The Heist Sam Derochers, Landon Broughton, Sam Brown, Angie Palm Proposal V2

Problem Statement

Problem: Food insecurity is the lack of access to healthy foods that negatively affects the nutrition and health of its victims. This is a problem that affects more than fifty million Americans nationwide, but "the causes of such [insecurity is] complex and wrapped in larger socio-economic challenges endemic to low income, urban, and rural areas".¹ There is no single component that causes the issues related to food insecurity, but rather there are an abundance factors that work together to make it a prominent issue, such as pricing, accessibility, and social mindsets. Frequently, healthy food tends to be more expensive, harder to find, and can even have a negative stigma associated with it. These issues shift from region to region, making one single solution, even if it works well in one area, not necessarily relevant in other communities.

Significance: The impact of food insecurity is costly to the nation as a whole, in more ways than a financial aspect. However, the Center for American Progress estimates that food insecurity and hunger cost the United States 167 billion dollars a year.² This cost is an estimated sum of healthcare bills covering the medical complications of eating unhealthy food or no food at all, employees missing work days, as well as charitable expenses. The impact of food insecurity reaches beyond monetary consequences to causing health issues, both physical and mental. For example, the risk of developing diabetes is higher for those affected by food insecurity, and other chronic diseases may also arise, namely hypertension, hyperlipidemia, and cardiovascular disease.³ The Diabetes Association estimates that the indirect effects of diabetes on society include reduced productivity for the working and "an inability to work due to disease- related disability", which in and of itself costs the nation 21.6 billion dollars.⁴ While the specific costs of food insecurity may be vastly different from the costs of diabetes as a whole, many of the implications are the same – the burden on people who have undiagnosed disorders is also cost to society, productivity, and to human health.⁴

No Kid Hungry points out that food insecurity can be a vicious cycle of causes. Children that do not get enough to eat are less likely to be able to focus and do well in school, and they are more likely to get sick. With trouble focusing, missing school more frequently, as well as other factors, these children are less likely to graduate from high school.⁵ Without a high school degree, it is much harder for these children to feed their families when they grow up.⁵ Frequently, those that fall into this category can only afford to move to "neighborhoods [that] have easier access to fast food and junk food than to fruits and vegetables." ⁶ For the general population, poor food choices may be made due to ease - junk food is quicker and easier to consume. However, in food insecure areas, these decisions are made because the healthy food is not accessible to the majority of the population - perhaps it would require a car to drive elsewhere, a luxury that many low income families cannot afford. On a larger level, some of the reasons that food insecurity still exists, even though food production exceeds food need nationwide, are political-agricultural practices, environmental factors, and economic reasons.

1 (2013). Why There's No Easy Solution to America's Food Deserts. GOOD. Retrieved from http://www.good.is/posts/whythere-s-no-easy-solution-to-america-s-food-deserts 2 Blumenthal, S. & Blackwood, K. (2013). Transforming Food Deserts and Swamps to Fight Obesity. The Huffington Post: Healthy Living. Retrieved from http://www.huffingtonpost.com/susanblumenthal/food- deserts_b_3822428.html 3 Coleman-Jensen, A. (2013). Physical and Mental Health. Feeding America. Retrieved from http://feedingamerica.org/hunger-in-america/impact-of-hunger/physical-and-mental-health.aspx 4 (2013). The Cost of Diabetes. American Diabetes Association. Retrieved from http://www.diabetes.org/advocacy/news-events/cost-ofdiabetes.html 5 (2013). The Problem. No Kid Hungry. Retrieved from https://www.nokidhungry.org/problem/nutrition-childdevelopment 6 Johnson, C. (2013). Food Security & Food Access. The Sustainable Table. Retrieved from http://www.sustainabletable.org/280/food-security-food-access Political-agricultural practices include "substituting commodity crops for food crops."⁶ Two such commodity crops are corn and soy. These crops are used primarily as biofuels rather than as a source of nutrition, and they reduce the utility of arable land.⁶ Environmental factors tend to be natural disasters that prevent food either from being grown or from being distributed. Soil degradation is also becoming more and more of a problem worldwide, caused by heavy irrigation, erosion, and soil pollution which are results of the rise of "industrial agricultural practices. Lastly, economic factors refer to increases in food costs. The decline of the US dollar can cause this nationwide, but reduced crop yield is also a factor.⁶

If access to nutritious food were to be more widespread, the three primary factors (pricing, accessibility, and social mindsets) would have to change drastically. This may result from a push towards local food production, which could relieve some of our reliance on foreign imports and decrease food prices.⁶ In some instances, a reduction in food costs can even push people back above the poverty line.⁷ Accessibility stands to improve by less volatility of agricultural production. Oftentimes, fresh food may be available and accessible, though only during certain times of the year. This was the case with Truly Living Well, a community garden that was completely shut down during the winter. Social mindsets would benefit by moving away from the idea that delicious and affordable food can only be unhealthy. Other common mindsets are that one would only eat healthily if he or she were trying to lose weight or that not cleaning one's plate, even if the consumer is full, is rude. Even when healthy food options are available at low cost restaurants, fast food restaurants tend to promote a preference towards their least healthy items. These social conventions are harmful, and living in a nation where everyone is comfortable eating primarily healthy food and unhealthy food in moderation would be a huge step towards ending health problems related to food insecurity.

Stakeholders: Those most directly impacted by this issue are people living in low income areas with poor access to grocery stores and little to no access to automobiles. There are 2.5 million people in the United States that live under these conditions.¹ Twenty five percent of these people are above the poverty line and are therefore ineligible to participate in government-funded food assistance programs⁸, and households with children have twice the incidence of food insecurity as households without children.⁹ Those at highest risk are going to be households with children that exist near or below the poverty line. The first stakeholder is going to be the head of a household with children, living at or below the poverty line. People in this situation lack access to full service grocery stores and farmers' markets. Due to the nature of their situation, they are often faced with high stress, emotional situations trying to put food on the table. Because of this, families often try to stretch their money to get a higher quantity of food that tends to be lower quality.¹⁰ Higher calorie, more filling food ends up on the table, which also tends to be lower in nutrition, because it would enable the family to have a full meal. Another phenomenon occurring within this group is parents trying to protect their children from hunger. They will "restrict their food intake and sacrifice their own nutrition in order to protect their children from hunger," which puts them especially at risk for complications such as diabetes and obesity.¹⁰ This group of stakeholders will try to buy healthy food when they can, but it is often unavailable or of lower quality than in other areas.¹⁰ Being limited in this regard, with a whole family depending on you, can be extremely stressful, and something that could improve their lives, as well as their children's through accessibility and affordability could change everything.

7 Abruzzese, L. (2013) Global Food Security Index. Food Security Index. Retrieved from http://foodsecurityindex.eiu.com/ 8 Carollo, K. (2011). Millions of Americans Can't Always Afford Food. ABC News. Retrieved February 28, 2014, from http://abcnews.go.com/Health/food-insecurity-affects-50-million-americans/story?id=13206053 9 Facts about Hunger. (n.d.). National Coalition for the Homeless. Retrieved February 28, 2014, from http://www.nationalhomeless.org/factsheets/hunger.html 10 Why Low-Income and Food Insecure People are Vulnerable to

Overweight and Obesity. (n.d.). Food Research Action Center. Retrieved February 27, 2014, from http://frac.org/initiatives/hunger-and-obesity/why-are- low-income-and-food-insecure-people-vulnerable-to-obesity/

could improve their lives, as well as their children's through accessibility and affordability could change everything.

Another stakeholder in this issue is the founder of a nonprofit, such as a food bank. These organizations are also often under high pressure. While the parents of a food insecure family have their children depending on them, a food bank has those in need of nutritional food depending. However, often these organizations, just like the parents, choose to provide more food to more people, even if it is lower quality. This is why the prominence of canned food drives is so high and so popular. Foods like canned goods can be stored over time, and they are much easier to ship than healthy foods such as a pre-prepared meal. If something is easier to donate, then more beneficiaries are more likely to donate, resulting in larger quantities produced. One of California's regional food banks stated, every dollar we get can be turned into four meals. While this statistic is on first glance extremely impressive, it is, on second thought, a little disturbing. While this means the food bank may be able to feed a good deal more people than they would otherwise, how are they getting this food, and how high quality is it? To put this in perspective, one cheeseburger from McDonald's costs \$1.29. The fact that this food bank can serve people on 25 cents is amazing to prevent starvation, but it is just as harmful in producing other problems such as obesity and diabetes. If a food bank could provide healthy food cheaply, it would to serve its people well. However, right now it appears that quantity speaks more loudly than quality, and having both is becoming more and more difficult.

Governing officials represent a third stakeholder. As a representative of their people and their people's interests, they want to provide for them well. There are precedents for these representatives trying to take active measures to promote wellness. Both San Francisco and New York City implemented legislation concerning soda. For San Francisco it came in the form of a tax, and for NYC, it came in the form of a ban.¹¹Yet, neither of these hot topics of debate address food deserts, the legislation on which has been left out of the spotlight. Legislators in Pennsylvania, for example, began addressing the issues of food insecurity beginning about a decade ago, which entailed the Fresh Food Finance Initiative. This initiative gives incentives to grocers who begin selling in underserved communities. Dwight Evans, a Pennsylvania representative states that they used an entrepreneurial theory to attack a social problem. The state financed these grocers with \$30 million initially, and then the growth of the community began to start on its own, unprompted. This is the role and perspective that government officials tend to take. By incentivizing certain actions with the policies and funds that the government has access to, these stakeholders can really make an impact in communities. The only problem is that not all legislators are going to believe in this problem initially. The voting populations, as well as lobbyists, need to let them know that this is a problem before it can be addressed.

A final stakeholder could be someone in charge of a fast food business. Immediately, many jump to blaming these stakeholders for the wealth of health problems our country is currently facing. In fact, there is a large movement to sue fast food companies for the health care costs of obesity. However, most of these lawsuits fail even though other populations have had great success suing fast food companies. This is because the precedents here hold consumers accountable for their decisions to eat unhealthy food. "It's dangerous to confuse corporate responsibility with personal responsibility," says Marc Gunther.¹² It is in these companies' interests to promote their food as if it were healthy and to prevent people from finding healthier alternatives.

11 SF's Soda Tax Is Less Annoying than New York's Soda Ban. (n.d.). The Bold Italic. Retrieved February 28, 2014, from http://www.thebolditalic.com/articles/4374-sfs-soda-tax-is-less-annoying-than-new-yorks-soda-ban

Context and Existing Solution: Food deserts and food insecurity began evolving during the first industrial revolution, when a migration trend to the city was beginning to be set. Because the ratio of farmers to consumers began to drop, farms began to conglomerate and the average farm size began to skyrocket due to the new technology and the need to feed an actively growing population. Grocery stores soon began to follow suit, but as of yet the modern food desert had yet to appear. In the 1950's corner stores began to turn into convenience stores, which in turn started to offer new mass made prepackaged products. The first time the term "food deserts" was used was in a 1990's U.K. study to describe areas that have barriers that prevent people from having easy access to grocery stores and healthy food. Barriers may include lack of access to food retailers, availability of nutritious foods, or affordability of foods. An increasing amount of research on food deserts and food insecurity has been done since the 1990's, and findings have included links between increased rates of obesity, mental health problems, and diabetes and the inhabitants of food deserts.

While there have been a multitude of proposed and enacted solutions, little has changed on a large scale, because there has not been any large scale, permanent financial backing. There are and have been private funds that provide loans to stores that plan to offer increased access to healthy foods to low income areas. Similar federal programs have been established that offer tax breaks and different incentives to grocery stores that build stores that are in these low income areas.¹³ These solutions are met with opposition from convenience stores and grocery stores alike. Both parties claim that this offers an unfair advantage over other stores. Also, these stores tend to go out of business once these tax incentives and loans end. Community gardens are mostly considered a solution to the lack of access to healthy food, while these gardens do create a sense of community and provide food to those who tend the garden, the portion of the population who lives around the garden that does not have time to tend the garden misses out on its benefits, so a portion of the targeted demographic is left out. Mobile market trucks are also one of the more prevalent solutions.¹⁴ These mobile food trucks tend to make weekly stops in unprivileged neighborhoods and try to sell food at an affordable price and tend to accept EBT.

These solutions all run into common problems, however. Frequently, they try to implement solutions entirely on their own, as well as try to operate on a very small scale. While operating on a small scale is an effective way to test a program out, it does not provide much in terms of publicity or marketing. People affected by food insecurity often do not know or have access to programs meant to help their situation. These programs, like community gardens and mobile markets, often fall victim to the economy as well, and they are terminated before they are started. A vast majority of what is lacking is networking among these programs and substantial planning of the implementation. Marketing and partnerships will be essential to implementing an effective solution to this problem.

12 The Gunther Report. (n.d.). GreenBiz.com. Retrieved February 28, 2014,

from http://www.greenbiz.com/blog/2011/12/21/how-mcdonalds-mainstreaming-sustainability?page=0%2C0 13 Legislative Preview: Food Deserts. (n.d.). WGCU News. Retrieved February 28, 2014, from http://news.wgcu.org/post/legislative-preview-food-deserts 14 Five Innovative Solutions From "Food Desert" Activists: Food Tank. (n.d.). Food Tank RSS. Retrieved February 28, 2014, from http://foodtank.com/news/2013/05/five-innovative-solutions-from-food-desert-activists

Existing solutions for urban farming are plentiful, but each have their own implementation challenges. Local gardens often take the form of either allotment gardens or community gardens. While all participants work on the same land in a community garden, allotment gardens divide up the land into parcels for individual or family use. While community gardens often promote team building, allotment gardens often give gardeners a feeling of empowerment ¹⁵.Both give any idle group (usually children, the elderly, and the unemployed) the sense that they are being productive and useful ¹⁵. In addition, growing one's own food gives money back to the consumer to either save or spend in the market¹⁵. However, both are not without their drawbacks. Households with access to community gardens still continually report themselves as being food insecure¹⁵. While community gardens involve working with other people who often know what they are doing, allotment gardens can be intimidating for new users that have never gardened before. This barrier of entry often prevents families from jumping out of the food insecure pool by working on their own¹⁵. Community gardens can present difficulties dividing up food for the participants if they are mismanaged, which can lead to conflict ¹⁶. However, both of these styles of garden share many of the same flaws. Primarily, local gardens have limited space to work with in urban environments, so many have long waiting lists to be able to utilize them ¹⁶. Yet, these obstacles are some of the things that engineers and gardeners everywhere are looking to mitigate or even eliminate.

Proposed Work

Goal

The **scope** of this particular issue is the lack of nutritional health of urban Atlanta residents due to food insecurity. Our **goal** is to research and track the specific geographic and other factors contributing to food insecurity in Atlanta in order to better understand this issue and develop a viable solution to it. Our **rationale** for this approach is supported by our interviews with experts in this problem area as well as the barriers to prior solutions that we have encountered. While there is the general trend of poverty being linked to food insecurity, it is a multifaceted issue that is a combination of "other socioeconomic and political problems" specific to the area involved⁶. Similarly when we interviewed Dr. Steven Van Ginkel (professor in environmental engineering at Georgia Tech who has developed a zero-net energy aquaponics system), he told us that he has had issues implementing his system on a large scale due to factors such as failure to get social acceptance by the general populace despite having created the technology to solve his issue¹⁷. Along those same lines, we visited a community garden in the West End area of southwest Atlanta located adjacent to government housing. The manager of the farm told us that despite their location in reference to the farm, he rarely sold any produce to anyone in that neighborhood due to something other than just direct physical accessibility. When interviewing Dr. Carl DiSalvo (professor at Georgia Tech whose research deals with environmental sustainability and local food systems), he told us that there will not be some overarching solution to food insecurity due to its complex nature that is dependent on the specific region that it is affecting¹⁸.

15 Camille Tuason Mata. (n.d.). Retrieved from <u>http://soa.utexas.edu/crp/planningforum/downloads/pf12_barangay.pdf</u> 16 Cruz, Y. (24, June 14). *The pros and cons of a community garden*. Retrieved from <u>http://bargainbabe.com/the-pros-and-cons-of-a-community-garden/</u> 17 Van Ginkel, Steve. (2014, January 22). Personal Interview. 18 DiSalvo, Carl. (2014, January 17). Personal Interview. Due to this, refining the scope of our problem and solution areas and researching in depth over this new refined area is critical to developing an effective solution to this complex issue¹⁸. From our prior proposed solutions, we have found due to the complexity of food insecurity in urban areas presents a huge barrier in finding a solution. While we have narrowed our focus area to fixing the convenience issue in food insecurity, we are still presented with problems with our solutions. When we suggested a food truck that delivers prepared food, problems with keeping the cost low enough to be viable to our demographic arose. When we proposed an online catalog of low cost produce at local grocery stores that would tell people where to buy this produce, it was pointed out that there is not high enough percentage of internet service owners in our targeted demographic. By continuing to research and track the factors of this issue in the refined scope of small affected communities in Atlanta, we expect the **impact** to be a new analysis of this issue that will allow us and other food initiatives in Atlanta to develop a solution tailored to our region with fewer barriers and be more effective over the scope of this issue.

Objectives

Objective 1: Find a neighborhood or community that fits our targeted demographic that is close to Georgia Tech.

Research will be done on the neighborhoods around Georgia Tech to see which ones have the biggest population that fits our targeted demographic of lower working middle class. Once a neighborhood has been selected, additional research should be done to determine if the neighborhood's population is interested in our initiative, so in other words, will our initiative be supported.

Completing this objective is vital to the success of our group's project. Conducting thorough research that will lead to finding a neighborhood that fits our targeted demographic and is interested in our getting increased access to healthy food will not ensure the success of the initiative, but will increase the chances. If the proper neighborhood is targeted then more relevant data can be gathered and in the future our solution can be improved upon much more than choosing an improper neighborhood. On the other hand, if the wrong neighborhood is chosen, the chances of initial failure will increase or data that is not relevant to our project will be gathered, and our whole time table will have to be moved back.

<u>Steps</u>

Prior Data Research. Before consulting an expert on food insecurity, we will research neighborhoods by looking up typical incomes, racial population, and other relevant factors of neighborhoods close to Georgia Tech. If this information can be found, we can cross reference it with the USDA's map of food deserts to see correlations.

Expert Consultation. We will present the information we have just gathered to the expert. The research done by our group should give us a solid base of information to present to the expert or experts that we will talk with. The expert(s) than can confirm or deny our findings, and give us a recommendation based off of their extensive knowledge with the area. Neighborhoods near or that have already existing healthy food initiatives will be focused on the most.

Gauging Interest. Gauge interest in the selected neighborhood by using surveys or door to door surveying. If the interest has already been gauged by another independent group or expert, this step might be completely unnecessary.

Final Pick. Choose the neighborhood based on the past three steps.

Anticipated Problems

1. If data cannot be found that helps our group pick a neighborhood than our group will have to base the neighborhood choice based off the expert's advice.

2. Multiple experts have to be consulted if one does not have a complete and satisfactory knowledge of most of the neighborhoods around Georgia Tech.

Objective 2. Conduct field research in the neighborhood chosen

Interaction with people in the neighborhood is vital to how we form our ideas about the critical causes of food insecurity. It also an important source for reshaping our solution. From the people in this proposed neighborhood we can be directly told the most limiting factors to people not being able to access to healthy food. Establishing ties with our targeted neighborhood also helps with further steps of research.

Steps

Talk to people in the proposed neighborhood. Either by survey or door to door questioning, our group needs to talk to people and find out what their problems are with regards to accessing healthy foods.

Compare data found in the field to data found in other research. Our group will search for disparities when comparing this data. It's possible that online data represents some issues and thus misconstrues the problems behind food insecurity. Discrepancies can also highlight problems that were unforeseen.

Relate this data to a map of the area. If there are discrepancies in the field data and article data, then see if there are any patterns geographically, racially, monetarily, etc. . . Identify these patterns and research them.

Anticipated Problems

1. Patterns might not be obvious at first.

2. People in our targeted neighborhood might be reluctant share information about themselves

3. Gathering data in the field will be very time consuming

4. Sorting through the data and finding the pieces that actually are relevant to our project will be hard. There is a possibility of throwing away data that is relevant to our project because we don't see the immediate value of it.

Objective 3: Map research to topography of Atlanta and look for connections

We have to use the data we've gathered to construct a map of the neighborhood that shows the relevant data. This map will help us find patterns that we didn't recognize before, and hopefully help us take a step toward finding a solution. From this map, our group hopes to make connections that haven't been made before. We will try to find problems that reoccur in this food insecure area and then see what causes them.

Steps

Construct an accurate map of the neighborhood. Use a map that shows individual residences and will allow us to display the data in a way that can show patterns.

Put the data on the map. Connect the data gathered to the individual residences. Simply graph the data to the individual residences.

Search for the obvious and unobvious patterns. Make as many connections as possible, even if they don't seem relevant. Sort through the connections and see if there tends to be a pattern in the connections themselves.

Anticipated Problems

1. We might have to construct our own map of the neighborhood which might be difficult with the resources we possess.

2. If people aren't willing to relinquish data about themselves then patterns will be more camouflaged and much harder to isolate.

Objective 4: Target critical connections and try find solutions to these weak points

After mapping the areas around Atlanta to determine where the food insecure areas are, where stores are, and where local gardens are, the next logical step is to determine the significance of these maps. From mapping, we hope to find an area in which there is a distinct pattern in the way things are spatially distributed, the way the community is organized, and how accessible the community is to us. This is important in allowing us to take a step back and find where we think the problem of food insecurity is most approachable and logical. In doing so, it allows us to be able to work more efficiently in our chosen area.

Furthermore, having this information available provides an easier way to take a step back and analyze patterns when we run into barriers. This is a very important aspect for the team, as the number of barriers that we have run into is significant.

Steps

Organize data of local food distributors and producers. The first step in understanding connections between our target audiences is organizing all of the data in ways that make it easier to look for patterns. This may involve looking at what is sold at these places, where these places are located, who owns these places, or what the average prices are at these places.

Analyze the average consumer in the target community. The actions and behavior of those living in our chosen community are just as important as the characteristics of the providers in the community. Since the problem area is very complex, it is necessary to look at all possible complications with and reasons for food insecurity.

Anticipated Problems

- 1. There may not be an obvious pattern. This will slow down the progress of the group.
- 2. There may be data that we have not mapped.

Objective 5: Isolating specific key factors of food insecurity in the chosen Atlanta community with regards to solution implementation.

Once all of the data has been analyzed, the factors that we find are the most important regarding causes of food insecurity will be prioritized for a solution. Isolating these specific factors is important in allowing us to progress through the "W" model once again in so that we may find a more applicable and innovative solution to the problem of food insecurity. Once we have done this, isolating a solution that can be implemented will be significantly easier.

Steps

Determine what identified focal point of food insecurity that the team would like to *tackle*. This may be social, economic, behavioral, or a combination. It is important, however, to narrow our scope to one area, rather than trying to fix everything about the problem with one solution.

Brainstorm ideas for solution and present them to experts for consultation. We need to come up with multiple ideas that would be considered viable so we have a basis for our final solution.

Implement solution. Implement the solution that has been finalized keeping in mind that the initial solution might not work. We need to keep in contact with our test subjects and constantly revisit and ask for ways to better our solution

Anticipated Problems:

1. The areas of the problem may be so intertwined that tackling one aspect would not be possible.

2. Implementing a solution that might partially or wholly depend on feedback is risky because we are dependent on these people for feedback

Research Team

Public Relations/ Communications – This person will continually keep in touch with the group's partners and will communicate any emails, phone calls, or any other form of communication that is directed towards the group to the group in the meetings. This person is also in charge of scheduling meetings potential partners and various different events. This person will also be in charge of any advertising of the group's project, and in general informing people about our initiative.

Long Term Researcher/Data Analyst – This person will be charged with the responsibility of continually researching and reading about new findings concerning improving access to healthy food. This person will then be in charge of relaying all this information to the group. This person will also be in charge of analyzing both quantitative and qualitative data that comes from our project, and using that data to improve our project in any way possible.

Partner and Expert Relations – This person this will be in charge of all interaction between the group and its partners and the expert advisors. Meetings with partners and expert advisors will be set up by this group member. Any information that is given to this person by either a partner or an expert advisor should be passed along to the group by this person.

Overall Team Leader – This person will make sure people are fulfilling the roles they have been assigned to. They should be well aware of what each group member's task is. This person is also in charge of organizing meetings between everybody and getting them on the same page, and setting deadlines for each group member to achieve their goals. This person's focus should be on the big picture.

Timeline

	<u>Summer 2014</u>	Fall 2014	Spring 2015	<u>Summer 2015</u>
Objective 1				
	Х			
Objective 2				
	Х	Х		
Objective 3				
	Х	Х	Х	
Objective 4				
			Х	
Objective 5				
			Х	Х

Budget

Materials and Supplies

Survey and Flyers Materials \$200.00

Equipment

Data Mapping Program \$50.00

Services

N/A at this Time

Travel

Estimated Total		\$550.00
Gas for Surveying Trips	\$150.00	\$0.50/mile Federal Rate
Gas for Site Visit Trips	\$150.00	\$0.50/mile Federal Rate

Expected Outcomes and Future Directions

At the end of this phase of our project, we would like to be able to track and isolate factors of food insecurity specifically affecting Atlanta communities. We believe that this will allow us to better tailor a solution to target the causes of this regional issue instead of blindly attempting to treat the symptoms.

Future directions for this project are really unknown at this point. The data that we gather and map can be used by not only us for aiding in this solution, but can also be provided to many different entities. Any information or insight that we obtain could be provided to larger organizations such as Atlanta Local Food Initiative and The Westside Community Alliance in order to shape their current efforts to be more effective at targeting this issue. Similarly, trends could be analyzed and presented to law and policy makers that may shift the way federal aid or other governmental social programs respond to this issue. By studying the factors, we may discover new means to tackle this beast and by providing to others who may have more resources, we can jointly work to make this an issue of the past for Atlanta.

It is critical for us to remember at this moment where we are in our project. We have observed how other projects fail in this problem space due to poor or insufficient planning and so while this direction may seem not as "physically involved" in the space yet, it is a necessary direction in order to not oversimplify the problem and waste more resources on something that is not innovative or will fail. Also, this sort of data collecting and mapping specifically for the region of Atlanta is something new that we can bring to the table as far as we know and will be invaluable in the updating and continuation of our project.