AN ABSTRACT OF THE THESIS OF

Mary Elizabeth Vanlue for the degree of Honors Baccalaureate of Science in Industrial Engineering presented on November 19, 2010. Title: A Method to Effectively Measure Sustainability in Non-Profit Organizations.

Abstract approved:

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Karl R. Haapala

With the growing importance of sustainability, organizations in the non-profit sector need a way to measure, track, improve, and report their sustainability. Through research in current literature and a survey of practices within local non-profits, it is shown these organizations need a simple, flexible process with stakeholder participation to measure sustainability. A method is presented to define, track, improve, and report sustainability and then is demonstrated for a local non-profit organization.

Key Words:
sustainability, non-profit organizations, performance measurement

Corresponding e-mail address:
mbvanlue@gmail.com

A Method to Effectively Measure Sustainability in Non-Profit Organizations

by

Mary Elizabeth Vanlue

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APPROVED:

_____

Mentor, representing Mechanical, Industrial, & Manufacturing Engineering

_____

Committee Member, representing Mechanical, Industrial, & Manufacturing Engineering

_____

Committee Member, representing Mechanical, Industrial, & Manufacturing Engineering

_____

Head, School of Mechanical, Industrial, & Manufacturing Engineering

_____

Dean, University Honors College

I understand that my project will become part of the permanent collection of Oregon State University, University Honors College. My signature below authorizes release of my project to any reader upon request.

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Mary Elizabeth Vanlue, Author

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TABLE OF CONTENTS

Page

INTRODUCTION 1

LITERATURE REVIEW 3

Background Information 3
Sustainability in Business 4
Measurement Methods 6
Importance of Stakeholder Participation 8

REVIEW OF CURRENT METHODS IN ORGANIZATIONS 10

Research Method 10
Survey Results 14

Defining Sustainability for an Organization 16
Tracking and Monitoring 18
Data Storage and Tracking 24
Reporting 25
Summary of Results 28

METHOD FOR TRACKING SUSTAINABILITY 29

Requirements and Method Overview 29
Step 1: Defining Sustainability for the Organization 31
Step 2: Tracking 32
Step 3: Making Improvements 33
Step 4: Reporting 34
Step 5: Reevaluating and Repeating the Method 35

CASE STUDY 36

Design Solutions 37
Results 39

CONCLUSIONS AND FUTURE WORK 41

BIBLIOGRAPHY 43

LIST OF FIGURES

Figure		Page
1.	Average Importance of Aspects of Sustainability	16
2.	Metrics Tracked with Billing	19
3.	Use Metrics	19
4.	Measurement Methods Used to Monitor Workplace Health and Safety	21
5.	Measurement Methods Used to Monitor Employee/Volunteer Satisfaction	21
6.	Measurement Methods Used to Monitor Community Involvement	22
7.	Tracking Waste Streams in the Future	23
8.	Methods Used to Track Sustainability Data	24
9.	Hours Spent on Sustainability Efforts per Month	25
10.	Different Methods Used to Report Sustainability	26
11.	Stakeholders Who Receive Reports about Sustainability	27
12.	Method for Measuring Sustainability	30

LIST OF TABLES

Table		Page
1.	Categories of Non-Profit Organizations	11
2.	Theoretical Versus Actual Sample Distribution of Categories	15
3.	ANOVA for Means of Importance of Aspects of Sustainability	17

LIST OF APPENDICES

Appendix		Page
A.	Survey Consent Document	47
B.	Survey of Sustainability Metrics in Non-Profit Organizations	49
C.	Survey Recruitment Email	55
D.	Survey Data	56
E.	Manually Tallying of Metrics	67
F.	Computerized Reports of Metrics	68

A Method to Effectively Measure Sustainability in Non-Profit Organizations

INTRODUCTION

Sustainability is becoming increasingly important to society and, in turn, to all types of organizations. Stakeholders are looking for companies and organizations that are environmentally, socially, and economically sustainable. Organizations are looking for ways to measure and improve their sustainability. If an organization can become more sustainable, it is good for the Earth, the organization's image and relationship with society, and can potentially help the organization financially. To help organizations track and report their progress, they must have established metrics and methods to document them in place.

Many large companies and organizations have started their "green journeys" (efforts toward environmental sustainability) and have been documenting them, but the efforts of smaller organizations, such as many non-profit organizations, have not been widely reported in research literature. Also, the sustainability tracking and reporting methods used by manufacturers, corporations, and large service companies do not necessarily translate to a non-profit organization.

The objective of this thesis is to provide a method for defining, measuring, tracking, and reporting the sustainability of non-profit organizations. First, a literature review will provide background information on the definitions of sustainability, methods that have been created to track sustainability, and other key insights that companies have learned as they have been working toward their sustainability goals. Next, the current sustainability assessment methods used by local and regional non-profit organizations

will be analyzed using a survey approach. From this information, a method to aid non-profit organizations in their sustainability tracking, reporting, and improvement efforts will be presented. Lastly, the introduction of this method is demonstrated for a local non-profit organization, Furniture Share (Corvallis, Oregon), based on work completed as part of a senior capstone industrial engineering project. The changes and results of changes made to the processes at the non-profit as a result of the senior project are presented.

This thesis will begin to fill the gap in sustainability measurement literature about non-profit organizations and add to the performance measurement body of knowledge. Looking specifically at non-profit organizations and their environmental, economic, and social sustainability from a measurement perspective is not well reported in literature. Thus, the work in this thesis will highlight the need for research in performance measurement in non-profit organizations, especially looking at sustainability metrics.

LITERATURE REVIEW

Much research activity has focused on sustainability and the various means to measure, track, and define it, especially over the past ten years. In this section, background information on the non-profit sector, sustainability, measurement methods for sustainability, the benefits of adopting sustainability, and the importance of stakeholder participation will be presented.

Background Information

The non-profit sector includes a wide variety of organizations, from large trade unions and international aid organizations to small neighborhood associations and museums. The National Taxonomy of Exempt Entities provides a clear picture of the wide variety of groups that fall into the non-profit category (Center on Nonprofits and Philanthropy, 2009). A non-profit organization must not have the intent to make a profit for private gain. It may make a profit, but that cannot be the primary purpose on which it is organized or operated (ICNL, 2010).

There are many definitions of sustainability, but the most widely accepted definition is from the Brundtland Commission Report. It states that sustainability is "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987). The three aspects of sustainability, i.e., environmental, economic, and social, need to work together and are many times referred

to as three pillars of sustainability or the triple bottom line. The concept is that each needs to be considered when making decisions (Kleindorfer, Singhal, & Wassenhove, 2005; Krajnc & Glavič, 2005). Hutchins, Gierke, and Sutherland (2009) pointed out that more emphasis has been recently placed on the environmental aspect and financial measures, while research around the social pillar has been limited. To become truly sustainable, an organization needs to consider all three aspects of sustainability, and to do so must understand how the three are interconnected.

Sustainability in Business

The three aspects of sustainability in business are becoming more important for the reasons of public concern, limited resources, and financial considerations. With the current economic situation and the general public demanding more sustainable products and services, a company might not survive long if it does not adopt sustainable practices (Laszlo, 2003). McKeown (2010) wrote that leading CEOs are seeing the importance of sustainability as a business strategy and its importance from a global perspective. Of 760 leading CEOs surveyed, 93% said they believe that sustainability issues will be important to the future success of their businesses (McKeown, 2010). Industries from construction to information systems and beyond have been adopting sustainability goals and realizing the value it can add to a company through monetary savings and improvement of their public image (Beheiry, Wai Kong, & Haas, 2006; Melville, 2010). Brown (2010) repeated the idea that sustainable practices can add value and improve the bottom line and restated the importance of sustainability, “there is no question that the world

demands—and the fragility of the planet requires—focus, planning and management of the finite natural resources that the planet produces."

Sustainability issues cannot be side issues. Some changes might improve a single aspect of a company's sustainability profile, but hurt the company in other areas. For example, fair trade materials can cost more money, but are more socially sustainable. In spite of this, choosing fair trade materials might still be the right decision from a business perspective, even though they cost more for the company. If all aspects of sustainability become critical parts of business and decision-making, all the information will be available to make informed decisions (Edwards, 2008).

Pursuing sustainability goals can also attract talented employees. More and more jobseekers are looking for companies that are incorporating sustainability into their business plans. These jobseekers may want to feel that they have a higher purpose at work and that they are helping the world through their day-to-day actions (Freese, 2007). Working on sustainability goals is an opportunity to recruit and engage new and old employees in new ways. Businesses are important in shaping how the world is going to change and, if changes are made with the right intentions, can positively influence societal evolution (Lazlo, 2003). Businesses have an opportunity to shape how society is going to change, and the goal of sustainable businesses is to have society change to be more sustainable as well.

Measurement Methods

Various models, methods, strategies, and frameworks have been developed in the past five to ten years to measure sustainability metrics. The problem with most, when trying to apply them to a non-profit organization, is their complexity and, in many cases, the focus on product manufacturing.

Graham and Bertels (2008) proposed and demonstrated the use of a sustainability portfolio assessment framework. The framework used interviews of internal and external stakeholders to define what was being done and what needed to be done through actions and improving competencies in four areas, i.e., pollution, product stewardship, clean technology, and sustainability vision. The main ideas from the interviews were mapped on a grid based on whether the idea was a current concern or for future growth and whether it was an action or competency. As they applied the framework in a real world example, Graham and Bertels discovered they had to broaden the method to make it useful and understandable to everyone participating. The framework created a view of sustainability in the whole organization with current and future action items defined, but still needed to be modified for each organization's use.

Sustainability is about systems and their interconnected nature, so systems thinking and engineering is another approach that has been proposed to evaluate organizational sustainability (Burnham, 2009). A systems approach works to first define the problem or threat and then analyzes the environment of the problem, looking at inputs, outputs, and other factors. Last, it comes up with solutions to solve the problem or ward off the threat. However, the decision making with this method was found to be based too heavily on reason and would not hold up in the business environment due to the

many social and political factors that are difficult to be considered. Life Cycle Assessment (LCA) could also be used, but more work needs to be done to truly integrate social sustainability into the method (Hutchins et al., 2009). LCA looks at every impact a product or service has from the beginning to the end of its life and then how to minimize the negative impacts.

More mathematically based models are being created as well. To be able to compare two companies in the same industry, formulas have been used to normalize sustainability efforts into one score (Krajnc & Glavič, 2005). Barbiroli, Candela, and Raggi (2008) proposed a mathematical model to measure eco-efficiency. Eco-efficiency was defined as "the ratio between environmental impact of a given product/technology to be reduced and the value of production to be increased" (Barbiroli, Candela, & Raggi, 2008). Both of these models are complex and hard to use without a technical background. New indices have been created as well to capture sustainability numerically, e.g., a corporate sustainability commitment index, a sustainability component of project planning index, corporate social responsibility index, and corporate sustainability index (Beheiry et al., 2006; Hediger, 2010).

Looking specifically at non-profit organizations, there is very limited research reported in measuring and tracking sustainability metrics, but the healthcare industry is one non-profit sector that has begun work in this area. The healthcare industry has established goals of reducing medical waste, providing better nutrition to patients and staff, and creating green buildings (Kinney, 2010). Kinney reported the motivation for greener practices came from employees seeking change. Practice Greenhealth provides guidelines for healthcare organizations as well as tools for tracking and reporting the

organizations' sustainability metrics (Practice Greenhealth, 2008). These useful tools are specific to the healthcare industry, so would need to be adapted for use elsewhere.

Measuring performance specifically in non-profit organizations is becoming more important. Public and private donors want to know the impacts and effects of their donations (Medina-Borja & Triantis, 2007). They want to know what impact the programs and services are having on the community, the environmental impact the organization is having, and other information. Involvement of stakeholders, such as donors, is important to find out what information they are interested in and what should be reported.

Importance of Stakeholder Participation

Engaging stakeholders is a key activity in any business, whether those stakeholders are employees, customers, suppliers, or even the greater community. One of the first steps is to identify who the company's key stakeholders are and then develop a plan to engage those stakeholders (Schlange, 2009; Vaccaro, 2008). One study reported how Ben & Jerry's talked to employees about their ideas and then let employee-run green teams have the freedom to present and make changes (Freese, 2007). Employees at all levels of the organization were involved, and their everyday actions reflected the sustainable values of the company.

As in the healthcare industry, in many other organizations, the idea of working on sustainability plans has been a grassroots movement started by non-management level employees. These employees have worked hard to communicate their values and took

action. The employees wanted a healthier and more "green" work environment. Management saw the changes and their employees' passion and, in turn, the companies became more committed to sustainability (Kinney, 2010; Engelhart, 2010). Whether the engagement of stakeholders is bottom-up or top-down, it has an important effect on the outcome of a company's sustainability efforts.

REVIEW OF CURRENT METHODS IN ORGANIZATIONS

The current methods used to track, monitor, and report sustainability efforts in non-profit organizations needed to be characterized to fill the gap in literature and gather the required information to develop a method to track sustainability efforts in non-profit organizations. To do this, a survey was designed and distributed to about 100 organizations in the Willamette Valley region of Oregon. The research method used to create the survey and the results of survey are summarized below.

Research Method

The intent of the survey was to gather information directly from organizations about their sustainability tracking, documentation, and reporting. The consent document that had to be completed before a participant could enter into the survey, as well as the complete survey, can be found in Appendices A and B.

The first step in designing the survey was to decide what topics were going to be explored. The focus areas for the survey were the demographics of the organization and the organization's definition, measurement and tracking, and reporting of sustainability. Organization background information was needed to give context to the rest of the data collected and to be able to draw conclusions about certain demographic populations of organizations. The other categories were seen as the logical steps for organizations as they worked on improving their sustainability profile; they need to define, measure and track, and then report their metrics.

Non-profit organizations work in a variety of fields, so it was important to narrow down the type of organizations responding. Nine categories were used based on The National Taxonomy of Exempt Entities (NTEE) (Center on Nonprofit and Philanthropy, 2009). These categories are listed in Table 1.

Category	Typical Areas Served
Arts, Culture, and Humanity	Museums, Visual/Performing Arts, Historic Preservation, Genealogy, Cultural Awareness
Education	Early Childhood, Adult, Distance, Extracurricular, Literacy, Teacher Training, Student Health Programs, School Counseling
Environment and Animals	Sustainable Design, Conservation, Animal Training, Wildlife Preservation/Protection
Health	Health Care, Patient/Family Support, Rehabilitation, Intervention, Counseling, Medical Research
Human Services	Crime/Legal Services, Job Training/Employment, Food/Agriculture, Housing, Disaster Services, Recreation/Sports
International and Foreign Affairs	International Development, International Peace/Security, International Human Rights
Public and Societal Benefit	Civil Rights, Community Development, Grant Making, Community Service, Science/Technology, Social Science
Religion Related	Christianity, Buddhism, Inter-faith, Islam, Judaism, Hinduism
Mutual and Member Benefit	Insurance, Retirement, Pension

Table 1: Categories of Non-Profit Organizations (Center on Nonprofit and Philanthropy, 2009)

To finish gathering information about the background of the organization, the size of the organization was examined based on both the geographical reach and the number of employees and volunteers that were working at the organization at any given time. With these pieces of information, one can get a picture of the amount of resources the organization has available to devote to their sustainability efforts. At the same time, there is not enough information to be able to identify the organization. The idea was to have

the participants provide minimal identifying information about their organizations to encourage honest and candid responses. If participants had questions or wanted to receive the completed thesis, they were asked to email their requests separately.

Next, the goal was to design questions to gain insight into and compare how organizations define their sustainability. This was a challenge because organizations and individuals might describe sustainability differently and therefore it would be difficult to compare the answers to each other. To create a question where answers could be easily compared and the answer would still define an organization's sustainability, the importance of each aspect of sustainability (environmental, economic, and social) to the organization was thus rated on a scale of one to five.

After an organization has defined what sustainability means to them, it should work on improving sustainability from that perspective. To track these improvements, organizations need to measure and track metrics that indicate sustainability from that perspective. To find out how organizations were currently measuring and tracking sustainability and what metrics they were tracking, questions were posed about possible metrics across all three aspects of sustainability, along with several options for how they might track the metrics. For each metric, a list of different tracking options was provided, as well as an option to provide an alternate answer if the method the organization used was not listed. Then, a question about the possibility of tracking each of these metrics in the future was posed. The intention was to see if an organization planned on dropping, adding, or changing the metrics it tracked in the future. Questions about where data is stored, what specific tools are used to calculate their sustainability metrics, and if they have any sustainability certifications were the posed to identify the

most common practices. The last question in the section asked how many hours a month are spent tracking, monitoring, and reporting their sustainability profile, which shows how much employee time they are willing and can dedicate to sustainability goals. The last section, reporting, focused on the form, frequency, and the stakeholders who receive reports on the organization's sustainability profile. Its intent is to show how organizations' sustainability metrics and messages are being spread.

Once the survey was designed, it was submitted to the Institutional Review Board (IRB) at Oregon State University. This required submitting documentation of the recruitment process, the consent form for participants, the survey, and the purpose of the study. The survey was designed carefully to not include identifying information for the participant or the organization so the IRB ruled that it was not human subject research. Research proceeded without further IRB involvement.

Next, the survey was uploaded to the Internet using Google Forms. Participants from Lane, Linn, Lincoln, and Benton Counties, and the Portland Metropolitan area were contacted through listserv or direct emails to their organizations. The recruitment email used can be seen in Appendix C. The survey was sent to two listservs, United Way of Benton and Lincoln Counties' Listserv and the Institute of Nonprofit Management (INPM) at Portland State University's Listserv. The survey was also sent out via email directly to 60 organizations. Their addresses were found on websites with lists of non-profit organizations for Linn, Benton, and Lane Counties in Oregon (LBvision, 2009; Oregon Public Networking, 2010). In total, it was distributed to an estimated 100 organizations.

Survey Results

Of the approximately 100 organizations contacted, twelve completed the survey. Although this was a small percentage of the organizations contacted, the responses provided some useful qualitative insights and began to paint a picture of how non-profit organizations were defining, measuring, tracking, and reporting their sustainability profile. Some possible reasons for the low response rate were that the recipient did not have the time to complete the survey, did not have the interest in completing the survey, or forgot to complete the survey. The individual who received the survey could have felt that he or she did not have the expertise to complete the survey or that the survey did not apply to the organization. To have a 95% confidence level and a 5% margin of error, 80 of the 100 organizations contacted would have needed to respond (Montgomery, 2005). The complete results can be viewed in Appendix D.

The NTEE codes for the 60 organizations who were contacted directly can be seen in Table 2 with those for a theoretical representative sample population of twelve organizations. It is unknown what types of organizations were contacted through the listserv emails. Of the twelve responding organizations, five categorized themselves as Human Services, two as Education, two as Environment and Animals, one as Arts and Humanities, one as Religion Related, and one as Public and Society Benefit based on NTEE codes (Center on Nonprofit and Philanthropy, 2009). The comparison between the theoretical and actual sample population can also be seen in Table 2.

NTEE Code	Number of Organizations Contacted	Theoretical Sample Number of Organizations	Actual Responding Number of Organizations.
Arts, Culture, and Humanity	9	2	1
Education	7	1	2
Environment and Animals	8	2	2
Health	1	0	0
Human Services	19	4	5
International and Foreign Affairs	0	0	0
Public and Societal Benefit	9	2	1
Religion Related	7	1	1
Mutual and Member Benefit	0	0	0
Total	**60**	**12**	**12**

Table 2: Theoretical Versus Actual Sample Distribution of Categories

Two of the organizations offered services state-wide and ten were local organizations. Only one organization had more than fifty full time paid employees and 50% had less than 5 full time employees. All the organizations, with the exception of one, had a greater number of volunteers than employees. This quick overview of respondents will help frame the answers presented below.

As can be seen in Table 2, the distribution of organizations types in the actual sample population is similar to the theoretical sample population. This means that although it was a small data set, it was a representative population of at least the 60 organizations that were emailed directly and therefore the survey results are expected to be representative of that population. The deviation of results for the actual sample from the theoretical could be attributed to the organizations that were contacted through listserv emails because their types are unknown and were not used to calculate the theoretical sample. To be able to make accurate statistical conclusions, more

organizations would need to be surveyed. Initial data that was gathered is reported and discussed below for each section of the survey described above.

Defining Sustainability for an Organization

The organizations rated the importance of each aspect of sustainability on a scale of 1 to 5 (1 meant no importance and 5 meant high importance). All three categories were rated high for most organizations as can be seen in Figure 1.

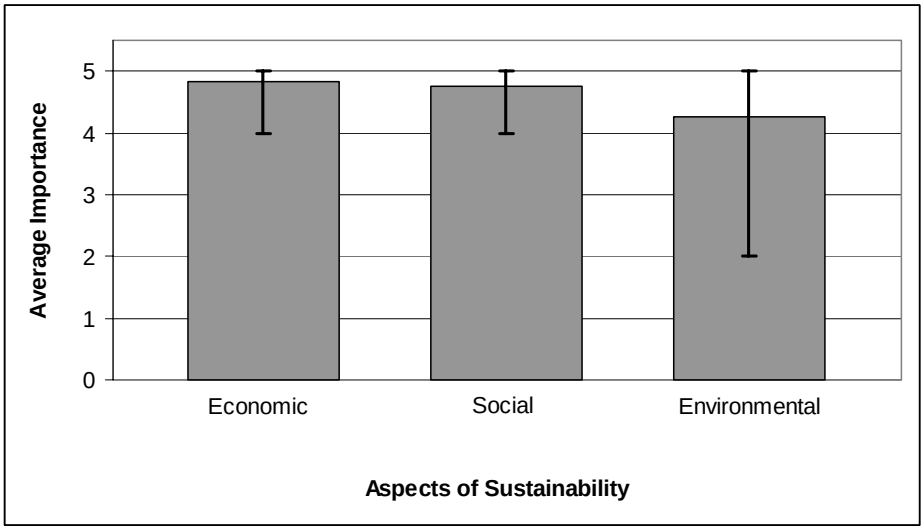

Figure 1: Average Importance of Aspects of Sustainability

The highest rated category was economic sustainability with an average of 4.83 out of 5 points possible. The lowest rating was a 4 in this category. The next category was social sustainability with an average score of 4.75 and a low score of 4 as well. The last

category was environmental sustainability with an average score of 4.25 and a low score of 2.

An analysis of variance (ANOVA) was performed to check if the means of the three ratings were statistically different.

$$H_0: \tau_{enviromental} = \tau_{economic} = \tau_{social} = 0$$
$$H_1: \tau_i \neq 0 \text{ for at least one i}$$

The hypothesis (H_0) says that each deviation from the overall mean (τ_i) is equal to zero and therefore assumes the three means are not statistically different. Reject H_0 if $F_0 > F_{\alpha, a-1, a(n-1)}$. The number of groups, a, is equal to three and the sample size, n, is equal to twelve. Alpha, α, is set at 0.1 to allow for a 10% risk of a type I error (rejecting H_0 when it is true).

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square	Fisher F-value	Significance (p)
Between Groups	2.371	2	1.186	2.406	0.106
Within Groups	16.26	33	0.493		
Total	18.631	35			

Table 3: ANOVA for Means of Importance of Aspects of Sustainability

The hypothesis is not rejected because $F_{0.1, 2, 33}$ is equal to 3.29 which is greater than F_0, 2.406. Therefore, it can be concluded that the means of the ratings of each aspect of sustainability are not statistically different.

It can be seen that economics are a priority for non-profit organizations as much as for companies, which is logical considering they must have income and monetary support to continue to operate. Social sustainability is especially important for non-profit

organizations as well seeing as they serve society. Without volunteer and community support, most organizations could not perform all of their daily functions. However, though ranked the lowest, environmental sustainability still was ranked of high importance. Overall, the organizations seemed to understand the importance of a balance of all the categories or the use of a triple bottom line. Five of the twelve organizations (42%) rated the three categories equally and, as the ANOVA calculations showed, the means were not statistically different. How the organizations tracked and monitored their efforts toward improving the above categories was revealed in the next section of questions.

Tracking and Monitoring

A range of tracking and monitoring methods of environmental metrics were reported with the most commonly tracked metrics being fairly easy to track with billing or purchasing records. The metrics that were tracked less or not at all required additional calculations and time. A summary of the results of the first six environmental metrics, i.e., electricity, fuel, city water, paper, supplies, and equipment use, is found below in Figures 2 and 3.

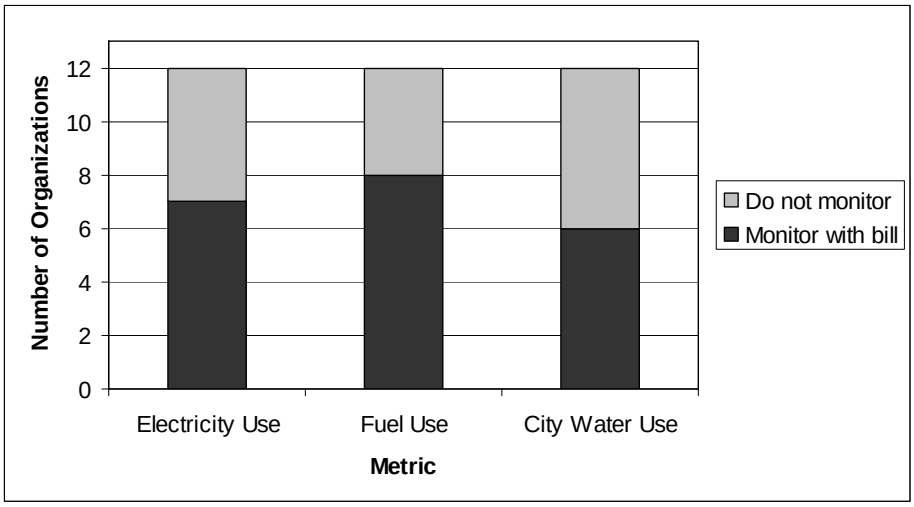

Figure 2: Metrics Tracked with Billing

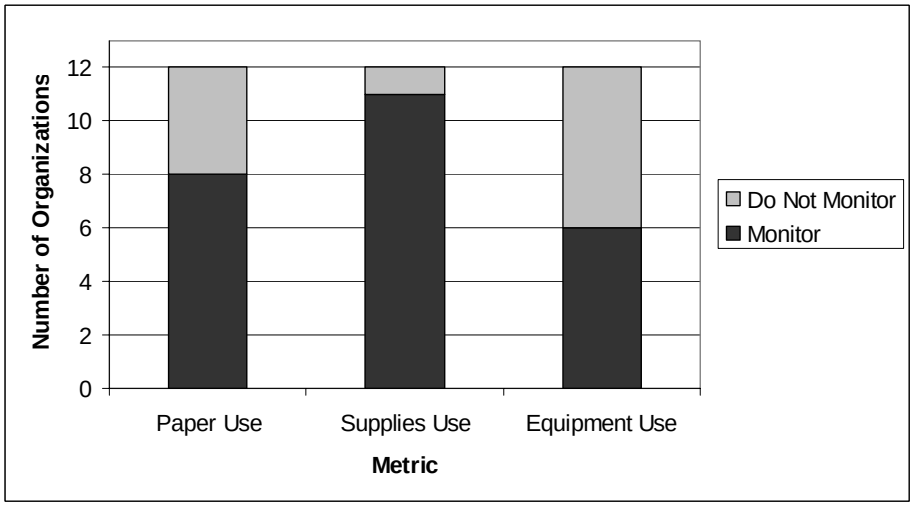

Figure 3: Use Metrics

The above six metrics seemed fairly straightforward to monitor, so it follows that at least 50% of the organizations tracked each metric. A few organizations provided comments about efforts to reduce paper use. One organization reported that it tried to use Google Documents for all document sharing purposes. Another pointed out that it uses

recycled printed-on-one-side paper for all internal documents. It was able to limit its use to less than one carton of new paper a year with fewer than five full-time employees, six to fifty full-time volunteers, and one hundred one to five hundred part-time volunteers. No organizations directly tracked their air pollution, ozone depletion, or green house gas emissions, and only two organizations tracked transportation emissions (by using odometer readings) and carbon footprint (by using an online calculator). These metrics take a little more time and initiative to track and do not directly relate to financial goals. If they reduced the first six metrics, i.e., electricity, fuel, city water, paper, supplies, and equipment use, they would see direct savings, so there was a larger incentive to track them.

Over 80% of the organizations did not track their recycling and waste. The exception to this was paper. Three of the organizations reported tracking their paper recycling, two by weight and one by volume. The two organizations that reported monitoring some of their recycling and waste streams commented that they did not track volume directly, but did monitor how often they delivered their recyclables to the local recycling center. One pointed out that all recycling was free, but it had to pay for trash pick-up (which was monitored by cost), so there was a strong incentive to recycle as much as possible. Like these two organizations, one organization that did not monitor its recycling and waste participated in all recycling and compost programs available in the area, but did not monitor the amount recycled or the amount of trash generated. Once again, it seems that monetary incentives make a difference in the tracking.

Not surprisingly, all of the organizations tracked their income, expenses, and taxes (those that non-profits are required to pay), using an accounting ledger or a similar

method. All but three monitored investments as well. One mentioned it also calculated and tracked the value of all volunteer hours and gifts in kind. Economic sustainability is clearly very important and tracking these metrics becomes a part of day to day business.

The social sustainability metrics had the widest variety of measurement methods used. Based on an organization's size and structure, different measurement methods are more effective than others. The different methods used to measure health and safety in the workplace, employee/volunteer satisfaction, and community involvement can be seen below (Figures 4, 5, and 6).

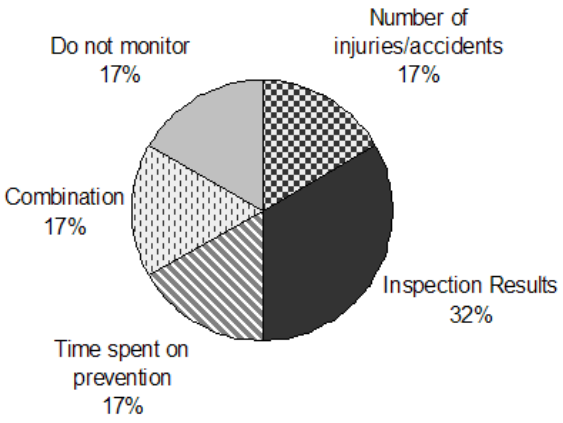

Figure 4: Measurement Methods Used to Monitor Workplace Health and Safety

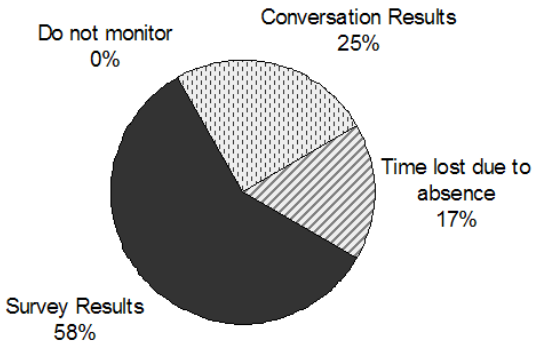

Figure 5: Measurement Methods Used to Monitor Employee/Volunteer Satisfaction

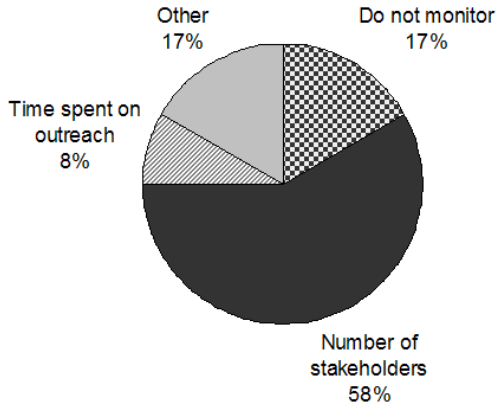

Figure 6: Measurement Methods Used to Monitor Community Involvement

All three of these metrics are important for non-profits to thrive. The comments in this section pointed out that the employees in smaller non-profit organizations were often heavily involved and interacted with volunteers and the community enough that measuring these metrics was a part of daily conversations. One even reported competing in the Best 100 Non-Profits Survey to be externally evaluated.

When the organizations were asked which environmental metrics (materials and energy) they would track in the future, most organizations answered the same as they did in the first set of questions. They planned on tracking what they currently were tracking. There were a few changes, but the overall percentages of tracking versus not tracking stayed about the same. Looking at the data on tracking recycling and waste streams, two organizations were "likely" to start tracking these metrics and four organizations were "unsure" whether they were going to start tracking these metrics. That leaves the two organizations that were already tracking and four organizations that had no plans to start

tracking their waste streams (Figure 7). Overall, there was an interest in tracking waste streams, but finding the time and motivation to start that tracking might be difficult.

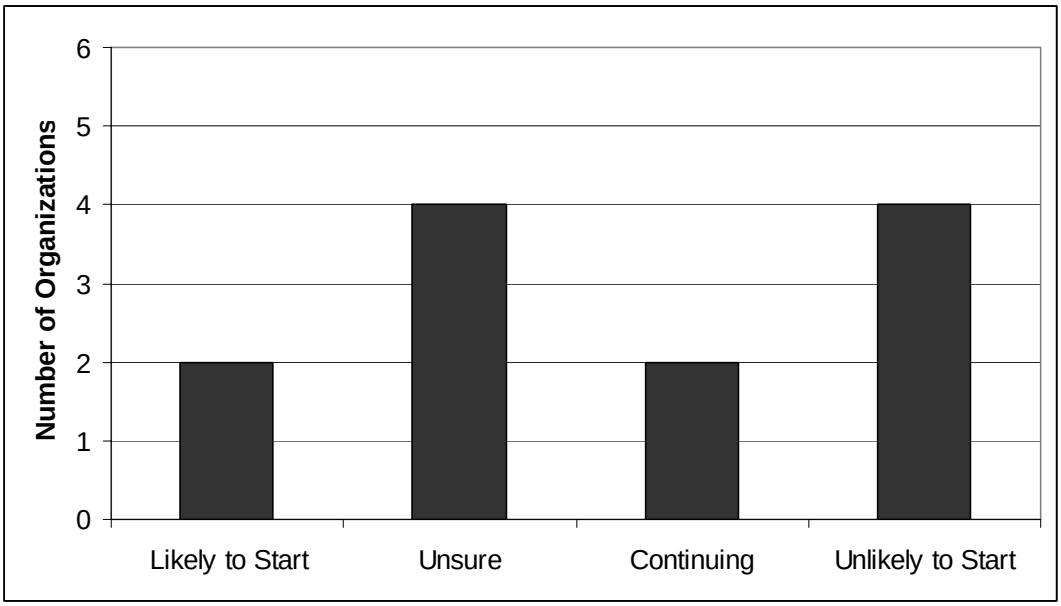

Figure 7: Tracking Waste Streams in the Future

All the organizations planned to continue tracking their financial metrics in the future. The organizations planned to continue their tracking of social metrics. One additional organization planned on tracking workplace health and safety and one more planned on tracking community involvement. Overall, the comments and data suggest that organizations were interested in tracking more metrics, but for now were focused on continuing what they were already tracking.

Data Storage and Tracking

The organizations were asked what tools they used to track and calculate their sustainability metrics. Half of the organizations (six) used a spreadsheet or database, four used paper tracking, and two primarily used estimation (Figure 8).

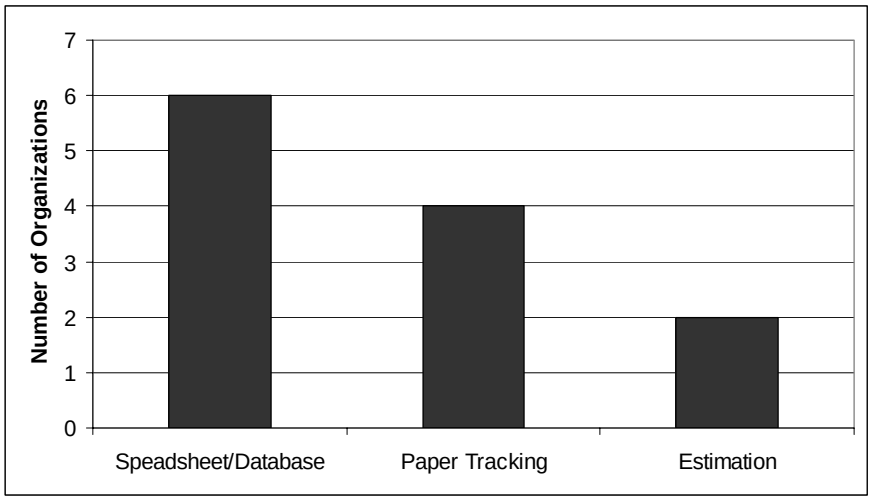

Figure 8: Methods Used to Track Sustainability Data

Two organizations that used spreadsheets and one that used paper tracking also used estimation. Estimation involves observing metrics informally and then recording ballpark figures through the use of judgment and inferences. Even though half of the organizations were not using electronic methods to track their sustainability data, ten of the organizations reported they stored their data in a spreadsheet or database and only one reported using paper tracking for storage purposes (one organization did not respond).

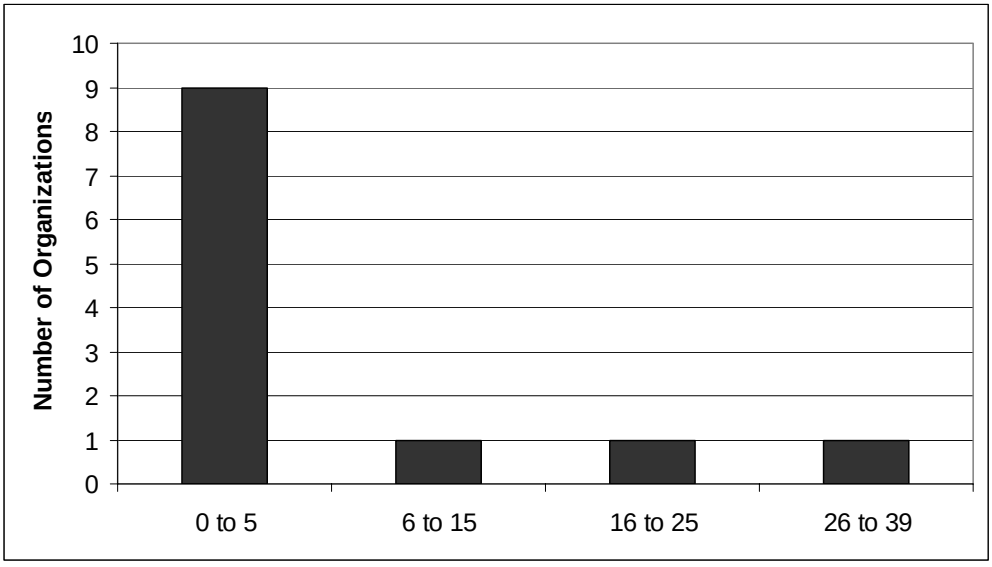

Figure 9: Hours Spent on Sustainability Efforts per Month

On average, the total amount of time that each organization reported spending monitoring, tracking, and reporting their sustainability profile was low. Only three organizations spent more then five hours a month (Figure 9). Employee time is valuable, so the tracking each organization commits to do needs to be completed in the least amount of time possible.

Reporting

Organizations reported using a variety of methods to report their sustainability profile. Many used a combination of methods. Figure 10 shows these various methods (note that organizations were allowed to select more than one method).

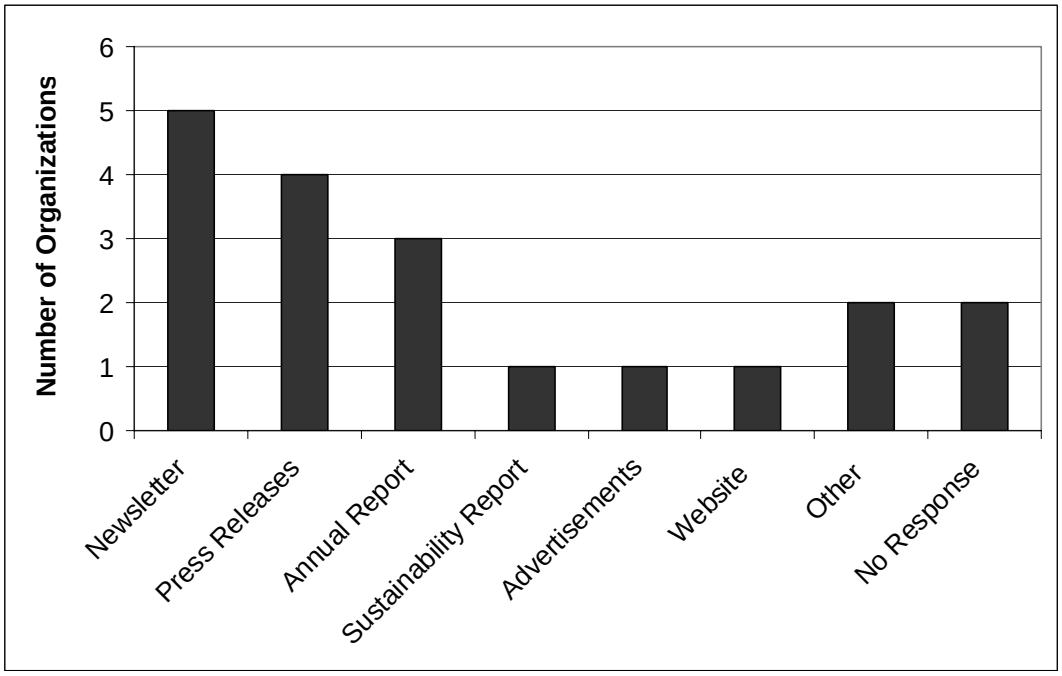

Figure 10: Different Methods Used to Report Sustainability

Just as there were various methods to report sustainability metrics and goals, there was a variety of people who were the intended recipients of the reports. The most common form was reporting to a board of directors; all but one of the organizations reported to their board about sustainability metrics. Half of the organizations reported to donors and half reported to their employees. Only a third reported their sustainability profile to the public and a quarter of the organizations reported to their clients and customers. Two organizations mentioned reporting to granting organizations (Figure 11).

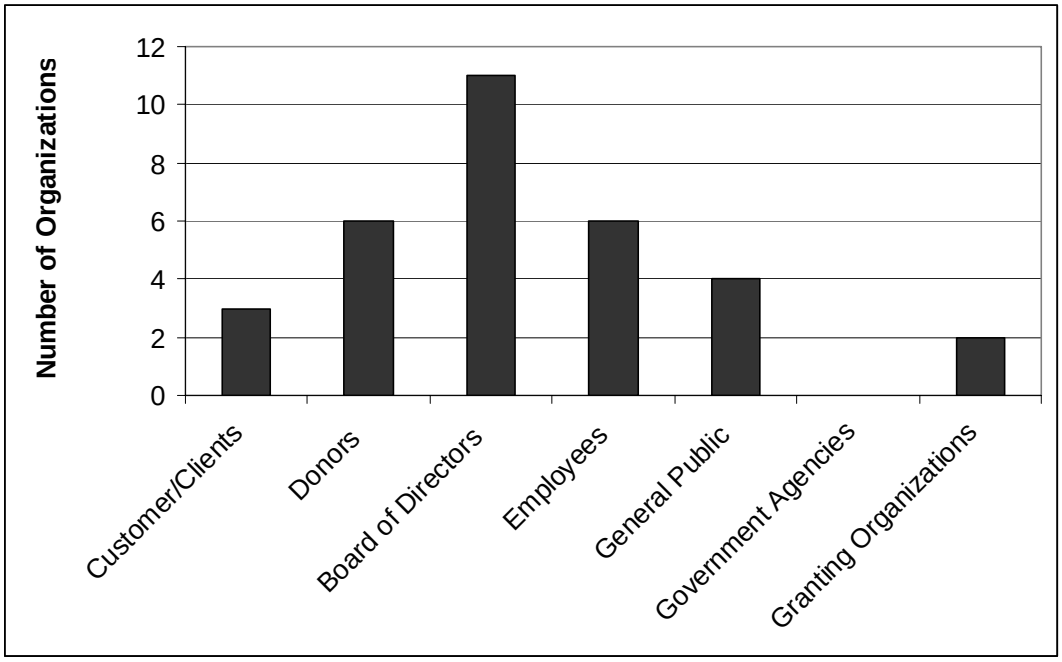

Figure 11: Stakeholders Who Receive Reports about Sustainability

The frequency of reporting to stakeholders varied greatly as well, though the information reported about the frequency of reporting was not conclusive. The only clear trend was that the recipient of the most regularly scheduled reporting was the board of directors, with all but two organizations reporting monthly, quarterly, or yearly. To receive more clear data for this question, reporting would need to be better defined. Some organizations answered that they reported daily to a group of individuals, while others answered that they reported yearly. In fact, each organization might discuss progress daily with the group, but both did not view this as reporting.

Summary of Results

The organizations that responded knew the importance of all three aspects of sustainability. They were monitoring economic and social metrics. They were tracking environmental metrics that had a monetary incentive and were simple to track. Overall, the organizations had limited time to spend on sustainability efforts and were most commonly reporting to their board of directors, employees, and donors.

To gain more insight, more details about how sustainability is a part of the organization's mission statement and goals could be gathered. A clear definition of reporting would need to be developed and questions on how the organization decides on and implements sustainability improvements should be added. Beyond those changes, follow-up interviews with select organizations could occur to gather more specific information about the organizations' sustainability efforts.

METHOD FOR TRACKING SUSTAINABILITY

As shown in the literature review and survey responses, non-profit organizations need a method to assess, improve, and report their sustainability. Through the time spent working with Furniture Share during a senior capstone industrial engineering project, which occurred concurrently with work on this thesis, it become apparent that the organization wanted to track their sustainability, but did not have the tools in place to do so. As described in the case study below, it had limited time and resources to dedicate to sustainability efforts, but still wanted to highlight its activities for the public and potential funding organizations. From the survey responses, literature review, and the Furniture Share project, a few requirements were identified for methods to tracking sustainability metrics in non-profit organizations, especially smaller ones like the ones surveyed. The requirements will be presented and then the five-step method created to fill those requirements will be explained.

Requirements and Method Overview

Requirements identified for tracking and reporting sustainability metrics include simplicity of use, ability to change for different organizations, low time commitment, highlighting monetary savings, and stakeholder involvement. Organizations need a system that is simple to use because many have minimal technical backgrounds to be able to successfully utilize a complex computer system or mathematical model. Similarly, with small staffs, employee time at non-profits is at a premium, so less time needed to

perform tracking and reporting is better for the organization. The task of tracking and reporting will most likely be added to someone's job or be split between employees, which is another reason for simplicity. More importantly, the system needs to be able to be tailored by the organizations to their particular needs. For example, different organizations will need to track different metrics and will be at different places in their sustainability journeys.

The survey showed that tracking metrics that have monetary savings are very important. To gain initial buy-in to tracking sustainability metrics and working on improving the sustainability profile, the monetary savings need to be the initial focus. Most business employees are familiar with financial metrics, so this is an effective way to communicate with them, especially as sustainability reporting and goals are initially introduced. The more stakeholders participate, the more they will work on the sustainability efforts and the more ownership they will feel (Freese, 2007). A basic five-step method (Figure 12) is proposed to measure sustainability in non-profit organizations. The method applies a similar approach to other continuous improvement models such as the plan, do, check, act model or the managing for daily improvements model (Morse & Babcock, 2010; Chapman, 2007). While it does follow a similar structure, the emphasis is placed on sustainability efforts.

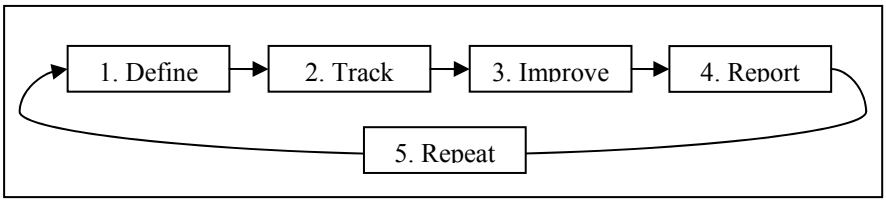

Figure 12: Method for Measuring Sustainability

The basic steps in the proposed method are the following: define sustainability for the organization, track metrics that support the definition, make improvements to organizational processes, report results, and then repeat the process.

Step 1: Defining Sustainability for the Organization

The first step to measuring sustainability and pursuing sustainability as a goal is to decide what sustainability means to the organization. Conversations and brainstorming sessions should be held with stakeholders (for example: employees, volunteers, customers, donors, and board members) to hear how sustainability efforts fit within broader organizational goals. Conversations should cover all three pillars of sustainability, i.e., environmental, economical, and social. The following are some questions to be considered and discussed:

- How should our organization define sustainability?
- What is the focus/mission of our organization?
- What metrics do stakeholders want to see tracked and reported?
- What is the process for identifying and selecting improvements that could positively influence the organization's sustainability metrics?
- What is currently being tracked and monitored?
- How much time can be dedicated to tracking our sustainability metrics?
- Who will these metrics be reported to and at what frequency?

As the conversations evolve, more questions will be raised. Conversations should be documented as they occur, while keeping in mind that, like in any brainstorming process,

no idea is right or wrong (Reese, 2008). The more stakeholders that get involved during this stage, the better the outcomes will be. The organization will get a broader view of the stakeholders' concerns and the stakeholders will be invested in the efforts.

From the brainstorming results, the key stakeholders should narrow down the responses to the key ideas and decide which metrics should be tracked. The number and complexity of these metrics will depend on the organization and its needs. An effective strategy might be to start with key metrics and add more as the organization works on its sustainability policies. Ideally, these metrics will be a combination of the three pillars of sustainability with emphasis on the area of focus of the organization. Also, these should be metrics of interest to donors and granting organizations.

Step 2: Tracking

Once the metrics have been chosen, the method of tracking and recording the data needs to be decided upon. This method is going to once again depend on the organization and, more importantly, what it decides to track. To begin with, the data should be stored in a spreadsheet or database. This allows for easy access, long term tracking, and ability to graph and analyze trends. As the tracking method develops, more complex software and systems could be a possibility. Decisions should be made about who will be doing the tracking and data collection and at what frequency it will be collected. With the metrics, the individuals, the method, and the frequency decided upon, it is time for implementation of the plan.

The recording instruments will need to be created and the individuals that will be performing the tracking will need to be trained. In some cases, the data will come from an invoice or purchasing record. In this case, all that needs to be done will be to create a spreadsheet or some other method to record the data. In other cases it might be more complicated and require a mathematical formula or special instrument to take the data.

Once the system is physically in place, the first set of data should be recorded. This is the baseline data that will establish the starting point for the organization. After the initial baseline data is collected, recording of data should start at the frequency decided upon. Without improvements, no changes will probably be seen, but tracking will become a part of the normal routine and the baseline data can be checked for accuracy.

Step 3: Making Improvements

From this baseline data, goals should then be set for each metric. Then, the organization should ask what it needs to do to reach that goal. Once again, involving stakeholders is a great idea; they might know something about the organization or about an aspect of sustainability that is not known to management. Strategies could be as simple as turning off lights to reduce electricity consumption or investment in more efficient equipment.

To narrow down the list of improvement ideas, the organization should consider which metrics need to be improved the most and which improvements would have the largest effect on those metrics. The cost of each improvement and the overall budget for

improvements should be compared to check on the feasibility of each improvement. The improvements chosen for implementation and their anticipated benefits should be explained to both internal and external stakeholders to encourage their buy-in to the improvements. Changes should then be made and data should continue to be recorded.

Step 4: Reporting

Reporting to stakeholders should occur throughout the process as the organization develops its sustainability program, but regular reporting should also be established. The results (positive and negative) of the organization's tracking and improvement activities should be documented and reported to stakeholders. The form, the frequency of reporting, and the recipients of reports will vary from organization to organization, but the main goal is to show organizational progress and continued effort toward sustainability goals. Reporting progress is targeted toward gaining internal and external stakeholder buy-in to the sustainability effort.

Reporting the results in understandable and relatable terms is important. If it is a numerical result, e.g., kilowatts of electricity that are being saved or amount of material that is being recycled, it could be reported in a manner that can be visualized. This might be the number of households that can be powered with the electricity or the amount of physical space the recyclables would take up. Another form that can be effectively communicated is in financial terms, e.g., dollars. An organization will gain buy-in to their sustainability efforts if it can show the cost savings of sustainability improvements.

Step 5: Reevaluating and Repeating the Process

After the organization has completed all the previous steps, the process should begin again. Are the right metrics being tracked? Should metrics be added? Does data need to be collected in a different manner or frequency? Should more or fewer people be reported to? The organizations should solicit input from stakeholders. Was there a positive impression of initial improvements and where there ideas of future improvements?

Once decisions have been made about which changes need to be completed, the cycle moves to step two and so on. More data is collected and more insight is gained. This framework can be used in all types of organizations, but will work well with non-profit organizations because of its simplicity and flexibility.

A senior capstone industrial engineering project team used part of this basic method at a local non-profit organization to define the organization's sustainability profile and create tracking devices to help the organization begin using the method. The results are presented in the case study below.

CASE STUDY

As part of one of the 2010 Senior Capstone Projects in the School of Mechanical, Industrial, and Manufacturing Engineering at Oregon State University, which occurred concurrently with the work on this thesis, a team looked into the tracking and reporting of Furniture Share's (then known as Benton Furniture Share) sustainability efforts (Hughes, Sugyiama, & Vanlue, 2010a; Hughes, Sugyiama, & Vanlue, 2010b). Furniture Share is a nonprofit agency serving primarily Oregon's Benton and Linn Counties by collecting and redistributing furniture to families in need. The team worked on improving a variety of processes at Furniture Share, such as written work instructions, warehouse layout, flow of used goods, and tools for performance data collection.

The project began with the first step, to define sustainability for the organization, gauge resource availability and current tracking, and decide which metrics will be tracked. One of the challenges Furniture Share had was a very small staff of about one and half paid employees, so they wanted to reduce the time needed to gather performance data that is reported to the board of directors and used for grant writing purposes. Michelle Maddux, the Executive Director of Furniture Share, told the group that whenever she was writing a grant, she manually counted the number of children that received beds, the total number of items diverted from the landfill, or any other metric that supported the focus of the granting organization. All of the requests for items were kept in binders by month. It was a well organized system, but to train each volunteer to move the papers to the right section and make the correct notations took a lot of time.

The team then asked what aspects of sustainability were important to Furniture Share's mission. Maddux responded that it is important to track the number of items or tons of material that is diverted from the landfill by being donated and redistributed through Furniture Share. Second, the non-profit wanted to fill as many client requests as they could, especially to families with children, and the organization wanted to accomplish these goals while being financially sustainable and responsible. The metrics chosen for tracking were tons of material diverted from the landfill and information on client orders and demographics.

Design Solutions

The second step in the method outlined above is to decide how the metrics will be tracked, who will track them, and how often they will be tracked. The team focused on the "how" by creating and implementing the tools Furniture Share needed. Assigning the task of tracking and deciding on the frequency of tracking was left for Furniture Share to decide. Highlights of three components that were implemented by the team to help Furniture Share better track and report their sustainability profile will be shared here. The three components include a Microsoft Access database, a Microsoft Excel spreadsheet, and formulas to calculate furniture equivalencies. All three of these components were provided at no cost to Furniture Share, but have helped reduce reporting time and improved the clarity of the reports.

The team worked with a community volunteer to design the Microsoft Access database. It compiles the information that was already recorded on client request forms.

This has allowed Furniture Share to track repeat requests from clients and make notes about any problems encountered. Once all the data is entered, it can be queried into reports with the specific statistics of interest when writing grants and reports, or for general tracking purposes. Client demographics can be broken down or the number of twin beds versus the number of queen beds can be compared, for example. The goal was to provide a first step for Furniture Share into electronic tracking and eliminate manual tracking of data. After Furniture Share is accustomed to the database, the organization could reduce paper use by receiving requests through email or their website, which would continue to improve their sustainability profile.

Second, the team developed a simple Microsoft Excel spreadsheet to track the relationship between Furniture Share and other non-profits in the area. Furniture Share has been exchanging materials and shop time with Habitat for Humanity ReStore to repair furniture and also wanted to track the amount of material taken to Allied Waste. The worksheets were designed to track the estimated value of these transactions, the labor hours involved, and a description of each item. With these worksheets, each organization can report their interactions with the other organization in quantitative terms.

The third item to highlight is the furniture equivalency calculations developed by the team. The Executive Director explained that they reported an estimated tonnage of material that is diverted from the landfill. Even though this number sounded impressive, the granting organizations and groups she talked to could not visualize the amount of material. The team calculated how many semi-truck trailers, train cars, pick-up trucks, or football fields the material diverted would fill. This makes a larger impact on the individuals she talks to because they can picture the volume of material diverted.

With these three elements in place, Furniture Share was ready to begin its tracking. Improvement possibilities can be discussed once baseline data is recorded. The team prepared a report for Furniture Share of possible future improvements which would require financial investment. These suggestions ranged from a document scanner to scan client requests into the database to additional shelving and hand trucks. Implementing future improvements and establishing regular reporting are the next steps for Furniture Share. The team reported all its findings to the board of directors and Maddux plans on continuing regular reporting to them. After improvements and reporting, it will be time for Furniture Share to reevaluate and begin the cycle again.

Results

Four months after the senior capstone project was completed, a brief interview with Maddux was conducted to see how implementation of design solutions were going and what benefits they were seeing, as well as to gain insight into their future goals (Maddux, 2010). Maddux explained that data entry into the database had been slow to begin with due to training and available time. During the fourth month, they entered all requests into the database and ran the reports. Then they did their normal manual paper count to double check. Examples of their old method of manual tallying and of the new reports are provided in Appendix E and F. She estimated that once the database is fully utilized, it will take one person 30 minutes per work day (four days a week) to enter the data, or around 8 hours per month plus the minimal time to run the reports as needed. Previously, it took one person manually tallying and counting from their paper records

about 20 to 25 hours at the end of each month. The potential savings is 12 to 17 hours per month. Maddux explained that they are using the Microsoft Excel spreadsheet for tracking, but have yet to report those figures outside of the board of directors and with the other organizations involved. That would be a goal in the future once enough data has been gathered.

Last, she raved about the furniture equivalency. She said she uses it in almost every conversation she has about the organization. In these conversations she said she can see the eyes of the people she is talking with get large as they image what a football stadium filled two feet deep with debris looks like (Maddux, 2010). Furniture Share's stakeholders can now see the amount of work that it does.

By making a few small changes in Furniture Share's data collection and reporting process it can now more easily and clearly show the amount of work it is doing. With clear data the organization can begin to look into different aspects of its sustainability in the future. Since Furniture Share uses a rented space, there are many things out of its control, e.g., insulation, windows, lighting, power sources. It has chosen to focus on a few main metrics to track, monitor, and report due to its limited workforce and current size of its organization. These metrics are mainly the ones desired by the fifteen to twenty granting organizations from which Furniture Share seeks support. As it receives more funding, it hopes to formally track more aspects of its sustainability profile and be able to share those aspects. By continuing to reevaluate what metrics it is tracking and regularly reporting to its board of directors and granting organizations, it has begun actively improving its sustainability profile.

CONCLUSIONS AND FUTURE WORK

In this thesis, current literature on the various aspects of sustainability has been reviewed. Next, a survey was designed and distributed to discover more about what non-profits are doing to measure and track their sustainability efforts. The results of these two sections and work on the case study show the need for a simple, flexible method with stakeholder involvement and an emphasis on financial measures. A five-step method was proposed as a starting framework for non-profits. The steps include define sustainability for the organization, track metrics that support the definition, make improvements to organizational processes, report results, and repeat the steps. It works in the above needs and helps the organizations define, track, and report their sustainability profiles. The introduction of this method in a local non-profit was then shared.

This thesis is just the beginning of potential research in the non-profit sector. The non-profit sector needs to start tracking and reporting their sustainability profiles and they need help figuring out the best method. More specific models can be created for different non-profit sectors, like the one by Practice Greenhealth being used in the healthcare industry (Practice Greenhealth, 2008). Surveying more organizations to gain a sufficiently large sample of each type and size of organization would allow researchers to look into trends based on these attributes. Looking at trends across the country and internationally could be another potential for research using a similar survey method. This would create a more compressive data set. The initial twelve data points used in this thesis are not statistically significant but they do provide a small representative population of the organizations contacted and show the potential for further research.

Many organizations are doing their part to become sustainable, but do not have the tracking and reporting systems in place to show the results. By using the simple method to create a tracking and reporting system, non-profit organizations will be able to share their results. The more organizations that are involved in sustainability reporting, the more attention and interest the public will have in becoming sustainable as well. Many small changes can make a large difference. In this changing world, everyone needs to do what they can to become sustainable and to leave a better world for future generations. Everyone has the power to influence change and businesses have the potential to shape where this change in society will lead.

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APPENDICES

Appendix A: Survey Consent Document

CONSENT FORM

1. WHAT IS THE PURPOSE OF THIS FORM?
This form contains information you will need to help you decide whether to be in this study or not. Please read the form carefully and email the study team member(s) questions about anything that is not clear.

2. WHY IS THIS STUDY BEING DONE?
The purpose of this study is to record current monitoring, tracking, and reporting activities for sustainability in non-profit organizations. The results will be used to develop a method for non-profit organizations to measure and improve their sustainability profile. It is part of the student researcher's undergraduate honors thesis. Up to 100 organizations will be invited to take part in this study.

3. WHY AM I BEING INVITED TO TAKE PART IN THIS STUDY?
You are being invited to take part in this study because you are involved with a non-profit organization.

4. WHAT WILL HAPPEN IF I TAKE PART IN THIS RESEARCH STUDY?
The study activities include an online survey. We estimate that it will take you about 30 minutes to complete the survey.

If you would like to receive a final copy of the thesis which will contain the findings of the survey, please email Mary Elizabeth Vanlue at vanluem@onid.orst.edu.

5. WHAT ARE THE RISKS THIS STUDY?
There are no foreseeable risks to you by participating.

6. WHAT ARE THE BENEFITS OF THIS STUDY?
This study is not designed to benefit you directly. The results of the study could be used to benefit your organization in the future.

7. WILL I BE PAID FOR BEING IN THIS STUDY?
You will not be paid for being in this research study.

8. WHO WILL SEE THE INFORMATION I GIVE?
The information you provide during this research study will be kept confidential to the extent permitted by law. Research records will be stored securely and only researchers will have access to the records. Federal regulatory agencies and the Oregon State University Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy records pertaining to this research.

If the results of this project are published your identity will not be made public. To help ensure confidentiality, we will be using password-protected computer files and online survey.

9. WHAT OTHER CHOICES DO I HAVE IF I DO NOT TAKE PART IN THIS STUDY?

Participation in this study is voluntary. If you decide to participate, you are free to withdraw at any time without penalty. You will not be treated differently if you decide to stop taking part in the study. If you choose to withdraw from this project before it ends, the researchers may keep information collected about you and this information may be included in study reports. You can skip any question that you would prefer not to answer.

10. WHO DO I CONTACT IF I HAVE QUESTIONS?

If you have any questions about this research project, please contact:
Mary Elizabeth Vanlue, Student Researcher at vanluem@onid.orst.edu
Dr. Karl R. Haapala, Assistant Professor and Principle Investigator at karl.haapala@oregonstate.edu

12. WHAT DOES MY AGREEING TO THIS CONSENT FORM MEAN?

Your selection of 'I agree' indicates that you understand the above information, that your questions have been answered, and that you agree to take part in this study. Please print a copy of this document for your records.

☐ I agree.

☐ I disagree.

Appendix B: Survey of Sustainability Metrics in Non-Profit Organizations

SUSTAINABILTY METRICS IN NON-PROFIT ORGANIZATIONS

This survey will record current monitoring, tracking, and reporting activities for sustainability in non-profit organizations.

BACKGROUND INFORMATION

Information in this section meant to define the type and size of your organization. This information will be used to place responses into different sets for comparison.

1. How would you classify your organization? (Choose one)

☐ Arts, Culture, and Humanities (Museums, Visual/Performing Arts, Historic Preservation, Genealogy, Cultural Awareness)

☐ Education (Early Childhood, Adult, Distance, Extracurricular, Literacy, Teacher Training, Student Health Programs, School Counseling)

☐ Environment and Animals (Sustainable Design, Conservation, Animal Training, Wildlife Preservation/Protection)

☐ Health (Health Care, Patient/Family Support, Rehabilitation, Intervention, Counseling, Medical Research)

☐ Human Services (Crime/Legal Services, Job Training/Employment, Food/Agriculture, Housing, Disaster Services, Recreation/Sports)

☐ International, Foreign Affairs (International Development, International Peace/Security, International Human Rights)

☐ Public, Societal Benefit (Civil Rights, Community Development, Grant Making, Community Service, Science/Technology, Social Science)

☐ Religion Related (Christianity, Buddhism, Inter-faith, Islam, Judaism, Hinduism)

☐ Mutual/Membership Benefit (Insurance, Retirement, Pension)

☐ Other
If other please briefly explain what your organization does. ☐

2. Where is your organization located? (Choose one)
☐ Local: located and services provided within a state regional area
☐ State wide: located and services provided throughout the state
☐ Regional: located and/or services provided in several states
☐ National: located and/or services provided throughout the U.S.
☐ International: located and/or services provided inside and outside the U.S.

3. How many of the following employee types do you have working for your organization on average (at any one time)?

	0 to 5	6 to 50	51 to 100	101 to 500	501+
Full time paid employees	☐	☐	☐	☐	☐
Part time paid employees	☐	☐	☐	☐	☐
Full time volunteers	☐	☐	☐	☐	☐
Part time volunteers	☐	☐	☐	☐	☐

DEFINING SUSTAINABILITY FOR YOUR ORGANIZATION

Information collected in this section will tell us about how your organization defines sustainability.

4. How important is each of following sustainability categories to your organization? (1= not important, 3= neutral, 5= very important)

	1	2	3	4	5	Not Applicable
Environmental	☐	☐	☐	☐	☐	☐
Economic	☐	☐	☐	☐	☐	☐
Social	☐	☐	☐	☐	☐	☐

MEASUREMENT AND TRACKING
Information collected in this section will tell us about how your organization measures and tracks sustainability related metrics.

5. Indicate how the following environmental metrics are monitored by your organization.

Materials/Energy

Electricity Use
☐Do not monitor ☐Meter readings ☐Electric bill ☐Other

Fuel Use
☐Do not monitor ☐Meter readings ☐Fuel bill ☐Other

City Water Use
☐Do not monitor ☐Meter readings ☐Water bill ☐Other

Paper Use
☐Do not monitor ☐Physical count ☐Purchasing records ☐Other

Supply Use
☐Do not monitor ☐Physical count ☐Purchasing records ☐Other

Equipment Use
☐Do not monitor ☐Hours of use ☐Energy use ☐Material use ☐Other

Transportation Emissions
☐Do not monitor ☐Odometer readings ☐Fuel purchases ☐Other

Air Pollution
☐Do not monitor ☐Direct measurement ☐Purchasing records ☐Other

Carbon Footprint
☐Do not monitor ☐Direct measurement ☐Purchasing records ☐Online tool ☐Other

Ozone Depletion
☐Do not monitor ☐Direct measurement ☐Purchasing records ☐Online tool ☐Other

Green House Gas Emissions
☐Do not monitor ☐Direct measurement ☐Purchasing records ☐Online tool ☐Other

Other ☐

Recycling/Waste

Paper
☐Do not monitor ☐By weight ☐By volume ☐ Shipping record ☐Other

Plastics
☐Do not monitor ☐By weight ☐By volume ☐ Shipping record ☐Other

Glass
☐Do not monitor ☐By weight ☐By volume ☐ Shipping record ☐Other

Aluminum
☐Do not monitor ☐By weight ☐By volume ☐ Shipping record ☐Other

Compost
☐Do not monitor ☐By weight ☐By volume ☐ Shipping record ☐Other

Trash
☐Do not monitor ☐By weight ☐By volume ☐ Shipping record ☐Other

Other ☐
☐Do not monitor ☐By weight ☐By volume ☐ Shipping record ☐Other

6. Indicate how the following economic metrics are monitored by your organization.

Expenses	☐Do not monitor	☐Accounting ledger	☐Other ☐
Income	☐Do not monitor	☐Accounting ledger	☐Other ☐
Taxes	☐Do not monitor	☐Accounting ledger	☐Other ☐
(Re)Investments	☐Do not monitor	☐Accounting ledger	☐Other ☐
Other ☐	☐Do not monitor	☐Accounting ledger	☐Other ☐

7. Indicate how the following social metrics are monitored by your organization.

Health and Safety at Work
☐Do not monitor ☐Number of injuries ☐Time spent on prevention ☐Inspection ☐Other

Employee/Volunteer Satisfaction
☐Do not monitor ☐Benefits ☐Time lost due to absence ☐Survey ☐Other

Community Involvement
☐Do not monitor ☐Number of stakeholders ☐Time spent on outreach ☐Number of Complaints ☐Other

Other ☐
☐Do not monitor ☐Other ☐

8. How likely is your organization to track the following environmental metrics in the future (either continuing or starting to monitor)?

	Very Likely	Likely	Unsure	Not Likely	Very Unlikely
Material/Energy					
Electricity Use	☐	☐	☐	☐	☐
Fuel Use	☐	☐	☐	☐	☐
City Water Use	☐	☐	☐	☐	☐
Paper Use	☐	☐	☐	☐	☐
Supply Use	☐	☐	☐	☐	☐
Equipment Use	☐	☐	☐	☐	☐
Transportation Emissions	☐	☐	☐	☐	☐
Air Pollution	☐	☐	☐	☐	☐
Carbon Footprint	☐	☐	☐	☐	☐
Ozone Depletion	☐	☐	☐	☐	☐
GHGs Emissions	☐	☐	☐	☐	☐
Other ☐	☐	☐	☐	☐	☐
Recycling/Waste					
Paper	☐	☐	☐	☐	☐
Plastics	☐	☐	☐	☐	☐
Glass	☐	☐	☐	☐	☐
Aluminum	☐	☐	☐	☐	☐
Compost	☐	☐	☐	☐	☐
Trash	☐	☐	☐	☐	☐
Other ☐	☐	☐	☐	☐	☐

9. How likely is your organization to track the following economic metrics in the future (either continuing or starting to monitor)?

	Very Likely	Likely	Unsure	Not Likely	Very Unlikely
Expenses	☐	☐	☐	☐	☐
Taxes	☐	☐	☐	☐	☐
(Re)Investments	☐	☐	☐	☐	☐
Other ☐	☐	☐	☐	☐	☐

10. How likely is your organization to track the following social metrics in the future (either continuing or starting to monitor)?

	Very Likely	Likely	Unsure	Not Likely	Very Unlikely
Health and Safety at Work	☐	☐	☐	☐	☐
Employee/Volunteer Satisfaction	☐	☐	☐	☐	☐
Community Involvement	☐	☐	☐	☐	☐
Other ☐	☐	☐	☐	☐	☐

11. What tools does your organization use to track sustainability related information (data)? (Check all that apply.)

☐ Clean Air Cool Planet
☐ iReuse
☐ Carbon calculator
☐ Spreadsheet/database
☐ Estimation
☐ Paper tracking
☐ Other Please specify: ☐

12. Where is your data stored? (Check all that apply.)

☐ Spreadsheet/database (soft copy)
☐ Paper tracking (hard copy)
☐ Other Please specify: ☐

13. What certifications does your organization have? (Check all that apply.)

☐ International Organization for Standardization (ISO) 14001 (Environmental Management Systems)
☐ International Organization for Standardization (ISO) 26000 (Social Responsibility)
☐ AccountAbility (AA) 1000 (Accountability, Responsibility, and Sustainability)
☐ Social Accountability (SA) 8000 (Social Accountably)
☐ Other Please specify: ☐

14. Approximately how much time does your organization spend monitoring, tracking, and reporting sustainability related information?

☐ 0 to 5 hours per month
☐ 6 to 15 hours per month
☐ 16 to 25 hours per month
☐ 26 to 39 hours per month
☐ 40+ hours per month

REPORTING

Information collected in this section will tell us about how your organization compiles and reports sustainability related information.

15. How does your organization report sustainability related information to interested parties? (Check all that apply)

- ☐ Annual Report
- ☐ Environmental Report
- ☐ Sustainability Report
- ☐ Newsletters
- ☐ Advertisements
- ☐ Press Releases
- ☐ Use Global Reporting Initiative guidelines
- ☐ Other Please specify: ☐

16. Who is the sustainability related information reported to? (Check all that apply)

- ☐ Customers/Clients
- ☐ Donors
- ☐ Board of Directors
- ☐ Employees
- ☐ General Public
- ☐ Government Agencies
- ☐ Others Please specify: ☐

17. How often is the sustainability information reported to the above groups?

Choose Daily, Weekly, Monthly, Quarterly, Yearly, Bianually, Infrequent/Irregular, or N/A for each of the following.

Customers/Clients	☐
Donors	☐
Board of Directors	☐
Employees	☐
General Public	☐
Government Agencies	☐
Others	☐

18. Please provide any additional comments you might have below.

☐

Appendix C: Survey Recruitment Email

Dear Potential Participant,

Your help is requested to provide input about your organization for a research study on sustainability metrics for non-profit organizations. The study is being conducted by Mary Elizabeth Vanlue, an undergraduate student working on her honors thesis in Industrial Engineering. This study will gather information about current monitoring, tracking, and reporting activities for sustainability. The results will be used to develop a method for non-profit organizations to measure and improve their sustainability profile.

We are looking for voluntary participants who have knowledge of sustainability efforts in their non-profit organization to complete a short survey. The survey will take approximately 30 minutes to complete. The survey looks first at the type and size of the organization and then at what sustainability means and how it is being tracked by the organization. If you choose to participate, you are not asked for your name during the survey. If you would be willing to answer further questions or would like to receive a copy of Mary Elizabeth's final thesis please email her with your name and email address at vanluem@onid.orst.edu.

You may choose not to participate or answer any of the questions in this survey. If you wish to participate, please respond to the questions at https://spreadsheets.google.com/viewform?formkey=dHdOdXBEUEFud2lFS0lQS0J0d242OVE6MQ.

The researcher, Mary Elizabeth Vanlue, will be the only one with access to the online responses. If you have any questions or comments, you may contact Mary Elizabeth at vanluem@onid.orst.edu or Professor Karl Haapala at karl.haapala@oregonstate.edu. If you have any questions about your rights as a research subject, please contact the Oregon State University Institutional Review Board (IRB) Human Protections Administrator, OSU Research Office, 541- 737-8008, IRB@oregonstate.edu

Please save this email for your records.

Mary Elizabeth Vanlue
Student Researcher
vanluem@onid.orst.edu

Karl R. Haapala, Ph.D.
Assistant Professor
karl.haapala@oregonstate.edu

Appendix D: Survey Data

The letters A to L represent the twelve organizations that responded to the survey.

	Q1	Q2	Q3: Full time paid employees
A	Arts, Culture, and Humanities	Local	0 to 5
B	Education	Local	
C	Education	State wide	6 to 50
D	Environment and Animals	Local	6 to 50
E	Environment and Animals	State wide	6 to 50
F	Human Services	Local	0 to 5
G	Human Services	Local	0 to 5
H	Human Services	Local	0 to 5
I	Human Services	Local	0 to 5
J	Human Services	Local	51 to 100
K	Human Services	Local	6 to 50
L	Religion Related	Local	0 to 5

	Q3: Part time paid employees	Q3: Full time volunteers	Q3: Part time volunteers
A	0 to 5	0 to 5	6 to 50
B	0 to 5		6 to 50
C	0 to 5		51 to 100
D	0 to 5	0 to 5	6 to 50
E	0 to 5		501 +
F	6 to 50	0 to 5	6 to 50
G	0 to 5		
H	0 to 5	6 to 50	101 to 500
I	0 to 5		101 to 500
J	6 to 50		6 to 50
K			
L	0 to 5		

	Q4: Environmental	Q4: Economic	Q4: Social	Q5: Electricity Use	Q5: Fuel Use
A	5	4	5	Do not monitor	Do not monitor
B	5	5	5	Do not monitor	Do not monitor
C	4	5	5	Do not monitor	Fuel bill
D	5	5	5	Electric bill	Fuel bill
E	5	4	4	Do not monitor	Do not monitor
F	3	5	5	Electric bill	Fuel bill
G	5	5	5	Do not monitor	Do not monitor
H	5	5	5	Electric bill	Fuel bill
I	2	5	5	Electric bill	Fuel bill
J	4	5	4	Electric bill	Fuel bill
K	3	5	4	Electric bill	Fuel bill
L	5	5	5	Electric bill	Fuel bill

	Q5: City Water Use	Q5: Paper Use	Q5: Supply Use	Q5: Equipment Use
A	Do not monitor	Other	Physical count	Do not monitor
B	Do not monitor	Do not monitor	Do not monitor	Do not monitor
C	Do not monitor	Do not monitor	Purchasing records	Other
D	Water bill	Other	Other	Hours of use
E	Do not monitor	Physical count	Physical count	Do not monitor
F	Water bill	Do not monitor	Purchasing records	Do not monitor
G	Do not monitor	Purchasing records	Purchasing records	Material use
H	Water bill	Other	Purchasing records	Other
I	Do not monitor	Do not monitor	Purchasing records	Other
J	Water bill	Purchasing records	Purchasing records	Do not monitor
K	Water bill	Purchasing records	Purchasing records	Material use
L	Water bill	Physical count	Physical count	Do not monitor

	Q5: Transportation Emissions	Q5: Air Pollution	Q5: Carbon Footprint
A	Odometer readings	Do not monitor	Do not monitor
B	Do not monitor	Do not monitor	Do not monitor
C	Do not monitor	Do not monitor	Do not monitor
D	Do not monitor	Do not monitor	Do not monitor
E	Do not monitor	Do not monitor	Do not monitor
F	Do not monitor	Do not monitor	Online tool
G	Do not monitor	Do not monitor	Do not monitor
H	Do not monitor	Do not monitor	Do not monitor
I	Do not monitor	Do not monitor	Do not monitor
J	Do not monitor	Do not monitor	Do not monitor
K	Odometer readings	Do not monitor	Do not monitor
L	Do not monitor	Do not monitor	Online tool

	Q5: Ozone Depletion	Q5: Green House Gas Emissions
A	Do not monitor	Do not monitor
B	Do not monitor	Do not monitor
C	Do not monitor	Do not monitor
D	Do not monitor	Do not monitor
E	Do not monitor	Do not monitor
F	Do not monitor	Do not monitor
G	Do not monitor	Do not monitor
H	Do not monitor	Do not monitor
I	Do not monitor	Do not monitor
J	Do not monitor	Do not monitor
K	Do not monitor	Do not monitor
L	Do not monitor	Do not monitor

	Q5: Other Text Responses Part 1
A	We use the monthly/annual cost to monitor use
B	
C	
D	usage count
E	
F	we try not to use paper at all, just google docs.
G	
H	We use "used on one side" paper almost exclusively for internal document printing. We have a "do not print" policy for e-mails. We send board packets electronically. We actively discourage buying new paper and use less than a carton a year as a consequence.
I	
J	
K	
L	Our equipment use is monitored through the invoices. We don't count materials distributed by number or weight - it is all counted by value.

	Q5: Paper	Q5: Plastics	Q5: Glass	Q5: Aluminum	Q5: Compost
A	Do not monitor	Do not monitor	Do not monitor	Do not monitor	Do not monitor
B	Do not monitor	Do not monitor	Do not monitor	Do not monitor	Do not monitor
C	Do not monitor	Do not monitor	Do not monitor	Do not monitor	Do not monitor
D	Other	Other	Other	By weight	Other
E	By weight	Do not monitor	Do not monitor	Do not monitor	Do not monitor
F	Other	Other	Other	Other	Do not monitor
G	By weight	Do not monitor	Do not monitor	Do not monitor	Do not monitor
H	Do not monitor	Do not monitor	Do not monitor	Do not monitor	Do not monitor
I	Do not monitor	Do not monitor	Do not monitor	Do not monitor	Do not monitor
J	Do not monitor	Do not monitor	Do not monitor	Do not monitor	Do not monitor
K	By volume	Do not monitor	Do not monitor	Do not monitor	Do not monitor
L	Do not monitor	Do not monitor	Do not monitor	Do not monitor	Do not monitor

	Q5: Trash	Q5: Other Text Responses Part 2
A	Do not monitor	
B	Do not monitor	
C	Do not monitor	We participate in all recycling and composting programs available to us but do not formally monitor volume of material.
D	Shipping record	
E	Do not monitor	
F	Other	
G	Do not monitor	
H	Do not monitor	We do not measure internally generated recyclables. We deliver them to the County transfer station as necessary. Cardboard we deliver twice weekly, glass bottles once every few months. We generate aluminum as a by product of used window recycling. We sell this material directly, and track for the DEQ. Compost we do not track, we maintain compost bins and do not put any organic material in the trash.
I	Do not monitor	Recycling is required to avoid fines. We do not measure; there is a requirement of ALL recyclables recycled. Trash is monitored by cost. No-cost recycling is very appealing and practiced by staff to insure their work generates profits not just pays trash bills. pays trash bills.
J	Do not monitor	
K	Do not monitor	
L	Do not monitor	

	Q6: Expenses	Q6: Income	Q6: Taxes	Q6: (Re)Investments
A	Other	Other	Other	Other
B	Accounting ledger	Accounting ledger	Accounting ledger	Accounting ledger
C	Accounting ledger	Accounting ledger	Accounting ledger	Accounting ledger
D	Accounting ledger	Accounting ledger	Other	Other
E	Accounting ledger	Accounting ledger	Accounting ledger	Accounting ledger
F	Accounting ledger	Accounting ledger	Accounting ledger	Accounting ledger
G	Accounting ledger	Accounting ledger	Accounting ledger	Do not monitor
H	Accounting ledger	Accounting ledger	Other	Do not monitor
I	Accounting ledger	Accounting ledger	Accounting ledger	Do not monitor
J	Accounting ledger	Accounting ledger	Accounting ledger	Accounting ledger
K	Accounting ledger	Accounting ledger	Accounting ledger	Accounting ledger
L	Accounting ledger	Accounting ledger	Accounting ledger	Accounting ledger

	Q6: Other Text Responses
A	We don't pay taxes (excluding payroll taxes)
B	
C	
D	
E	
F	google spreadsheet, bank statements, and accountant
G	
H	We are non profit, therefore do not pay taxes. We have no investments apart from reserve accounts.
I	
J	
K	
L	We track the gifts in kind that are given to us and the value of volunteer hours.

	Q7: Health and Safety at Work	Q7: Employee/Volunteer Satisfaction
A	Do not monitor	Survey
B	Do not monitor	Survey
C	Number of injuries	Time lost due to absence
D	Other	Survey
E	Inspection	Survey
F	Inspection	Survey
G	Inspection	Survey
H	Other	Other
I	Time spent on prevention	Other
J	Inspection	Survey
K	Time spent on prevention	Time lost due to absence
L	Other	Other

	Q7: Community Involvement
A	Time spent on outreach
B	Number of stakeholders
C	Number of stakeholders
D	Other
E	Number of stakeholders
F	Other
G	Number of stakeholders
H	Other
I	Do not monitor
J	Do not monitor
K	Number of stakeholders
L	Other

	Q7: Other Text Responses
A	Health & Safety: We monitor incidents/accidents and have a Safety Committee that reviews those quarterly Employee/Volunteer Satisfaction: by walking around Community Involvement: volunteer hours/ number of new and recurring groups involved
B	
C	Very small work force with 1.5 paid staff. We rely on volunteer participation with a smaller, focused group of people so individual conversations are a reasonable monitoring process.
D	
E	
F	
G	
H	1) We monitor all safety meetings, track injuries per man hour worked, offer rewards for meeting increasingly stringent goals. Our profession is highly dangerous and we take safety very seriously. We track attendance at trainings. 2) We participated in the 100 Best Nonprofits to work for survey. We regularly poll employees internally also. 3) We track number of agencies, schools and organizations we donate materials to, and value of gift certificates given out.
I	We are a membership-based organization. We respond to the needs of individuals and families. We need community involvement as volunteers and use many, and we must satisfy thousands of customers.
J	
K	
L	Employee/Volunteer satisfaction is measured by personal interviews.

	Q8: Electricity Use	Q8: Fuel Use	Q8: City Water Use
A	Very Unlikely	Very Unlikely	Very Unlikely
B	Not Likely	Unsure	Unsure
C	Not Likely	Likely	Not Likely
D	Very Likely	Very Likely	Very Likely
E	Not Likely	Not Likely	Not Likely
F	Very Likely	Not Likely	Very Likely
G	Likely	Not Likely	Likely
H	Very Likely	Very Likely	Very Likely
I	Very Likely	Very Likely	Very Unlikely
J	Likely	Likely	Likely
K	Very Likely	Very Likely	Very Likely
L	Very Likely	Very Likely	Very Likely

	Q8: Paper Use	Q8: Supply Use	Q8: Equipment Use	Q8: Transportation Emissions
A	Very Unlikely	Very Unlikely	Very Unlikely	Likely
B	Unsure	Likely	Unsure	Unsure
C	Likely	Very Likely	Very Likely	Very Unlikely
D	Not Likely	Not Likely	Not Likely	Not Likely
E	Very Likely	Very Likely	Unsure	Very Unlikely
F	Unsure	Very Likely	Unsure	Very Unlikely
G	Very Likely	Very Likely	Very Likely	Not Likely
H	Likely	Likely	Likely	Not Likely
I	Very Likely	Very Likely	Very Likely	Very Unlikely
J	Likely	Likely	Likely	Unsure
K	Very Likely	Very Likely	Very Likely	Very Unlikely
L	Likely	Likely	Unsure	Not Likely

	Q8: Air Pollution	Q8: Carbon Footprint	Q8: Ozone Depletion	Q8: GHGs Emissions
A	Very Unlikely	Very Unlikely	Very Unlikely	Very Unlikely
B	Not Likely	Not Likely	Not Likely	Not Likely
C	Very Unlikely	Very Unlikely	Very Unlikely	Very Unlikely
D	Not Likely	Not Likely	Not Likely	Not Likely
E	Very Unlikely	Not Likely	Very Unlikely	Very Unlikely
F	Very Unlikely	Very Unlikely	Very Unlikely	Very Unlikely
G	Not Likely	Not Likely	Not Likely	Very Unlikely
H	Not Likely	Unsure	Not Likely	Unsure
I	Very Unlikely	Very Unlikely	Very Unlikely	Very Unlikely
J	Unsure	Unsure	Not Likely	Not Likely
K	Very Unlikely	Very Unlikely	Very Unlikely	Very Unlikely
L	Very Unlikely	Unsure	Unsure	Unsure

	Q8: Paper	Q8: Plastics	Q8: Glass	Q8: Aluminum	Q8: Compost
A	Unsure	Not Likely	Very Unlikely	Very Unlikely	Unsure
B	Not Likely	Not Likely	Not Likely	Not Likely	Very Likely
C	Likely	Unsure	Unsure	Unsure	Very Unlikely
D	Very Likely	Very Likely	Very Likely	Very Likely	Very Likely
E	Very Likely	Unsure	Unsure		Likely
F	Unsure	Unsure	Unsure	Unsure	Very Unlikely
G	Likely	Likely	Likely	Not Likely	Very Unlikely
H	Unsure	Not Likely	Unsure	Unsure	Very Unlikely
I	Very Unlikely	Very Unlikely	Very Unlikely	Very Unlikely	Very Unlikely
J	Unsure	Unsure	Unsure	Unsure	Unsure
K	Very Likely	Unsure	Unsure	Unsure	Not Likely
L	Likely	Likely	Likely	Unsure	Likely

	Q8: Trash	Q8: Other Environmental Metrics
A	Likely	
B	Very Likely	
C	Very Unlikely	We are concerned about energy use and efficiency for our building and are actively working on replacing old windows with energy efficient ones or providing a form of storm window coverage for others. We have replaced all heating systems in the building with new efficient furnaces. We focus on fluorescent lighting.
D	Very Likely	
E	Likely	
F	Very Likely	
G	Unsure	
H	Unsure	Bulky wood waste, number of employees certified as "master recyclers" through County program.
I	Very Unlikely	
J	Unsure	
K	Unsure	
L	Likely	

	Q9: Expenses	Q9: Income	Q9: Taxes	Q9: (Re)Investments
A	Likely	Likely	Likely	Likely
B	Very Likely	Very Likely	Very Likely	Very Likely
C	Very Likely	Very Likely	Very Likely	Very Likely
D	Very Likely	Very Likely	Very Unlikely	Very Unlikely
E	Very Likely	Very Likely	Very Likely	Very Likely
F	Very Likely	Very Likely	Very Likely	Very Likely
G	Very Likely	Very Likely	Very Likely	Not Likely
H	Very Likely	Very Likely	Not Likely	Not Likely
I	Very Likely	Very Likely	Very Likely	Very Unlikely
J	Very Likely	Very Likely	Very Likely	Very Likely
K	Very Likely	Very Likely	Very Likely	Very Likely
L	Very Likely	Very Likely	Very Likely	Very Likely

	Q9: Other Economic Metrics
A	
B	
C	
D	
E	
F	
G	
H	We track net profit (yes, non profits can, and should, make money), debt to equity ratio, $ per man hour worked (and efficiency measure), cash to payables.
I	State budget and Human Services budgets
J	
K	
L	Gifts in Kind value and Value of volunteer hours

	Q10: Health and Safety at Work	Q10: Employee/Volunteer Satisfaction
A	Not Likely	Very Likely
B	Very Likely	Very Likely
C	Very Likely	Very Likely
D	Very Likely	Very Likely
E	Very Likely	Very Likely
F	Very Likely	Very Likely
G	Very Likely	Very Likely
H	Very Likely	Very Likely
I	Very Likely	Very Likely
J	Very Likely	Very Likely
K	Very Likely	Very Likely
L	Very Likely	Very Likely

	Q10: Community Involvement	Q10: Other Social Metrics
A	Likely	
B	Very Likely	
C	Very Likely	
D	Very Likely	
E	Very Likely	
F	Very Likely	
G	Very Likely	Diversity for staff, Board of Directors, and volunteer outreach
H	Very Likely	
I	Unsure	School and community inclusion of individuals with disabilities
J	Very Likely	
K	Very Likely	
L	Very Likely	

	Q11	Q12
A	Estimation	
B	no specific mechanism	Spreadsheet/database (soft copy)
C	Spreadsheet/database	Spreadsheet/database (soft copy)
D	Spreadsheet/database, Estimation	Spreadsheet/database (soft copy)
E	Estimation, Paper tracking	Spreadsheet/database (soft copy)
F	Paper tracking	Spreadsheet/database (soft copy), Paper tracking (hard copy)
G	Paper tracking	Spreadsheet/database (soft copy)
H	Spreadsheet/database	Spreadsheet/database (soft copy)
I	Paper tracking	Paper tracking (hard copy)
J	Spreadsheet/database	Spreadsheet/database (soft copy)
K	Spreadsheet/database	Spreadsheet/database (soft copy)
L	Spreadsheet/database, Estimation	Spreadsheet/database (soft copy)

	Q13	Q14
A		0 to 5 hours per month
B		0 to 5 hours per month
C		26 to 39 hours per month
D		0 to 5 hours per month
E		6 to 15 hours per month
F		0 to 5 hours per month
G		0 to 5 hours per month
H	Earthadvantage Silver	0 to 5 hours per month
I		0 to 5 hours per month
J		0 to 5 hours per month
K		16 to 25 hours per month
L		0 to 5 hours per month

	Q15
A	Press Releases
B	Annual Report, Newsletters
C	financial reports to Board
D	Newsletters, Press Releases
E	Sustainability Report, website
F	
G	Newsletters
H	Annual Report, Newsletters, Press Releases
I	just to our own board and some things in newsletters
J	
K	Annual Report, Newsletters, Advertisements, Press Releases
L	regular reporting to board of directors

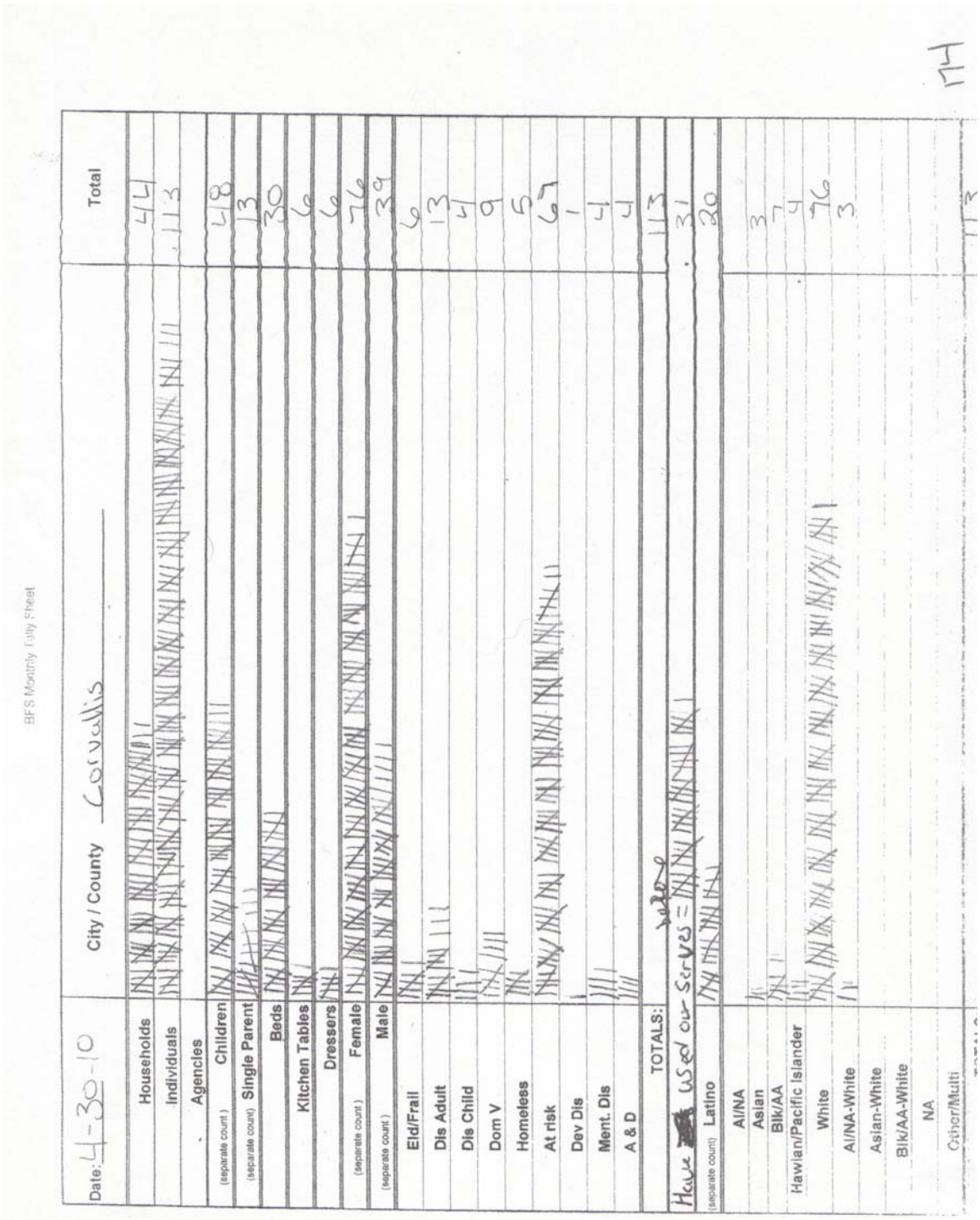
	Q16
A	General Public
B	Donors, Board of Directors, Granting organizations
C	Board of Directors, Employees
D	Customers/Clients, Donors, Board of Directors, Employees, General Public
E	Customers/Clients, Donors, Board of Directors, Employees
F	Board of Directors, Employees, anyone who asks
G	Board of Directors
H	Donors, Board of Directors, General Public, Grantors
I	Donors, Board of Directors, Employees
J	Board of Directors
K	Customers/Clients, Donors, Board of Directors, Employees, General Public
L	Board of Directors

	Q17: Customers/Clients	Q17: Donors	Q17: Board of Directors
A	Daily	Daily	Yearly
B	N/A	Infrequently/Irregularly	Infrequently/Irregularly
C	N/A	N/A	Quarterly
D	Infrequently/Irregularly	Infrequently/Irregularly	Yearly
E	Yearly	Yearly	Yearly
F	Daily	Daily	Monthly
G	N/A	Daily	Infrequently/Irregularly
H	Infrequently/Irregularly	Quarterly	Quarterly
I	Yearly	Yearly	Yearly
J	N/A	N/A	Monthly
K	Daily	Quarterly	Monthly
L	Infrequently/Irregularly	Infrequently/Irregularly	Monthly

	Q17: Employees	Q17: General Public
A	Daily	Yearly
B	N/A	N/A
C	Monthly	N/A
D	Infrequently/Irregularly	Infrequently/Irregularly
E	Yearly	Yearly
F	Monthly	Daily
G	Infrequently/Irregularly	Daily
H	Infrequently/Irregularly	Infrequently/Irregularly
I	Yearly	Yearly
J	Infrequently/Irregularly	N/A
K	Daily	Quarterly
L	Monthly	N/A

	Q17: Government Agencies	Q17: Other from Q16
A	N/A	N/A
B	Infrequently/Irregularly	N/A
C	Yearly	Daily
D	N/A	Daily
E	Yearly	N/A
F	Daily	Infrequently/Irregularly
G	N/A	Infrequently/Irregularly
H	Infrequently/Irregularly	Infrequently/Irregularly
I	Daily	Daily
J	Yearly	Monthly
K	Quarterly	Daily
L	N/A	Monthly

Appendix E: Manual Tallying of Metrics



BFS Monthly Tally Sheet

Date: 4-30-10	City / County Corvallis	Total
Households		44
Individuals		113
Agencies		
(separate count) Children		48
(separate count) Single Parent		13
Beds		30
Kitchen Tables		6
Dressers		6
(separate count) Female		76
(separate count) Male		39
Eld/Frail		6
Dis Adult		13
Dis Child		4
Dom V		9
Homeless		5
At risk		67
Dev Dis	1	1
Ment. Dis		4
A & D		4
TOTALS:		113
Have used our services =		31
(separate count) Latino		20
AI/NA		3
Asian		7
Blk/AA		4
Hawian/Pacific Islander		96
White		3
AI/NA-White		
Asian-White		
Blk/AA-White		
NA		
Other/Multi		174

Appendix F: Computerized Reports of Metrics

Furniture Share
Monthly Report Form

From 7/1/2010 to 9/30/2010

# of Items Distributed:	3493
$ Value of Items Distributed @ $75 (average):	$261,975.00
Tons Diverted from Landfill @ 50 lbs (average):	87.325

New Corvallis Households	**88**	***New Corvallis Individuals***	**253**

Individuals Served

Homeless:	276
At Risk Homeless:	958
Domestic Violence:	79
Elderly/Frail:	78
Disabled Adults:	174
Disabled Children:	114
Developmental Disability:	12
Alcohol/Drug:	57
Mental Illness:	20
Total Individuals Served:	1615
SingleParentFamily:	103
Adults:	714
Children:	901

Households Served

	2
Adair Village	1
Albany	106
Alsea	2
Blodgett	1
Corvallis	162
Foster	1
Independence	7
Jefferson	2
Lebanon	57
Lincoln City	1
Monmouth	4
Monroe	4
Philomath	14
Salem	5
Scio	2
Springfield	1

Single Parents Served

Albany	30
Corvallis	38
Jefferson	1
Lebanon	12
Monmouth	1
Philomath	2
Scio	1
Springfield	1
Sweet Home	6
Teledo	1
Toledo	1

Furniture Share
Monthly Report Form

From 7/1/2010 to 9/30/2010

Sweet Home	28
Tangent	1
Teledo	1
Toledo	1
Total Households Served:	403

*Note: Only the first of four pages of this list is included.

Distributions

Beginning Date 7/1/2010
Ending Date: 9/30/2010

Printed: 10/29/2010 12:23:26 PM

	2
Dresser	29
Kitchen Table - Dining	4
Kitcken Table - Dining	21
Air Conditioner	5
baby gate	1
bar stool	1
bath mat	1
Bed - Bunk	7
Bed - Crib/Toddler	2
Bed - Full Box	86
Bed - Full Frame	32
Bed - Full Headboard	3
Bed - Full Mattress	87
Bed - King Box	13
Bed - King Frame	5
Bed - King Mattress	11
Bed - Other	26
Bed - Queen Box	94
Bed - Queen Frame	44
Bed - Queen Headboard	1
Bed - Queen Mattress	84
Bed - Twin Box	406
Bed - Twin Frame	101
Bed - Twin Headboard	2
Bed - Twin Mattress	499
bed-king mattress	1
blankets	4
book case	2
book shelf	5
book shelves	6
bookshelf	5
bookshelves	2
Bunk bed	2
Cabnet for top of desk	1
chair	10
Chair - Dining	2
chairs	32

Client Ethnicity By City

Beginning Date: 7/1/2010

Ending Date: 9/30/2010

City	Native American	Asian	African American	Pacific Islander	White	Native American/ White	Asian/ White	African American/ White	Native American/ African American	Other Ethnicity	City Totals	Hispanic
		4			2						6	
Adair Village			3		1						4	2
Albany	85	6	37	6	496						630	55
Alsea					5						5	
Blodgett					2						2	
Corvallis	44	27	26	2	218	10					327	120
Foster	2				1						3	
Independen					5						5	31
Jefferson					4						4	
Lebanon	10		7		186						203	14
Lincoln City					3						3	
Monmouth					10						10	3
Monroe	3				6						9	
Philomath	2				21						23	
Salem	18				2						20	18
Scio					6						6	
Springfield											0	3
Sweet Home	11				59						70	1
Tangent				2							2	

City	Native American	Asian	African American	Pacific Islander	White	Native American/ White	Asian/ White	African American/ White	Native American/ African American	Other Ethnicity	City Totals	Hispanic
Teledo					5						5	
Toledo					4						4	
Totals	175	37	73	10	1036	10					1341	247