

Social Return on Investment Analysis

Hawaiian Homestead Technology, Inc.
A Dual Dividend Company

Prepared by:



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About 3Point

3Point is a dual dividend social enterprise that strives to produce both financial return for its investors and social return for communities. Through research, advocacy, consulting services, and demonstration projects, 3Point promotes creative solutions to pressing public problems.

About SROI Analysis

3Point analyzes the social and economic impacts of dual dividend companies, quantifying and tracking their Social Return on Investment (SROI). We believe that developing and popularizing appropriate measures of social return will support a growing movement of dual dividend enterprises.

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Introduction

This Social Return on Investment (SROI) report analyzes the social benefits generated by Hawaiian Homestead Technology, Inc. (HHT). HHT is a “dual dividend” business that strives for profitability while simultaneously pursuing a clearly defined social mission. This analysis attempts to place a dollar value on HHT’s various social benefits, calculating the social rate of return for society and government. It provides a framework for ongoing evaluation of the company, and of similar social enterprises.

Company Overview

Hawaiian Homestead Technology, Inc. (HHT) is a wholly owned, for-profit subsidiary of the nonprofit Council for Native Hawaiian Advancement. HHT’s principal business is in document digitization: the conversion of documents from paper to electronic form. Document digitization creates value for customers because electronic files are more easily stored and transported than paper files. HHT uses leading edge technology to provide fast and accurate conversion of complex text and graphics, and to offer the highest level of security for sensitive data.

Though organized as a for-profit corporation, HHT operates as a “dual dividend” enterprise, generating financial return for its investors and social benefits for its community. The social purposes of HHT are three-fold:

- (1) To create living wage, technology jobs for low-income Native Hawaiians in Hawaiian Homestead communities;
- (2) To build the capacity of Hawaiian Homestead community associations with which HHT partners to create branch facilities;
- (3) To generate profits which can be used to support the community development programs of the nonprofit Council for Native Hawaiian Advancement and other Native Hawaiian nonprofits.

Company History

HHT was incorporated in the State of Hawai‘i in December of 2002, and began operations in early 2003. It established its first production facility in the community of Anahola – a small, rural, Hawaiian Homestead community on the island of Kaua‘i. At the time of HHT’s founding, Anahola was a neighborhood in economic distress, with a small employment base and little business activity. Data from the 2000 Census paint a portrait of a community with high rates of poverty, unemployment, and welfare dependency.

Figure 1. Census 2000 Data, Anahola

	Anahola	State
% Native Hawaiian	71.7%	19.8%
% Unemployed	10.8%	6.3%
% in Poverty	14.2%	10.7%
% on Public Assistance	18.5%	7.2%
% with Post-Secondary Education	34.4%	56.1%
Per Capita Income	\$13,829	\$21,587

To establish a presence in Anahola, HHT partnered with the Anahola Hawaiian Homes Association (AHHA), the community association of Native Hawaiian homesteaders in the area. Through its partnership with AHHA, HHT was able to identify and acquire a structure for use as a production facility. At the time of acquisition the structure was vacant and dilapidated and used as a drug house by users and dealers of crystal methamphetamine (“ice”). AHHA raised funds to purchase the facility, organized community volunteers to help with renovations, and agreed to maintain the property. HHT acquired start-up funding, secured the first customers, and set up hardware and other systems needed for production.

Having established its facility, HHT then set about recruiting employees. With help from AHHA, it targeted unemployed, underemployed, and low-income residents of Anahola to staff its operations. Ultimately, 12 individuals were hired: 11 Native Hawaiian residents of Anahola and 1 Native Hawaiian CEO from Honolulu. With the exception of the CEO, none of the employees had a four-year college degree or substantial computer experience. Half were unemployed at the time they were hired. Those who had jobs prior to HHT were *underemployed*, working part-time and earning under \$5,500 per year on average.

HHT provided each new hire with 6 months of intensive training covering the use of hardware and software, and technical aspects of the document conversion process. The training was roughly equivalent to an Associates Degree in a computer science-related field.¹ Employees were offered full-time positions whenever possible with flexible hours, and paid up to \$8.00 per hour. They were also provided a package of benefits that included health insurance.²

Since beginning operation in 2003, the Anahola team has completed projects for several customers including the U.S. Army, the U.S. Navy, and Delta Airlines. It generated \$432,000 in sales from January to July of 2004,³ and is on track to end the year with roughly \$1 million in gross revenues and a small profit.⁴ The company aims to replicate the rapid success of its Anahola facility by establishing similar facilities in other Hawaiian Home Lands communities. As of this writing, HHT was poised to open two additional processing centers, each with production capacity and staffing similar to the Anahola office.

The Anahola facility has provided a variety of social and economic benefits to the residents of Anahola, and to society at large. It has created well-paying jobs for Native Hawaiian residents of an economically distressed area – jobs that offer benefits and build transferable, technology-related skills. By creating jobs for people close to where they live and providing flex-time, HHT has also allowed people to spend more time with family and pursue higher education while working. And, by using a former drug house as its new facility, HHT has contributed to reduced substance abuse-related crime in the neighborhood. These and other forms of social return are discussed in greater detail below.

Financial Outlook

Steady growth is anticipated for HHT over the next 5 years due to a large and growing market for document digitization services. A variety of clients including hospitals, law offices, and government agencies are recognizing the benefits of document conversion. HHT offers competitive pricing, an efficient conversion process, and the highest levels of

data security. It has proven able to attract business from local firms as well as from federal government agencies. As noted, the company is on track to produce a modest profit by the end of 2004 with gross revenues approaching \$1 million.

Contributing to a bright financial outlook for HHT is the fact that the company will benefit from a special federal contract set-aside authorized by Congress. The set-aside entitles HHT and 10 similar tribally-owned technology companies to an equal share (100% / 11 companies = 9.09% each) of \$55 million in federal contracts for document digitization each year for the next two years. At least 51% of this work must be performed by the Native enterprise itself. The other 49% can be performed by a 'mentor company' experienced in digitization and providing start-up support to the Native enterprise. At minimum, then, HHT is entitled to \$5,099,490 of federal contract set-asides over two years (\$55 million x 9.09% x 51%), or approximately \$2.55 million per year. The amount of government set-asides beyond two years has yet to be determined, however HHT's CEO expects work flow levels to remain steady beyond this period.

Although the government set-aside is approved, funds have not yet begun to flow to HHT. To date, the company has generated all of its revenue through other contract work. HHT's CEO expects the level of this *non-set aside* contracting to increase steadily over the course of HHT's operation. Indeed, the company has already been approached by several large Hawai'i firms seeking digitization services. The company anticipates that contract payments under the set-aside will begin to flow by the end of 2004, supporting an increase in revenue, hiring and wage levels.

Financial & Employment Projections

Based upon the above information and other assumptions, we developed financial and employment projections for HHT. In many cases, we substituted our own conservative assumptions in place of projections supplied by the company. Key assumptions included the following:

- ▶ HHT anticipated that its \$2.55 million in federal set-asides would begin to flow before the end of 2004. We instead incorporated this revenue into projections for Years 2 and 3.⁵
- ▶ HHT anticipated wage increases by the end of 2004. We assumed that wage increases would not be possible until Year 3.
- ▶ HHT expected work under the federal contract set-aside to remain steady even after the guaranteed two year period. Our projections assume that set-aside work drops from \$2.55 million to \$1.75 million per year after two years.
- ▶ Although HHT is on track to generate \$1 million in *non-set aside* contract work by the end of 2004, we reduced the current year (Year 1) sales level to \$750,000 to be conservative. We then projected a gradual increase in the amount of *non-set aside* revenues from the current level of \$750,000 per year to \$1 million by Year 4, and \$2 million by Year 6.
- ▶ Based on a review of HHT's brief financial history, and financial data on the industry as a whole, we estimated Operating Expenses as 98.0% of Sales, and Interest, Taxes and Other Expenses at an additional 0.5% of Sales, leaving Earnings (profit) of 1.5% of Sales.⁶

- ▶ HHT’s CEO anticipated the creation of at least 42 FTE jobs once federal set-asides begin to flow to the company. We projected only 36 jobs between 3 sites at full capacity beginning in Year 3.

Figure 2. Five-Year Financial Projection (in \$1,000s)

	Year 1	Year 2	Year 3	Year 4	Year 5
Sales - Government Set-Aside	\$ -	\$ 2,550	\$ 2,550	\$ 1,275	\$ 1,275
Sales - Non-Set Aside	\$ 750	\$ 250	\$ 500	\$ 1,000	\$ 1,500
Contracts					
Total Sales	\$ 750	\$ 2,800	\$ 3,050	\$ 2,275	\$ 2,775
Operating Expenses	\$ 735	\$ 2,730	\$ 2,974	\$ 2,218	\$ 2,706
Other Expenses	\$ 4	\$ 14	\$ 15	\$ 11	\$ 14
Total Expenses	\$ 739	\$ 2,744	\$ 2,989	\$ 2,229	\$ 2,719
Net Income	\$ 11	\$ 56	\$ 61	\$ 45	\$ 55
No. of Facilities	1	2	3	3	3
No. of Employees	12	24	36	36	36

Social Return on Investment

The SROI analysis to follow focuses on three types of social return: **(1)** increased wages and earning power of HHT’s employees; **(2)** benefits associated with creating jobs close to the homes of employees (principally, spending more time with children); and, **(3)** the adaptive re-use of a vacant structure used as a drug house.

- ▶ **Increased Earning Power.** Wage gains by employees reflect increased earning power and productivity resulting from training and experience received through HHT. Increased earning power will continue to benefit these individuals, their families, and their community whether or not they remain at HHT. Prior to being hired, the earning power of employees was severely limited. None of the new hires had a 4-year degree (except the CEO), 6 of 12 were unemployed, and those who were employed earned an average annual wage of \$5,493.

Employment at HHT resulted in average wage increases of \$10,113 for each new hire. In the first full year of operation, the combined wage increase for employees was \$113,238. Based on our financial projections, increased work flow from federal set-asides will allow hourly wages to reach \$15.00 (\$30,000 per year, for full-time employees) by Year 3, for a combined total of \$317,820 in wage gains that year.⁷ In order to gauge the net benefit of wage gains to employees and their families, we subtracted new taxes owed on the gains, and the value of any foregone public assistance.⁸ The combined net gain after these effects was \$254,884 in Year 3.

- ▶ **Working Closer to Home.** Some employees report that prior to joining HHT, distance to work and inflexible work hours made it difficult to attend to family responsibilities, particularly caring for young children. Numerous studies have found that children in “self care” are more likely to engage in delinquent activity, become substance abusers, and require special education services, all of which impose costs on society.⁹ Long-term costs are difficult to monetize,¹⁰ however, at minimum, Hawai’i residents are willing to pay up to \$4,800 per year (the market rate of childcare) to avoid these future costs.¹¹ While values are underestimated by this

market rate, the figure provides a highly conservative valuation of the social benefits associated with increased parent time at home.

At least 1 HHT employee reported being able to spend more time at home with her young children due to closer proximity to home and flexible hours. One other HHT employee anticipated having a child within the next 1-2 years, and spending more parenting time at home due to HHT's employer practices. Other employees will likely have children in the next 3-10 years, but to be conservative, the benefit from these cases was left out of the social return calculation.

- ▶ **Avoided Costs of Drug House.** As previously noted, HHT acquired and rehabilitated a vacant structure that was being used as a drug house. Substance abuse saddles society with a variety of costs including lost productivity, drug-related crime, and a need for healthcare and rehabilitation services. Society is willing to pay for police, incarceration, rehabilitation, and other programs to avoid these costs. We conservatively estimate the social value of these avoided costs as the cost of 3 avoided drug-related incidents per year: 2 requiring 1-month of drug treatment each at \$3,954 per month, and 1 requiring 6-months of incarceration at \$1,667 per month. Eliminating the drug house allows society to avoid these costs, which total \$17,908 per year.¹²
- ▶ **Uncalculated Social Return.** Our calculation of SROI excludes a variety of social benefits created by HHT. For instance, HHT's employer-provided health insurance allows its employees to seek preventive care, stay healthy, and control healthcare costs.¹³ Nearly half of HHT's employees were uninsured prior to being hired. In addition, HHT's partnership with AHHA increased AHHA's capacity to provide services and create new community programs. These benefits are not factored into this analysis. Finally, a portion of the profits generated by HHT are devoted to funding CNHA's community development programs and donated to other Native Hawaiian organizations. These programs themselves generate social return, creating a social "multiplier effect." These social returns, too, are excluded from our analysis. Other examples of excluded return include the cost of traffic accidents avoided by shorter drive times, and the benefits of higher education made possible by HHT's flexible working hours. Given these exclusions, the calculation to follow represents a *highly conservative* estimate of the social value of HHT.

Total Social Return on Investment

Grant-makers (including government, private foundations, and parent CNHA) initially provided a total of \$238,770 in subsidies to HHT to cover the cost of planning, retaining a CEO, and training new employees. As a result of this initial investment, society reaps benefits in the form of increased wages, avoided social costs, and other community impacts each year. The initial investment of \$238,770 in grants results in an average social return of \$269,166 per year, per HHT site over 10 years, or an annualized rate of return of 72%. If we could take all current and future social benefits and combine them into a present-day purchase price for HHT's social worth, that price would be in excess of \$1 million.¹⁴ In other words, HHT's grantmakers are purchasing well over \$1 million in social value for just under \$240,000, a benefit-to-cost ratio of more than 4 to 1.

Government Return on Investment

A portion of the social return analyzed above actually accrues to Government in cash form.

¹⁵ Government receives cash back on its initial grants to HHT in the way of new taxes and avoided costs of public assistance. This section puts aside the full social value of HHT, and focuses more narrowly on the *cash return* to Government from the company. Note that the cash return to Government is a subset of the social value created by HHT and should not be added to the SROI calculated above.

- ▶ **Avoided Cost of Public Assistance.** Increased wage levels allowed some HHT employees to avoid using various forms of public assistance. Two employees reported that prior to HHT they utilized or anticipated utilizing Medicaid benefits: one for 7 months per year (due to the seasonal nature of her prior employment) and the other for 12 months per year. Two other employees reported that employment at HHT allowed them to avoid using Foodstamps which they anticipated needing year-round. Two employees also avoided using government childcare subsidies. The total value of these benefits amounts to approximately \$25,000 per year.¹⁶
- ▶ **Avoided Drug-Related Costs.** Government also pays a portion of costs associated with substance abuse – costs avoided due to the elimination of the drug house. As discussed above, avoided costs include two 1-month stays in a treatment program, and one 6-month incarceration. Government pays the full cost of incarceration, but on average only 46.2% of treatment costs, with the rest coming from private insurers, family, or the individual in treatment.¹⁷ Taking this into consideration, Government’s avoided drug-related costs amount to roughly \$13,600 per year.
- ▶ **New Income Tax Revenue.** Increased wages among HHT employees also yield new Personal Income Tax revenue for Government. Assuming that HHT employees are taxed at the relatively low rate of 15%, wage gains result in new Personal Income Taxes of \$16,986 in Year 1, increasing to \$47,637 by Year 3. Thereafter, wages are projected to increase at 3% per year, and tax revenues increase at the same rate.
- ▶ **Uncalculated Government Return.** Our calculation of Government’s return excludes a variety of cash benefits. For example, Government also reaps new tax revenue from HHT in the way of corporate taxes, excise taxes and fees. The company also purchases supplies and materials from other firms, creating a tax multiplier effect. Lastly, Government avoids social spending on subsidized legal services, social services, special education services, and other programs that might normally be utilized if not for improvements in earnings, health, family life, and other areas made possible by HHT. The cash value of these benefits is not included in our analysis.

Total Government Return on Investment. Government provided \$99,750 of the initial \$238,770 in subsidies used to establish HHT. As a result of its initial investment, Government reaps new tax revenue and avoids social spending each year for as long as HHT is operational. The initial investment of \$99,750 results in an average cash return of \$71,904 per year, per site, over 10 years, or an annualized rate of return of 58%. If we could

take all current and future cash flows to Government and combine them into a present-day purchase price for HHT's cash value to Government, that price would be nearly \$300,000.¹⁸ In other words, Government has purchased more than \$300,000 in cash value for just under \$100,000, a benefit-to-cost ratio of 3 to 1.

Customer Return on Investment

Customers of HHT include government agencies and private companies that contract with it for document digitization services. These customers provide cash flow to HHT which, in turn, supports the social benefits analyzed above. Indeed, HHT depends on its customers to sustain the social return it produces year after year. HHT's quality and pricing are comparable to other companies in its industry, therefore each \$1.00 spent by HHT's customers generates \$1.00 worth of document digitization services. This would be the case for any document digitization company.

However, in the case of HHT, each \$1.00 in sales also generates \$0.28 of social return in the way of benefits like wage increases, avoided social costs, and other positive community impacts. These social benefits would not be produced by a profit-driven document digitization firm, for such a company would likely hire trained employees, locate without regard to family impacts, and seek high grade facilities in low-crime areas. Assuming comparable price and quality, given the choice between a "dual dividend" business like HHT and a conventional document digitization company, customers should choose HHT, because it creates more overall value per dollar spent.

Conclusion

This analysis presents preliminary findings using data that requires refinement, and methods that can surely be improved upon. Still, it allows for a fairly firm conclusion about the social impact of Hawaiian Homestead Technologies. HHT produces a substantial social return on investment with social benefits that outweigh costs by more than 4 to 1. An initial investment of \$238,770 by public and private grant-makers yields more than \$269,000 in social return *every year, per HHT facility*. A similar rate of social return can be expected from investments in future facilities, provided HHT continues to locate and hire in ways consistent with its social mission.

This analysis may be useful as a starting point for ongoing examination of the social impact of HHT and similar social enterprises. Ultimately, though, the value of a "dual dividend" company like HHT cannot be expressed in a lump sum of dollars and cents. When asked what she liked about working at HHT, one new hire, a young woman in her 20s, remarked: "A lot of people don't think that Hawaiians can work with computers. I guess we're proving them wrong." This statement captures better than any metric the value of HHT: its ability to cultivate the knowledge, confidence and pride that will build strong and self-sufficient Native Hawaiian communities.

- ¹ From interview with HHT CEO, August 1, 2004.
- ² From interview with HHT CEO, August 1, 2004; HHT payroll records as of July 31, 2004.
- ³ From HHT's unaudited financial statements.
- ⁴ From interview with HHT CEO, August 1, 2004.
- ⁵ Though HHT began operating in mid-2003, for purposes of financial projections, we defined calendar year 2004 as Year1 and projected forward with Year 2 = 2005, Year 3 = 2006, etc.
- ⁶ Financial Ratios for SIC 7374 Data Processing & Preparation from Integra Information, 2004. Firms in this industry actually had profits that were 0.5% of sales. However, the figures for this industry include low-margin companies like traditional data entry and file storage firms. Since document digitization is a new and fast-growing segment of the industry, and because HHT has few local competitors, we assumed slightly higher profitability of 1.5%.
- ⁷ From interview with HHT CEO, August 1, 2004. The CEO actually anticipates wage increases sooner than Year 3, but see discussion of our assumptions, above.
- ⁸ Some employees were able to reduce their utilization of various forms of public assistance as a result of wage gains. See "Returns to Government" below.
- ⁹ See, for example, Barnett, W. Lives in the Balance: Benefit-cost analysis of the High Scope Perry Preschool Program. MI: High Scope Press, 1996; L. Masse and W. Barnett. A Benefit Cost Analysis of the Abecedarian Early Childhood Intervention. NJ: NIEER, 2002.
- ¹⁰ At the time of this study, the Good Beginnings Alliance of Hawai'i and the National Economic Development Law Center were in the process of analyzing the economic impact of childcare for Hawai'i.
- ¹¹ Market rate of childcare in Hawai'i from PATCH Hawai'i, 2004.
- ¹² Cost based on an average cost per day of \$130 for short-term in-patient treatment program, and average stay of 1 month, from National Clearinghouse for Alcohol & Drug Information, Treatment Improvement Evaluation Study, 2003. See appendices for detailed data.
- ¹³ As one recent study puts it: "the uninsured are not staying out of the health care system; rather, they are receiving higher-cost medical care (through emergency room visits), and they are forcing others to pay for their health care." See Paul Fronstin, The Economic Cost of the Uninsured: Implications for Business and Government, Washington D.C.: Employee Benefit Research Institute, 2000.
- ¹⁴ Note that the \$1 million Present Value of social benefits is less than the sum of 10 years at an \$269,166 per year. This is because future benefits are heavily discounted to account for risk that HHT fails to perform according to projections. See the data appendix for a full explanation of the discounting methods employed.
- ¹⁵ Though "Government" is used generically to apply to State, Local and Federal governments, most of the costs and benefits discussed in this section accrue to the Federal government.
- ¹⁶ Utilization was projected based upon employee interviews, and no future increases in benefit amounts were assumed. See data appendix for detail.
- ¹⁷ Government portion of treatment costs from National Institute on Drug Abuse, The Economic Costs of Alcohol and Drug Abuse in the United States, 1992.
- ¹⁸ Note that the \$1 million Present Value of social benefits is less than the sum of 10 years at an \$269,166 per year. This is because future benefits are heavily discounted to account for risk that HHT fails to perform according to projections. See the data appendix for a full explanation of the discounting methods employed.

Data Appendices

Note on SROI Methodology

Calculating Social Return on Investment for HHT or any “dual dividend” company is challenging for a number of reasons. Often, social return is produced in the form of “public goods” – things which are good for society as a whole, but which the free market does not price appropriately. Because the market undervalues such goods, calculating their value requires looking at clues about society’s *willingness to pay* for such goods rather than looking at their actual market prices. For instance, the value of a National Park to society is not priced accurately by the free market, but we might infer its monetary value by looking at how much people pay each year to travel there. Some components of SROI analyzed here are valued according to this “public goods” method.

Other kinds of social return are “redistributive” – that is, they may not represent a net gain to society as a whole, but the redistribution of goods from the less needy to the more needy constitutes a desirable outcome in itself. Job creation in a distressed community is a good example of such a redistributive good: the jobs may not represent an overall gain to society as whole (they may have been created somewhere else, for instance, in a wealthier community), but the fact that we employ people in an economically distressed area is a positive result. In the case of redistributive benefits, we valued such benefits at their net effect upon the community of interest, attempting to minimize double counting of these and any “public goods” identified. For instance, many individuals experienced substantial wage increases as a result of employment at HHT. We counted the net benefit of these wage gains after taxes and foregone public assistance in our calculation of SROI.

Combining the value of “public goods” to society with the value of “redistributive benefits” to communities of interest complicates matters by mixing and matching two different kinds of social value. We had two reasons for combining benefits in this way: (1) HHT’s social mission is to create job opportunities for low-income Native Hawaiian communities – a redistributive benefit that must be included in our calculation; (2) supporters of HHT (grant-makers, government, socially-motivated investors) have an interest in both types of benefit. Only by accounting for both kinds of value (public and redistributive) can we paint a complete and meaningful portrait of social return for these stakeholders.

A final complication in calculating SROI is the fact that we must account for *future* social benefits in addition to current benefits. In the case of HHT, future social benefits are dependent upon the financial survival of the company and are therefore subject to business risks inherent in the enterprise. This requires that we make educated guesses (*projections*) about the future financial and social outcomes of HHT. If we want to determine the present-day value (or Present Value) of these future social benefits, we must also discount our estimates of future benefits to account for the possibility that the company may fail to produce results as projected (i.e., to account for risk). Projections and discounting are discussed in detail in the data appendices. In general, we used conservative assumptions about the future scale and performance of HHT, and its related social impacts. We also steeply discounted estimates of future benefits according to common professional practice in financial analysis.

We owe a great deal to the Roberts Enterprise Development Fund (REDF) which pioneered the analysis of Social Return on Investment. The general approach used in our analysis draws upon the SROI methodology of REDF. However, our analysis departs from REDF in that it quantifies different types of social benefits, combines redistributive and public benefits, and uses significantly different (larger) discount rates than those employed by REDF. REDF’s framework provided an important foundation for our work. Any errors are ours alone.

**DATA APPENDIX
SROI MODEL CALCULATIONS**

					Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11+
Employee 1 (FT) Previous Job: PT															
	<u>\$/Hour</u>	<u>Hrs/Wk</u>	<u>Wks/Yr</u>												
Pre-HHT Wage:	\$10.00	10	50		\$5,000	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796	\$5,970	\$6,149	\$6,334	\$6,524	\$6,720
Current HHT Wage:	\$8.00	40	50		\$16,000	\$16,480	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Year 3 HHT Wage: [a]	\$15.00	40	50		\$-	\$-	\$30,000	\$30,900	\$31,827	\$32,782	\$33,765	\$34,778	\$35,822	\$36,896	\$38,003
Total Wage Gain (Loss)					\$11,000	\$11,330	\$24,696	\$25,436	\$26,199	\$26,985	\$27,795	\$28,629	\$29,488	\$30,372	\$31,284
	<u>Avg. Ann.</u>	<u>Avg. Mo.</u>	<u>Mo./Yr.</u>												
TANF [b]	\$6,343	\$529	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Foodstamps [c]	\$3,203	\$267	12		\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203
Medicaid [d]	\$2,594	\$216	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Sec. 8/Housing [e]	\$3,900	\$325	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Childcare Subsidy [f]	\$3,000	\$250	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Total Public Savings					\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203	\$3,203
Employee 2 (PT) Previous Job: PT															
	<u>\$/Hour</u>	<u>Hrs/Wk</u>	<u>Wks/Yr</u>												
Pre-HHT Wage:	\$12.00	35	20		\$8,400	\$8,652	\$8,912	\$9,179	\$9,454	\$9,738	\$10,030	\$10,331	\$10,641	\$10,960	\$11,289
Current HHT Wage:	\$8.00	25	50		\$10,000	\$10,300	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Year 3 HHT Wage: [a]	\$15.00	40	50		\$-	\$-	\$30,000	\$30,900	\$31,827	\$32,782	\$33,765	\$34,778	\$35,822	\$36,896	\$38,003
Total Wage Gain (Loss)					\$1,600	\$1,648	\$21,088	\$21,721	\$22,373	\$23,044	\$23,735	\$24,447	\$25,181	\$25,936	\$26,714
	<u>Ben./Yr.</u>	<u>Ben./Mo.</u>	<u>Mo./Yr.</u>												
TANF [b]	\$6,343	\$529	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Foodstamps [c]	\$3,203	\$267	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Medicaid [d]	\$2,594	\$216	7		\$1,513	\$1,513	\$1,513	\$1,513	\$1,513	\$1,513	\$1,513	\$1,513	\$1,513	\$1,513	\$1,513
Sec. 8/Housing [e]	\$3,900	\$325	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Childcare Subsidy [f]	\$3,000	\$250	7		\$1,750	\$1,750	\$1,750	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Total Public Savings					\$3,263	\$3,263	\$3,263	\$1,513	\$1,513	\$1,513	\$1,513	\$1,513	\$1,513	\$1,513	\$1,513
Employee 3 (FT) Previous Job: PT															
	<u>\$/Hour</u>	<u>Hrs/Wk</u>	<u>Wks/Yr</u>												
Pre-HHT Wage:	\$6.25	5	50		\$1,563	\$1,609	\$1,658	\$1,707	\$1,759	\$1,811	\$1,866	\$1,922	\$1,979	\$2,039	\$2,100
Current HHT Wage:	\$7.25	22	50		\$7,975	\$8,214	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Year 3 HHT Wage: [a]	\$15.00	40	50		\$-	\$-	\$30,000	\$30,900	\$31,827	\$32,782	\$33,765	\$34,778	\$35,822	\$36,896	\$38,003
Total Wage Gain (Loss)					\$6,413	\$6,605	\$28,342	\$29,193	\$30,068	\$30,970	\$31,900	\$32,857	\$33,842	\$34,858	\$35,903
	<u>Ben./Yr.</u>	<u>Ben./Mo.</u>	<u>Mo./Yr.</u>												
TANF [b]	\$6,343	\$529	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Foodstamps [c]	\$3,203	\$267	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Medicaid [d]	\$2,594	\$216	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Sec. 8/Housing [e]	\$3,900	\$325	0		\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Childcare Subsidy [f]	\$3,000	\$250	12		\$-	\$3,000	\$3,000	\$3,000	\$3,000	\$-	\$-	\$-	\$-	\$-	\$-
Total Public Savings					\$-	\$3,000	\$3,000	\$3,000	\$3,000	\$-	\$-	\$-	\$-	\$-	\$-

**DATA APPENDIX
SROI MODEL CALCULATIONS**

				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11+	
Adaptive Re-Use of Drug House															
	<u>Cost/Yr.</u>	<u>Cost/Mo.</u>	<u>Mo./Yr.</u>												
Drug Re-Habilitation [g]	\$47,450	\$3,954	1												
No. of Cases			2	\$7,908	\$7,908	\$7,908	\$7,908	\$7,908	\$7,908	\$7,908	\$7,908	\$7,908	\$7,908	\$7,908	\$7,908
<i>Government Portion</i>			46%	\$3,654	\$3,654	\$3,654	\$3,654	\$3,654	\$3,654	\$3,654	\$3,654	\$3,654	\$3,654	\$3,654	\$3,654
Incarceration [h]	\$20,000	\$1,667	6												
No. of Cases			1	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
<i>Government Portion</i>			100%	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Total Social Benefit				\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908
<i>Government Portion</i>				\$13,654	\$13,654	\$13,654	\$13,654	\$13,654	\$13,654	\$13,654	\$13,654	\$13,654	\$13,654	\$13,654	\$13,654
Time At Home With Children [n]															
	<u>Value/Mo.</u>	<u>Mo./Yr.</u>	<u>Years</u>												
Parent Employee 1	\$400	7	3	\$2,800	\$2,800	\$2,800	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Parent Employee 2	\$400	12	4	\$-	\$-	\$4,800	\$4,800	\$4,800	\$4,800	\$-	\$-	\$-	\$-	\$-	\$-
Total Social Benefit				\$2,800	\$2,800	\$7,600	\$4,800	\$4,800	\$4,800	\$-	\$-	\$-	\$-	\$-	\$-

**DATA APPENDIX
SROI MODEL CALCULATIONS**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11+	
Financial Projections (\$1,000s)											Terminal [j]	
Sales - Government Set-Aside [o]	\$-	\$2,550	\$2,550	\$1,275	\$1,275	\$1,275	\$1,275	\$1,275	\$1,275	\$1,275	\$5,674	
Sales - Non-Set Aside Contracts [o]	\$750	\$250	\$500	\$1,000	\$1,500	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$8,902	
Gross Sales	\$750	\$2,800	\$3,050	\$2,275	\$2,775	\$3,275	\$3,275	\$3,275	\$3,275	\$3,275	\$14,576	
Operating Expenses [p]	\$735	\$2,730	\$2,974	\$2,218	\$2,706	\$3,193	\$3,193	\$3,193	\$3,193	\$3,193	\$14,211	
Other Expenses [p]	\$4	\$14	\$15	\$11	\$14	\$16	\$16	\$16	\$16	\$16	\$73	
Total Expenses	\$739	\$2,744	\$2,989	\$2,229	\$2,719	\$3,209	\$3,209	\$3,209	\$3,209	\$3,209	\$14,284	
Net Income	##	\$11	\$56	\$61	\$45	\$55	\$65	\$65	\$65	\$65	\$292	
Discount Rate [l]		22%										
Present Value of Future Cash Flows		\$219										
Internal Rate of Return (IRR)		21%										
Returns to Society (per 12-employee site)											Terminal [j]	
Total Wage/Productivity Gains (Losses) [m]	\$113,238	\$128,075	\$317,820	\$327,355	\$337,175	\$347,291	\$357,709	\$368,441	\$379,494	\$390,879	\$1,791,904	
Less New Taxes [j]	\$(16,986)	\$(19,211)	\$(47,673)	\$(49,103)	\$(50,576)	\$(52,094)	\$(53,656)	\$(55,266)	\$(56,924)	\$(58,632)	\$(260,957)	
Less Foregone Public Benefits	\$(12,263)	\$(15,263)	\$(15,263)	\$(13,513)	\$(13,513)	\$(10,513)	\$(10,513)	\$(10,513)	\$(10,513)	\$(10,513)	\$(46,790)	
Avoided Social Costs of Drug House	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$17,908	\$79,706	
Benefit of Time At Home With Children [n]	\$2,800	\$2,800	\$7,600	\$4,800	\$4,800	\$4,800	\$-	\$-	\$-	\$-	\$-	
Total Social Returns (Loss)	##	\$104,697	\$114,309	\$280,393	\$287,447	\$295,795	\$307,393	\$311,448	\$320,570	\$329,965	\$339,642	\$1,563,863
Discount Rate [l]		22%										
Present Value of Social Returns		\$1,045,578										
Less Total Subsidies (Govt & Private) [k]		\$(238,770)										
Net Present Value of Social Returns		\$806,808										
Social Internal Rate of Return		72%										
Returns to Government (per 12-employee site)											Terminal [j]	
Tax Revenue Increase [i]	\$16,986	\$19,211	\$47,673	\$49,103	\$50,576	\$52,094	\$53,656	\$55,266	\$56,924	\$58,632	\$268,786	
Total Government Savings	\$25,916	\$28,916	\$28,916	\$27,166	\$27,166	\$24,166	\$24,166	\$24,166	\$24,166	\$24,166	\$107,559	
Total Government Cash Return	##	\$42,902	\$48,128	\$76,589	\$76,270	\$77,743	\$76,260	\$77,823	\$79,432	\$81,090	\$82,798	\$376,345
Discount Rate [l]		22%										
Present Value of Government Returns		\$292,557										
Less Total Govt Subsidies		\$(99,750)										
Net Present Value of Government Returns		\$192,807										
Government Internal Rate of Return		58%										
Social Return : Sales Ratio (\$1,000s)											Terminal [j]	
Total Social Return (3 facilities)	\$105	\$219	\$499	\$682	\$864	\$891	\$915	\$939	\$962	\$990	\$4,544	
Gross Sales (3 facilities)	\$750	\$2,800	\$3,050	\$2,275	\$2,775	\$3,275	\$3,275	\$3,275	\$3,275	\$3,275	\$14,576	
Social Return / Gross Sales	\$0.14	\$0.08	\$0.16	\$0.30	\$0.31	\$0.27	\$0.28	\$0.29	\$0.29	\$0.30	\$0.31	

Benefit : Cost Ratio = 4.38

Benefit : Cost Ratio = 2.93

Notes to Social Return Model

- [a] Based on achievable target pay per hour once federal contracts begin to pay at their mandated rate, and HHT is operating at full capacity. Target wage, according to HHT CEO is \$15.00 per hour. Assumes that by Year 3, HHT is able to increase pay to its target wage rate due to the release of federal contracts hampered in Years 1 and 2. Note that \$30,000 exceeds the living wage for a 2-parent 2-child household on Kaua'i as determined by a recent Wider Opportunities for Women Study. All wages (pre- and post-HHT) are projected to increase at 3% annually.
- [b] Hawai'i average TANF benefit per family from DHHS, Office of Family Assistance, Annual Report, 2002.
- [c] Hawai'i average Foodstamps benefit per family from USDA, Food & Nutrition Service, Food Stamp Program: Average Benefits per Household, July, 2004.
- [d] Hawai'i average Medicaid benefit per enrollee from Henry J. Kaiser Foundation, State Health Facts, 2001.
- [e] Sec 8 rental housing subsidies pay for the difference between market rent and 30% of the beneficiary's household income. Average rent on Kaua'i for a 2 bed 1 bath unit was \$1,200 per month or \$14,400 per year in 2003. Based on the employee survey/interviews, average household income among HHT employees was \$35,000 prior to HHT employment. Therefore, the average annual subsidy was $\$14,400 - (30\% \times \$35,000) = \$14,400 - \$10,500 = \$3,900$ in housing subsidies per year.
- [f] Average cost of childcare in Hawai'i is \$400/mo. Average government subsidies are approximately \$250/mo. From PATCH Hawai'i, 2004. Months and years of care required based on employee interviews.
- [g] Conservatively assumed 2 drug rehab cases avoided per year due to elimination of drug house. Cost based on an average cost per day of \$130 for short-term in-patient treatment program, and average stay of 1 month, from National Clearinghouse for Alcohol & Drug Information, Treatment Improvement Evaluation Study, 2003. Government portion of treatment costs is 46.2% from National Institute on Drug Abuse, The Economic Costs of Alcohol and Drug Abuse in the United States, 1992.
- [h] Conservatively assumed 1 6-month incarceration avoided per year due to elimination of drug house. Annual cost of incarceration of \$20,000 from a 1994 American Correctional Association study, adjusted for inflation. Average sentence of 6 mos for repeat drug offenders and parole violators, from interviews with Legal Aid Society of Hawai'i.
- [i] Conservative assumption that the weighted average personal income tax rate for all employees is approximately 15%.
- [j] Terminal Value in Year 11+ column reflects the sum of all future benefits beyond Year 10, discounted using the Discount Rate (see below).
- [k] Total subsidies based on HHT unaudited financial statements. Government grants = \$99,750. Private foundation grants = \$37,200. Support from CNHA = \$101,820.
- [l] The Discount Rate is used to discount benefits in future years to account for the risk that the enterprise fails to perform as predicted. Consistent with modern financial theory and practice, the Discount Rate was calculated as equal to the enterprise's Weighted Average Cost of Capital (WACC), which is the weighted average cost of debt and equity used to fund the enterprise. The reason for using WACC as the Discount Rate is that anyone willing to lend or invest in an enterprise will have evaluated its risks, and reflected those risks in the price of their loan (its interest rate) or equity investment (its target rate of return). Because HHT has benefited from grants and discounted loans and equity from its parent CNHA and other sources, using its actual WACC as the Discount Rate might result in inflated estimates of the present value of future benefits (i.e., the WACC might be too low, resulting in insufficient discounting). Instead, HHT's WACC was calculated based upon the cost of capital and capital structure of comparable for-profit enterprises. The calculation of WACC and the Discount Rate is presented below is generally consistent with the theory applied by the Roberts Enterprise Development Fund in its Social Return on Investment calculations.

Discount Rate = Weighted Average Cost of Capital (WACC)
WACC = (Cost of Equity x % Equity Capital) + (Cost of Debt x % Debt Capital)
% Debt Capital = 63%, based on industry financial data and ratios from Integra Information, 2004.
% Equity Capital = 37%, based on industry financial data and ratios from Integra Information, 2004.
Cost of Debt = 9.00%, based on REDF/Stanford Business School 2001 analysis adjusted for subsequent interest rate reductions
Cost of Equity = Risk Free Rate + Market Risk Premium x Industry Beta + Small Business Illiquidity Premium
= 10 Year Treasury Bill + (S&P 500 Annualized Return - 10 Year T-Bill) x Beta for SIC 7374 Data Processing & Preparation + 25% Small Business Premium
= 4.20% + (15.00% - 4.20%) x 1.50 + 25.00%
= 45.40%, i.e., the rate of return an equity investor would demand from HHT to justify an investment.

Discount Rate Calculation			
	% Capital	Cost	Wtd. Cost
Debt	63.00%	9.00%	5.67%
Equity	37.00%	45.40%	16.80%
	WACC:		22.47%

- [m] Counting wage increases as a social benefit assumes that without training and other opportunities offered by HHT, employee's earning power would have stayed roughly the same.
- [n] Benefit of increased time at home with young children valued as roughly equivalent to the market rate cost of childcare in Hawai'i: \$400 per month or \$4800 per year. From interviews, 2 employees anticipating requiring childcare -- 1 for 3 years and 7 months per year and 1 for 4 years at 12 months per year.
- [o] Assumes that revenues from federal contract set-asides begin to flow in Years 2 and 3. See report narrative for explanation of amounts.
- [p] Financial Ratios for SIC 7374 Data Processing & Preparation from Integra Information, 2004. Firms in this industry actually had Operating and Other Expenses that ran 99% and 0.5% (respectively) of sales. However, these figures included low-margin companies like traditional data entry and file storage firms. Since document digitization is a new and fast-growing segment of the industry, and because HHT has few local competitors, we assumed slightly lower costs and higher profit margins.