		Anne Owen	Consultant
65	510-235-0198		Dan Knapp	President	Mary Lou Van Deventer	
66		VMBX@together.org	Bob Lawson			
67	914-637-3076		Elaine Sheridan			
	31	8	67	33	19	15

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	1	2
	Parent Organization	**Primary Mission**
1	Adirondack North Country Association	environmental
2	Albany County Opportunity	social
3	AMVETS	
4	Appliance Recycling Centers	
5	Center for Ecological Technology (CET)	environmental
6	Habitat for Humanity	housing
7	Building Materials Bank	
8	California Integrated Waste Management Board	
9		
10	Community Housing Resource Center	
11	Community Redevelopment, Inc.	
12	Community Resource Center	social
13	Barn Raisers, Inc.	housing
14	Computers for Classrooms	
15	Contract Manufacturers Group	
16	Mayor's Voluntary Action Center	social
17	ERCSWMA	environmental
18	FACE	environmental
19	The Partnership for the Homeless	social
20	Gifts In Kind America	social
21	Goodwill Industries	
22	Charis Community Housing, Inc.	
23	Hudson Valley Materials Exchange	environmental
24	Huntington Arts Council	
25	Indiana Materials Exchange	
26	Seattle King Co., Dept. Public Health, Haz. Waste Mngt. Program	environmental
27	Long Island City Business Development Corporation	business
28	ITAC/MEP	
29	LA Shares	social
30	Loading Dock	housing
31	Long Island Arts Council at Freeport	arts
32	Material Exchange	housing
33	NYC Dept. of Cultural Affairs & Sanitation	arts
34	City of Atlanta/Bureau of Cultural Affairs	arts
35	Mayor's Voluntary Action Center	
36	Minnesota Technical Assistance Program (MNTAP)	environmental
37	Movement and Acquisition of Gifts In Kind (MAGIK)	
38	The Surplus Exchange, Inc.	social
39	Northeast Industrial Waste Exchange, Inc.	environmental
40	BKM	
41	Performing Arts Resources	arts
42	Prevention of Blindness Society	
43	Re Sources	environmental
44	Recycle Ann Arbor	environmental
45	ReCycle North	social, environmental
46	Transportation Alternatives	environmental
47	Garbage Reincarnation, Inc.	environmental, education
48	Rehab Resource, Inc.	
49	Resource Connections	
50	Habitat for Humanity	
51	Habitat for Humanity	housing
52	ReUze Building Center	environmental
53	Rhode Island Donation Exchange Program	social
54	Rocky Mountain Materials Exchange (RMME)	
55	Salvation Army	
56	Urban Institute	
57	The Building Block	housing
58	The Furniture Bank	
59	The Renovators Resources	environmental
60	ReStore Resources, Unlimited	environmental
61	The Reuse Center	
62	The Surplus Exchange	environmental, social
63	United Way of NYC	social
64	Upstate New York Materials Exchange	environmental
65	Urban Ore, Inc.	environmental
66	Vermont Business Materials Exchange	environmental
67	Westchester County	environmental
	66	41

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	3	4	5	6	6
	Primary Mission - Comments	**For/Not-For Profit**	**Reuse Op. Currently Operating?**	**Supply Amount**	**Supply Amount Units**
1		not-for-profit (gov't)	1		
2		for-profit	1		
3					
4					
5		not-for profit (private)	1		
6	Support low-income housing construction through sale of bldg. mtls. & household-repair items.	not-for profit (private)	1		
7					
8					
9					
10					
11					
12		not-for profit (private)	1		
13		not-for profit (private)	1		
14					
15			1		
16		not-for profit (gov't)	1		
17		not-for profit (gov't)	1		
18	Education.	not-for profit (private)	0		
19		not-for profit (private)	1		
20		not-for profit (private)	1	4,500	items
21					
22					
23		not-for profit (private)	1	100	tons/year
24		not-for profit (private)	1		
25					
26		not-for profit (gov't)	1		
27		not-for profit (private)	1	1,342	tons/year
28		not-for profit (private)	1		
29		not-for profit (private)	1	2,500	tons/year
30		not-for profit (private)	1	7,000	tons/year
31		not-for profit (private)	1		
32		not-for profit (private)	1		
33	All materials go to arts organizations and programs as well as city agencies.	not-for profit (gov't)	1	440	tons/year
34		not-for profit (gov't)	1		
35					
36		not-for profit (gov't)	1		
37					
38		not-for profit (private)	1	35,000	cu. yd
39		not-for profit (private)	1		
40			1		
41		not-for profit (private)	1		
42					
43	Waste reduction.	not-for profit (private)	1	325	tons/year
44		not-for profit (private)	0		
45		not-for profit (private)	1	115	tons/year
46	To create a more equitable and sustainable transport system.	not-for profit (private)	1	12	tons/year
47		not-for profit (private)	1	600	tons/year
48			1		
49					
50					
51		not-for profit (private)	1	1,000	tons/year
52		for profit	1	250	tons/year
53		not-for profit (private)	1		
54					
55					
56					
57		not-for profit (private)	1		
58					
59	Minimize load on the landfill; reuse of usable materials.	for profit	1		
60	Promote reuse of material resources.	not-for profit (private)	1	10	tons/year
61					
62		not-for profit (private)	1		
63		not-for profit (private)	1		
64		not-for profit (gov't)	1		
65		for profit	1		tons/year
66		not-for profit (gov't)	1	10	tons/year
67		not-for profit (gov't)	1		
	7	43	46 44	15	16

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	7	8	9	10	11	12	13	14	15	16
							Structure			
	Supply Fair Market Value	Calculate Cost Savings?	Annual Purchasing Costs Avoided	Annual Disposal Costs Avoided	Start-Up Date	Survey Date	Warehouse	Broker	Listing	Warehouse %
1					1993		0	1	0	0%
2					1967		1	0	0	100%
3										
4										
5		0			1994	1994	0	1	1	0%
6		1			1994	1994	1	0	0	100%
7										
8										
9										
10										
11										
12	$300,000	1	$300,000		1985	1994	1	0	0	100%
13					1993		1	1	1	
14										
15										
16					1987			0	0	
17					1989		0	1	0	0%
18										
19		1			1991		1	1	0	95%
20	$118,000,000	1			1983	1994	1	0	1	40%
21										
22										
23		1	$45,000	$10,000	1993	1994	1	1	1	10%
24					1994		0	1	1	0%
25										
26	$2,500,000	1			1985	1994	0	0	1	0%
27	$107,964	1	$31,880	$76,084	1994	1994	0	1	1	0%
28					1987					
29	$10,000,000	0	$10,000,000	$1,000,000	1992	1994	1	1	1	80%
30	$1,750,000	1	$1,000,000		1984		1	1	1	90%
31		0			1994	1994	0	1	1	0%
32		0			1994		1	1	0	99%
33	$2,200,000	0			1979	1994	1	1	0	85%
34	$200,000	0	$400,000		1992	1994	1	1	0	90%
35										
36		0			1994	1994	0	0	1	0%
37										
38	$1,000,000	1	$564,000	$280,000	1984	1994	1	1	1	50%
39					1981		0	1	1	0%
40										
41							0	1	0	0%
42										
43	$250,000	1	$250,000	$30,000	1993	1994	1	0	0	100%
44					1996					
45	$177,000	0	$5,000		1991	1994	1	0	0	100%
46	$30,000	0	$3,000	$0	1994		1	1	0	80%
47	$150,000	0			1987	1994	1	0	0	100%
48										
49										
50										
51		1	$100,000	$100,000	1991	1994	1	0	0	100%
52		1			1992	1994	1	0	0	100%
53	$1,000,000	0			1986	1994	1	0	0	100%
54										
55										
56										
57							0	1	0	0%
58										
59	$125,000	1			1994	1995	1	1	1	90%
60	$25,000	0	$15,000	$7,500	1990	1994	1	0	0	100%
61										
62							1	0	0	100%
63					1987		1	0	1	
64					1993		0	1	1	0%
65					1982		1	0	0	100%
66		0			1993	1994	0	0	1	0%
67					1994		0	1	0	0%
	16	26 13	12	8	39	22	39 25	40 22	40 17	37

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	17	18	19	19	19	19	19	19	19	19	19	19	19
	Structure (cont.)		Materials										
	Broker %	Listing %	Art	Bicycles	Small Appliances	Construction Materials	Books	Chemicals	Large Appliances	Musical Instruments	Sporting Goods	Food	Clothing
1	100%	0%	0	0	0	0	0	0	0	0	0	0	0
2	0%	0%	0	0	0	0	0	0	1	0	0	0	0
3													
4													
5	80%	20%	0	0	0	1	0	0	1	0	0	0	1
6	0%	0%	0	0	0	1	0	0	0	0	0	0	0
7													
8													
9													
10													
11													
12	0%	0%	0	0	1	0	0	0	1	0	0	0	1
13			0	0	0	1	0	1	1	0	0	0	0
14													
15													
16	0%	0%	0	0	0	0	0	0	0	0	0	0	1
17	100%	0%	0	0	1	1	0	0	1	0	0	0	1
18													
19	5%	0%	1	1	1	0	0	0	1	1	1	0	0
20	0%	60%	0	0	1	1	0	0	1	0	1	0	1
21													
22													
23	45%	45%	1	1	1	1	0	1	1	1	1	1	0
24			0	0	1	0	0	0	1	0	0	0	0
25													
26	0%	100%	0	0	0	1	1	1	0	0	0	0	0
27	45%	55%	0	0	0	0	0	0	0	0	0	1	1
28													
29	15%	5%	1	1	1	1	1	0	1	1	1	0	0
30	8%	2%	1	0	1	1	0	0	1	0	0	0	0
31	100%		1	0	1	0	1	0	1	1	0	0	0
32	1%	0%	0	0	0	1	0	0	1	0	0	0	0
33	15%	0%	1	0	1	1	1	0	1	1	0	0	0
34	10%	0%	1	0	1	1	1	0	1	1	0	0	0
35													
36	0%	100%	0	0	0	1	0	1	0	0	0	0	0
37													
38	50%	0%	0	0	1	1	0	0	1	0	0	0	0
39			0	0	0	0	0	1	0	0	0	0	0
40													
41	100%	0%	0	0	0	1	0	0	1	0	0	0	0
42													
43	0%	0%	0	0	0	1	0	0	1	0	0	0	0
44													
45	0%	0%	1	1	1	0	1	0	1	1	1	0	0
46	20%	0%	0	1	0	0	0	0	0	0	0	0	0
47	0%	0%	1	1	1	1	1	1	1	1	1	0	1
48													
49													
50													
51	0%	0%	0	0	0	1	0	0	1	0	0	0	0
52	0%	0%	0	0	0	1	0	0	0	0	0	0	0
53	0%	0%	0	1	1	1	1	0	1	0	0	0	1
54													
55													
56													
57	100%	0%	0	0	1	1	0	0	1	0	0	0	0
58													
59	5%	5%	0	0	0	1	0	0	0	0	0	0	0
60	0%	0%	0	0	0	0	0	0	0	0	0	0	0
61													
62	0%	0%	0	0	1	1	0	0	1	0	0	0	0
63	0%		0	0	1	0	0	0	1	0	0	0	1
64			0	0	0	1	0	0	1	0	0	1	0
65	0%	0%	1	0	1	1	1	0	1	0	0	0	1
66	0%	90%	0	0	0	1	0	1	0	0	0	1	0
67	100%	0%	0	0	1	0	0	0	1	0	0	0	0
	36	34	40	40	40	40	40	40	40	40	40	40	40
			10	7	20	26	9	7	28	8	6	4	10

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	19	19	19	19	19	19	19	19	19	19	19	19	19
	Materials (cont.)												
	Domestic Furniture	Arts and Craft Items	Paint	Electronics	Office Supplies	Tools	Lighting	Office Equipment	Industrial Scrap	Fabric	Toys	Housewares	Office Furniture
1	0	0	0	0	0	0	0	0	1	0	0	0	0
2	1	0	0	0	0	0	0	0	0	0	0	1	0
3													
4													
5	0	1	0	0	1	0	1	1	1	0	0	0	1
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7													
8													
9													
10													
11													
12	1	0	1	0	1	0	0	1	0	0	0	1	1
13	1	0	1	0	0	0	0	1	0	0	0	0	1
14													
15													
16	0	0	0	0	1	0	0	1	0	0	0	0	1
17	1	0	1	0	0	0	0	0	0	0	0	1	0
18													
19	1	1	1	1	0	0	1	0	0	0	1	1	0
20	1	0	1	1	1	0	0	1	0	0	0	1	1
21													
22													
23	1	1	1	1	1	1	1	1	1	1	1	1	1
24	1	0	0	0	1	0	0	1	0	0	0	1	1
25													
26	0	0	1	1	1	1	1	1	1	1	0	0	1
27	0	0	0	1	1	0	1	1	1	1	0	0	1
28													
29	1	1	1	1	1	1	1	1	0	1	1	1	1
30	1	0	1	0	0	1	1	0	0	0	0	0	1
31	1	1	0	1	1	0	0	1	0	1	0	1	1
32	0	0	1	0	0	1	1	1	0	1	0	0	1
33	1	1	1	1	1	1	1	1	1	1	0	1	1
34	1	1	1	1	1	1	1	1	1	1	0	1	1
35													
36	0	0	0	1	1	0	0	1	1	1	0	0	1
37													
38	0	1	0	1	1	1	1	1	1	1	0	0	1
39	0	0	0	0	0	0	0	0	1	0	0	0	0
40													
41	1	1	1	0	0	0	1	0	0	1	0	0	0
42													
43	0	0	1	0	0	1	1	0	0	0	0	0	1
44													
45	1	1	0	1	1	1	1	1	0	0	1	1	1
46	0	0	0	0	0	0	0	0	0	0	0	0	0
47	1	1	1	1	1	1	1	1	0	0	1	1	1
48													
49													
50													
51	0	0	1	1	0	1	1	0	1	0	0	0	1
52	0	0	0	0	0	0	1	0	0	0	0	0	0
53	1	0	0	0	0	1	1	1	0	0	1	1	1
54													
55													
56													
57	0	0	1	0	0	0	0	0	0	0	0	0	0
58													
59	1	0	0	0	0	1	1	0	0	0	0	0	1
60	0	1	0	0	1	0	0	0	1	1	0	0	0
61													
62	0	0	0	0	1	0	0	1	1	0	0	0	1
63	1	0	1	0	1	0	0	1	0	0	0	1	1
64	0	0	1	0	1	0	0	1	0	0	0	0	1
65	1	0	1	0	0	0	1	1	0	0	0	1	1
66	0	0	0	1	1	0	0	1	1	1	0	0	1
67	1	0	0	0	0	0	0	1	0	0	0	0	1
	40 21	40 12	40 20	40 15	40 21	40 14	40 20	40 25	40 14	40 13	40 6	40 16	40 29

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	19	20	21	21	21	21	21	21	21	21
	Materials (cont.)		Supply Sources							
	Other	Hazmats	Business Commercial	Gov't Federal	General Public	Business Industrial	Gov't State	Business Institutional	Gov't Local	Other
1										
2										
3										
4										
5	Medical equipment, packaging materials, organics, paper.	0	1	0	0	1	0	1	0	farms
6		0	1	0	1	1	0	0	0	
7										
8										
9										
10										
11										
12		0	1	0	1	0	0	1	0	
13										
14										
15										
16										
17					1					
18										
19		0	1	1	1	0	0	1	1	
20	Emergency supplies.									
21										
22										
23		1	1	1	0	1	1	1	1	
24					1					
25										
26		1	1	1	1	1	1	1	1	
27	Antifeeze, oils, plastics, rubber, wood, paper, metal, glass.	1	1	0	0	1	0	1	0	
28										
29		0	1	1	0	1	1	1	1	
30		1	1	1	1	1	1	1	1	
31		0	1	0	1	0	0	0	0	
32		0	1	0	1	0	0	0	0	
33	Cars.	0	1	1	1	1	1	1	1	
34	Paper, safety equipment.	0	1	1	1	1	1	1	1	
35										
36		1	1	1	1	1	1	1	1	
37										
38		0	1	1	1	1	1	1	1	
39										
40										
41										
42										
43		0	1	0	1	1	0	1	1	
44										
45		0	1	1	1	0	1	1	0	
46		0	0	0	1	0	0	0	0	
47	Hazardous: oils, batteries, paint.	1	1	1	1	1	1	1	1	
48										
49										
50										
51		1	1	1	1	1	1	1	1	
52		0	1	1	1	1	1	1	1	
53		0	1	1	1	0	1	1	1	
54										
55										
56										
57										
58										
59		0	1	1	1	1	1	1	1	
60		0	1	0	1	1	1	1	0	
61										
62										
63										
64			1			0		1		
65					1					
66	Commercial scrap.	1	1	0	0	1	0	1	0	
67										
	7	25 8	26 25	25 15	28 23	26 18	25 15	26 22	25 15	1

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	22	22	22	22	22	22	22	23	24	25	26
	Product Recipients							Warehouse			
	Housing Providers	Not-For Profits	Gov't	Low-Income Individuals	General Public	Businesses	Other	Quantity	Size	Planned?	When?
1								0	0		
2	0	0	0	1	0			1	1,000		
3											
4											
5	0	1	0	0	1	1	Schools, farms, daycare centers.	0	0	1	
6	1	1	0	1	1	0		1	20,000	0	
7											
8											
9											
10											
11											
12	0	1	0	0	0	0		1	3,750		
13	0	1	0	0	1	0		4	25,000		
14											
15											
16		1	1	0							
17					1			0	0		
18											
19	1	1	0	0	0	0		1	42,000	0	
20		1						25	300,000		
21											
22											
23	1	1	1	1	1	1		1	400	1	1995
24		1						0	0		
25											
26	0	1	1	1	1	1				0	
27	0	1	0	0	1	1		0	0	0	
28											
29	1	1	1	1	0	1		3	40,000	0	
30	1	1	1	1	0	1		1	21,000	0	
31	0	1	0	0	0	0	Arts organizations only.	0			
32	1	1	0	1	1	0		1	10,000		
33	1	1	1	0	0	0	Anything art related.	1	10,000		
34	0	1	1	1	0	0	Other arts related.	1	15,000		
35											
36	0	0	1	0	0	1					
37											
38	1	1	1	1	1	1		1	40,000	1	1995
39								0	0		
40											
41		1			1		Anything art related.	0	0		
42											
43	1	1	0	1	1	1		1	9,000		
44									12,000		
45	1	1	0	1	1	1		1	7,500	1	1996
46	0	1	0	1	1	0		1	300	0	
47	1	1	1	1	1	1		2	2,000	0	
48											
49											
50											
51	1	1	0	1	1	1		1	20,000	1	
52	1	1	1	1	1	1		1	10,000	0	
53	1	1	0	1	1	1		1	14,100	0	
54											
55											
56											
57	0	1	0	1	0	0		0	2,200		
58											
59	1	1	1	1	1	1		1	10,000		
60	0	1	1	1	1	1	Schools, daycare.	1	1,500	0	
61											
62	0	1	0	0	1	1		1	40,000		
63	0	1	0	0	0	0		1	19,200		
64						1		0	0		
65	1	1	1	1	1	1					
66	1	1	1	1	1	1					
67								0	0		
	31 17	35 33	32 15	32 21	33 22	31 20	6	35	35	16 5	3

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	27	28	29	29	30	31	32	32	33	33
						Warehouse Economics				
	Outside Area	Truck Quantity	Scheduled Operation	Scheduled Operation Units	Scheduled Shifts	How Acquired	Terms	Terms Units	Donation Source	Other Donation Source
1	0	0						/year		
2		1				donated	$0	/year		
3										
4										
5	0	0								
6	12,000	2	260	days/year	1	lease	$7,000	month		
7										
8										
9										
10										
11										
12		1	260	days/year	1	lease	$4	sq. ft./year		
13		2				donated				
14										
15										
16										
17	0	0								
18										
19	0	0	260	days/year	1	lease	$2	sq. ft./year		
20						lease				
21										
22										
23	21,780	1	260	days/year	1	donated			local gov't	
24	0	0								
25										
26			260	days/year						
27	0	0								
28										
29	20,000	3	260	days/year	1	donated	$0		commercial business	
30	10,000	1	312	days/year	1	purchased, donated	$18	square foot	commercial business	
31		0								
32	0	1	150	days/year	1	donated			industrial business	
33		2	260	days/year	1	lease	$9	sq. ft./year		
34		3				donated	$0	/year	local gov't	
35										
36										
37										
38	10,000	2	300	days/year	1	purchased		capital costs		
39	0	0								
40										
41	0	0								
42										
43	0	1	312	days/year	1	lease	$4	sq. ft./year		
44						lease				
45	0	1	310	days/year	1	lease	$6	sq. ft./year		
46	0	0	156	days/year	1	donated			local gov't	Public school
47	145,750	1	359	days/year	1	donated			local gov't	
48										
49										
50										
51		5	312	days/year	1	purchased				
52	0	1	300	days/year	1	lease				
53		1	260	days/year	1	lease	$2	sq. ft./year		
54										
55										
56										
57	0	1								
58										
59	0	2	260	days/year	1	lease	$2	sq. ft./year		
60	0	1	208	days/year	1	lease	$3	sq. ft./year		
61										
62	0	3				purchased				
63	0	2				lease				
64	0	0								
65		3								
66										
67	0	0								
	26	35	19		18	25	13		7	1

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	34	34	35	36	36	37
	Warehouse Economics (cont.)		Truck Economics			
	Sources of Funds	**Other Sources of Funds**	**How Acquired**	**Terms**	**Terms Units**	**Donation Source**
1					/year	
2						
3						
4						
5						
6		Donations, center revenues.	donated	$0		comm. business, individual
7						
8						
9						
10						
11						
12	foundations		donated	$0	/year	foundation grant
13			purchased			
14						
15						
16						
17						
18						
19	foundations, state and local gov't					
20			lease			
21						
22						
23	foundations, state gov't, membership		donated			individual
24						
25						
26						
27						
28						
29	fed. gov't, local gov't, foundations, corp.		donated	$0		comm. business, individual
30	bank, fed., state, local gov't, foundations, private investors		lease	$10,000	/year	commercial business
31						
32	corporations		purchased			
33	local gov't		purchased	$90,000	capital costs	
34	local gov't		donated	$0	/year	local gov't
35						
36						
37						
38			purchased		capital costs	
39						
40						
41						
42						
43	sale of materials		purchased			paid cash
44						
45	sales/service revenues		purchased		grant moneys	commercial business
46	foundations, local gov't					
47			purchased	$500	capital costs	
48						
49						
50						
51			purchased			
52	private investors		purchased			
53	foundations, local & state govt., service fees		purchased		grant	
54						
55						
56						
57						
58						
59	self-financed		purchased	$1,000	capital costs	
60	store sales revenue		lease			
61						
62			purchased			
63			lease			
64						
65			purchased		/year	
66						
67						
	15	1	22	8	11	8

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	37	38	38	39
		Truck Economics (cont.)		Supply
	Other Donation Source	**Sources of Funds**	**Other Sources of Funds**	**Purchase/Charge/Donation**
1				accept as donation
2				accept as donation
3				
4				
5				accept as donation
6			Donations, center revenues.	accept as donation, purchase
7				
8				
9				
10				
11				
12				accept as donation
13				donated
14				
15				
16				accept as donation
17				
18				
19			Foundation contracts & grants for out-source trucking	accept as donation
20				donated
21				
22				
23				accept as donation
24				donated
25				
26				
27				
28				
29		fed. & local gov't, foundations, corp.		accept as donation
30		foundations		accept as donation
31				accept as donation
32	grant surplus		Local company.	accept as donation
33		local gov't		accept as donation
34		local gov't		accept as donation
35				
36				
37				
38		foundations		accept as donation
39				accept as donation
40				
41				donated
42				
43		previous savings		accept as donation
44				
45		local gov't		accept as donation
46				accept as donation
47				accept as donation
48				
49				
50				
51				accept as donation
52		bank		accept as donation
53		church		accept as donation
54				
55				
56				
57				donated
58				
59		self-financed		accept as donation, purchase, consignment
60			Personal vehicle, reimbursed for mileage with sales revenue	accept as donation
61				
62				accept as donation
63				accept as donation
64				accept as donation
65				purchased
66				
67				accept as donation
	1	10	4	35

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	40	41	42	43
	Supply (cont.)			
	Explain Purchase Charge	Price Units	Explain Price	Pickup?
1				0
2				1
3				
4				
5				0
6		by volume		1
7				
8				
9				
10				
11				
12			Annual membership fee.	0
13				1
14				
15				
16				1
17				
18				
19	Businesses (hotels) are solicited for new or used good furnishings.			1
20				1
21				
22				
23				1
24				0
25				
26				0
27				0
28				
29				1
30		handling		1
31				0
32				1
33				1
34				1
35				
36				
37				
38	Solicit local businesses for surplus-inventory donations.			1
39				0
40				
41				0
42				
43	Mostly donations, some purchases, & lots of trade credits.	by item	Cash purchases & trade credits determined per item.	1
44				
45				1
46				0
47				0
48				
49				
50				
51		by item		1
52				1
53				1
54				
55				
56				
57				1
58				
59		by item	Depending on rarity and movement of stock.	1
60				1
61				
62				1
63				1
64				0
65		/ton		1
66				
67				0
	3	6	3	37 24

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	44	44	45
	Supply (cont.)		Product
	Pickup Fee	Pickup Fee Units	Sell/Donate/Handling Fee
1			donate
2	$0.00		donate
3			
4			
5			donate
6	$0.00		handling fee charged, sell
7			
8			
9			
10			
11			
12			donate
13			sell
14			
15			
16	$0.00		donate
17			
18			
19	$0.00		donate
20	$0.00		handling fee charged
21			
22			
23	20% of cost savings above membership fee.		membership fee
24			donate
25			
26			
27			donate
28			
29			donate
30		/trip	handling fee charged
31			donate
32	$0.00		sell
33	$0.00		donate
34	$0.00		donate
35			
36			
37			
38	$0.00		sell
39			donate
40			
41			donate
42			
43			sell
44			
45		/trip	sell, donate
46	$5.00	/bicycle	donate, sell
47			sell
48			
49			
50			
51			sell, donate
52			sell
53	$5.00	/trip	handling fee charged
54			
55			
56			
57			sell
58			
59	$0.00	/trip	handling fee charged, sell
60	$0.00		sell
61			
62	$0.00		handling fee charged
63			handling fee charged
64			donate
65		/truck load	sell
66			
67			donate
	15	6	36

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	46	47
	Product (cont.)	
	Explain Sell/Donate/Handling Fee	**Selling Price Determination**
1		
2		
3		
4		
5		
6		fair market value
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19	Clients referred by NYC, Partnership, or other agencies, receive furniture after moving from shelters or welfare hotels.	
20		
21		
22		
23	Sometimes generators charge, then we charge their fee only.	
24		
25		
26		
27		
28		
29		
30		handling fee
31		
32		fair market value
33	Only to registered recipients.	
34		
35		
36		
37		
38		handling fee
39		
40		
41		
42		
43	Most materials sold at 50% or less of cost of new.	fair market value
44		
45	Primarily sell, some merchandise is donated to not-for-profits.	fair market value
46	Sold 16%, donated 55%, and stripped the rest for parts.	fair market value
47		fair market value
48		
49		
50		
51		fair market value
52		fair market value
53		handling fee
54		
55		
56		
57		
58		
59	Consignment fee between 25% and 50%.	
60		fair market value
61		
62		
63		
64		
65		
66		
67		
	7	12

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	48	49	50	50	51	52
	Product (cont.)				Brokering/Listing	
	Explain Price	Delivery?	Delivery Fee	Delivery Fee Units	Catalog?	Issues/ Year
1		0	$0.00		0	0
2		0			0	
3						
4						
5		0			1	2
6	Charge customer fair market value of item less at least 25%.	0			0	
7						
8						
9						
10						
11						
12		0			0	
13		1			1	
14						
15						
16		0			0	
17					0	0
18						
19		1	$0.00		0	
20		1	$0.00		0	
21						
22						
23		1		membership	1	1
24		0			1	12
25						
26		0			1	6
27		0			1	6
28						
29		0			1	52
30		1			0	
31		0			1	12
32	25% to 30 % of retail price.	0			0	
33		0			0	
34		0			0	
35						
36					1	3
37						
38	Handling fee designed to recover cost of pickup, repair, storage, admin.	0			0	
39			$0.00		1	4
40						
41		0			0	
42						
43		1	$15.00	/trip	0	
44						
45		1		/trip	0	
46	Price based on quality of bike.				0	
47					0	
48						
49						
50						
51		0			0	
52		0			0	
53		1	$7.50	/trip	0	
54						
55						
56						
57		1			0	
58						
59	Charge half of new retail price.	1	$20.00	/trip in the city + $10/person	1	4
60	Attempt to charge enough to meet operating costs; currently meeting half.	0			0	
61						
62		0			0	
63		0			1	4
64		0			1	2
65		0			0	
66					1	4
67		0	$0.00		0	
	6	34 10	8	5	40 14	15

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	53	54	55	56	56	57	57	58
			Brokering/Listing (cont.)					
	Electronic Copy Available?	Electronic Copy How?	No Charge	Charge Each List	Charge Each List-Amt	Subscription	Subscription-Amt	Membership
1								
2	0							
3								
4								
5	0		1	0		0		0
6	0		0	0		0		0
7								
8								
9								
10								
11								
12	0							
13								
14								
15								
16								
17	0							
18								
19	0		0	0		0		0
20	0							
21								
22								
23	0		0	1	$20 out of area	0		1
24			1					
25								
26	1	Modem access # 509-466-1019.	1	0		0		0
27	0		0	0		0		1
28								
29	1	Call the computer.	1	0		0		0
30								
31	0		1	0		0		0
32	0		0	0		0		1
33								
34	0		0	0		0		0
35								
36	0		1	0		0		0
37								
38	0							
39				1	$75 or $150	1	$30	
40								
41			1					
42								
43								
44								
45								
46	0		0	0		0		0
47								
48								
49								
50								
51	0							
52	0							
53								
54								
55								
56								
57								
58								
59	1	Construction Association Bulletin Board.						
60								
61								
62								1
63								
64			1	0		0		0
65								
66	1	Local on-line service called TogetherNet.	0	0		0		0
67								
	21	4	16	15	2	15		15
	4		8	2		1		4

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	58	59	59	60	61	62	63
	Brokering/Listing (cont.)						
	Membership-Amt	Charge For Exchange	Charge For Exchange-Amt	Other-Explain	Cat Copy?	Business Listing	Track Mat Ex?
1							
2							
3							
4							
5		0			450	90	1
6		0					0
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19		0					0
20							
21							
22							
23	$25 - $100	0			6,000		1
24							1
25							
26		0			8,000	400	1
27	$275	1	20% of ADC/FMV		350	65	1
28							
29		0					
30							
31		0			130		0
32		1	20-30% retail				1
33							1
34		0					1
35							
36		0			17,000	600	1
37							
38							0
39							1
40							
41							1
42							
43							
44							
45							
46		1	$10 - $150	24 hrs. of bike-shop labor earns one bike.			1
47							
48							
49							
50							
51							1
52							
53							
54							
55							
56							
57							
58							
59							
60							
61							
62	$50 lifetime			Handling fee.			
63							1
64		0					
65					3,000	200	1
66		0					
67							
	3	14 3	3	2	7	5	19 15

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	64	65	66	67	68
	Brokering/Listing (cont.)	Employment			
	How Track Mat Ex	FTE Ees	Entry-Level Ees	Skilled Ees	Avg Hourly Wage
1		1			
2		120			
3					
4					
5	We have a paper record and also track matches on the database.	1	0	1	$14.00
6		3	0	3	
7					
8					
9					
10					
11					
12		3	0	3	$12.50
13		5			
14					
15		135			
16					
17		2			
18					
19		7	3	4	$10.00
20		35		35	
21					
22					
23	Phone follow-up and through warehouse.	2	1	1	$11.75
24		6			
25					
26	Telephone callbacks, then keep on RBase software which is IBM compatible.	3			
27	Transaction logs kept by generator &/or user; various criteria used to track material amounts/types, & savings/revenue.	2	1	1	$14.00
28		32			
29		7	4	3	$8.00
30		18	9	18	$9.00
31		0	1	0	$7.50
32	Written record.	2	2	0	$4.50
33	Computer tracking system.	8		8	
34	Computer inventory system.	3	1	2	$10.00
35					
36	Paradox database custom program.	2	1	2	
37					
38		16	2	10	$8.00
39		2			
40		100			
41		1			
42					
43		6	3	3	$9.35
44					
45		7	2	5	$8.50
46	Project Dir. networks w/ recipient organizations; kids who earn bikes return to the shop to fix them; sales not tracked.	2			$15.00
47		8	5	3	$12.50
48		5			
49					
50					
51		6	1	5	
52		7	0	7	
53		9	6	3	$6.50
54					
55					
56					
57		3			
58					
59		4	1	3	$8.50
60		1			$6.00
61					
62		17			
63		4			
64		1			
65		23			
66	Mail and phone surveys.	1	0	0	
67		1			
	10	43	21	23	18

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	69	70	70	70	70	71	71	71	71
					Employment (cont.)				
		Source of Volunteers				Volunteer Types			
	FTE Volunteers	Advertising	Word-of-Mouth	Local Vol Nets	Other	High School Students	Domestics	Church Members	College Students
1	0								
2	200								
3									
4									
5	1	0	1	0	Job applicant pool.	0	0	0	0
6	0	0	0	0	Through parent organization.	1	1	1	1
7									
8									
9									
10									
11									
12	0	0	1	1		0	1	0	1
13						1	0	0	1
14									
15									
16									
17	2	0	1	0					
18									
19	3	0	1	1		1	0	0	1
20	40	0	0	1		0	0	0	0
21									
22									
23	1	1	1	1	Government.	0	0	0	1
24	70	0	1	0		1	0	0	1
25									
26									
27	5	0	1	1	Graduate school programs.	0	0	0	1
28				1					1
29	2			1		1			1
30	50	1	1	1	Recipients and donors of materials.	1	1	1	1
31	10	1	1	1		1	0	0	1
32	1	0	1	0		0	0	0	0
33	10	0	0	1		1	0	0	1
34	12	0	1	0		0	0	0	1
35									
36									
37									
38	3	0	1	1		1	0	1	1
39									
40									
41	220	0	1	1		1			1
42									
43	1	0	1	0		0	0	0	1
44									
45	3	0	1	1		1	0	0	1
46	30	0	1	1		1	0	0	1
47	2	0	1	1		0	0	0	0
48									
49									
50									
51	12	1	1	1		1	1	1	1
52	0								
53	3	0	1	1		0	1	1	1
54									
55									
56									
57	1	0	1	0					
58									
59	0	0	0	0		0	0	0	0
60	0								
61									
62	15	0	1	0		1	0	0	1
63	20	0	0	1		1	0	0	1
64									
65	0								
66	0								
67									
	33	26 4	26 21	28 18	5	26 15	24 5	24 5	27 22

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	71	71	71	72
	Employment (cont.)			
	Volunteer Types (cont.)			
	Professionals	Retirees	Other	Job Training?
1				
2				
3				
4				
5	1	0		0
6	1	1		0
7				
8				
9				
10				
11				
12	1	0		0
13	0	0		
14				
15				
16				
17				
18				
19	1	1	Dept. of Corrections Aerobic Program.	1
20	1	0		0
21				
22				
23	0	1		0
24	1	0	Teachers.	
25				
26				
27	1	1		0
28				
29				1
30	1	1		0
31	1	1		0
32	1	1		1
33	0	1		1
34	1	1	Artists.	1
35				
36				0
37				
38	1	1	Community Service Disabled Persons.	1
39				
40				
41				
42				
43	1	1		0
44				
45	1	1		1
46	1	0		1
47	0	0	Just show up.	1
48				
49				
50				
51	1	1		1
52				1
53	1	1		0
54				
55				
56				
57				
58				
59	0	0		1
60				0
61				
62	0	1		
63	1	0		
64				
65				
66				0
67				
	24 18	24 15	5	25 12

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	73 Employment (cont.)	74 Economics
	Job Training Comment	**Initial Capital Cost**
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		$0
13		
14		
15		
16		
17		
18		
19	On the job training.	$848,557
20		$200,000
21		
22		
23		$50,000
24		
25		
26		
27		
28		
29		
30		$25,000
31		$16,000
32	As needed.	$2,500
33	They learn warehouse management and repair.	
34	Volunteer training, semi-annual redistribution, processing, computer entry, etc.	
35		
36		
37		
38	Work with disabled to retrain.	$100
39		
40		
41		
42		
43		$10,000
44		
45	1) Voc. skills training apprentice shops (appliance, electronic, retail), 2) Gen'l work experience programs, 3) Vol. comm. service participants.	
46	We offer 16 hour bike repair & maintenance course; work skills reinforced via 24-hour Earn-a-Bike program.	$22,500
47	Mentor program for other start-up businesses.	$0
48		
49		
50		
51	Cooperatives with other agencies.	$60,000
52	1) Customer service, 2) material handling, 3) equipment operation.	
53		$80,000
54		
55		
56		
57		
58		
59	Buddy system, on-the-job training.	$9,000
60		$750
61		
62		
63		
64		
65		
66		$0
67		
	11	16

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	75	76	77	78	78	78	78	78	78	78	78	78
				Economics (cont.)								
				Gov't Agencies			Gov't Grants			Gov't Contracts		
	Modif Capital Cost	Annual Operating Cost	Self Sufficiency Desired?	Source	Amount	%	Source	Amount	%	Source	Amount	%
1		$56,500		1	$11,300	20%	1	$45,200	80%	0		
2				0			1	$1,900,000	76%	0		
3												
4												
5		$5,000	1	0			1	$5,000	100%	0		
6	$2,000		1	0			0			0		
7												
8												
9												
10												
11												
12	$20,000	$120,000	0	0			0			0		
13				0			1	$12,672	8%	1	$49,104	31%
14												
15												
16												
17				1	$312,000	100%	0			0		
18												
19		$708,831	0	0			0			1	$316,885	45%
20		$3,500,000	0	0			0			0		
21												
22												
23		$75,000	1	1		4%	1		94%	0		
24				0			1	$16,000	100%	0		
25												
26		$200,000	0	1	$200,000	100%	0			0		
27		$118,000	0	0			0			1	$70,000	59%
28												
29												
30	$47,000	$500,000	1	0			0			0		
31			1	0			1	$16,000	100%	0		
32			0	0			1	$12,000	43%	0		
33		$350,000	0	1	$350,000	100%	0			0		
34			0	1	$33,250	95%	1	$1,750	5%	0		
35												
36												
37												
38	$125,000	$450,000	1	0			0			0		
39										1	$70,000	70%
40												
41												
42												
43	$4,000	$230,000	1	0			0			0		
44												
45		$192,000		0			1	$25,000	12%	0		
46		$62,600		0			0			1	$17,380	34%
47				1	$115,740	37%	0			0		
48		$400,000										
49												
50												
51	$200,000	$200,000	1	0			0			0		
52			1									
53	$0	$220,000	0	1	$48,150	29%	1	$5,333	3%	0		
54												
55												
56												
57				0			0			0		
58												
59	$0	$5,000	1	0			0			0		
60	$7,000	$25,000	1	0			1	$7,000	27%	0		
61												
62				0			0			0		
63				0			0			0		
64				1	$20,000	25%	1	$60,000	75%	0		
65				0			0			0		
66	$0	$20,000	0	1	$20,000	100%	0			0		
67						25%			75%			
	10	20	21	33	9	11	33	12	14	34	5	5
			11	10			13			5		

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
	Economics (cont.)																	
	Foundation Grants			Private Donations			Private Contracts			Membership Fees			Service-User Fees			Product Sales		
	Source	Amount	%	Source	Amount	%	Source	Amount	%	Source	Amount	%	Source	Amount	%	Source	Amount	%
1	0			0			0			0			0			0		
2	0			1	$600,000	24%	0			0			0			0		
3																		
4																		
5	0			0			0			0			0			0		
6	0			0			0			0			0			1		100%
7																		
8																		
9																		
10																		
11																		
12	1	$55,005	57%	1	$31,845	33%	1	$1,930	2%	1	$7,720	8%	0			0		
13	0			1	$23,760	15%	1	$22,176	14%	1	$3,168	2%	1	$4,752	3%	1	$42,768	27%
14																		
15																		
16																		
17	0			0			0			0			0			0		
18																		
19	1	$135,000	19%	1	$50,000	7%	0			0			0			0		
20	1	$800,000	24%	1	$50,000	1%	0			1	$500,000	15%	1	$2,000,000	60%	0		
21																		
22																		
23	0			0			0			1		2%	0			0		
24	0			0			0			0			0			0		
25																		
26	0			0			0			0			0			0		
27	1	$25,000	21%	0			0			1	$6,000	5%	1	$17,000	15%	0		
28																		
29																		
30	0			0			1	$25,000	5%	1	$50,000	10%	0			1	$400,000	80%
31	0			0			0			0			0			0		
32	0			1	$10,000	35%	0			0			0			1	$6,000	22%
33	0			0			0			0			0			0		
34	0			0			0			0			0			0		
35																		
36																		
37																		
38	1			1			0			1		5%	0			1		95%
39													1	$30,000	30%			
40																		
41																		
42																		
43	0			0			0			0			0			1	$250,000	100%
44																		
45	1	$1,000	1%	1	$5,000	2%	0			0			0			1	$177,000	85%
46	1	$30,500	60%	1	$1,250	3%	0			0			0			1	$1,439	3%
47	0			0			0			0			0			1	$200,000	63%
48																		
49																		
50																		
51	0			1			0			0			0			1		
52																		
53	1	$16,757	10%	1	$16,637	10%	0			1	$1,845	1%	1	$57,685	35%	1	$5,011	3%
54																		
55																		
56																		
57	1		75%	1		5%	0			0			1		20%	0		
58																		
59	0			0			0			0			0			1	$150,000	100%
60	0			1	$1,500	6%	1	$2,000	8%	0			0			1	$15,000	59%
61																		
62	0			0			0			1	$25,000	5%	0			1	$475,000	95%
63	1		90%	1		1%	0			0			1		9%	0		
64	0			0			0			0			0			0		
65	0			0			0			0			1	$21,000	2%	1	$1,379,000	98%
66	0			0			0			0			0			0		
67																		
	33 10	7	9	33 14	10	12	33 4	4	4	33 9	7	9	34 8	6	8	33 15	12	14

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	78	78	78	78	78	79	79	79	79	79	79	79	79
	Economics (cont.)					Marketing							
	Other Income/Funding Sources				Funding Annual Amount Total	Direct Mailing	Radio Ads	Flyers	Mass Mailing	TV Ads	Print Ads	Press Releases	Radio PSAs
			Amount	%									
1		Source Type	Source		$56,500	0	0	0	1	0	0	0	0
2			0		$2,500,000	1	0	0	0	0	0	0	0
3			0										
4													
5					$5,000	1	0	0	0	0	0	1	0
6			0			0	0	1	1	0	0	1	1
7			0										
8													
9													
10													
11													
12		0			$96,500	1	0	0	0	0	1	1	1
13					$158,400	1	0	0	0	0	1	0	0
14													
15													
16													
17		0				0	0	0	1	0	0	0	0
18													
19	Deficit covered by gen'l partnership op. funds.	1	$206,946	29%		1	0	0	0	0	0	0	0
20		0			$3,350,000	1	0	0	1	0	1	1	0
21													
22													
23		0			$75,000	0	0	0	0	0	0	1	0
24		0			$16,000								
25													
26		0			$200,000	1	0	1	0	0	0	1	0
27		0			$118,000	1	0	0	0	0	0	1	0
28													
29						1	0	0	0	0	0	0	0
30		0			$500,000	0	1	1	0	0	1	0	0
31		0			$16,000	1	0	1	0	0	0	1	1
32		0			$28,000	1	0	1	0	0	0	1	1
33		0			$350,000	1	0	0	0	0	1	1	0
34		0			$35,000	1	0	0	1	0	0	0	1
35													
36						1	0	0	0	0	0	0	0
37													
38		0				1	0	1	0	0	0	1	1
39					$100,000	0	1	0	0	1	1	1	1
40													
41					$20,000	0	0	0	0	0	0	1	0
42													
43		0			$250,000	0	1	1	0	0	1	1	0
44													
45		0			$208,000	0	0	1	1	0	1	1	1
46	Individual contributions.	1	$80	0%	$50,649	0	0	0	0	0	1	0	0
47		0			$315,740	0	0	0	0	0	1	0	0
48													
49													
50													
51		0				1	1	1	0	0	1	1	0
52						0	0	0	0	0	1	0	0
53		1	$13,435	9%	$164,853	0	0	1	0	0	1	0	1
54													
55													
56													
57		0			$70,000	1	0	0	0	1	0	0	0
58													
59		0			$150,000	0	1	1	0	1	1	1	1
60		0			$25,500	1	0	1	1	0	1	1	0
61													
62		0			$500,000	1	1	0	0	1	1	0	1
63		0			$320,000	1	0	0	0	0	0	0	1
64		0			$80,000	0	0	0	0	0	0	0	0
65		0				0	1	0	0	0	1	0	0
66		0			$20,000	1	0	0	1	0	1	1	0
67					$60,000	0	0	1	0	0	1	0	0
	2	29	8	3	30	38	38	38	38	38	38	38	38
		3				21	7	13	8	4	19	19	12

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	79	79	79	79	79
	Marketing (cont.)				
	Presentations	Yellow Pages	TV PSAs	Word of Mouth	Other
1	1	0	0	0	
2	0	0	0	0	
3					
4					
5	1	0	0	1	
6	0	1	0	1	
7					
8					
9					
10					
11					
12	0	0	1	0	
13	1	0	0	0	
14					
15					
16					
17	1	1	0	0	
18					
19	1	0	1	1	
20	1	1	0	1	
21					
22					
23	1	0	0	1	
24					
25					
26	1	0	0	1	Recycle hotline. Department of Ecology referrals.
27	1	0	0	1	
28					
29	1	0	0	1	
30	1	0	1	1	Trade Associations.
31	0	0	0	1	
32	1	0	0	0	
33	1	0	0	1	Trade Association Newsletters.
34	1	0	0	1	
35					
36	1	0	0	1	
37					
38	1	0	1	1	News Spots TV Interviews Newspaper and Magazine Articles.
39	1	0	0	1	
40					
41	1	0	0	1	
42					
43	1	0	0	1	Location.
44					
45	1	1	1	1	Classifieds.
46	0	0	1	1	
47	1	0	0	1	
48					
49					
50					
51	1	1	0	1	
52	0	1	0	1	
53	1	0	1	1	
54					
55					
56					
57	0	0	0	0	
58					
59	1	1	1	1	
60	1	1	0	1	Participation at events and festivals.
61					
62	1	1	1	0	Trade Shows.
63	1	0	0	0	
64	1	0	0	0	
65	0	1	0	1	
66	1	0	0	1	
67	0	0	0	0	flyers.
	38	38	38	38	9
	29	10	9	27	

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	80	80	80	80	80	80
				Info Mngt		
			Inventory			Donor/Recipient Information
	Op?	Hardware	Software	Op?	Hardware	Software
1	1	Mac Classic II	Database, WordPerfect	1	Mac Classic II	Database, WordPerfect
2	0			0		
3						
4						
5	1	IBM PC	dBase IV	1	IBM PC	dBase IV
6	0			0		
7						
8						
9						
10						
11						
12	1	Mac	Filemaker Pro, Word	1	Mac	Filemaker Pro, Word
13	1	IBM PC/UNIX	Word, Lotus/Realword	1	IBM PC/UNIX	Word, Lotus/Realword
14						
15						
16	1	IBM PS2	OS2	1	IBM PS2	OS2
17						
18						
19	1	Gateway 2000	Paradox, Word, Windows, Lotus 6, WordPerfect	1	Gateway 2000	Paradox, Word, Windows, Lotus 6, WordPerfect
20	1	IBM, HP, Digital	Lotus, Microsoft	1	IBM, HP, Digital	Lotus, Microsoft
21						
22						
23	0			0		
24	1	IBM	AmiPro, Alpha 4	1	IBM	AmiPro, Alpha 4
25						
26	1	IBM Compatible	RBase	1	IBM Compatible	PageMaker Desktop Publishing
27	1	IBM 486	FoxPro & Excel	1	IBM 486	FoxPro & WordPerfect
28						
29	1	Mac	4D	1	Mac	4D
30	1	Apple Mac	Microsoft, FilemakerPro	1	Apple Mac	Microsoft, FilemakerPro
31	1	IBM	AmiPro, Alpha 4	1	IBM	AmiPro, Alpha 4
32	1			1		
33	1	IBM	Clipper, WordPerfect	1	IBM	Clipper, WordPerfect
34	1	IBM PC-486	Windows/Peachtree	1	IBM PC-486	Windows/Peachtree
35						
36	1			1		
37						
38	1	IBM and MAC	General Accounting	1	IBM and MAC	ACT
39	0			1	IBM	dBase IV, grants
40						
41		IBM 386	Alpha 4			
42						
43	0			1	Mac	Filemaker Pro
44						
45	0			1	IBM 386	WP, PageMaker, Excel
46	0			1	IBM	Microsoft Word, Lotus, Raiser's Edge
47	0			0		
48						
49						
50						
51	1		Excel	1		Various MS Products
52	0			0		
53	0			1	IBM 386 D4 40MZ	Q + A 4
54						
55						
56						
57	0			1	PC, modem, printer	MS Works, One-Write +
58						
59	1	IBM	Business Vision	1	IBM	Business Vision
60	0			1	IBM laptop	WordPerfect
61						
62				1	IBM 486 and Macs	Accounting, WP
63				1	IBM PCs	Microsoft: Excel, Access, Word, SQL
64	1	Gateway P5-60	MS Office	1	Gateway P5-60	FoxPro
65	0			0		
66	1	IBM 486	File Express	0		
67	0			1	UNISYS	Mapper wp
	36 22	20	21	38 31	28	29

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	80	80	80	80	80	80
				Info Mngt (cont.)		
		Routing/Scheduling			Inventory	
	Op?	Hardware	Software	Op?	Hardware	Software
1	0			0		
2	0			0		
3						
4						
5	0			0		
6	0			0		
7						
8						
9						
10						
11						
12	0			1	Mac	Filemaker Pro, Word
13	0			1	IBM PC/UNIX	Word, Lotus/Realword
14						
15						
16	0			0		
17						
18						
19	1	Gateway 2000	Paradox, Word, Windows, Lotus 6, WordPerfect	0		
20	1	IBM, HP, Digital	Lotus, Microsoft	1	IBM, HP, Digital	Lotus, Microsoft
21						
22						
23	0			0		
24	0			0		
25						
26	0			0		
27	0			1	IBM 486	QuickBooks
28						
29	1	Mac	4D	0		
30	0			1	Apple Mac	Microsoft, FilemakerPro
31	0			0		
32	0			1		
33				1	IBM	Clipper, WordPerfect
34	0			1	IBM PC-486	Windows/Peachtree
35						
36	0			0		
37						
38	0			0		
39	0			1	IBM	dBase IV, grants management program
40						
41						
42						
43	0			0		
44						
45	0			0		
46	0			0		
47	0			0		
48						
49						
50						
51	0			1		AccPac
52	0			0		
53	0			0		
54						
55						
56						
57	1	PC, modem, printer	MS Works, One-Write +	0		
58						
59	0			1	IBM	Business Vision
60	0			0		
61						
62						
63				1	IBM PCs	Microsoft: Excel, Access, Word, SQL
64	0			0		
65	0			0		
66	0			0		
67	0			0		
	35 4	4	4	37 12	10	11

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	80	80	80	80	80	80	80
				Info Mngt (cont.)			
	Sales Tracking				Other Operations		
	Op?	Hardware	Software	Operation Type	Op?	Hardware	Software
1	0				0		
2	1	IBM PC-286	PCFile Database				
3							
4							
5	1	IBM PC	dBase IV	listings catalog	1	IBM PC	dBase IV and PageMaker
6	0				0		
7							
8							
9							
10							
11							
12	0				0		
13	1	IBM PC/UNIX	Word, Lotus/Realword		0		
14							
15							
16	0				0		
17							
18							
19	0				0		
20	1	IBM, HP, Digital	Lotus, Microsoft	e-mail, internet, membership	1	IBM, HP, Digital	Lotus, Microsoft
21							
22							
23	0			catalog	1	IBM	MS Word
24	0				0		
25							
26	1	IBM Compatible	RBase		0		
27	1	IBM 486	FoxPro & Excel		0		
28							
29	0				0		
30	1	Apple Mac	Microsoft, FilemakerPro		0		
31	0				0		
32	1				0		
33	1	IBM	Clipper, WordPerfect				
34	1	IBM PC-486	Windows/Peachtree		0		
35							
36	0				0		
37							
38	1	IBM and MAC	General Accounting		0		
39	0				0		
40							
41							
42							
43	1	Mac	Excel		0		
44							
45	1	IBM 386	WP, PageMaker, Excel	word-processing, graphics	1	IBM 386	WP, PageMaker, Excel
46	1	IBM	Microsoft Word, Lotus, Raiser's Edge	thank yous	1	IBM	Microsoft Word, Lotus, Raiser's Edge
47	1	IBM 386	Word Processing		0		
48							
49							
50							
51	1		MS Excel		0		
52	0				0		
53	0			budget data	1	IBM 386 D4 40MZ	Champion System 5
54							
55							
56							
57	1	PC, modem, printer	MS Works, One-Write +		0		
58							
59	1	IBM	Business Vision	customer requests, graphic	1	IBM, Mac Quadra	dBase III, PageMaker
60	0			accounting	1	IBM laptop	One Write Plus
61							
62	1	IBM 486 and Macs	Accounting, WP				
63							
64	0				0		
65	0				1	Mac-SE, IIVX	Excel, Word, PageMaker Photoshop, Powerpoint
66	1	IBM 486	File Express	publishing	1	IBM 486	Page Maker
67	0				0		
	37 20	18	19	9	34 10	10	10

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	81
	Interested in New Venture?
1	
2	
3	
4	1
5	1
6	0
7	
8	
9	
10	
11	
12	0
13	
14	
15	1
16	
17	
18	1
19	1
20	1
21	
22	
23	0
24	
25	
26	1
27	1
28	
29	1
30	1
31	1
32	1
33	1
34	0
35	
36	1
37	
38	1
39	
40	1
41	
42	
43	1
44	
45	1
46	1
47	1
48	
49	
50	
51	1
52	0
53	1
54	
55	
56	
57	
58	
59	1
60	1
61	
62	
63	
64	
65	1
66	1
67	
	31 26

Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	82
	Strengths
1	
2	
3	
4	
5	Potential for integrating reuse into SWM services; strong 20 yr. track record of community-based programs; small, regional approach.
6	Capturing and reselling donated building materials to the general public.
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	Experience, international scope, donor-driven, logistics expertise.
21	
22	
23	The materials we collect are local and seem to be best suited for schools and artists.
24	
25	
26	Good record keeping; good service (return calls, attempt match-making); reliable publication (accurate and on-time six times a year).
27	Active brokering with networks of companies in west Queens & north Brooklyn; hands-on approach entailing material qualifications; close proximity to most transacting parties.
28	
29	Major positive impact on the community.
30	The spirit, commitment; ability to do what ever it takes to get the job done well; networking with local groups & bringing people together for common good.
31	We know our community's arts-related needs; administratively strong.
32	Our trucks make this all possible; we pick up items at no charge.
33	Statistical reports are generated each month which help to substantiate the program, and keep account of tonnage (materials entering the warehouse are weighed, direct donations are estimated), value and number of the donations.
34	Potential for development; volunteer commitment; reception by recipients and donors.
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38	Handle every type of business surplus except food, clothing, toxic waste; self-sufficient, requiring no outside funding; capable of reusing or recycling 95% of input; well accepted by community; win-win-win for all.
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43	Self-funding within 6 months of opening; parent organization provides waste reduction & recycling education to all segments of community; store manager is an experienced building contractor; contract.
44	
45	Overall success and growth; providing unique and necessary services; establishing collaborative relationships with social service agencies, solid waste management organizations, and the City of Burlington; revenue growth and generation.
46	Youth environmental action (ages 10-13) and education; community involvement in recycling.
47	County contract at a landfill and a transfer station; county pays us to be there, therefore, we have a guaranteed financial stability; our strength lies in our innovative approach; our warehouse is actually a series of buildings built from reused items.
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52	Independence and a total commitment to being market driven.
53	Redistribution of goods, furniture and appliances from those who have to those who have not; distribution of surplus/excess NRN clothing; recycling of used clothing, household goods, surplus building materials.
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59	Dismantling projects continue supply to warehouse; currently working on electronic materials exchange; 1 partner-architect, C/D expert, promotion; 1 partner-engineer, MBA, business background; 1 partner-renovator, warehouse operations.
60	Only facility of its kind in Vermont; in growth phase with a dedicated staff; ample materials/inventory; target market of educators; grant to develop art component; grant to develop "value-added" component.
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66	It is extremely well received by everyone.
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Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	83
	Weaknesses
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5	Lack direct funding for reuse operation; do not have enough staff time dedicated to the project; do not have system to track volumes and values of materials exchanged effectively.
6	Many times the materials received are hard to resell to the general public or on an individual homeowner basis.
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20	Knowledge of charities in similar organizations that distribute locally is needed - could always have more.
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23	Not enough funding or staff; director weak in business development.
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27	Lack of established city-wide network to tap; need more paid staff to conduct R&D activities, broker transactions, and update and fax listings more frequently.
28	
29	Need more money to cope with increased supply and demand.
30	Not skilled in high tech computers; on-time, etc.; under staffed; more space needed.
31	Only one of many programs that we run; primary focus is service to the arts community; in this time of budget cuts, we have had difficulty maintaining the program.
32	Too new to have any weaknesses. Need a better warehouse - no heat, no toilet, no water.
33	Not being able to meet the demands of the field due to space limitations is a problem; we had planned to more than double the warehouse space but major cut backs in City funding eliminated that commitment.
34	Lack of adequate paid staff.
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38	Track inventory on paper only; lack of neatness.
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43	Current warehouse is for sale, so we will have to move.
44	
45	Financing/fundraising; insufficient management/supervisory/administrative support.
46	Inefficient due to youth focus; recycling constraint due to a focus on young children and a lack of storage space.
47	We are away from commercial centers and at a landfill, therefore, we don't get very high dollar amounts for these materials.
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52	Access to quality inventory can be difficult.
53	Lack of reliability of outside funding sources; inability of the agency to charge enough to be self-supporting because of the social mission of the agency.
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59	Finding established computerized inventory systems for this type of business.
60	Rural area/limited demand; undeveloped Board of Directors/limited interaction; marginal viability has required facility to move several times; hibernate which is difficult for maintaining customer base; Executive Director over-extended.
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66	Yet to reach critical mass in terms of number of listings and number of users.
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Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

	84
	Barriers
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5	Businesses and organizations still need to be educated about reuse. They are reluctant to change their thinking about waste disposal; businesses do not have storage space and must move materials more quickly than we can identify a recipient.
6	Cash flow.
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20	Impatience.
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23	Not enough funding, space, difficult getting word out; too distant from potential users.
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26	Initial marketing of concept of industrial materials exchange; it has taken us five years and we are still working on it.
27	Transportation cost barriers/storage limitations; finding desirable materials for transaction; low billing and tracking capacity.
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30	Warehouse space, staff, and skill; getting people to take a risk.
31	Donors want materials out immediately, often can't react quickly enough; we haven't developed database yet; once it is set up, I anticipate that the program will be stronger.
32	
33	Most of our obstacles are due to being part of a city bureaucracy and will not apply to a general not-for-profit or for-profit operation; if this becomes of interest, we would be open to discussing these matters.
34	Loss of full-time program coordinator through city cutbacks.
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36	We would find some sort of "good Samaritan" liability legislation that would protect companies that contribute solid and hazardous materials to reuse programs very helpful.
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38	Took time to figure out the pitfalls.
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43	Lack of good warehouse space at affordable rates in good retail location.
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45	Facilities, equipment, and personnel.
46	Local government grant was awarded 4 months later than anticipated.
47	The local health department always wanted to shut us down thinking we would be unsightly.
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52	Building zoning use; banks; in Toronto area, 99% of C&D waste is dumped in U.S. every day.
53	Instability of funding; overhead costs, especially space and payroll costs; non-glamorous nature, to the general public, of such operations.
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59	Spent too much time looking for funding which amounted to $0.
60	Limited business management background; financing/operating funds; public attitudes re: Reuse (How much willing to pay for the "service" or materials?).
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Source: *Institute for Local Self-Reliance, 1995.*

Table A1 **Survey Data** (continued)

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	Comments
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4	From inception through 1993, ARCI has distilled & sold more than 100,000 pounds of CFCs; prices have risen from $1 to $7 per pound; need for recycled CFC refrigerant to service existing refrigeration and AC equipment will be heightened.
5	Thank you for compiling this information; the reuse conference was extremely valuable, and it will be helpful to have updated, comprehensive information about other organizations with reuse operations.
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15	ILSR talked with Davies during Recycled Products Show in D.C. (6/29/92).
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23	I can give more information on phone but don't have time to do more in writing so feel free to call with questions.
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38	National Surplus Exchange Program headed by founder of The Surplus Exchange, Inc., Kansas City; purpose of the National Program is to train other cities how to establish their own reuse facility by training them in a school in Southern MO.
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47	The issues of trucks and warehousing is really not applicable to us as we are given materials by people on the way to there landfill; for the first few years, we had no indoor space; because we were one of the first reuse yards around.
48	In addition to helping low-income homeowners, Rehab prevents usable building mtls. from going to landfills; in the past, retailers and distributors found it easier to dispose excess, discontinued and cosmetically damaged materials than to reuse.
49	This program has been disbanded due to lack of staff and funds.
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59	Looking forward to collaborating with new used building material associates.
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65	All material comes from transfer station floor & people who bring in materials; suppliers include small contractors, haulers, property managers, homeowners, businesses, and institutions.
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Source: *Institute for Local Self-Reliance, 1995.*

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