

A Complementary Currency: Carlisle, PA

Danielle Hoffman

Submitted in partial fulfillment of
The requirements for the degree of
Bachelor of Arts
Department of Environmental Studies
Dickinson College
Carlisle, PA

April, 2010

ABSTRACT

“Complementary currency” is a term that is used to describe any means of exchange that is used in conjunction with mainstream money. Communities throughout the United States are using complementary currencies to address their unique geographical issues. By studying the three most successful currency models in the United States—the BerkShare of Western Massachusetts, the Ithaca Hour or Ithaca NY, and the time banking—this paper explores how local currencies can be used effectively to build community, stimulate local economies and raise awareness about local and global environmental assets and challenges. Once this foundation is established, this study turns to focus on Carlisle, PA, one of the many small to medium sized towns in the United States that is working to strengthen its community, revitalize its economy, and decrease the environmental impact of its operations. Through interviews with downtown business owners and a survey of community members at two locations, this study seeks to determine if interest in a local currency exists among the Carlisle community.

ACKNOWLEDGEMENTS

I would like to thank the following people who contributed greatly to the success of this project.

- I would like to thank Professor Nicola Tynan for agreeing to advise me on this research. Your support and guidance was indispensable to the continued progress of this project. I very much appreciate your time, patience and dedication.
- I would like to thank Jenn Halpin for agreeing to be part of my advising team. Jenn, your comments and questions were very helpful when it came to clarifying ideas and concepts within this paper. Thank you very much for your continued support throughout the past four years.
- I would like to thank Carlisle business owners, residents and officials for their receptivity to a new idea and their participation in this study. Thank you all for taking time out of your busy schedules to speak with me and fill out questionnaires.
- I especially would like to extend gratitude to Sandy Miller of Appalachian Whole Foods and Karen Rohody of Courthouse Commons for the willingness to administer my survey to their customers.
- I would also like to extend thank to several people outside of Dickinson. First to Steven Burke, of Ithaca Hours Inc., for his patience and willingness to speak with me repeatedly. Secondly I would like to thank my parents for their support and encouragement throughout this project.
- Finally, I would like to thank Dickinson College and the Environmental Studies Department for providing me with the opportunity to conduct this research.

TABLE OF CONTENTS

- INTRODUCTION..... 1
 - What is a Complementary Currency?** 1
 - The Area: Carlisle PA** 2
- METHODS..... 3
- WHY USE A COMPLEMENTARY CURRENCY?..... 5
 - Economic Resiliency** 9
 - Social Relationships**..... 12
 - Environmental Awareness** 15
- ARE COMPLEMENTARY CURRENCIES LEGAL?..... 18
- WHY A COMMUNITY CURRENCY?..... 20
- COMPLEMENTARY COMMUNITY CURRENCY FORMS..... 20
- DISCOUNT CURRENCIES..... 22
 - The BerkShare** 24
 - Take Away Points: Discount Currency** 26
- FIAT CURRENCIES..... 27
 - The Ithaca Hour** 27
 - Take Away Points: Fiat Currency**..... 30
- TIME BANKING..... 31
 - Shippensburg Time Bank** 34
 - Take Away Points: Time Banking** 35
- SYSTEM SUCCESS..... 36
 - How many participants? Is there enough diversity?** 37
- A COMPLEMENTARY CURRENCY: CARLISLE, PA..... 38
- RECAP OF CARLISLE METHODS..... 39
- CARLISLE RESULTS..... 40
- CARLISLE COMMUNITY RESULTS..... 46
- DISCUSSION..... 48
 - Further build and strengthen the Carlisle community**..... 50
 - Increase the connection between Carlisle and the three colleges** 50
 - Increase support for local businesses and strengthen the local economy**..... 50
 - Raise awareness about Carlisle’s unique cultural and environmental assets** 51
 - Raise awareness about pressing local and global issues** 51
- CONCLUSIONS..... 52
- FURTHER STUDY..... 53
- WORKS CITED..... 54

FIGURES

Figure 1: A Carlisle Visitor: A narrative demonstrating how a local currency can attract visitors	2
Figure 2: A Discount Currency A narrative describing how a discount currency might work in Carlisle.....	2
Figure 3: A Fiat Currency A narrative depicting how a fiat currency might work in Carlisle	2
Figure 4: Time Banking A narrative depicting how a time bank might work in Carlisle.....	2
Figure 5: A bar graph depicting the diversity of participating businesses.....	2
Figure 6: A pie chart showing business participation in a local economic market.....	2
Figure 7: A pie chart depicting business interest in increasing participation in a local market.	2
Figure 8: Pie Chart depicting previous exposure to complementary currencies.	2
Figure 9: A bar graph depicting the level of interest downtown businesses had in a local currency.....	2
Figure 10: Pie chart depicting perceived feasibility of a local currency.....	2
Figure 11: A pie chart depicting interest in remaining involved in this project.....	2
Figure 12: A Pie chart displaying how many businesses would accept a local currency.....	2
Figure 13: A bar graph showing how often the 51 community participants shop in Carlisle.	2
Figure 14: Bar graph depicting community interest in a local paper currency.....	2
Figure 15: Bar graph depicting community interest in a time banking system.....	2

APPENDICES

Appendix 1: Existing Currency Systems Discovered	60-61
Appendix 2: Existing Currency Systems Contacted	62
Appendix 3: Businesses & Community Members Interviewed	63
Appendix 4: Handout to Business Owners	64-66
Appendix 5: Questionare for Carlisle Businesses	67-68
Appendix 6: Questions for Carlisle Residents, left at Court House Commons and Appalachian Whole Foods	69

INTRODUCTION

Communities and towns across the United States are using complementary currencies as a means to mitigate their unique demographic, economic and geographical challenges and to enhance the vitality of their communities. A complementary currency is any means of exchange that runs parallel to the dominant currency, money. They can be structured uniquely for specific purposes, such as increasing downtown shopping, building social cohesion, encouraging customer loyalty, decreasing violence or creating incentives for sustainable behaviors. While the successes of these efforts are not extensively studied, interest in the *potential* of local currencies continues to grow in the light of the current economic and ecological challenges we face nationally and globally.

Complementary *community* currencies, or those currencies used widely within a geographic region, in particular, seem to hold the potential to have broad beneficial influences on economic, social and environmental resilience and vibrancy. Although the design and application of these tools is unbounded, several versions of community currencies have been successfully used in the United States. Three complementary community currency models will be the focus of this paper: two paper currencies, the Ithaca Hour of Ithaca, NY, the BerkShare of the Berkshire region of MA, and a systematic, information based exchange called time banking. The first two are tangible, physical currencies that function like the US dollar but are unique in their creation and intended function as money. The latter is a reward system in which participants accrue “time dollars” for services performed for others within their community.

The area of study, Carlisle, PA, is one of the many small to medium sized towns in the United States that is working to strengthen its community, revitalize its economy, and decrease the environmental impact of its operations. Through the exploration of these complementary, local currency models, this paper aims to answer the questions:

1. Why would we want to use complementary currencies?
2. What is the potential for a local currency system in Carlisle?

It also aims to highlight the potential of complementary currencies as tools to raise awareness about economic, social and environmental challenges and subsequently, facilitate the evolution of conscious thoughts and actions.

What is a complementary Currency?

“Complementary currency” is a blanket term that refers to a wide range of exchange systems designed to address specific needs unmet by conventional money (Seyfang, 2007a, p. 4). “Complementary” is the chosen descriptor because these currencies are created to

work in parallel with national currencies, not replace them. In the last few decades, the phrase, “alternative currencies,” has gained popularity, however “alternative” is misleading because these forms of currency are not *substitutes* for our national currency. Rather they augment the function of mainstream money. In this sense, local currencies are tools, used to connect people within a community who are currently not connected by mainstream money. *Local currency, secondary currencies* and *local exchange systems* are other phrases commonly used in community currency initiatives. These follow much more closely the theory of complementary currencies, and can almost be used interchangeably with the blanket term.

The Area: Carlisle, PA

Carlisle is home to nearly 18,000 people (US Census Bureau, 2000) and is the county seat of Cumberland County in South Central, Pennsylvania. Known widely for its rich history, beautiful architecture, and quaint shopping experience, Carlisle attracts several hundred thousand visitors annually (S. Farr, personal communication, April 22, 2010). There are also three institutes of higher education in Carlisle: Dickinson College, the Penn State Dickinson School of Law and the Army War College, meaning several thousand young, transient adults call Carlisle home for nearly 10 months each year.

Downtown Carlisle is full of award winning restaurants and many independently owned specialty shops that seem to thrive. Some have been in Carlisle for over 50 years, many have been in business for more than 5 years, and several have just opened (M. Brady, personal communication (p.c.), February 19, 2010; F. Wardecker, p.c., February 15, 2010; J. Walker, p.c., March 3, 2010). Carlisle is home to many manufacturing businesses including: Frog and Switch, Carlisle SynTech, Giant Corporation, PPG, and the trucking industry. However, the manufacturing scene is facing challenges. In the past two years, at least three of Carlisle’s major manufacturing plants have announced their closure: Carlisle Tire & Wheel, IAC, and Tyco (Cress, 2009 July 21; Cress, 2008; Cress, 2009, July 22; Cress, 2009 January; Scott, 2008).

In 2000, the median household income of the Carlisle Borough was \$33,969, while the median for the state of PA was \$40,106 (US Census Bureau, 2000b). In 2008, the state average median household income rose to \$50,702 (US Census Bureau, 2010). Cumberland County experienced a median household average of \$60,534, (US Census Bureau, 2010) and it is estimated that Carlisle Borough’s household median was \$44,149 in 2008 (Onboard Informatics, 2010). PA’s average poverty rate in 2000 was 11% (US Census Bureau, 2000b), while Carlisle experienced a slightly higher poverty rate of 14%. These numbers

suggest that while the Carlisle community is quite strong economically, the town faces the challenges of poverty and loss of manufacturing jobs.

The Borough has expressed interest in decreasing their carbon footprint and “greening” their town’s operations. In the next few months, the first phase of a “road diet” will be implemented in downtown Carlisle. The change includes a switch from four lanes of traffic to two and the addition of bike lanes on both sides of the street. A few goals of the project are to promote biking and walking, decrease air and noise pollution in the downtown, maximize downtown business success and improve parking safety (Seltzer, 2009). Carlisle has also expressed interest in performing a green house gas inventory, coming close to partnering with Dickinson College to perform this in 2008. Carlisle is home to a growing local foods movement, with a farmers market that has remained strong and welcoming, even after several changes in location. It is now located on the main square in Carlisle, and runs throughout the summer and late into the fall.

Recent development and discussion in the region surrounding Carlisle has focused on highlighting Southern PA’s natural assets. “With its fertile farmlands, clean waterways, renowned trout streams and vast woodlands, the more than 400,000-acre South Mountain region is truly blessed,” says acting DCNR Secretary John Quigley (DCNR, 2010). Area residents and leaders are coming together to discover the natural and cultural resources of this region and are taking steps to connect local economies to these assets. Together, individuals are brainstorming about how to highlight these strengths in order to maintain economic vitality and add to the sense of place of this region.

METHODS

The background information for this study was accrued through a literature review of previous research on complementary currencies. Although literature regarding complementary currencies is not prevalent, local currencies began to gain ground in the United States in the early 1990s, spurring both recreational and academic interest in the topic. Although academics and graduate students around the world have studied the location, distribution and use of local currencies, much of the existing research focuses on communicating the idea and potential of local currencies, rather than on what works and what does not work within these systems. Today, there is renewed interest in the topic as local currencies develop around the country, and the focus of more recent studies is turning towards measuring the benefits of local currencies and documenting their wide variety of applications.

To supplement previous research, I performed a basic survey of existing complementary currency websites, noting their location, form and when possible details of their system. This survey is not comprehensive, but even this short spectrum of discovery implies that much of the previous research on complementary currencies is outdated and the field of study is changing. Without much effort, I found over 40 existing currency systems in the United States (Appendix 1). In addition, according to the Time Bank USA website, there are 186 registered time banks in the United States (TimeBanks TM, 2010c). To receive updates on present day local currencies, I signed up to receive daily emails from Google that digested the news, blogs and internet coverage of “local currencies,” “complementary currencies,” and “time banking.”

Seventeen existing local currency systems in the United States were contacted and asked for an overview of their currency system, and advice for a community that was contemplating creating a local currency (Appendix 2). This preliminary communication was not very useful as the information collected was very simple and did not provide any detail. However, from these initial contacts, I was able to identify successful systems and through phone interviews, glean much more information about their function.

To gain perspective on the interest in Carlisle, several weeks were spent visiting downtown businesses. I interviewed 6 business owners in person and, due to time restrictions and the busy schedule of local business owners, approached and provided questionnaires to 38 others (see list in Appendix 3). After a brief explanation of the project, the employee or owner was presented with an informational hand out (Appendix 4) that provided an overview of the arguments in favor of complementary currencies, a list of established communities using local exchange systems, as well as a questionnaire. The questionnaire was left with the businesses for at least 3 days, usually a week, affording them time to familiarize themselves with the idea before responding.

The interview and questionnaire consisted of 15 questions (Appendix 5), half pertaining to the individual business and the Carlisle community, and the other half pertaining to complementary currencies. While broad, these questions provided useful information to assess the interest Carlisle business owners have in the establishment of a complementary currency in Carlisle. Throughout this process I also received suggestions from other downtown representatives to interview. An additional six individuals with strong ties to the downtown economy or specific communities within Carlisle were interviewed including Michelle Crowley of the Carlisle Chamber of Commerce and Glenn White of the Downtown Carlisle Association (for a full list see Appendix 3). These

additional interviews proved very insightful and are used alongside the interview responses.

Assessing the interest of community members proved more difficult, however, I was able to administer a simple five-question survey to customers at Appalachian Whole Foods and The Courthouse Commons Coffee Shop (see appendix 6). The surveys were left at the businesses for one week and during this time, 51 people provided answers. Throughout my conversations with community members, I was able to identify several community groups, but did not have the time to approach them. This information, however, will be useful to those who pursue this project.

WHY USE A COMPLEMENTARY CURRENCY?

Today, more and more communities throughout the United States are experimenting with local currencies (Schwartz, 2008). Some attribute this to the recent economic decline, citing the spike of secondary currency in the United States during the 1990s to suggest that complementary currencies are created in response, and as a remedy to, weak economic conditions (Krohn & Snyder, 2007, p.5). Others, however, suggest that something else is causing today's increase. They propose that people and communities are changing the way they understand money and its function (Greco, 2001; Korten, 2009). Instead of money being viewed as simply a means to procure goods and services, people are beginning to realize that money is an information system that holds valuable details about how our societies function. Unlike in the past when complementary currencies were created in response to economic decline, currencies today are being created as a tool for sustained social change (Helleiner, 2000, p. 36; Greco, 2001).

Some suggest that the way we currently create money exacerbates, if not perpetuates, many of our social, environmental and economic problems. In order to understand this argument it is helpful to discuss the history of money creation, transfer and storage. Historically, there were two types of banks: loan banks and deposit banks. Loan banks performed the social service of channeling borrowed savings into productive loans and investments. These bankers did exactly what most people assume bankers do: borrow money from some and lend money to others (Rothbard, 2008 , p. 83). Deposit banks on the other hand, function as safeguards of people's assets.

In the past, goldsmiths acted as deposit bankers, providing safe storage for gold and coins. When individuals needed gold to make a purchase, they went to the goldsmith, redeemed their deposit receipts, and had gold to exchange. The seller would then redeposit

that gold under his own name to ensure its safekeeping. Gold is heavy and cumbersome and people soon realized that it was much easier to simply exchange deposit receipts instead of gold. These receipts became known as notes, and suddenly the form of money had changed. Bank notes were accepted in lieu of gold because everyone knew they could be redeemed for the latter (Rothbard, 2008; Federal Reserve Bank of Chicago, 1992) and they were much easier to carry around.

These early bankers practiced what today is known as 100 percent reserve banking. In other words, all the receipts given out were backed by gold or coins. Somewhere down the line however, bankers realized that most people seldom, if ever, demanded to redeem all their receipts at one time. Bankers realized they could make money by lending out bank notes in quantities that *exceeded* their reserves of gold, and charging interest on the loan to ensure the money was paid back. By lending out someone else's deposit, the banker was practicing what today is known as fractional reserve banking. The reserves held by the banker were lower than the number of receipts the goldsmith had given out (Rothbard, 2008, p. 96). Fractional reserve banking is how modern day banks create money. They essentially create it from "thin air" when they give out a loan. (Hoffman, 2008; Rothbard, 2008; Greco, 2001). This practice allows fractional reserve banks to stimulate the economy by increasing the money supply, as experienced recently during the financial crisis.

While generally endorsed by economists, financiers and governments around the world, some criticize fractional reserve banking for being unethical, creating economic instability and perpetuating the scarcity of money (Rothbard, 2008; Greco, 2001; Korten, 2009). As an example, when someone takes out a loan they are always required to pay interest on the money borrowed. While money for the loan is "created" into existence, the money to repay the interest is not. Thomas Greco (2001) describes the resulting situation: "Thus debtors, as a group, are in an impossible situation of always owing more money than there is in existence. They are forced to compete with one another for scarce money, in a futile attempt to avoid defaulting on their debts (p. 9)." Greco says further that inevitably, someone has to lose in this situation because in order for one person to have money they have to take it from another. David Korten (2009) points out that in order to pay off the interest, more money needs to be created into existence, which creates a constant need for economic growth (p. 71-72).

Some scholars argue that the constant growth required to create money, promotes competition, perpetuates the scarcity of money and creates economic instability. This philosophical argument is sometimes cited as a reason for beginning a local currency system. If the mainstream economy suffered extensive decline, a local currency system

would persevere because the value and worth of the currency system is founded in the agreement among the local community in which it is printed. A more thorough discussion of this idea can be found in Greco's book, *New Money for Healthy Communities*. While this impetus for local currencies was popular in the 1990's, today, the momentum behind local currency systems has changed. Instead of focusing on the negative aspects of our current monetary system, most complementary currency systems are created because of the widespread community benefits they can produce *alongside* a national currency.

Conventional money is designed to perform three functions: a means of exchange, a store of value, and a unit of account (Greco, 2001, p. 23). Money functions as a unit of account because of the information it holds, namely that someone owes something to someone else. When someone sells an item or service they receive money; when they purchase an item or service they offer money in payment. In this way, money is like an IOU for keeping track of transactions.

Thomas Greco argues that the first two functions of money (a store of value and a means of exchange) are contradictory. Greco suggests that a means of exchange cannot also be a *store* of value. As a means of exchange, currency is a *signal* of value, a *representation* of value and therefore has no inherent significance itself (Greco, 2001, p. 24; Schusman, 2005, p. 7). For example, when we go to work and earn 40 dollars, the slips of paper we receive aren't really worth anything in and of themselves. Their value lies in the knowledge that we can use them to buy a sandwich and pay our gas bill. Their value is realized when they are exchanged for the goods and services we need. In this sense Greco would argue that money should not be stored because what we are storing has no worth.

Authors Hugo Bilgram and Louis Edward Levy suggest further, that money's success can be solely attributed to a "consensus of the members of a community to accept certain valuable things, such as coins and certain forms of credit, as mediums of exchange" (as cited in Greco, 2001, p. 25). Without mutual agreement between buyers and sellers, money as we know it would have no worth. Depositors originally agreed to accept paper slips in lieu of precious metals because they formed an agreement with the banker that the slips represented the costly metal. It is the fact that we know the baker down the street, the laundromat and the grocer will accept money for goods and services that gives that money its value (Federal Reserve Bank of Chicago, 1992). This mutual agreement is essential for any system of exchange to function successfully, whether complementary or conventional.

Money is a social construct, designed originally to confront the inadequacy of simple bartering (Bilgram and Levy as cited in Greco, 2009, p. 24). However Lieater states, "The

way money is created and administered in a given society makes a deep impression on values and relationships within that society” (Seyfang, 2009, p. 6). The philosophical and theoretical arguments that suggest our current means of creating money is unethical have evidentiary support. Conventional money promotes competition between saving and spending and between individuals as they vie for a scarce resource: money.

Complementary currencies on the other hand, tend to promote the opposite, valuing cooperation, collective action and trust (Lietaer & De Meulenaere, 2003, p. 977). Complementary currencies usually fill one of the functions of conventional money, often serving as a means of exchange instead of a store of value (Seyfang, 2009, p.6). Currently, we work for money. But money was created as a tool to make trade more efficient; as such it should work for us. “Money can be made to serve rather than rule, to be used- rather than profit-oriented- and to create abundance, stability, and sustainability,” said Margrit Kennedy at the Local Currencies in the 21st Century conference (Witt & Lindstrom, 2004).

The process of learning about complementary currencies and the many reasons why we might want to use them is a daunting educational process. Designing a currency to meet broad or specific goals, running an educational campaign, unleashing it within a community and finally implementing a local exchange system is a process that raises awareness about the function of money and some of society’s greatest challenges in a profound way.

Climate change, peak oil, increasing scarcity of clean, fresh drinking water, diminishing areas of arable land, massive deforestation, grossly inefficient distribution systems, vast disparities between the rich and the poor, failing economies, war- these are all interconnected, global problems that we don’t hear about or directly experience on a daily basis. They may seem distant and unrelated to us, however, we experience them directly on a smaller scale every day in the form of downtown economies struggling to survive as competition with larger outside forces increases, aging infrastructure, lack of access to fresh nutritious foods, continuing separation of classes and races, rising energy costs, the introduction of chemical toxins into our environments, loss of fertile crop land... the list goes on and on.

We can focus on solving each of these global and local challenges individually, or we can try to solve as many of them as we can together, without exacerbating others. Money, while certainly not the only similarity, is one common thread that runs throughout all of these problems. Funding for environmental, social and economic reform is difficult to come by no matter where one resides, be it the Europe or Africa, Los Angeles or Carlisle, PA.

While the problems listed above are truly unique to each region and every community, the globalization of our economies, communication networks and information systems have linked communities worldwide in an unprecedented manner. Purchasing decisions made in small American towns may significantly influence rural farming communities in Africa or South America, just as events in Asia and Europe can significantly influence the lives of Americans. Complementary, local currencies are a tangible tool that can raise awareness about local and global economic, social and environmental challenges and subsequently, facilitate the evolution of conscious thoughts and actions. They are tools that in their very design embody the familiar slogan, "Think Globally, Act Locally." The potential for local currencies as a tool to raise awareness about some of our most pressing issues can be demonstrated in three areas essential to the longevity of any community: economic resiliency, social relationships and environmental awareness.

Economic Resiliency

Money is a community resource: we need it to fix roads, build schools, promote safety and beautify our towns. Businesses need money to buy their products, expand their customer base and maintain their stores. During times of monetary decline local businesses and economies often struggle to maintain financial viability. Local currencies can help stimulate local economies and increase their resiliency by encouraging local spending, thus retaining money within a community, increasing the speed at which it circulates within a community, and identifying unfilled niche markets.

Resilience refers to the ability to hold together and maintain the capacity to function in the face of change or shocks from the outside (Hopkins, 2008, p. 54). The metaphor of a leaky bucket can be used to depict how local currencies can add resilience to local economies. Imagine that our local economy functions like a bucket, containing money within our geographical boundary. Every time money leaves the local economy, a hole forms in the bucket. As we begin to plug these holes by strengthening our network of local exchange and investing in our own communities, money stays within our local economy for longer periods of time (Hopkins, 2008, p. 197; Ward & Lewis, 2002).

At a micro level, this trend can be observed in one of the most successful examples of a modern day complementary currencies: airline frequent flyer miles. Frequent flyer miles were originally just a marketing ploy. However as of 2006, over 14 trillion airline miles have been issued by 5 global airline alliances. Earned by flying or making purchases with an airline credit card, the number of airline miles in circulation far exceeds the

amount of circulating US dollars (Lietaer & Hallsmith, 2006, p. 2). Airline miles can be exchanged for flights, rental cars, and hotels, sometimes even for bills or groceries (Dykema, 2003). In this sense, airlines, hotels, car companies or any other corporation that accepts airline mile credits, function together as a community. Frequent flier miles are the currency used to connect individual services to people's needs while decreasing competition from outside corporations by offering an incentive to participate in the system. Community currency systems work in the same manner, connecting buyers and sellers within a specific geographic region.

Inevitably, some money must leave our community economy; no town is isolated from the greater world. Advocates of local currencies, however, suggest that many of our current leaks can be fixed by identifying and strengthening the economic assets and abundance of our own communities. For example, today when someone suggests a book, we immediately think of Amazon.com instead of the bookstore downtown. This cultural phenomenon is engrained within our societies and will not disappear overnight. Campaigns such as "Buy Local" or the "3/50 Project" that encourage people to support their locally owned, independent merchants are becoming increasingly popular, but as informational campaigns, are limited in their success. Local currencies are a tangible tool that can be used in conjunction with these movements to inspire a change in our thinking, shopping and purchasing behavior. If someone has a local currency in their wallet, they most likely will think twice before clicking that "purchase" button on-line. Knowing they have money that can only be spent in their town, but will enhance their local economy, community and help protect their environment, will make them more likely to think about what needs they can fulfill locally.

As noted above, local currencies are based on a mutual agreement of value among those participating in the system, and thus, have a limited purchasing area. While sometimes seen as a shortcoming (Schusman, 2005, p. 10), it is precisely this characteristic that makes local currencies appealing. If a dollar is spent at a box store such as Wal-Mart, the majority of it immediately leaves the area, usually traveling out of state and often out of country. A study in New Orleans compared the economic impact of fifteen locally owned businesses to that of a SuperTarget and found that 84% of the money spent at the SuperTarget left the community compared to the 68% that left when spent at the locally owned businesses (Institute for Local Self-Reliance, 2009, p. 5-6). Civic Economics, a consulting firm in Texas, performed a similar study which compared the economic activity generated by two local bookstores to the economic activity generated by Borders discovering a dramatic benefit to local spending. For every \$100 dollars spent at Borders, the total local economic impact was \$13, while every \$100 spent at of the local merchants

generated \$45 of total economic impact (Houston, 2002, p. 14), demonstrating that local spending can generate nearly three times the economic activity of money spent at corporately owned businesses. Local currencies spent at local businesses are designed to recirculate within their community, thus ensuring that a community receives maximum benefit from the economic activity generated by the local spending.

Because conventional money is used as both a means of exchange and a store of value, it tends to pool and stagnate as it is saved. Every time a dollar is used it theoretically earns value, therefore, the more it is used the better. The Chiemgauer, a local currency in Prien, Bavaria, was shown to have a velocity, or circulating speed, 3 times greater than the Euro after five years of circulation (Gelleri, 2009, p. 64). A local currency circulates more quickly around a town, continuously spent at local stores because of its limited area of use. As a consequence, local currencies concentrate money within a community. This idea reflects Greco's argument that money should be used less as a store of value and more as a means of exchange.

Local spending does not just refer to community members supporting their downtown businesses, but also to encouraging visitors to shop at local businesses. Local currencies offer visitors a unique and fun incentive to spend their money at independently owned shops, thus helping ensure that outside money is incorporated into the local economy. These examples demonstrate how a local currency can help build resilience within our local economies by facilitating the retention of money within a local economy (See figure 1).

Complementary currencies also raise awareness about local businesses and services by highlighting niches within a local economy that can be filled. For example, a local restaurant needs to buy bread and wants to use a local currency to pay for it, but cannot because a local bakery does not exist. After discussing it with fellow restaurant owners, the group may lament the fact that they must go outside their town to source fresh bread. It becomes apparent to the group that an *opportunity* for a new business and potentially new jobs exist. A bakery needs workers, but it also needs ingredients. Theoretically, if a bakery was established and began to examine its own purchasing patterns (potentially due in part to the presence of local currency) new niches, such as grain farming, or grain milling will become apparent. By identifying resources that can be produced locally or regionally and supporting them, communities can begin to redefine their sense of place, develop local resilience and promote a greater understanding of their surroundings (this will be discussed in more detail under ecological reasons).

Figure 1: A Carlisle Visitor: A narrative demonstrating how a local currency can attract visitors

Nancy looks around at the sandstone buildings as she slowly drives through downtown Carlisle, PA. It's her first time in the town and she's excited to explore the downtown shopping. As she parks her store outside a small restaurant, she sees a sticker on the merchant's window that says "Carlisle HOURS proudly accepted here." Nancy is intrigued, but is much more excited when she spots the Antique Shop on Louthier Street. As she enters the shop, she notices the same sticker out of the corner of her eye. Inside she's distracted by all the lovely antiques and a half hour later has chosen several pieces to purchase. She waits patiently in line examining her new treasures but perks up when she overhears the cashier say, "Oh yes, we certainly accept HOURS!" The patron in front of her pulls out a form of money she's unfamiliar with and the cashier accepts it as if this exchange is perfectly normal. When Nancy gets up to the register, she asks politely just what exactly a Carlisle HOUR is. The merchant smiles and explains that a Carlisle HOUR is the town's local currency. He briefly explains some of the benefits of such a system and hands her a brochure with more information. As she pays him with US cash, he asks her if she'd like her change in HOURS. Excited, she eagerly accepts.

Throughout the day, Nancy visits several more shops with HOUR stickers. She spends her HOURS quickly and easily, and always asks for them in change. She admires their beauty and unique characteristics and decides that when she leaves for the day, she'll take one of each of the bills home with her as a souvenir. Essentially, this means Carlisle HOUR has just made some money, because Nancy took those bills out of circulation. She shows all of her friends the lovely money when she gets home, and together they plan their next excursion to Carlisle.

Social Relationships

One of the main documented benefits of complementary currency systems is the augmentation of community through the increase in social interaction, which promotes the building of social capital and collective action. Because complementary currencies are designed to connect people, they readily facilitate the creation of new friendships (Soder, 2008, p. 36). Participation in these exchange systems often automatically introduces you to new social circles within in your own community, as community potlucks, introductory sessions and other group gatherings are common to complementary currency systems. Increasing peer-to-peer exchange and communication between individuals and groups builds interpersonal trust and a sense of solidarity within communities. New ideas are

exchanged and find support when people come together and communicate, creating a breeding ground for collective action.

A survey of 42 participants in the Ithaca Hour currency system in Ithaca, NY suggests that using the local currency creates a sense of community among Hour users. Fifty five percent agreed that the local currency improved the quality of their lives, and

another 29% of those surveyed strongly agreed with this statement (Jacob, Brinkerhoff, Jovie, & Wheatley; Soder, 2008). Over 90% said that Hours allowed them to help people. Over two-thirds of participants believe that a local currency can and does strengthen their circle of friends. Nearly 4 out of 5 respondents said that HOUR transactions lead to developing trust for future transactions (Jacobs *et alt.*). A member of the Humboldt Exchange in CA remarked about community currency, "It's fun and makes you interact with people in different ways than normal currency does. You are calling people up. Friends and neighbors or new people to meet, and that creates an impetus...that has great benefits for community and society." Another member described the local exchange system as, "providing a space for folks to come together who then end up having conversations questioning how society works...what we can do to change it...how we can create peace, justice and democracy." (As quoted in Soder, 2008, p. 43-44). These examples demonstrate how local currencies are successful in connecting people, facilitating exchange relationships and building a sense of trust within a community.

While complementary currencies can be used to build community on a large scale, they can also be used to target a specific demographic. While performing research in Bali, Bernard Lietaer, an economist, discovered that the Balinese used two currencies: the Indonesian national currency and time (Lietaer & De Meulenaere, 2003, p. 974). Lietaer also observed that people who had money tended to have little time, whereas those with little money tended to have more time. The dual currency system in that village served to bridge this gap, and can be used for the same function in modern day society (Lietaer & De Meulenaere, 2003, p. 975). While the conditions experienced in Bali are different than those we experience here, we still suffer from disparities between the poor and the wealthy, those with time and those with money. Complementary currencies can help bridge the divide between socioeconomic groups by making otherwise undervalued jobs, such as cooking, babysitting, driving or caring for the elderly suddenly viable. People who have a lot of money generally spend much of their time earning that money and as such, do not always have the time to perform essential functions such as caring for the elderly or taking the time to design an effective campaign to reduce bullying in schools. Complementary currencies create new markets and venues for exchange and in doing so, generate opportunities that value underappreciated skills. These new markets allow people to earn complementary currencies in addition to conventional money while gaining experience and building trust within their communities (Cahn, 2001).

Elderly populations are a prime example. The population of Americans over 65 is projected to increase rapidly within the next decade as the baby boomer generation ages. This demographic needs care, support and, more than anything, company. In today's

economy, taking an hour or two to sit with an elderly person can actually cost you money. There is little incentive to fill this important and growing niche. Indeed, there is disincentive because by taking that time, you lose the money you could be making elsewhere. Complementary currencies create a new market that allows one to perform this invaluable service and benefit instead of lose. Besides identifying and potentially funding new job opportunities, local currencies also allow a community to quantify into their local economy, undervalued but indispensable tasks. Although one may lose a few hours of conventional money by performing these jobs, another type of currency can be earned that can be exchanged for necessary goods and services.

In Japan, a currency system called “*fureai kippu*” which translates into “caring relationship tickets” is used to pay for care of elderly people that are not covered by national health insurance. People receive credits for helping an elderly person in their neighborhood or town (shopping, bathing, food preparation etc.). These credits are put into a savings account and can then be used to obtain care if one gets sick, or can be given electronically to a parent or relative that requires immediate care. This system allows for hundreds of thousands of people to stay in their homes longer than they otherwise could (Dykema, 2003).

In *Yes! Magazine*, Edgar Cahn (2004) describes how a Chicago school, dubbed a “killing zone,” used a time banking system to reform its system. Instead of paying outside tutors to come in and mentor younger kids, Cahn suggested they reward older students for their help. Any student, regardless of grades or academic standing could participate in the program. For every hour spent tutoring, the students would earn “1 Time Dollar.” In return for earning 100 Time Dollars, students were promised a recycled computer. The change observed in that school system was remarkable: older students unknown for their academic prowess began to shine, younger students earned better grades, afterschool fighting and bullying all but stopped because the younger kids were protected by their older mentors. School attendance even increased on mentoring days. Below is an excerpt from Cahn’s article:

“The focus of the Time Dollar program was not on what this community lacked, but what it had. Kids were not empty vessels to fill, cracked vessels to repair, or defective merchandise to relegate to the scrap heap. They were producers, earners, learners, mentors... In short, Time Dollars helped unleash the wealth that was already there by reclaiming people (and computers) society was prepared to throw away” (Cahn, 2004).

Whether used to connect entire populations or targeted at specific demographics, local currencies create a heightened sense of community (Soder, 2008, p. 38). A heightened sense of community refers to the connection one feels to the community in which he or she resides. It refers to the relationships with fellow residents, with business owners and service providers and also to the extent in which members are involved in community events and committees. Because local currencies seeks to connect buyers and sellers, people with needs and people with skills to offer, they excel at building community.

Environmental Awareness

The debt imperative created by fractional reserve banking perpetuates economic growth, and consequently resource consumption, because expansion is essential to maintain economic stability (Korten, 2009). Growth is necessary for the development of any economy, but at present, much of the world's economic growth is occurring in discordance with environmental reality. For years, scientists have researched and proven that our natural resources are geologically finite; if we do not use them wisely, they'll run out. Many are predicting water, energy, fuel and food scarcities in the relatively near future as a consequence of environmental and social systemic instabilities. Complementary, local currencies facilitate the relocation of living and can help build resilience into human environments and communities.

While many community currencies were not created with the explicit goal of environmental sustainability or decreasing carbon foot prints, most have an implicit positive impact on the environment. Gill Seyfang, a senior research associate at the University of East Anglia identifies five priorities for promoting sustainable consumption (2009a, p. 5) that local currencies can support:

- Localization
- Reducing ecological footprints
- Community building
- Collective action
- Building new social institutions

She found that while complementary currency models do not often fulfill all five of these priorities, generally they promote a majority of them. For example, her study determined that time banking promotes community building, collective action and the building of new social institutions. Further, it has some benefits on reducing ecological foot prints but it does not create any net localization effect because it is focused on already locally-based services (Seyfang, 2006, p. 5-8). Her findings suggest that the connection

between ecological incentives and complementary currencies exists, but needs to be identified and promoted. Seyfang says, "These [*complementary currencies*] are a new tool for sustainable consumption, which shift consumption behavior towards more localized, inclusive and community-focused patterns, with lower ecological footprints, and associated reductions in CO2 emissions" (Seyfang, 2009b, p. 4).

Perhaps the most notable environmental benefit of local currency systems is their ability to help create a sense of place in the region in which they are printed. People develop a sense of place by experiencing the environment in which they live: through learning its history, geography, wildlife, legends and witnessing its natural abundance (Fermata, Inc., 2009). Connecting and identifying with the land is something that can be encouraged and facilitated but cannot be forced. Local currencies raise awareness about social and cultural strengths, but also the ecological assets of their community. Their creation clearly demonstrates the interdependence of economies, people, and the environment. Local currency systems employ local artists to design imagery for printed bills that often draw attention to ecological systems, historical figures or distinctive features. For example, the 1 Hour bill printed in Ithaca, NY features the "Lick Brook," while the eighth Hour note depicts a salamander on front and a bioregional bug (found only in Smith Woods) and Cayuga Lake basin map on the back (Ithaca Money Home Pages, 2006).

Through this simple visual stimulus and by encouraging local purchasing, currencies can draw attention to environmental impacts in a more comprehensible way. Susan Witt, founder of the BerkShares says,

"One of the crucial tasks of the new century will be to so shape our economic system that environmental and social safeguards are built into its design. Advocacy for better working conditions and nonpolluting methods of production will certainly play a part in this reshaping, but theoretical knowledge by itself will not necessarily stimulate a change in our consumer habits. Rather, we need to be able to picture the manufacturing processes so clearly that we are compelled to demand secure conditions for the workers, and to restore the waters poisoned by toxic waste.

By intentionally narrowing our choices of consumer goods to those locally made, local currencies allow us to know more fully the story of items purchased, stories that include the human beings that made them and the minerals, rivers, plants and animals that gave of their substance to form them. Such stories, formed from real life experience, work in the imagination to foster responsible consumer choices and re-establish a commitment to the community. In this sense, local currencies become a tool not only for economic development but for cultural renewal" (Witt, 1998).

As mentioned earlier, many claim that local currencies are gaining popularity because our collective understanding of the role of money is expanding from seeing money as simply a medium of exchange to viewing money as a tool that holds information. As Witt describes in the quote above, by learning the history and details of our purchases, we begin to formulate a story of what we buy which allows us to connect more deeply with the investment of time, people, money and natural resources (both local and globally) that went into creating the object or service. Perhaps the educational value of initiating and operating a local currency system holds the most potential for creating environmental benefit.

The educational impact of analyzing local purchasing behaviors and learning more about the impact that individual and community choices may have on the greater global community can raise awareness profoundly. A stronger community is more likely to begin an initiative like a tool share program in response to higher fuel costs and interest in the environment and cooperative behavior. A local currency might inspire a group to collectively purchase and share one or more tools that each member may use only occasionally, like a twenty foot ladder or a lawn mower. A local currency is not necessary for setting up such a program; however the awareness that arises with the implementation and use of a local currency may serve as a vehicle to increase the chances of this happening.

Local currencies can also be used to inspire behavior changes in a tangible way. In Rotterdam, Netherlands, Nu Spaarpas is a virtual incentive program for sustainable behavior and consumption. People can earn points through purchasing items with a green label, organic products or second hand goods or for behaviors such as sorting their waste recycling. People can then redeem their saved points for items such as free day passes for public transportation, free admission to local attractions and sustainability specials at participating shops (van Sambeek & Kampers, 2009).

Seyfang is currently researching the potential for a country-wide personal carbon trading system in the United Kingdom. The program is modeled off the EU Emissions Trading Scheme, a cap and trade system for reducing green house gas emissions across the European Union. Proponents suggest that an overall carbon budget be established, and 60% of the credits be doled out to businesses and the public sector and the remaining 40% be divided equally among all citizens. They propose that the credits be stored on a smart card and be spent alongside money when purchasing fuel or energy. High energy users will need to purchase more credits, while those who use less energy can sell their extra credits for a profit. This model is endorsed by several key actors in the UK government, but is

criticized by others for being too expensive and currently publically unacceptable (Seyfang, 2009b, p. 7).

An exciting prospect of complementary currencies is the future of low interest loans and investment capital. In difficult economic times, many banks will not make small loans because they are not as profitable as large a loan, which inhibits small-scale local entrepreneurship. The potential benefits of local loan programs are threefold: building and diversifying local economies through creating jobs and new businesses, decreasing environmental impacts by incentivizing and financing environmentally friendly projects such as energy conservation or renewable energy installations, and all the while building community trust and solidarity through increased interaction between members of a community (Witt & Lindstrom, 2004).

Ithaca HOURS Inc. is exploring the potential local currencies have in supporting local initiatives. In 2000, the world's largest local currency loan was made to Alternatives Federal Credit Union/CUSO, who received \$30,000 in the form of 3,000 Ithaca HOURS. The firm used the HOURS to finance local contract work, such as plumbing, carpentry and electric work during the construction of the credit union's new headquarters. Bill Myers, manager of the credit union said, "HOURS complement our missions of local re-investment." Because local currency loans generally have no associated interest charges, they have great potential to finance projects for which money is not readily available such as: protecting local farm land, establishing small businesses, solar power, transportation and low-cost innovative housing (Glover, 2000 May).

ARE COMPLEMENTARY CURRENCIES LEGAL?

YES! While the federal government prohibits states from coining money, they place no such barriers on private parties such as individuals or organizations. As long as the currency, often referred to as script, follows certain guidelines, it is legal. For example, the federal anti-counterfeiting provision requires that tokens or paper be "similar in size and shape to any of the lawful coins or other currency of the United States" (Solomon, 1996, p. 99). Congress prohibits states and private entities from issuing coins, of any metal, with the intention of using them as legal U.S. money. A private issuer may however, legally issue coins as long as they do not intend them to circulate as lawful money. For example, a business or organization could issue coins redeemable for a discount or for merchandise at particular businesses in their community (Solomon, 1996, p. 99). Several states have their own laws regarding the creation and circulation of alternative currencies. At least thirteen states prohibit employees paying worker wages in script. Florida and Massachusetts have

their own anti-counterfeiting laws, which place slightly more restriction on the issuance of script. Vermont on the other hand, authorizes the formation of corporations to issue script and prohibits counterfeiting of that script (Solomon, 1996, p. 105).

Laws of security protection at both the state and federal level are designed to protect both “offerees” and “purchasers” of securities. A “security” refers to a broad range of instruments that represent value such as notes, evidences of indebtedness, stocks, etc. There are complicated laws and requirements that restrict the sale and purchase of these securities unless they are found to be exempt. If a script is issued by “a person organized and operated exclusively for religious, educational, benevolent, fraternal, charitable or reformatory purposes and not for pecuniary profit and in no part of the net earnings of which insures the benefits of any person, private stockholder or individual,” which most local currencies are, they are exempt. More information on this topic can be found in Lewis D. Solomon’s Book, *Rethinking our Centralized Monetary System*.

The final legal consideration is taxation. Local currencies backed by the dollar, such as discount currencies and HOURS, are taxable, as are barter systems in which goods or services are exchanged for credits that can be used to acquire goods and services. However, a special exception in taxation exists for credits posted to volunteer accounts. If neither the volunteer provider nor the recipient incurs contractual obligations, the IRS views the credit as a “means of motivation,” not as cash substitutes (Solomon, 1996, p. 120-121). Time banking falls under this exception. According to Time Bank USA, “the tax-exempt status of Time Dollars is founded on three principles:

1. *It makes little economic sense that everyone’s time is valued equally in the TimeBanking world.*
2. *Time Dollars are not “legal tender.” You can’t sue a person or a Time Bank if someone refuses to take your Time Dollars for goods or services that they are offering.*
3. *There is a general charitable intent behind Time Dollars. They exist to help people live more wholesome lives of meaning and connection. They are not intended to provide luxury goods (TimeBanks TM).*

Goods can be “sold” with a time banking system, but it is important that they are priced based on the time it takes to make them and the charge for materials or other physical goods is paid in United States Dollars (USD). The most important thing to remember for legality of time banking is that no equivalency should be made between time dollars and regular dollars (TimeBank TM).

WHY A COMMUNITY CURRENCY?

While the currencies described above manifest in a variety of forms, from frequent flier miles to discount vouchers to elderly care credits, there is a sector of complementary currencies that has a broader scope. Complementary *community* currencies are those that are more widely accepted by businesses and individuals, but still limited by a geographical boundary of use. As a form of local currency, they have the potential to accomplish all of the social, economic and environmental goals listed above yet still can be targeted in their design to address a specific issue. Two popular forms of community currencies in the United States are paper currencies and information-based currencies. Paper currencies manifest in a physical form and function just like the dollar; they are taxable and are counted like regular income. Information based systems on the other hand may never have a physical form. Instead, a person's actions and services will earn them credit to their accounts. Two main paper currency models exist in the US, the BerkShares, a discount currency, and the Ithaca Hour, a fiat currency. Time banking is one of the most successful information based currency systems in the United States and will be the model explored in this category. With any form, it is important to note that, just like regular money, complementary, local currencies are based on a mutual agreement of value among those who participate in the system. It is this characteristic that gives the currency worth and success.

COMPLEMENTARY COMMUNITY CURRENCY FORMS

As mentioned above, this paper will explore three complementary currency forms: Discount currencies and fiat currencies (paper currencies) and time banking (an information based system). While each is unique, they all function as tools within their community. All three are used to connect individuals in both economic and social senses. They strengthen local economies by bringing attention to local businesses and service providers' thus increasing support both financially and culturally. They help retain and recirculate money within the geographic areas in which they are used. All three build social capital by increasing the number of peer to peer interactions between individuals and introducing them to new social circles within their communities. All three also, in some way, can serve as a means of increasing awareness about the natural assets of their region, often resulting in outcomes that not only benefit the community, but also the health of their surrounding environments.

While discount currencies, fiat currencies and time banking are each unique in their manner of design and operation, there are several operational similarities among them. For

example, most community currency systems either partner with an existing not-for profit organization, or create such an institution to oversee the local currency system. This makes sense for legal, financial and organizational reasons.

First, becoming a non-profit organization clears up any potential legal confusion about securities, because the organization meets the criteria of “organized and operated exclusively for...educational, benevolent, fraternal, charitable or reformatory purposes...” (Solomon, 1996, p. 116). Financially, it makes sense to become a non-profit organization because under the Internal Revenue Code 501 (c) (3), non-profit organizations are exempt from paying corporate income tax, and any incoming charitable contributions are tax-deductible (Foundation Center). Having 501 (c) (3) status also allows the organization to solicit and accept donations from the public. Achieving nonprofit standing is not free however; it takes time, effort, money and often, legal guidance (Foundation Center, 2010). Having a self standing entity to oversee the local currency ensures that an overall management plan exists and covers potential issues such as currency printing, circulation, management of bill wear and tear, and membership.

The main expenses of a local currency system are printing and advertising, but with present day tools, these expenses have all but disappeared (S. Burke, p.c., 2010). The internet is a priceless advertising tool, and printing of both outreach materials and actual currency can be done at home if someone has sophisticated equipment. Most currency systems are funded through donations, grants and extensive volunteer efforts (S. Burke, p.c., March, 3 2010; A. Rosenblatt, p.c., March 7, 2010; C. Kimmel, p.c., October 28, 2010). Some groups choose to charge membership fees, generally ranging from \$5 to \$10 for individuals and slightly more for businesses to cover operational and printing fees.

Beginning a local currency system requires money, but does not have to be outlandishly expensive. Mountain Money, a local currency launched in February of 2010 in Saguache County, Colorado, has received 3,600 dollars worth of grant money to fund the currency. The group budgeted in \$600 for printing costs, however did not spend it all. Most of the money was used to pay a part-time coordinator, who said in an email conversation, “A large part of the coordination of the currency has been unpaid and I also have a committee of volunteers helping with the project.”(April 18, 2010). Mountain Money has applied for a second grant and is looking for more funding sources as they get their currency off the ground (A. Rosenblatt, p.c., April 18, 2010). The BerkShares System on the other hand, started with a \$100,000 initial grant from a group of funders. They spent \$15,000 on printing and used the rest to fund staff members, marketing and outreach. Kate Poole says the system costs about \$30,000 a year to maintain. “At this point BerkShares is

supported in part by the educational non-profit, the E. F. Schumacher Society and through individual donations,” says Poole (p.c., April 19, 2010).

Starting a time bank can be essentially monetarily free if a dedicated core group of volunteers maintain outreach and brokerage. It appears that most systems in the United States choose to register with Time Bank USA (TB USA), which requires them to pay membership fees. It costs \$65 to join TB USA, for which you receive a starter packet, which includes access to TB USA online software. Each year after that, time banks renew their membership based on size: For time banks with fewer than 35 members it costs \$99 while time banks with membership between 35 and 500, it costs \$500 a year (Time Bank USA, 2010b). Again, some time banks charge annual membership fees to cover these administrative costs, while other look for money elsewhere.

Local currency systems employ a variety of mechanisms to protect against counterfeiting. Bills have to inspire confidence, so must be of good quality, able to withstand a laundry cycle or be stuffed into a pocket (S. Burke, personal communication, March, 3 2010). Bills are generally printed on special paper and incorporate anti-counterfeiting features into their bill design. The methods employed by Ithaca Hours and BerkShares will be explored below. Both Poole and Burke suggested however, that security is not a huge concern for either BerkShares or Ithaca Hours. It is illegal to counterfeit local currencies, so trying to use a “fake” Ithaca Hour would be an offense equivalent to passing a bad check. Not only would you receive a negative reaction from the local community, you would be in trouble with the federal government. “Because of the small scale and intimacy of the BerkShare program, if someone showed up with a bunch of 20 dollar bills, we’d know something was up,” says Kate Poole (personal communication, March 23, 2010). Burke reaffirmed, saying it is a relatively closed system, and you could not get far passing bills in Ithaca (personal communication, March, 3 2010). So while security is something to think about and to incorporate into the system, it is not a major concern.

Discount Currency

All complementary currencies must be tied to USD for legality purposes. Discount currencies are unique, however, because they can be redeemed for US dollars. For example, in a system with a 5% discount rate, one would receive 100 local currencies dollars in exchange for \$95 USD. The local currency can be used just like a dollar at any participating business or with any participating individual. If for some reason the local currency cannot be spent, it can be exchanged back for USD: 100 local currency dollars for \$95 USD.

Figure 2: A Discount Currency A narrative describing how a discount currency might work in Carlisle

George wakes up on Wednesday morning at 6am and gets ready for work. As he walks out his door, he realizes he needs a cup of coffee. Since he lives and works in Carlisle, he uses the Carlisle Dollars (CDs), a currency unique to his town and community. George “buys” 100 CDs a week, by exchanging \$95 USD at his local bank. What’s in it for him you might ask? He gets a 5% discount on all his purchases, knows he is supporting his fellow local businesses and is having fun. He’s also slowly but surely strengthening his local economy.

George walks into the Local Coffee Shop on Louthier Street where he is greeted with a warm smile, gregarious “Good morning George!” and the smell of addictive but delicious caffeine. He orders his coffee and pulls out his CDs to pay. The cashier smiles, admires the beautiful artwork on the bill, and hands him his change. Some days she gives him his change in US dollars, but today she hands him some of the town’s colorful money. George gladly accepts his CD change and strolls off to work. Throughout the day he will do some more shopping, and more than half his expenses will be in CDs. He buys his lunch with the “funny money,” and pays half his dry cleaning bill in CDs. However, gasoline and batteries from Radio Shack, he pays for in US dollars; these businesses are corporately owned and do not accept CDs.

That night, the Local Coffee Shop tallies the day’s earnings. In addition to their regular accounting columns, the Coffee Shop has an assets column for Carlisle Dollars and an expense column for Carlisle Dollars. At the end of every night they total their CD earnings. They use their accumulation of CDs in a variety of ways. Sometimes they pay a portion of their employees’ wages in CDs. Sometimes they buy coffee shop essentials, such as vegetables for their salads, from a local farm, or flour for their pastries from the refurbished grain mill on the outskirts of town. If they’re having a special event and need advertising, they’ll often pay part of the printing expense with CDs. Sometimes they save up CDs and use them to go out to dinner at one of the delicious restaurants in town or to buy a piece of artwork from one of the downtown galleries. They hardly ever have trouble spending their CDs, however, they know if they do end up with more than they can spend, they can exchange the CDs for US dollars at their local bank. They’d rather spend them, however, because then they also can take advantage of the 5% discount, and they like supporting their local economy.

In this sense, a discount currency functions like a coupon. However it is important to note that unlike a coupon, which is usually limited to one use at one business, a discount currency can be used repeatedly throughout the community with businesses and individuals alike. For all intents and purposes, discount money is real money. It is not *extra money* but instead is a currency that represents money and when spent, provides the purchaser with a discount. Communities or organizations that create discount currencies usually partner with a local financial institution, generally a bank or credit union, in order to ensure that the system works properly. Money exchanged for local

currency is set aside in a “local currency bank account” and is secure in case someone does need to re-exchange the local currency for USD.

The discount rate means that when using the local currency, one essentially receives a discount on everything he or she purchase. To a customer, this is a small reward for shopping locally. While at first an automatic discount might deter some businesses, Kate Poole from BerkShares Inc. explains that for a business, this discount is comparable to the 3-5% charge for the use of credit cards (K. Poole, personal communication, March, 23, 2010). However, with a local currency, you know that the 5% discount is being fed back into your local economy instead of being sent to credit card companies all over the world (Seccombe, 2009). Unlike a credit card charge, where that 3-5% is automatically lost, businesses have the opportunity to receive a 5% discount on their own purchases by recirculating the local currency within their community. If for some reason the local currency is exchanged for USD, that discount is lost. One does not actually lose money; instead one forgoes the potential savings. Most community currency systems provide resources and services to help local businesses and individuals connect to local markets so as to maintain the circulation the local currency.

The most successful discount currency model in the United States is the BerkShare of the Berkshire region of Western Massachussetts. This paper currency will be used to demonstrate how a discount currency actually works when applied to a real life community.

The BerkShare

The BerkShares are the local currency used in the Berkshire region on Western Massachusetts, and is one of the most successfully currency models in the United States. The BerkShare is the result of a discussion group, formed in 1982 around the topic of regional economies. Shortly thereafter, a non-profit organization called SHARE (Self-Help Associated for a Regional Economy) was formed, with the intention of establishing the base for a local currency. SHARE first focused on making low-cost productive loans to people in their area who produced quality goods and services for local consumption and were unable to afford normal bank financing (Swann & Witt, 1995). Their program was very successful, with 100% returns on all loans. SHARE strove to revitalize the area’s regional economy by redirecting money into loans that supported local entrepreneurship.

One of their earliest local currency experiments was with Frank Tortoriello, the owner of a popular Deli on Main Street in New Barrington, MA. In the early 1990’s Frank needed to move his restaurant, The Deli, to a larger venue, but the banks would not loan

him the necessary money. At a loss of what to do, Mr. Tortoriello turned to SHARE. Because Frank had such a loyal customer base, SHARE suggested that he create his own mini loan program by issuing “Deli Dollars.” For just \$8, people could buy a “Deli Dollar” that was redeemable for \$10 worth of food after 6 months. Within thirty days Frank raised over \$5,000 dollars- enough to move his business. The dollars were bought by the community: contractors, parents, college students, even the bankers that denied Frank the original loan. Deli Dollars circulated throughout town, even ending up in church collection plates (Jenkins, 1991). According to Swann and Witt (2001), “Frank repaid the loan, not in hard-to-come-by federal notes but in cheese-on-rye sandwiches.” This example clearly demonstrates how the local currency Deli Dollars was used to augment this community. Not only was the currency used to build trust and support within this town, it served as a tool that mobilized collective action. The community clearly demonstrated support for Frank and his Deli by purchasing his complementary currency and facilitating his move to a larger venue.

Impressed by the success of these local scripts, the Southern Berkshire Chamber of Commerce decided to work with the Schumacher Society, a non-profit founded in 1980 dedicated to building strong local economies, to issue BerkShares as a summer promotion. For every ten dollars spent at a participating business over the six weeks of summer, customers were given one BerkShare. The BerkShares were redeemable during a three-day period when they could be spent like any other dollar at any of the seventy participating stores. Out of seventy-five thousand BerkShares distributed (representing $\frac{3}{4}$ of a million dollars in BerkShare trade), twenty-eight thousand were spent during that three-day period (Swann and Witt, 2001).

The next step was the creation of a year-round local currency. The idea became a reality in 2006 when the BerkShare committee suggested that 5 local banks begin a no-interest loan program. In response, the banks suggested that BerkShares Inc. create a year-round discount note (Swann and Witt, 2001): the BerkShare was born. In September, 2006, BerkShares Inc. printed 90,000 BerkShares in five denominations: ones, fives, tens, twenties and fifties. In order to maintain bill security, the organizations prints their currency at Excelsior Printing Company in North Adams Massachusetts, a printer used by federal government. Printed on high quality paper, each bill has a hologram, serial number and watermark (K. Poole, personal communication, March 23, 2010).

Originally the BerkShares could be bought for a 10% discount. In other words, people could go to a bank and buy 100 BerkShares for 90 dollars. In February, 2009, however, BerkShares Inc. lowered the 10% discount rate to 5%. According to the

BerkShares website, this change was implemented “in order to enable broader participation of the business community and to increase circulation throughout the region (BerkShares, 2009).”

In the past four years, nearly 2.5 million BerkShares have been put into circulation. BerkShares Inc. states that roughly 400 businesses officially accept the currency, and many more do so informally. Thirteen branches of five local banks exchange BerkShares. Tourists to the region, upon hearing about the BerkShare currency through the national press have been seen entering banks to exchange their USD for a few of the beautifully decorated bills (The BerkShares Team, February 2008). The eventual goal of BerkShares Inc. is to untie BerkShares from the dollar entirely, instead backing their currency on the productivity of their region (a cord of wood, a gallon of maple syrup, chicken eggs), things that give the currency real value (K. Poole, p.c., March, 23, 2010). With this goal, the ecological benefits of this local community currency start to become apparent. By highlighting the wealth of their local environment they are beginning to recreate the definition of their town and community, incorporating much more than the structural and human aspects into their narrative.

Take Away Points: Discount Currency

One strength of a discount system is the exchange rate because it allows businesses that require non-local purchasing leeway to participate (K. Poole, p.c., March, 23, 2010). Most businesses cannot source all of their necessities from local retailers and businesses. For example, it might be difficult to find a local retailer who sells greenhouse plastics or high end cosmetics. In most towns, these items are purchased at corporately owned stores or outside the community altogether. The ability to exchange a discount currency allows businesses with outside needs access to USD if for some reason they cannot spend all of their local currency. This exchange rate is also seen as a weakness however because the local currency can be readily returned into USD that can leave the community easily.

Being able to visit a bank or other financial institution and exchange USD for local currency is another strength of the discount currency system. The currency does not require membership to acquire, instead it is readily and easily accessible to anyone interested. In this sense, it is very easy for anyone to participate in the discount currency system. One of the biggest limitations of a discount system is the added bookkeeping required for businesses (A. Rosenblatt, p.c., March 7, 2010). In order to maintain accurate records for tax purposes, earnings made in local currencies must be recorded in a separate column (Rosenblatt, 2009, p. 4). According to several existing system coordinators, while

sometimes bothersome, this does not dissuade many businesses from participating in a local exchange system (A. Rosenblatt, p.c., March 7, 2010). Most currency organizations make sure to offer “how-to guides” for their businesses. BerkShares and Mountain Money both provide guides for businesses that are very helpful.

One of the biggest limitations of a discount system is the added bookkeeping required for businesses (A. Rosenblatt, p.c., March 7, 2010). In order to maintain accurate records for tax purposes, earnings made in local currencies must be recorded in a separate column (Rosenblatt, 2009, p. 4). According to several existing system coordinators, while sometimes bothersome, this does not dissuade many businesses from participating in a local exchange system (A. Rosenblatt, p.c., March 7, 2010). Most currency organizations make sure to offer “how-to guides” for their businesses. BerkShares and Mountain Money both provide guides for businesses that are very helpful.

Fiat Currency

A Fiat currency is another form of paper currency. Fiat simply means *recognized* as legal tender by the government. Unlike discount currency, however, fiat currencies are not redeemable for the USD. Instead they are printed (created *in addition* to regular money, thus not merely representing conventional money) to add to a community’s in-pocket-cash supply. The currency has a fixed value, equal to the dollar, and in the eyes of the government, is legal tender. The fixed value is determined by the community that prints the currency, however in most systems throughout the United States, one Hour is equivalent to 10 dollars. One of the most successful examples of a fiat currency is the Ithaca Hour of Ithaca, New York. This model will be used to demonstrate how a fiat currency system works in practice.

The Ithaca Hour

The Ithaca Hour was created in 1991 when half a dozen concerned citizens sat around a table discussing how to respond to living from one pay check to the next, without enough cash in their pockets. The group realized that there were many unmet “needs” in their community and that an ample supply of able bodies existed that could fill those needs and engage in meaningful work; what was lacking was the means to connect the two. They wanted to create a way for people to earn money doing things they liked to do (S. Burke, p.c., March, 3 2010), while, helping each other out in the doing. The idea of a local currency was inspired by the observed need of their community. They found encouragement in the success of the Deli Story of New Barrington, MA and the discussion of creating a Berkshire Currency (S. Burke, p.c., March, 3 2010; Jacob; Jacob *et al*).

In order to create a currency, the group received some grant funding and donations from involved individuals. Paul Glover, cited as one of the key members of the Ithaca Hours founding group, received a Volunteer in Service to America (VISTA) grant from the federal government which allowed him to work on the project for over three years (Jacob *et al*). "From the start, we always wanted to keep it simple," says Stephen Burke the current president of the Ithaca Hours board. Starting small, they focused on services individuals could provide. For example, someone had a truck and could help another person move their furniture; a teacher,

Figure 3: A Fiat Currency A narrative depicting how a fiat currency might work in Carlisle

Brianna opens her mailbox eagerly, hoping that the envelope she's been waiting for is inside. Just last week she joined Carlisle Hours Inc, an organization dedicated to building community, creating a vibrant local economy and raising awareness about the unique and priceless environmental assets of the Carlisle region. The envelope has arrived!

Inside are four bills, one Hour, one ½ Hour and two ¼ Hours. Each bill has a unique design: the Hour highlights the LeTort Spring Run, the ½ Hour depicts Molly Pitcher, one of Carlisle's local heroines and the ¼ Hour features an image of South Mountain. Altogether, the bills represent the equivalent of 20 dollars, not bad for the \$10 she paid to join the organization. Excited, Brianna admires her new money and begins to brainstorm what she might use them for.

Brianna remembers that she can view a listing of members and offering of Carlisle Hour Inc. online. Brianna wants to start a garden in her backyard, but doesn't know anything about bed preparation, and hasn't had the time or money to put much effort into learning. She chooses, "gardening and horticulture," from a drop down menu and immediately sees 10 different members who list gardening as an offering. Some members garden for fun, while others are actual landscape businesses. Brianna remembers hearing that more local businesses are accepting Carlisle Hours, because more people are walking around Carlisle with Hours in their pockets. Accepting the local currency is a new form of advertising, and a new way to encourage local spending.

Brianna calls up Pete's Garden Center and explains that she needs help building garden beds and would like to pay in Hours. Pete says that he charges \$20 for a consultation and will accept half of the fee in Carlisle Hours. Pete explains that he can't accept full payment in Hours because he needs to buy fuel for his lawn care equipment. Because no fueling station currently accepts Hours, Pete would have a hard time spending more than 10 Hours at the moment. Brianna, happy with the price and payment options, schedules a time to meet.

The next day, she takes a walk downtown and visits one of the boutiques on High Street. She finds a dress that fits her perfectly and spends her other Hour to pay part of the dresses cost. She's not worried about running out of Hours because she's signed up to receive \$5 dollars of every pay check in Carlisle Hours. She also knows she can ask for Hours as change at many of the local businesses downtown. Happily, she walks home with her new purchase, dreaming about all the fresh vegetables she'll be picking in a few months.

who loves painting and does it quite well, spends her Saturday afternoon painting and earns a few Hours. While these jobs may seem trivial, they are needs that often are not given precedent when cash is limited. The addition of the Ithaca Hours into people's pockets allowed them 20 extra US dollars that could be spent on bills, groceries, etc. while allowing them to attend to backburner projects. In this way, Ithaca Hours were used to create work within the Ithaca community.

Glover and the other members of the group spent four months soliciting participation in the new exchange system. The first twelve people approached agreed without waiting for a business plan or guarantee of success and, inspired, the group went out and found over 90 people to agree to participate in the system. In October 1991, 1,500 Hours and 1,500 Half Hours were printed (Glover, 2000 Jan). The Ithaca Hour is based on one common theme: "meaningful work at a livable wage, in the service of community." (Jacob, Brinkerhoff, Jovie & Wheatley, b, p. 35-36). "Hour" was chosen as the name, because it "is meant to remind you that, in addition to being a medium of exchange for commodities, currency represents someone's labor, the time taken to provide a skill or perform a service. Your time is worth something to someone else," says Ithaca Hours Inc. (as cited in Soder, 2008, p. 29). In order to maintain bill security, Ithaca Hours Inc. uses a commercial printer and prints their money on special paper with distinctive design techniques such as serial numbers and crosshatches incorporated into their bill (S. Burke, personal communication, March 3, 2010).

Several studies were used to determine what constituted a "living wage" in Ithaca. The number settled upon was \$10 (Jacob et al. b, p. 32) so was decided that one HOUR would be equivalent to 10 US dollars. Hour notes come in six denominations: 2, 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, and $\frac{1}{10}$ hours. In exchange for joining the organization, one receives a disbursement of Hours and advertising in the Our Hour Directory, the equivalent of yellow pages for members of Ithaca Hours Inc. The Our Hour Directory is an important tool for community building in Ithaca because it highlights an individual's unique skills and talents, introducing them to others in an approachable way. This annual membership fee is used to cover printing and other basic administrative needs of Ithaca Hours Inc.

Currently there are three ranks of membership, designed for individuals, small businesses and larger businesses, but every member essentially doubles their money when they join. For example, an individual can join Ithaca Hours Inc. for 10 dollars and in return they receive listing in the directory and 2 Hours, equivalent to \$20. Different membership levels were created because often stores needed more Hours in order to disperse them as change (S. Burke, p.c., March 17, 2010). By issuing money this way, the community is able

to gradually and carefully increase the supply of Hours in circulation. Since 1991, Steve Burke estimates that 13,000 Hours have been put into circulation (130,000 USD). Ithaca Hours Inc. has on average, 400 individuals and businesses participating on an annual basis (S. Burke, p.c., March, 17 2010).

Unlike the BerkShares, Ithaca Hours does not partner with an organization like the Schumacher Foundation. Instead they are simply a group of individuals, mainly volunteers, trying to build social, cultural and economic capital in their community. "Every once in a while we'll hire a staff person, but only if we need it," says Burke (p.c., March 3, 2010). Their office is located in the corner of a downtown bookstore, which also serves as one of their two "banks." The other is a downtown music store, owned by Steve Burke. People can visit the Ithaca Hour office with questions about the system, if they want to join, or to replace worn or torn bills.

In August 2009, the Tomkins Consolidated Area Transit (TCAT) agreed to accept partial payment in Hours. The public transportation organization agreed to accept up to ½ HOUR (5 USD) towards monthly bus passes. The board also agreed to periodically review the use of Hours to determine if they should expand the opportunity (Tomkins Consolidated Area Transit Inc, 2009, p. 4-5). This represents a progressive step towards raising awareness of the ecological benefits of public transportation within the town of Ithaca, facilitated by their local currency.

Take Away Points: Fiat Currency

One of the major strengths of a fiat currency like the Hour is that the local currency cannot leave the area in which it is printed because its value is based on the agreement between the community and the businesses that participate in the system. Again, this can be seen as a limitation to businesses who may not be able to fulfill their needs locally, but unlike a discount note, this fiat money cannot be turned back into a USD so can not leave the community. Also, because fiat currencies function like the dollar, no fancy accounting is required, although most businesses and individuals keep track to satisfy their own curiosity (S. Burke, p.c., March, 17 2010).

Because fiat currencies introduce more money into the system, inflation, or the devaluation of money, is a concern. If too many Hours are introduced into a community, they may lose their value. However, system coordinators are aware of this, and it is precisely this reason why most systems disburse only 2 Hours to members instead of more.

The fact that Ithaca Hours are disbursed by Ithaca Hours Inc. instead of being readily available can be seen as a limitation to the system. However, it ensures that participants understand the function of the local currency. The beauty of these systems is that they are flexible and negotiable because they are created and maintained by the individuals involved. In both discount currency systems and fiat currency systems, people are encouraged to accept only as much local currency as they think they can spend themselves to encourage currency circulation instead of stagnation. By defining an acceptance policy that includes a combination of local and federal money, those who need conventional money to buy supplies, businesses for example, can ensure that they have enough federal money while also participating in the local trading scheme. Humboldt Exchange, a local currency system in California, created a Business Packet that lists the following suggestions for acceptance policies:

- *As a maximum percentage per purchase*
- *As a maximum total per purchase*
- *Only on purchase minimums above a certain amount*
- *On certain days of the week, days of the month, times of day or during off hours*
- *For off season items*
- *On certain types of merchandise, like sale items*
- *Fixed percentage of cost*
- *Fixed percentage of cost for certain items and services (can vary by item i.e. 50% for accessories, 10% for large equipment)*
- *Total cost of certain items or services*
- *Max amount per person*
- *Max amount per day*
- *Max amount per purchase, with minimum expenditure of U.S. dollars*
- *Used to pay for memberships, subscriptions or annual dues (Humboldt Exchange Community Currency, 2010)*

In both paper systems, local currency can be given as change for purchases, and can also be used to pay wages or provide bonuses to employees. These examples demonstrate that venues other than simple retail and purchasing exist for local currency use.

Time Banking

Time banking is a less tangible form of exchange, than discount or fiat currencies, based on keeping track of the trade of services. These systems require a central information center, often an online database or individual/organization that acts as a broker through which members can post the services they offer. Members exchange their time (in the form of service) for credit, which can then be used to “purchase” someone

else's skills and time. Time Bank is a national organization that facilitates the creation of this type of exchange network and most of the time banks that exist in the United States are registered with Time Bank USA.

Time Banking was begun by Edgar Cahn, a lawyer with a deep concern about the way society treats people as "throw away objects." The original focus of Time Banking was to reduce nursing home institutionalization by giving senior citizens a way to compensate volunteerism, however, within the last few decades time banking has grown to include a wide range of activities that build relationships between individuals within a community. By rewarding individuals for beneficial work that they otherwise would not receive credit for, time banking functions as a means of rewarding volunteerism and social services instead of a means to make money. "I wanted Time Dollars clearly to be about people getting to know each other and trust each other," says Cahn (Block, 1998).

Founded as a social justice movement, Time Banking is based on five core values:

1. **Assets** *We are all assets.* Every human being has something to contribute.
2. **Redefining Work** *Some work is beyond price.* Work has to be redefined to value whatever it takes to raise healthy children, build strong families, revitalize neighborhoods, make democracy work, advance social justice, make the planet sustainable. That kind of work needs to be honored, recorded and rewarded.
3. **Reciprocity** *Helping works better as a two-way street.* The question: "How can I help you?" needs to change so we ask: "How can we help each other build the world we both will live in?"
4. **Social Networks** *We need each other.* Networks are stronger than individuals. People helping each other reweave communities of support, strength & trust. Community is built upon sinking roots, building trust, creating networks. Special relationships are built on commitment.
5. **Respect** *Every human being matters.* Respect underlies freedom of speech, freedom of religion, and everything we value. Respect supplies the heart and soul of democracy. When respect is denied to anyone, we all are injured. We must respect where people are in the moment, not where we hope they will be at some future point (TimeBanks TM, 2010).

Figure 4: Time Banking A narrative depicting how a time bank might work in Carlisle

James has just joined the Carlisle Time Bank. He has seen fliers and other advertising around town and decided today to join. He hops on the computer at the library and creates an account on the Carlisle Time Bank Website. All of his transactions will be recorded on this interface. He fills out his profile, listing his "offerings" as plumbing, tutoring and painting and his "seekings" as massage, weatherization of his home, and fresh baked goods. James puts down his phone number so that others in the Time Bank can reach him in case he cannot check his online account on a regular basis.

Two days later, James checks his profile and notices two new messages. The first is from Becki, an expectant mother looking for someone to paint her nursery. She'll supply all the paint, brushes and other tools, she says, if he will come and do the work. The second message is from Charlie who is looking for a math tutor for his grandson. James, excited by the quick responses to his posting, replies yes to both Becki and Charlie and arranges all the details.

The next day he arrives at Becki's door promptly at 10 am. She shows him the room and tells him how she would like it painted. She explains that she offers hand-made jewelry and knitted products and makes most of her time dollars through the sale of these good. She also offers knitting and jewelry making lessons. James is impressed, but since he does not have a need for either jewelry or a new hat, he gets to work. He spends four hours painting and earns four Time Dollars. He stops by the library on his way home and records his earnings on his profile. Excited that he now has money to spend, he explores the offerings of other members and sends a message to Bill, asking if he could buy some fresh bread.

James tutors Charlie's grandson later that week and earns another time dollar. Within a month, James has enough "time" saved up to ask Brett and Sally to weatherize his house, excited at money he will save on his heating bills this winter. He attends the monthly Carlisle Time Bank potluck and is introduced to many new members. He likes putting a face to a name and enjoys spending time with people eager to make a difference in his community. He also discovers that the Carlisle Time Bank might soon have a small office in the United Way building in Carlisle. He is happy to have a person to communicate with if he ever has any questions. Until then, he continues to exchange his time, labor and skills via the website.

These values define the essence of time banking, that in order to help someone, the individual must be enlisted and engaged in every step of the process (TimeBanks TM, 2010 b). By using time as a measure of account, the playing field is leveled. Everybody has 24 hours in each day and in time banking, everyone's time is valued the same. At first it makes little sense that the time of a lawyer and a dishwasher would be valued equally.

However, time banking strives to appreciate and strengthen the "core economy," of our society. Core economy refers to the economies of families, neighbors and communities. It refers to the tasks and jobs that are often overlooked and undervalued such as raising children, cooking nutritious meals, cleaning up streets, or caring for the ill (TimeBanks TM, 2010 b). "In the Core Economy," the Time Bank website, states, "exchanges are built on a sense of obligation and reciprocity, not price or supply and demand. Acts of pitching in, sharing, loyalty and love—not price—are the

driving forces behind a healthy Core Economy” (2010). In this way, Time Banks strive to create geographical families within communities.

One concern that some have about time banking is quality control. For example, trusting others coming into their house or what to do if the work performed is not satisfactory. Each system has their own membership standards that are clearly outlined upon joining a time bank. Some choose to perform background searches on members, while others simply have their members sign contracts. Because time banking is a very open system (no one is anonymous) it is very difficult to “cheat” the system. According to the time banking website, the organization cannot remember someone misusing a time banking system (TimeBank TM, 2010d).

Although it sounds like bartering, time banking is much more than a simple swap system. It is an organized way for people to help one another that is not limited by a double coincidence of wants. For example, Tim needs help with his lawn work and I need a chiropractic adjustment. I do not mind lawn work but Tim is not a chiropractor. Within a barter system, it would not make sense for me to help Tim because he cannot provide me with the service I need. However with time banking it does not matter that Tim is not a chiropractor because instead of an instantaneous reward for my help, I earn time dollars or time credits that I can use at a later date to obtain a chiropractic adjustment from someone else.

Anyone can participate in a time bank. Professionals can set aside a percentage of their weekly appointments for time bank members. Businesses can participate by exchanging goods based on the time it takes to make them, instead of their material costs. As long as money is not equivocated with a good or service, there is no limitation to participation (TimeBank TM). Materials that cannot be “bought” with time, such as paint or paintbrushes are provided by the “buyer.” Time banking is based on mutual respect, generosity and trust; therefore members are responsible for making sure the system functions properly. The Shippensburg Time Bank will be used to depict a real life time bank.

Shippensburg Time Bank

The Shippensburg Time Bank (STB) is one of over 150 Time Banks in the United States. Chad Kimmel, a sociology professor at Shippensburg University read the story of the use of Time Banking in the Chicago School mentioned at the beginning of this paper and thought it was a neat idea. He had heard of currencies like Ithaca Hours and BerkShares, but it was not until he heard about time banking that he was inspired to act. At the time, he

was teaching a Community Sociology Class which included a community initiative to build social capital and decrease the divide between the town of Shippensburg and the College. One of the questions his class focused on was, "How hard would it be to start a time bank here in Shippensburg?" (C. Kimmel, p.c., October, 28 2009). After holding a community information session as a call for participation and finding interest, the project began to gain ground. In July 2009, the Shippensburg Time Bank was launched. Ever since, they have been holding monthly potlucks and orientation sessions to introduce participants to each other and recruit new membership.

The Shippensburg time bank has about 23 members. Some are students, but most are community members of all different ages, educational backgrounds and socio-economic backgrounds. The STB currently works with a local food bank, Kings Kettle, to build relationships through service, and Kimmel is working to involve local churches and rotary clubs as well as some local area businesses. Services offered through the time bank include drum lessons, car work, exercise support, tutoring, babysitting...the list goes on.

Kimmel says the project is fairly time intensive, stating, "You've got to keep pots simmering" (C. Kimmel, p.c., October, 28 2009). He spends a fair amount of time networking- following up with new participants, making sure more members are posting more listings and finding what they are looking for. Right now, Kimmel and a student intern run the time bank. His eventual goal is to create a place for the time bank at the United Way, where it can find a visible location and some creative advertising.

"Some people ask, "Why do you need the time dollars? Isn't this just like bartering?" says Kimmel. "What we are trying to do is branch out and get people together who wouldn't otherwise be together." Kimmel shared the example of a college student who joined on a weekend and soon after connected with a woman who needed a baby sitter. Soon the girl had accumulated over 14 Time Hours which she could then use to "purchase" rides to the grocery store from other Time Bank members. "Without this forum, this connection never would have happened," says Kimmel (p.c., October 28, 2009).

Take Away Points: Time Banking

Time Banking readily supports the building of social capital and creation of strong communities. Because of its focus on the "core economy," time banks excel at connecting people who have needs with those who have skills to offer who otherwise might have difficulty meeting. Time banking promotes intergenerational relationships and values, essential qualities of healthy communities that are often overlooked as "simplistic" in

today's society. Time banks can target a certain demographic, such as the elderly, the poor, or the youth, or they can be created simply to increase neighborly support.

One of the limitations of time banking systems is that often it can be difficult for businesses or retailers to participate. However, it is possible to price items in a time banking system in order to maintain tax exempt status in a legal manner.

Since time banking is most easily tracked using online software, access to computers and the internet can be a limitation to participation. This challenge can be mitigated by designating an individual, group of individuals or organization as a system broker, or someone who can manually connect a user with a provider. Also, with the availability of the internet and free computer access at public libraries, this limitation is becoming less of an issue.

SYSTEM SUCCESS

Starting a complementary currency system is no simple feat. A successful implementation requires significant resources, mainly time and money (time in reference to longevity, but also to signify the immense people power needed). A successful system is created by people's time and dedication. Many systems have been started in the United States, but not as many have achieved the success maintained by Ithaca Hours and BerkShares. In fact, many complementary currencies fail. Collom, in his study of local currencies in 2005, identified 82 currencies that were started in the USA since 1991 (p. 23). In 2005, he found that only 20.7% or 17 systems were still operating. Collom determined that cities and towns with economic marginality, higher education rates, more self employment and younger demographics seemed to experience more success with local currencies (2005, p. 21). He also notes that Time Banks experience more success than paper currencies and seemed to thrive in a different environment- those more focused on the elderly and/or poor (2005, p. 24).

Collom found that the most frequent causes of decline in local currencies were leadership burnout and limited participation (2005, p. 24). In a study of the North Carolina PLENTY (Piedmont Local EcoNomic Tender), an Hour based system, Lepofosky and Bates discovered that a lack of public awareness about the area's local currency was one of the major limiting factors in the currency's use. As part of this observation, Lepofosky and Bates add further that several of their survey respondents expressed concern that the local currency was perceived as "hippie money," and part of a countercultural experiment. The notion that it was "alternative" was unappealing to some. Other concerns arose, such as a

misunderstanding of where the money could be spent, the size of the note (won't fit in a wallet) and the design of the note (too beautiful to spend) (p.10). All of these observations suggest that a strong educational campaign is essential for creating a successful local currency.

Tucson Traders was an Hour-based system started in 1991. In its heyday, the currency system had over 400 participants, including 30 businesses (Ithaca Money Home Page, 2006b). As time progressed, however, the system's success fizzled out. According to Mary DeCamp, a resident and candidate for Tucson city council, Tucson Traders lost momentum when their range of services dried up. She explained further that the system "suffered from too many massage therapists and not enough mechanics" (p.c., March 29, 2010). Interest in a Tucson local currency system still remains, and recently another group called Tucson Life Cache has formed and is working to lay the foundation for a new successful local currency. The group plans to incorporate several measures to ensure the currency doesn't fail this time around. "To be successful, we believe we need to have the backing of a financial institution to ensure the value of the new currency and facilitate exchange of federal dollars and a new currency." Says DeCamp (March 29, 2010). To make sure that Tucson Life Cache doesn't suffer from organizational burnout, the group plans to pay the administrator of the currency system instead of relying solely on volunteer efforts. In order to ensure a diverse group of participating businesses and available services within the system, Tucson Life Cache plans to develop a comprehensive list of services and actively recruit membership within each area. By tracking membership, they can see if a sector is under-represented and recruitment efforts can be taken to fill the gap (DeCamp, p.c., March 29, 2010).

How many participants? Is there enough diversity?

The number of participating businesses is unique to every community that uses a local currency. For example, it is estimated that there are 376 participants in the BerkShares system, over 400 participants in the Ithaca HOUR system, and 21 participants in the Mountain Money scheme (K. Poole, p.c., March, 23, 2010; S. Burke, p.c., March, 3 2010; A. Rosenblatt, p.c., March 7, 2010). The number of businesses is not as important as diversity of products and services. A local currency that can only be used at seven stores might work out just fine, but the longevity of the system will probably be limited if four of the seven stores sell sneakers and the other three sell coffee. Tucson Life Cache is aiming to involve 20% of Tucson businesses in their newly formed trading system, but more importantly, as mentioned above, they will be identifying groups of services and monitoring participation to ensure that their diversity is maintained. (M. DeCamp, p.c.,

March 29, 2010). Time Banks can also function quite well with low membership as long as they maintain a diversity of offerings. The smallest time banks registered with Time Bank USA have one member, but most likely these are just getting off the ground, or much of their membership is offline. Smaller time banks have 3 to 40 members, while the larger time banks range from 50s to hundreds. The largest registered Time Bank as of April 2010 is in Madison Wisconsin and has 1,551 members (Time Banks TM, 2010c).

A Complementary Currency: Carlisle, PA

Now that we have an understanding of complementary currencies, have explored why they are being used around the country and seen how the three successful currency models in the United States function, we can begin to explore the potential for a community currency system in Carlisle, PA. This section serves to answer the following questions:

1. In what areas might a complementary currency benefit Carlisle?
2. Is there interest in such a tool within the Carlisle community?

The town of Carlisle has many characteristics that make it a viable location for the implementation of a successful local currency. The town has a strong sense of community and a diverse population, however, it seems that lines of communication and spheres of interaction can be further strengthened. Although there is a stable economic base, the local economy has felt the effects of the recent financial crisis, and there is a diversity of need among its residents. Carlisle is home to three institutes of higher education, an important characteristic to note, as many of the most successful local currencies in the United States are located in College towns (Soder, 2008; Jacob *et al.*). Ithaca HOURS, Madison HOURS, even the Shippensburg and Lewisburg time banks are all in college towns. The Carlisle community has expressed interest in decreasing their carbon footprint and incorporating more environmentally friendly techniques into their operations. There is also a growing movement to create a sense of place in this region, highlighting and celebrating the area's unique cultural and ecological assets. A local currency could be created to support or target any or all of these issues.

There have been two attempted "coupon" currencies and one successful local currency in Carlisle: the CertifiChecks, the DCA dollars and Beverage Express Beer Bucks. CertifiChecks, Inc. was a national third-party provider that sold commissary gift certificates around the country, often through chambers of commerce. These CertifiChecks were redeemable at local businesses and restaurants. According to Michelle Crowley of the Carlisle Chamber of Commerce, CertifiChecks were well used in Carlisle. Larger businesses

and companies would buy Certifichек and give them away as “holiday bonuses.” Sons and daughters of Carlisle residents who had left the area would call up and purchase the Certifichекs as gifts because they could be spent locally and did not require the hassle of post. In the several years they participated, the Carlisle Chamber sold over \$20,000 worth of Certifichекs. In 2009, the Ohio Company declared bankruptcy, shutting their doors and making no promises to honor withstanding Certifichекs (Kroll, 2009). All across the country, participating organizations were facing serious monetary loss. While some chambers faced upwards of \$30,000 worth of outstanding Certifichекs, the Carlisle Chamber of Commerce spent \$2,500 to reimburse outstanding certificates (M. Crowley, p.c., March 3, 2010).

The Downtown Carlisle Associated also experimented with DCA dollars or coupons that could be used as money at DCA member stores. According Glenn White of the DCA, the Downtown dollars worked well when the DCA was member based. People embraced the concept. Since the move away from membership, however, the idea has been more difficult to spread around town, says White (p.c., February 9, 2010). According to Rusty Shunk, Dickinson College’s liaison to the Carlisle community, the DCA Dollar success was limited because not everyone knew they could be used, and often, not all employees were trained to accept them (p.c., September 17, 2010).

Beverage Express successfully uses Beer Bucks to encourage customer loyalty. For every \$10 dollars spent at the store, Beverage express offers 1 beer buck to those who ask. Beer bucks can be redeemed for items such as t-shirts and other promotional materials. The implication of the success’ and limitations of these both the Certifichек and DCA dollars on a future Carlisle currency will be discussed below.

RECAP OF CARLISLE METHODS

So is there an interest within Carlisle in a complementary currency? In a nutshell, it would seem so. However, my introduction of the idea to both the business and residential community was brief and basic. The handout provided to the businesses included a short opening paragraph that described local currencies, which was followed by some of the ways they can be used as tools to benefit the communities in which they are used. The handout also addressed the legality of secondary currencies and listed the names and websites of some successful currencies in the United States including Ithaca Hours, BerkShares and Lewisburg and Shippensburg time banks (Appendix 4). I asked participants 15 questions (Appendix 5), half pertaining to their business and their perception and experience of the Carlisle community, half assessing their reaction to the

idea of a local currency. In addition to the business owners, I also talked to several individuals who were suggested as key players in community building and development.

Diversity of participants is crucial to the success of any local currency. With this in mind, I tried to engage a variety of types of businesses in this research. The 50 businesses approached were comprised of 15 food/restaurants, 12 service providers, 9 non-profit organizations, 8 specialty shops, 5 gifts/art galleries and 1 lodging establishment. The 33 businesses that chose to participate consisted of 9 restaurants or food providers, 7 service providers, 6 non-profit organizations, 6 specialty shops and 5 gift/ art galleries (Figure 5).

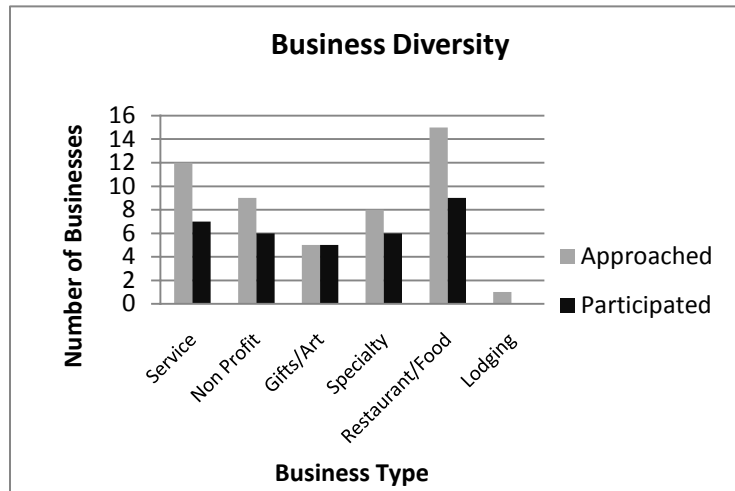


Figure 5: A bar graph depicting the diversity of participating businesses.

Out of the 50 businesses, organizations and individuals approached, 33 returned questionnaires or agreed to an interview. Of the remaining 17 businesses, 7 denied participation. Some felt uncomfortable, others declined due to corporate or company constraints. Ten simply did not return the questionnaire.

CARLISLE RESULTS

In order to assess the strength and scope of the local economic market in Carlisle, I asked businesses if they participated in any sort of local economic market, defined as they buying or selling of local goods. Twenty one of the 33 participants replied yes. All of the restaurants/food providers replied that they buy produce locally when it is in season. Most of the gift



Figure 6: A pie chart showing business participation in a local economic market.

shops and art galleries replied that they work closely with local artisans, purchasing art when possible. Several of the specialty shops offered examples of the local products they sell, ranging from local honey (J. Wood, February 19, 2010) to locally made jewelry (S. & N. Bobb, March 2, 2010; M. Colucci, February 15, 2010) to work by other local artisans (C. Andrews, February 19, 2010; N. Stamms, February 19, 2010; C. Bresci, November 5, 2009). Those who replied “no,” explained that for their particular business, the products they needed were not available locally (Figure 6).

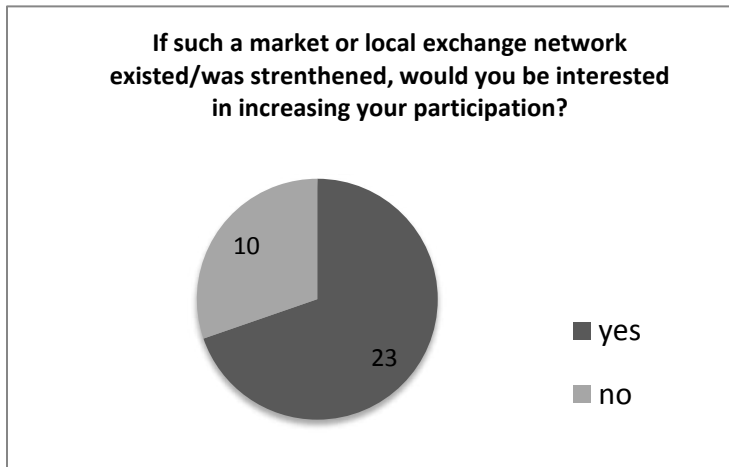


Figure 7: A pie chart depicting business interest in increasing participation in a local market.

Twenty-three of the 33 businesses said that they would be interested in increasing their participation in local exchange networks if they were strengthened or created (Figure 7). Several expressed concerns however:

- Chris Petsinis at North Hannover Grill replied that he would be leery of buying certain foods such as alcohol or premade foods from local producers (February, 19, 2010).

- Kellie Diodato at Colours on

High said her business would be open to purchasing an organic line of hair products but that maintaining the quality of their products would take precedent (March 3, 2010).

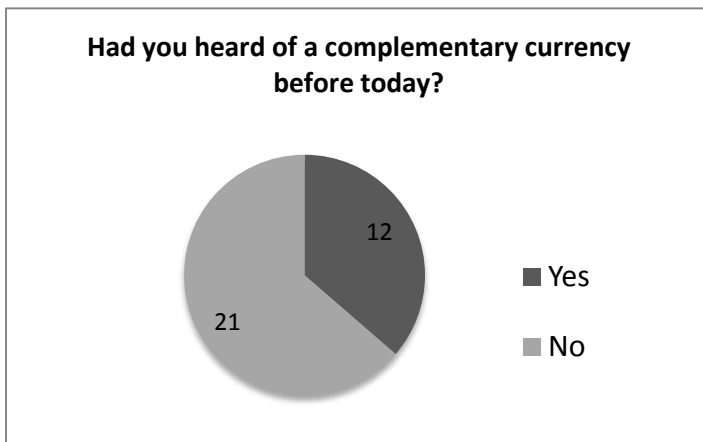
- Sally and Naomi Bobb from the Clothes Vine replied, “It depends on many variables. Quality- plus it takes a lot of time and effort to document sales and keep track of selling local products (March 2, 2010).

In all of these instances, it is clear that there are niche markets that are waiting to be filled in Carlisle, and that merchants and service providers are looking for quality.

In order to identify areas in which a local currency might be useful to Carlisle, participants were asked to identify some of Carlisle’s strengths and weaknesses. In response to the questions, “What are some of the Carlisle Community’s strengths?” eight participants referred to the town’s history and ten to the presence of the three institutes of higher education (in particular Dickinson College). Five replied that the town’s location, at the intersection of Interstate 81 and the PA turnpike was one of the town’s strengths.

Twelve participants noted Carlisle’s tight knit community. Ross Morris, owner of Piatto and co-owner of Café Bruges describes the community as a set of mini-webs, the intricacies and connections becoming more apparent the longer one spends time in Carlisle (November 5, 2010). Jeff Conway at the Carlisle United Way explained how volunteerism is very important to the success of this town (October 27, 2009). Ivo Otto stated that the town’s steady and stable economy is one of its main strengths (February 19, 2010).

Nine respondents cited the recent economic decline as a major challenge to the Carlisle community. Answers ranged from, “lack of manufacturing jobs,” to “companies downsizing/closing” to “lack of retail businesses in town.” Five identified increasing competition with Harrisburg, online shopping and box stores as a challenge for Carlisle, while four pointed out that there is a need to increase foot traffic in town. Six people said that parking, parking meters and downtown traffic are a problem in Carlisle. Two referred to crime and one to Carlisle air quality. A challenge observed by Glenn White of the DCA is that downtown businesses don’t always understand one another. Some don’t realize that the store across the street is their ally, not their competition. “We need local businesses to encourage their customers to stay within our “mall,” says White, pointing out that the competition is not across the street, but in Harrisburg, Mechanicsburg and other surrounding metropolitan areas. “When someone is here we need to keep them here by suggesting they shop across the street,” says White (February 9, 2010).



Of the 33 businesses, only 12 had heard of a local currency before the idea was introduced in this study (Figure 8). When the concept of a local currency was explained, several people noted that they had heard of the idea, but never with that name. Carrie Breschi from Carlisle Arts and Learning Center said, “No not officially, but I do it all the time” (November 5, 2009).

Figure 8: Pie Chart depicting previous exposure to complementary currencies.

The reactions I received in response to the idea of a complementary currency outlined in the handout ranged from flat out, “I’m not interested” to “This is a great idea!” and everything in between. Those who fell in the middle generally found the idea intriguing, but wanted to see a plan and more details before committing their opinion either way. I ranked the businesses interest based on their

The reactions I received in

answers to the questionnaire and my interaction with them. A score of “1” represents a business that showed very little interest in a local currency, “2” someone who could identify some of the positive benefits but had little interest in staying involved in the project. A score of “3” represents a business owner who was intrigued by the idea but wanted more information. A score of “4” is someone who supported the concept but had some concerns about the logistics. A score of “5” is assigned to those who immediately said they thought a local currency was a great idea.

Out of the 33 participating businesses, organization and individuals, 23 demonstrated medium to high level of interest (score of 3-5) while 8 businesses had a low interest (score of 1-2) and 2 had no interest at all (Figure 9). This data, while not overwhelming, demonstrates the majority of businesses did show interest. More than half could identify positive effects a local currency

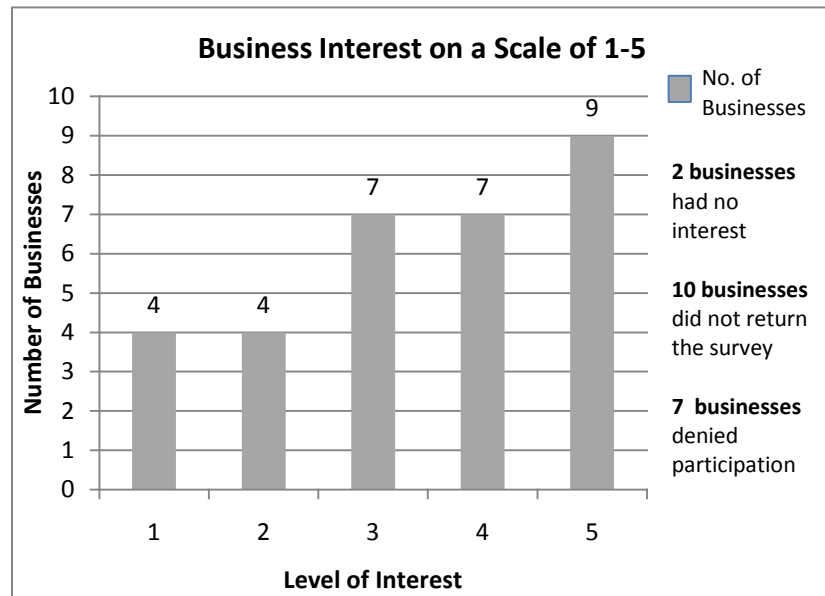


Figure 9: A bar graph depicting the level of interest downtown businesses had in a local currency.

would have on the Carlisle community, and responses ranged from “promoting a feeling of togetherness and forward thinking” (M. Brady, February 15, 2010) to “getting people moving downtown, utilizing businesses” (K. Diodato, March 3, 2010) to “opening communication between businesses” (C. Hollenbaugh, March 3, 2010).

- Sandy Miller from Appalachia Whole Foods said, “I think this project will get people to think: Main St. vs. Box St. It will bring attention back to the main street stores. It might get people in here that wouldn’t come in normally and people might learn about new services” (October 21, 2009).
- Jeff Wood from the Whistle Stop Bookstore replied that a local currency could, “strengthen the idea of community and [of Carlisle being] a “special place” (February 19, 2010).

Those who reported little interest in the currency system most often simply answered “no,” however Charles Andrews from Garden Gallery replied, “I don’t think it address the issues (economically) that are affecting the downtown and the community” (February 19, 2010).

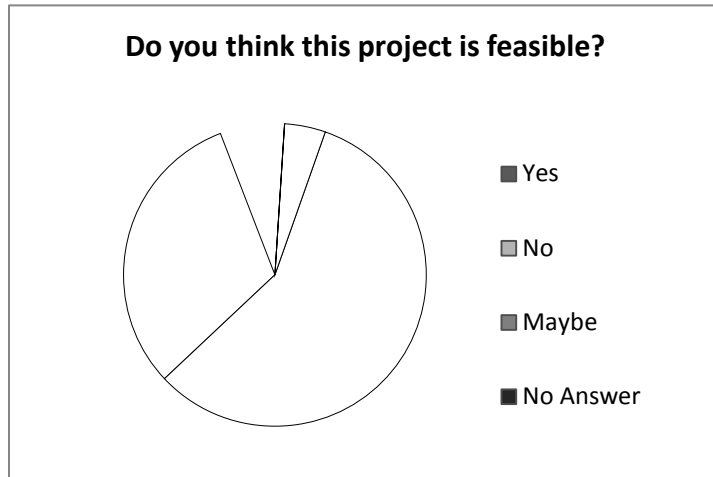


Figure 10: Pie chart depicting perceived feasibility of a local currency in Carlisle.

Twenty of the 33 participating businesses believed that implementing a local currency would be feasible (Figure 10). Four believed that it might be possible and 6 did not believe a local currency would work in Carlisle. Three businesses did not answer this question. Several who found the idea feasible had reservations:

- Ryan McManamy from Expert Tire answered, “It does sound feasible, but there must be interest from a major supply of local

businesses and consumers to be successful. Otherwise it could just be a waste of time and or investments” (February 19, 2010).

- Tammi Broskoski from the Fancy Cake Shop said, “I would need to see a concrete proposal before fully supporting it but it has worked in other communities so I do find it feasible” (March 1, 2010).

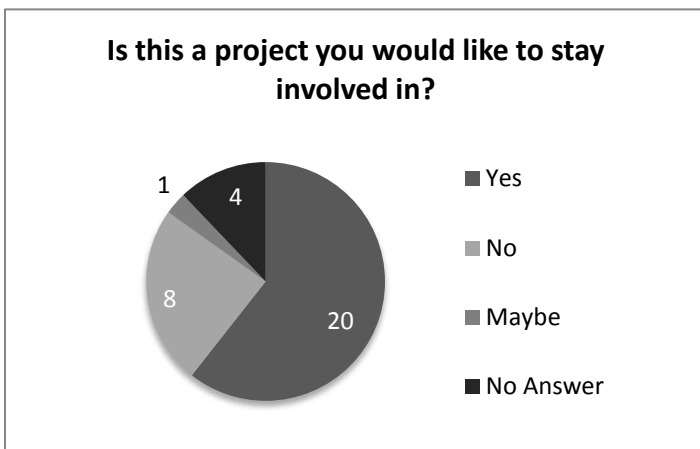
At least two businesses answered that it was not feasible because their businesses might not be able to participate because of insurance or legality issues. Others suggested that Carlisle is not always receptive to change (G. Thompson, February 19, 2010; S. Miller, September 21, 2009; M. Colucci, February 15, 2010).

Glenn White, Main Street Manager at the Downtown Carlisle Association (DCA) thinks there would be interest in this project in Carlisle, and said that the “DCA” would of course be interested in supporting the idea. However, White was realistic about the chances of something like this getting off the ground, saying “Theory is great, but implementation in the real world...that’s something different.” He went on to say that this type of project would take a whole lot of effort, from printing to security, receiving to advertising, management to participate recruitment. “Even time banking requires

extensive database management,” said White (February 9, 2010). His main concern was about implementation without consistent management.

Michelle Crowley of the Chamber of Commerce also expressed curiosity for the project. She said it sounded feasible and that the chamber would be interested in taking a lead role in supporting and advertising a local currency. Crowley explained that the Chamber has 700 business members and that for something like this to work, participation would have to extend beyond the downtown. Similar to White, she expressed concern about management and said she would like to see a financial institution backing the project. Time banking might be easier to arrange, she noted, because you are not dealing with cash, an item for which retailers are already pressed (March 3, 2010).

Jeff Conway of the United Way sees the potential for a time banking system in Carlisle. He says that United Way is planning to begin a time bank in Carlisle in the fall of 2010. They will serve as the main office for the time bank and hope to hire an intern from Dickinson College to help with management and connection of members (October 27, 2009).



Twenty of the 33 participating businesses answered that they would like to stay involved in this project, 8 had no interest in staying involved, 1 had potential interest and 4 did not answer the question (Figure 11). There is an apparent correlation between 20 participants who thought it feasible and the 20 who wanted to stay involved.

Figure 11: A pie chart depicting interest in remaining involved in this project.

I added the question “would you accept a local currency?” about 1/3 of the way into the interview process. Although the data is incomplete and no conclusions should be made from it, it warrants inclusion: 7 businesses said yes, 5 said no, 4 said maybe and 17 did not answer or were not presented with the question (Figure 12). Given the limited information

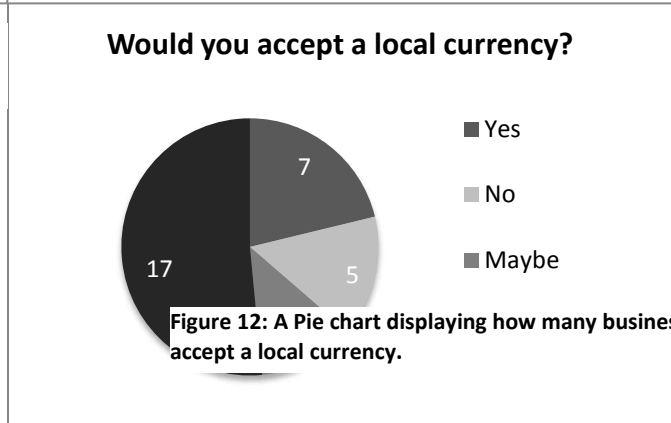


Figure 12: A Pie chart displaying how many businesses would accept a local currency.

that was provided, it is not surprising that the majority of data collected falls into “unanswered.” More respondents did reply yes than they did no, however, as mentioned above this is not conclusive data.

CARLISLE COMMUNITY RESULTS

Individual’s reaction to this project was measured by administering a short 5-question survey at Appalachian Whole Foods and Court House Commons. The survey was available at these businesses for about a week and resulted in 51 participant answers. The first question asked was, “How often do you shop in Carlisle?”

Twenty-four of the respondents said they shop in Carlisle on a daily basis while 22 said they shop in Carlisle on a weekly basis, and 4 replied on a monthly basis. Only one survey taker replied “rarely.” The majority of those surveyed shop in Carlisle on a daily or weekly basis (Figure 13).

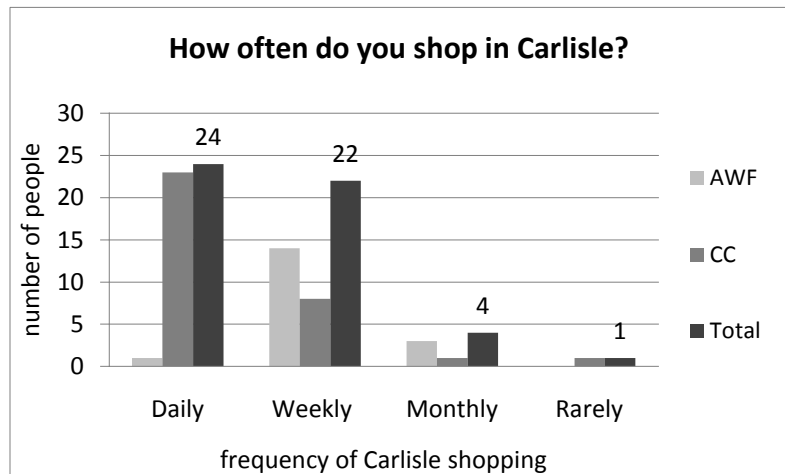


Figure 13: A bar graph showing how often the 51 community participants shop in Carlisle.

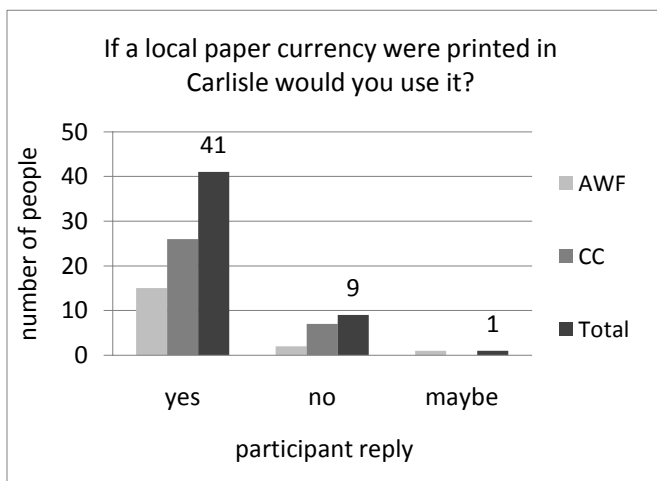


Figure 14: Bar graph depicting community interest in a local paper currency.

To assess the interest in the use of a local currency I asked the following questions,

1. If a local paper currency were printed in Carlisle, would you use it?
2. If a time bank were started in Carlisle, would you be interested in participating?

A total of 41 people replied “yes” to using a local paper currency (Figure 14). Nine said no, and 1 said maybe. Among these 50 Carlisle residents, there seems to be a strong interest in using a local paper currency. There was less interest in participation in a Carlisle time bank with thirty people responding “yes,” seventeen replying they would not be

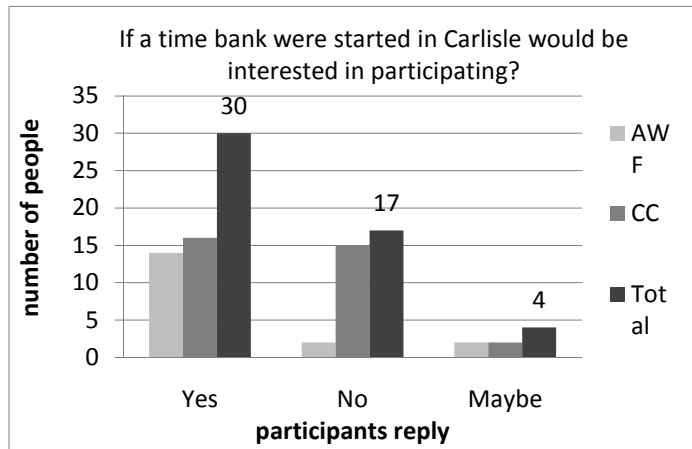


Figure 15: Bar graph depicting community interest in a time banking system.

interested in participating and 4 being unsure (Figure 15). This represents a 60% interest in time banking as opposed to an 82% interest in a local paper currency.

Several people who answered that they had an interest in time banking provided offerings they could provide to the system. The following is a list of offerings:

- Cooking, baking, lawn mowing, I don't paint professionally but I can spackle a room.
- I teach French and improvisational theater and dance
- Sewing and Crafts
- Editing
- Yoga and health counseling
- Gardening, computer related skills
- I can do nominal wood working, sealing and varnishing. I also have some agricultural experience
- Spanish tutoring/lessons
- Voice lessons, song writing, healing sessions
- Hair and retail
- Accounting, booking, taxes

The list of offerings from just these 12 individuals represents a strong and diverse set of skills.

DISCUSSION

The interview and survey results of this study suggest that there is significant interest in a local currency system in Carlisle, PA. Sixty-nine percent of the businesses and individuals interviewed expressed a strong level of interest in a local exchange system and more than could half identify some of the benefits a local currency system could provide to the Carlisle community. Both paper currencies and information-based systems found support among the 51 community members surveyed, with 82% percent expressing interest in a paper currency system, and 60% expressing interest in a time bank. From this data, it seems that both systems could be successful in Carlisle.

Time banking received slightly less support than a paper currency system. This might be due to a lack of understanding of the system, as many associated the idea with simple bartering. More interest in a time bank was expressed at Appalachian Whole Foods than at the Court House Commons, perhaps because the coffee shop is located next to the Court House and a major professional area in Carlisle. The United Way has announced its plans to begin a time banking system in Carlisle in the fall. Having the support of a major community organization will be very helpful in starting and maintaining a Carlisle time bank. Not only will the United Way's support provide legitimacy to this time bank, they have also offered to serve as an office for the system. They plan to hire an intern to oversee promotion and facilitate member connections. The results of the survey suggest that individuals in Carlisle are interested in participating, and the list of offerings accumulated reveal that there are many skills and talents among Carlisle residents.

Respondents of the community survey expressed a high level of interest in a paper currency. Because there were two attempted coupon currencies in Carlisle that were not very successful, some might wonder why a fiat or a discount currency would work any better. Any successful local currency must be created and implemented by the community that is going to use it. To maximize the chances for success, the design, form and focus of the local currency should emerge from the structure and needs of the community; in a sense, as an organic response to the existing social webs.

Certifichcks demonstrates why this is important. Participants can monitor the circulation, distribution and issuance of the currency to ensure that the system works properly. If the community is involved from inception to implementation, they will be able to address challenges as they arise, reducing the chance that one of the paper systems explored above would experience bankruptcy like Certifichcks Inc.

The DCA dollar clearly demonstrates the need for a wide-spread education campaign to promote a local currency. People need to know where they can get the currency, where the currency can be spent, and most importantly, why they are using it. This information is unique to each and every system. Businesses need to train their employees to recognize, accept and promote a local currency. This education takes time and effort and is perhaps the most challenging aspect of starting a local paper currency. However, the results of the surveys and questionnaires suggest if a core group of people came together and dedicated their time to designing and implementing a paper currency, the community would support it.

The case studies of existing local currencies and previous research suggest that local exchange systems are relatively easy to begin. With some money and a group of enthusiastic volunteers, a community can easily implement a currency system. Ensuring the longevity and success of a local currency is the challenge. Many of the systems formed in the 1990s failed because of leadership burnout and/or a lack of participation. The NCPlenty discovered that participation in their system was limited because many people in their community were unaware their currency's existence. For a system to be successful, it seems it must have a diverse group of dedicated participants, a developed and targeted outreach program and consistent leadership. Taking the time to promote a local currency within a community before implementing it may decrease the limitations that other systems have faced. Identifying target areas or issues a local currency can be designed to address also seems to be very important. Airline frequent flyer miles, Japanese care notes and the time bank in the Chicago school all were designed with specific intentions and all experienced measurable success.

While identifying a target area for Carlisle is beyond the scope of this paper, information collected from the downtown interviews and trends observed in other local currency systems suggest that a local currency could be used to achieve the following goals in Carlisle:

- Further build and strengthen the Carlisle community
- Increase the connection between Carlisle and its three colleges
- Increase support for local businesses and strengthen the local economy
- Raise awareness about Carlisle's unique cultural and environmental assets
- Raise awareness about pressing local and global issues

Further build and strengthen the Carlisle community

The strong existing sense of community pride and connection in Carlisle and the manner in which several interviewees described the community as “more than willing to help out,” suggests that many members of the community understand the value of strengthening the social cohesion of their town. As demonstrated in the Ithaca Hours, BerkShares and Shippensburg Time Bank case studies, local currencies excel at connecting people who are otherwise unconnected. Highlighting the unique skills available in a community and advertising them in an approachable way (i.e.: Our Hour Directory) facilitates the expansion of social circles. Ross Morris explained that the unique social webs in Carlisle become more and more apparent the longer one lives in Carlisle. A local currency can help bring these circles together through exchange and community gatherings, increasing the potential for collective action.

Increase the connection between Carlisle and the three colleges

Several interviewees referred to Carlisle’s three institutes of higher education as community strengths. Others mentioned the need to further connect the college communities to the greater Carlisle community. While I cannot speak for the Army War College or the Dickinson School of Law, as a Dickinson student, I see a great deal of potential for a local currency to help build stronger connections between the Carlisle community and the Dickinson Community. A local currency would encourage Dickinson students, faculty and staff to support the Carlisle economy and community more readily, especially if it was somehow incorporated in the meal plan, or employee pay schedule. As demonstrated by the case study of the Shippensburg Time Bank, a local currency can facilitate simple interactions and exchanges between students and community members, such as baby-sitting and rides to the store. Increasing the number of face to face interactions between students and community members would help students more fully appreciate the community in which they spend nearly four years of their life.

Increase support for local businesses and strengthen the local economy

As demonstrated in the three case studies above, both paper currencies and time banking have positive effects on local economies. Limiting the area of use of a currency ensures that more money is spent locally. A well designed local currency in Carlisle could be used to highlight the strength of the town’s independent shops and also to indicate unfilled specialty niches.

Due to the global and national economic decline of the last few years, it seems that many in Carlisle are focusing on how to make the town an attractive destination for visitors. Glen White, of the Downtown Carlisle Association, describes the downtown Carlisle shopping area as a large outdoor mall without a roof. “We are trying to build an environment where you’d want to come and shop for a day. It’s all about the experience- of leisurely shopping, history, and the town,” says White (February 9, 2010).

A local currency could add an element of curiosity and fun to shopping, especially for visitors. As experienced in the Berkshires region of Massachusetts, people are intrigued when they hear about a local currency. Carlisle attracts several hundred thousand visitors annually. The intrigue of a local currency could encourage them to further explore and support the unique shops in town. In addition, if even a fraction of those visitors, took a Carlisle currency home with them, it would represent tremendous earnings for the organization overseeing the local currency and the Carlisle community.

Raise awareness about Carlisle’s unique cultural and environmental assets

Carlisle is rich in the arts. A Carlisle local currency could harness this community asset and employ local artists to design imagery that highlights the unique cultural and environmental resources of this area. The bills could feature the wide range of historical figures that influenced Carlisle as well as the natural abundance of the area: world class trout streams, expanses of forest and diverse flora and fauna. This imagery can spark conversation and dialogue among residents and visitors and help raise awareness about this area.

Raise awareness about pressing local and global issues

As quoted in the social relationship section, Susan Witt states that one of our greatest challenges is creating an exchange system that acknowledges the full story of the goods and services we purchase: the people, the time, the natural resources, the travel. The potential educational value of the process of initiating and operating a complementary currency include:

- Teaching citizens and business owners how money works, and how it can enhance or deter community
- Revealing, building and vitalizing community connections
- Teaching how everyday actions and choices impact local and global environmental, social and economic issues.

- Increasing the awareness and understanding of the role that personal responsibility plays in the creation of the kind of community everyone wants and promoting everyone in the community to become involved in the dialogue to define the “Carlisle we want to live in.”

When initiated well, the educational and outreach campaign required for the implementation of a complementary currency can help raise awareness about the impact our purchasing behaviors and social interactions have on our local and global communities. Here in Carlisle, the presence of three colleges helps facilitate this desire to further understand how our local actions affect the greater world. A local currency offers a tangible, inspired tool to help accomplish this goal.

The limited scope of this study prevents me from making any concrete suggestions as to how a local currency would best serve this community. As mentioned above, the most successful currencies are designed by the communities that are going to use them. This ensures that there is support and widespread understanding of the goals of the currency. While a local currency in Carlisle could be used to accomplish the goals listed above, I suspect there are many additional areas in which a currency may be beneficial.

CONCLUSION

Communities across the United States are using complementary, local currency systems to address their unique geographical challenges. Local currencies can be used effectively to build community, stimulate local economies and raise awareness about local and global environmental assets and challenges. There are three main local currency models used throughout the United States: The BerkShare, a paper discount currency, the Ithaca Hour, a paper fiat currency and time banking, an information-based exchange system. These models are unique in their design and function, but all three are used to accomplish the goals listed above. According to established currency systems, local exchange systems are relatively easy to begin, but require extensive educational campaigns to obtain participation and consistent leadership to ensure longevity. In order to attain the highest success, a local currency must be created and implemented by the community that is going to use it. Carlisle, PA has many social, economic and environmental characteristics that make it a viable location for the implementation of a local currency. Furthermore, many community members, local business owners and community leaders have expressed interest in a local currency system and believe it would be feasible to implement such a system in Carlisle. Although this paper identifies several areas in which a local currency

may benefit Carlisle, PA, many others exist. Discovering a focus for a currency that would find the most success and result in the most benefit to Carlisle warrants more research and community involvement.

FUTURE STUDY

This body of work has introduced the idea of a complementary currency and provided a basic overview of the potential economic, social and environmental benefits a currency can facilitate within a community. It also provided a basic assessment of the Carlisle community's interest in a local currency. This foundation serves as a base for a variety of future research. Some examples include:

- Working closely with a group of Carlisle citizens to identify a focus for a Carlisle currency, and subsequently designing an implementation plan with this focus group. Contacts can be provided to a student interested in pursuing this project.
- Exploring the potential of a regional currency (potentially the South Mountain Region) rather than just a Carlisle currency.
- Exploring how a local currency might be used to strengthen the relationship between Carlisle and Dickinson College.
- Studying in greater depth the Carlisle community's reaction and interest in a local currency.
- Approaching local banks and credit unions to see if they would participate in a local currency system.
- Researching the process of behavioral change in order to determine how best to advertise and promote a local currency system.
- Creating a "pilot" local currency to see if there is a way to determine the economic (or social, or environmental) impact a local currency has on the community and local economy.
- Use GIS to map the locations of successful local currencies around the United States and analyze the results to see if there are any noticeable trends among them.

WORKS CITED

- BerkShares Inc. (2010). *Bylaws*. Accessed Sept 2009
<http://www.berkshares.org/about/bylaws.htm>
- BerkShares Inc. (2010b). *BerkShares Exchange Banks*. Accessed April 2010
<http://www.berkshares.org/banks.htm>
- BerkShares. (2009, February). *BerkShares Success Enables Exchange Rate Change*.
BerkShares, Inc. Accessed Nov. 2009 http://www.berkshares.org/press/PR_5.htm
- Block, David. (1998, July/Aug). *Local Money Strengthens Communities*. In *Business: Creating Sustainable Enterprises and Communities*. Pp. 12-16.
- Cahn, Edgar. (2001). On LETS and Time Dollars. *International Journal of Community Currency Research*
- Cahn, Edgar. (2004). *Unleashing Our Hidden Wealth*. Yes Magazine. Accessed Nov. 2009
<http://www.yesmagazine.org/issues/living-economies/524>
- Collom, Ed. (2005, September). *Community Currency in the United States: The Social Environments in Which it Emerges and Survives*. *Environment and Planning. A* 37, 9. 1565-87.
- Cress, J. (2008, October 8). *Carlisle's IAC plant to close in December*. Retrieved October 2009, from The Sentinel Online:
<http://www.cumberlandlink.com/articles/2008/10/08/news/local/doc48ecfae3ef593631414154.txt>
- Cress, J. (2009, January 21). *Tyco to close Carlisle plant by late March*. Retrieved October 2009, from The Sentinel Online:
<http://www.cumberlandlink.com/articles/2009/01/22/news/local/doc497766745ae60536729109.txt>
- Cress, J. (2009, July 21). *Carlisle Tire & Wheel Plant to close*. Retrieved October 2009, from The Sentinel Online:
<http://www.cumberlandlink.com/articles/2009/07/22/news/local/doc4a65be66d4ea4611566787.txt>
- Cress, J. (2009, July 22). *Done Deal: Community reacts to Carlisle Tire & Wheel Closing*. Retrieved October 2009, from The Sentinel Online:

<http://www.cumberlink.com/articles/2009/07/22/news/local/doc4a671cd6a0910568819370.txt>

DCNR. (2010). "Summit to focus on expanding South Mountain regional economy using natural, cultural resources." Appalachian Trail Conservancy. Accessed April 2010
<http://www.dcnr.state.pa.us/news/resource/res2010/10-0203-southmountaincli.aspx>

Dykema, Ravi. (2003). *Complementary Currencies for Social Change: An Interview with Bernard Lietaer*. Nexus Colorado's Holistic Journal. Accessed March 2010
http://www.nexuspub.com/articles_2003/interview_2003_ja.php

Federal Reserve Bank of Chicago. (1992). *Modern Money Mechanics: A Workbook on Bank Reserves and Deposit Expansion*. Chicago: Federal Reserve Bank of Chicago.

Fermata, Inc. (2009, Dec). *South Mountain Conservation Landscape Initiative Strategic Plan*. South Mountain Partnership. Accessed April 2010
<http://www.keepandshare.com/doc/1642886/south-mountain-plan-final-122309-conclusions-and-recommendations-pdf-december-29-2009-9-20-am?da=y>

Foundation Center. (2010). *FAQs: What are the advantages/disadvantages of becoming a nonprofit organization?* Accessed Mar 2010
http://foundationcenter.org/getstarted/faqs/html/np_pro_con.html

Gelleri, C. (2009). Chiemgauer Regiomoney: Theory and Practice of a Local Currency. *International Journal of Community Currency Research* , 61-75.

Glover, P. (2000, May). *Largest HOUR Loan in History*. Retrieved October 2009, from Ithaca Money: <http://www.ithacahours.com/archive/0005.html>

Glover, Paul. (2000, January). *A History of Ithaca HOURS*. Ithaca Money Home Page. Accessed Nov. 2010 <http://ithacahours.com/archive/0001.html>

Greco Jr., Thomas H. (2001). *Understanding and Creating Alternatives to Legal Tender*. White River Junction. Chelsea Green.

Helleiner, Eric. (2000). *Think globally, transact locally: Green political economy and the local currency movement*. *Global Society*. Vol. 14, No. 1.

Hoffman, N. V. (2008, December 22). *The Fed Makes Money*. Retrieved 2009, from The Nation: <http://www.thenation.com/doc/20090105/howl>

- Hopkins, Rob. (2008). *The Transition Handbook: From Oil Dependency to Local Resilience*. Totnes. Green Books Ltd.
- Houston, Dan. (2002). *Economic impact Analysis: A Case Study Local Merchants vs. Chain Retailers*. Austin. Civic Economics & LivableCity Austin.
- Humboldt Exchange Community Currency. (2010 Winter). *Information Packet for Local Businesses*. Accessed March 2010 <http://www.humboldtexchange.org/bizPacket.htm>
- Institute for Local Self-Reliance. (2009). *Key Studies on Big-Box Retail*. Minneapolis: BigBoxToolkit.
- Ithaca Hours Inc. (2009). *Fee Schedule*. Accessed Nov 2009 <http://www.ithacahours.org/feeschedule.php>
- Ithaca Hours Inc. (2009b). *FAQs*. Accessed Apr 2010 <http://www.ithacahours.org/faq.php#A6>
- Ithaca Money Home Page. (2006). *The Ithaca HOUR Family*. Ithaca Money Homepage. Accessed Apr 2010 <http://www.ithacahours.com/currency.html>
- Ithaca Money Home Page. (2006b). *Other HOUR Cities*. Ithaca Money Homepage. Accessed Apr 2010 <http://www.ithacahours.com/otherhours.html>
- Jacob, J., Brinkerhoff, M., Jovie, E., & Wheatley, G. (n.d. a). The Social and Cultural Capital of Community Currency: An Ithaca HOURS case study survey. *International Journal of Community Currency Research Vol. 8.*, 42-56.
- Jacob, J., Brinkerhoff, M., Jovie, E., & Wheatley, G. (n.d. b). HOUR Town: Paul Glover and the Genesis and Evolution of Ithaca HOURS. *International Journal of Community Currency Research Vol. 8* , 29-38.
- Jenkins, B. (1991). *CNN Nightly News: Clip*. Small is Beautiful. Accessed Mar 2010 http://www.smallisbeautiful.org/local_currencies/cnn_old.htm
- Korten, David C. (2009). *Agenda for a New Economy: From Phantom Wealth to Real Wealth*. San Francisco. Berret-Koehler.
- Krohn, Gregory A. & Snyder, Alan M. (2007). *An Economic Analysis of Contemporary Local Currencies in the United States*. (Prepared for the Workshop in Macroeconomic Research at Liberal Arts College, Smith College 2007). Department of Economics, Bucknell University.

Kroll, Kathie. (2009, March). *CertifiChecks Inc. shutdown leaves gift certificates in question*. Accessed Mar 2010
http://blog.cleveland.com/business/2009/03/certifichecks_inc_shutdown_lea.html

Lepofsky, Jonathan & Bates, Lisa K. (n.d.). *Helping Everyone have PLENTY. Addressing distribution and Circulation in an HOURS based Local Currency System*. International Journal of Community Currency Research. Vol 9, p. 1-20.

Lietaer, B., & De Meulenaere, S. (2003). Sustaining Cultural Vitality in a Globalizing World: The Balanese Example. *International Journal of Social Economics* .

Lietaer, Bernard & Hallsmith, Gwendolyn. (2006). *Community Currency Guide*. Global Community Initiatives. Montpelier.

Onboard Informatics. (2010). *Carlisle, PA*. City-Data.com. Accessed Dec 2009
<http://www.citydata.com/city/Carlisle-Pennsylvania.html>

Rosenblatt, Alison. (2009). *Mountain Money Business Information Packet*. Villa Grove. ScSEED.

Rothbard, M. N. (2008). *The Mystery of Banking (2nd ed.)*. Auburn: Ludwig von Mises Institute

Schusman, A. (2005). *Remaking Money: Local Currency and the Meaning of Money in the United States*. (Presented at the annual meeting of the American Sociological Association, Marriott Hotel, Loews Philadelphia Hotel, Philadelphia, PA). Tuscon. University of Arizona.

Schwartz, Judith D. (2008). *Alternative Currencies Grow in Popularity*. TIME. Retrieved October 2009, from <http://www.time.com/time/business/article/0,8599,1865467,00.html>

Scott, J. (2008, December 7). *Losing a piece of history in Carlsile*. Accessed Oct 2009, from The Sentinel Online:
<http://www.cumberlandlink.com/articles/2008/12/07/news/local/doc493b65e8b0b6d348971856.txt>

ScSEED. (2010). *ScSEED-Mountain Money*. Accessed Mar 2010
<http://scseed.org/wb/pages/strategies/compatible-economic-development/mountain-money.php>

- Selgin, G. (2002). Should We Let Banks Create Money. *The Independent Review* , 5 (1), 93-100.
- Seyfang, Gill. (2006). Community Currencies: A New Tool for Sustainable Consumption? Norwich. Center for Social and Economic Research on the Global Environment, School of Environmental Sciences, University of East Anglia.
- Seyfang, Gill. (2007a). *Personal Carbon Trading: Lessons from Complementary Currencies*. Norwich. Center for Social and Economic Research on the Global Environment, School of Environmental Sciences, University of East Anglia.
- Seyfang, Gill. (2009a). *Low-Carbon Currencies: The Potential of Time Banking and Local Money Systems for Community Carbon-Reduction*. Norwich. Center for Social and Economic Research on the Global Environment, School of Environmental Sciences, University of East Anglia.
- Seyfang, Gill. (2009b). *Carbon Currencies: A New Gold Standard for Sustainable Consumption?* Norwich. Center for Social and Economic Research on the Global Environment, School of Environmental Sciences, University of East Anglia.
- Seltzer, Rick. (2009, March 28). *Carlisle 'road diet' received PennDOT funding*. The Patriot News. Accessed Jan 2010
http://www.pennlive.com/midstate/index.ssf/2009/05/carlisle_road_diet_receives_pe.html
- Soder, N. T. (2008). Community Currency: an Approach to Economic Sustainability in our Local Bioregion. *International Journal of Community Currency Research Vol. 12* , 34-52.
- Solomon, L. D. (1996). *Rethinking our Centralized Monetary System*. Westport: Praeger.
- Swann, Robert & Witt, Susan. (1995, February; revised 2001). *Local Currencies: Catalysts for Sustainable Regional Economies*. The E.F. Schumacher Society. Accessed Jan 2010
http://www.smallisbeautiful.org/publications/essay_currency.html
- The BerkShares Team. (2008, February). *Newsletter*. BerkShares Inc. Accessed Apr 2010
<http://www.berkshares.org/press/newsletters/08Febabc40.htm>
- TimeBanks TM. (2010). *The Five Core Values of Time Banking*. Time Banks USA. Accessed Mar 2010
<http://www.timebanks.org/five-core-values.htm>
- TimeBanks TM (2010a). *The Core Economy*. Time Banks USA. Accessed Mar 2010
<http://www.timebanks.org/core-economy.htm>

TimeBanks TM. (2010b). *Funding your Time Banking*. Time Banks USA. Accessed Mar 2010
<http://www.timebanks.org/funding.htm>

TimeBanks TM. (2010c). *Find a Time Bank*. Time Banks USA. Accessed Apr 2010
<http://community.timebanks.org/findtimebanks.php>

TimeBanks TM. (2010d). *Frequently asked questions*. Time Banks USA. Accessed Apr 2010
<http://www.timebanks.org/faqs.htm#trust>

TimeBanks TM. (n.d.). *Time Dollars and Stuff: How to Sell Things for Time Dollars without Jeopardizing its Tax-exempt Status*.

Tomkins Consolidated Area Transit Inc. (2009, August 27). *Board of Directors Meeting*.
Authors. Accessed Mar 2010 http://www.tcatbus.com/files/all/bod_inc_mtg_8-27-09_final_1.pdf

US Census Bureau. (2000). *Table DP-1. Profile of General Demographic Characteristics: 2000*.
US Census Bureau.

US Census Bureau. (2000b). *Table DP-3. Profile of Selected Economic Characteristics: 2000*.
US Census Bureau.

US Census Bureau. (2010, February 23). *State and County Quick Facts: Pennsylvania*.
Accessed Mar 2010 <http://quickfacts.census.gov>

Van Sambeek, Paul & Kampers, Edgar. (2009). *Nu-spaarpas, the sustainable incentive card scheme*. Accessed Mar 2010
http://www.nuspaarpas.nl/www_en/pdf_en/NUspaarpasENGCH2.pdf

Ward, Bernie & Lewis, Julie. (2002). *Plugging the Leaks: Making the Most of Every Pound that Enters Your Local Economy*. The New Economics Foundation.

Wedge Card Ltd. (2010). *What is Wedge?* Accessed Apr 2010
http://www.wedgocard.co.uk/what_is_wedge

Witt, S., & Lindstrom, C. (2004, July-August). *Local Currencies in the 21st Century*. In *Bussiness*, p. 2.

Witt, Susan. (1998). *Printing Money, Making Change: The Future of Local Currencies*. Orion
Afield. Great Barrington. Accessed Mar 2010
http://www.smallisbeautiful.org/publications/essay_orion.html

APPENDIX 1: Existing Currency Systems Discovered

Name	City	State	Type
Anacostia Hours	Mount Rainier	MD	HOURS
Arroyo Time Bank	Padadena, North LA,	CA	Time bank
Ashville Currency Project	Ashville	NC	Paper
Ashville LETS	Ashville	NC	LETS
Austin Time Exchange Network	Austin	TX	Time bank
BerkShares	Western	MA	paper
Bernal Bucks	Bernal Heights neighborhood	CA	stickers
BloomingHOURS	Bloomington	IN	HOURS
Cascadia Hours	Portland	OR	paper
Community Way Dollars	Comox Valley	Canada	money
Dane County Time Bank	Madison	WI	Time bank
Davis Dollars	Davis	CA	paper
Echo Park Time Bank	Los Angeles	CA	Time bank
Emerald valley time exchange	Eugene	OR	Time bank
HOUR Exchange	Corvallis	OR	paper
Hour Exchange Portland	Portland	ME	Time bank
Houston Heights Time Bank	Houston	TX	Time bank
Humboldt Exchange	Humboldt County	CA	paper
Ithaca Hours	Ithaca	NY	HOURS
Lathrup Village Time Bank	Detroit	MI	Time bank
Lewisburg Time Bank	Lewisburg	PA	Time bank
Madison HOURS	Madison	WI	HOURS
Martha's Vineyard Greenback	Martha's Vineyard	MA	PROPOSED-digital
Mendo Time Bank	Mendocino County	CA	Time bank
Michiana Community Currency	South Bend	IN	PROPOSE-paper
Mountain Money (MoMos)	Saguache County	CO	paper
Nokies (Blue Ridge Mountain Exchange)	Roanoke Area	VA	PROPOSE-paper
Ojai Buck	Ojai	CA	PROPOSED-paper
Phoenix Bucks	Phoenix	AR	coins
Phoenixville Area Time Bank	Phoenixville	PA	Time bank
Philadelphia Equal Dollars	Philadelphia	PA	paper
Potomac	D.C.	MD	Paper
Rhinebucks	Rhinebeck	NY	paper

Name	City	State	Type
Rich Hours	Richmond	VA	HOURS
Southern Arizona's Local Living Economy (SALLE)	Southern Arizona	AZ	money
The Raleigh Time Bank	Raleigh	NC	Time bank
Time Trade Circle	Cambridge	MA	Time bank
TimeBanks NYC	NYC	NY	Time bank
TradeMarket	Nevada City	NV	paper
Tucson life Cache	Tucson	AZ	Time bank
Valley Bucks and Lehigh Doe	Lehigh Valley	PA	PROPOSED
Vermont Sustainable Exchange, LLC (VSE)		VT	online

APPENDIX 2: Existing Currency Systems Contacted

Ithaca Hours Ithaca, NY
BerkShares Great Barrington, MA
Detroit Scrip Detroit, MI
NC Plenty North Carolina
Equal dollars Community Currency Philadelphia, PA
Tucson Life Cash Tucson AZ
Santa Monica, CA (just beginning)
Fayetteville, AR (just beginning)
Bay Bucks Traverse City, MI
Totnes Pound Project Devon, England
Austin Time Exchange Austin, TX
Shippensburg Area Time Bank Shippensburg, PA
Phoenixville Area Time Bank Phoenixville, PA
Lewisburg Area Time Bank Lewisburg, PA
Lehigh Valley Exchange Lehigh Valley, PA
Mountain Money Saguache County, CO
Ojai Bucks Ojai, CA

Further Contact:

Ithaca Hours [Steve Burke]
BerkShares [Katie Poole]
Mountain Money [Ali Rosenblatt]
Shippensburg Time Bank [Chad Kimmel]
Tucson Traders [Mary DeCamp]
Phoenixville Area Time Bank [Joel Bartlett]

APPENDIX 3: Businesses & Community Members Interviewed

** indicates an interview ♦ **Bold** indicates participation*

50s Malt Shop
Antiques on High
***Appalachian Whole Foods**
Arogasy
Bosler Library
Brenneman Tax Services
Brian Mentzer
***Café Bruges**
***CALC**
Carlisle Crossroads
Carlisle House
Carlisle Theater
Chaparritas
Clothes Vine
Colours on High
Colucci and Company
Courthouse Commons
Cumberland Valley Decorators
***Elaine Livas (Project SHARE)**
Employment Center
Expert Tire
Fancy Cake Shop
Fayes Restaurant
Garden Gallery
Gingerbread Man
***Glen White (DCA)**
Hamilton Restaurant and Lounge
History on High
Issei Noodles
***Ivo Otto**
J.W. Music
Jones Plumbing
Kilian Family Dentist
***Klinedinst Chiropractic**
Lebos Plumbing
Lilies Thai
Line and Line Jewelers
Market Cross

***Meghan Ready (Farmers on the Square)**
***Michelle Crowley (Chamber of Commerce)**
Nancy Stamm's Galleria
North Hanover Grill
***Pat Craig Studios**
***Piattos**
Pomfret St. Books
Stott & Stott
Traini Shoe Repair
Wardeckers Uniformly yours
Whistleshop Bookshop
***Yarn Garden**

Additional Interviews:

***Professor Michael Poulton**
***Rusty Shunk**

APPENDIX 4: Handout to Business Owners

What is a complementary currency?

Local currencies have long been used within communities and subsections of society. The idea of a complementary currency is not to create alternative tender, but to provide a paired system of exchange that encourages autonomy and support between individuals and businesses within a community. Used widely during the depression era, complementary currencies are legal means of exchange recognized by governments throughout the world. These systems are regaining popularity in light of climate change, peak oil, social inequality and the current economic condition. Money and exchange are a primary means of communication- we've all heard the phrase, 'money speaks.' The way we spend our dollars places a value on the product or service we are purchasing. At the same time, where we spend our money places a value on the store or person from whom we are purchasing. Local communities can use the information collected by 'money' to evaluate the strength of a local economy and community. In this sense, communities can use complementary currencies as tools. As a unit of value, money can be used to stimulate depressed local economies, address pressing social issues within communities, and increase community or regional resilience; in essence, local systems of exchange are being used to re-knit the social fabric of communities across the United States and the world.

Complementary currencies manifest in several different forms: paper currency and time banking are two that are successful in the US.

Paper currency: A paper currency is a popular form of complementary currency because it is very visible and tangible. You spend these as you would the US dollar, but they are only accepted by those within the system who mutually agree upon their value. They end up circulating around the community many times because they cannot leave. Generally these systems are backed by the US dollar.

Time Banking: This is a less tangible form of exchange, based on the exchange of services. These systems require a central information center, often an online database, where members can post the services they offer. Members exchange their time (in the form of service) for credit, which can then be used to "purchase" someone else's skills and time. This is a very popular form of exchange because it is so easy to begin, and simple to maintain.

There are also international and national networks for communities promoting the creation of strong local economies, one important example is BALLE.

Business Alliance for Local Living Economies: "The Business Alliance for Local Living Economies (BALLE) brings together small business leaders, economic development professionals, government officials, social innovators, and community leaders to build local living economies. We provide local, state, national, and international resources to this new model of economic development." (BALLE website)

Why are people supporting complementary currencies?

Communities across the country are creating their own local exchange systems for a variety of reasons. The most common are:

Local currencies stimulate the local economy. Local currencies can only be spent locally. Because they can only be used within a defined area, purchasing power is retained within that community thus boosting the local economy. Each time a dollar is exchanged, its value is increased; with use, local currencies become value added products.

Local currencies connect sellers and buyers to create markets that do not exist within the current economic system. Local currencies create opportunities for people who have skills to offer but are not employed in the current job market. They create avenues for individual who are unemployed or self-employed to actively participate in exchange by supporting person to person exchange.

Local currencies build and strengthen community relationships and community resilience. By bringing a human face and a sense of place back into transactions, complementary currencies renew a collective focus on cooperation, neighborliness, conviviality and frugality.

Local currencies benefit the environment. Spending locally begins to reconnect us with the products and services we buy. We are more aware of where they are coming from and who made them. Local currencies increase the exchange of goods and services that are produced within a community's bioregion, or the surrounding environment.

Local currencies bring publicity and tourism to the regions using them. At this point, complementary currencies are an up and coming tool. They attract much attention because the idea of them is so intriguing. People often come, ask for the local currency, and keep the local dollar as a souvenir.

Local currencies allow the people to reclaim the power of money. By creating money we can make it work for us, instead of us working for it.

"For a hundred years we've been steadily extending the supply lines of our economy, becoming ever more globalized. But some have begun to question that trend and even to form the foundations of a newer, more local economy. The main reasons are two-fold: our ever-growing globe-spanning economy is increasingly vulnerable to the ecological disruption it is causing, with global warming the prime example; and despite record affluence Americans report ever-growing feelings of disconnection and loss of community, trends that can only be reversed if we manage to rebuild local institutions that draw people together."

-Bill McKibben

Are they legal?

Yes! Complementary currencies meet all the criteria for legal scrip as defined by the IRS, FBI, US Secret Service, Federal Reserve and Treasury Department. The main provisions are:

- Have a \$ US dollar equivalent for tax purposes.
- Must not resemble US currency
- No coins
-

Who is already doing this?

Ithaca, NY- Ithaca Hours [<http://www.ithacahours.org>]

Berkshire, MA- BerkShares [<http://www.berkshares.org/>]

Central counties of NC- NCPlenty [<http://www.ncplenty.org>]

Madison, WI- Madison Hours [<http://www.madisonhours.org/>]

Shippensburg, PA – Shippensburg Area Time Bank [<http://www.shiptimebank.org/>]

Pheonixville, PA- Pheonixville Area Time Bank [<http://www.pa-timebank.com/>]

Detriot MI, Detroit Scrip [<http://www.detroitscrip.org/>]

York and Lancaster Counties: Susquehanna Sustainable Business Network: [<http://www.susquehannasbn.org>]

For more information:

E.F. Schumacher Society: http://www.smallisbeautiful.org/local_currencies.html

BALLE: <http://www.livingeconomies.org/>

Time Banking: <http://www.timebanks.org/>

“Strong local economies are the foundation of strong communities that can grow and withstand the pressures created by an increasingly urbanized world. And strong communities require a holistic approach that not only provides the traditional deliverables of economic development—jobs, income, wealth, security—but also protects the environment, improves community infrastructure, increases and develops local skills and capacity, strengthens the social fabric, and respects heritage and cultural identity.”

-Mark Roseland, World Watch Institute

APPENDIX 5: Questionnaire for Carlisle Businesses

Date:

Business name:

Contact name:

Telephone:

Email:

Relating to your business:

How long have you been in business?

What makes your store unique to Carlisle?

Could you please describe your main customers? (Where are they from, demographics, etc)

Do you participate in any kind of local economic market? Ie: purchase or sell products locally?

If such a market or local exchange network existed/was strengthened, would you be interested in increasing your participation? In what ways?

What are some of the main challenges the Carlisle community faces?

What are some of the Carlisle Community's strengths?

Relating to complementary currencies:

Had you heard of complementary currencies before today?

Yes No

What is your initial reaction to the idea of a complementary currency?

Do you have any concerns with the idea either relating to Carlisle or directly to your business?

Can you think of positive effects a complementary currency system might have on your business? On the Carlisle community?

Does this project sound feasible to you? Please explain.

Is this a project you would like to stay involved in?
local currency?

Yes No

Would you accept a

Yes No

Please list others in Carlisle that might be interested in this project:

APPENDIX 6: Questions for Carlisle Residents, left at Court House Commons and Appalachian Whole Foods

Please Answer the Following Questions:

How often do you shop in Carlisle?

Daily Weekly Monthly Rarely

If a local paper currency were printed in Carlisle would you use it?

Yes No

If a time bank were started in Carlisle would you be interested in participating?

Yes No

Do you have access to a computer?

Yes No

Please list potential skills or services you would have to offer as a time bank member:

Please feel free to contact me with questions or concerns.-----