

Service Learning Experience

By: Justin Hartman

Through-out my academic career I've had to volunteer my time in order to complete an hour requirement for some sort of purpose of benefiting society. Whether it was volunteering serving food for the American Legion, School Events, or parades, I've helped the community before. However, this time it felt different, and as I prepared to write this paper I pondered why. I believe this was because of what Service Learning means and how I had to work towards the goal of accomplishing it. Service Learning is, I will paraphrase from the National Clearinghouse of Service Learning, a learning strategy that integrates meaningful community service with reflection to enrich the learning experience. What I gathered when we were discussing this topic in class, was that I had to find a way to apply my major into volunteering for another organization. I originally contacted the Humane Society of Tampa Bay to see if I could help them with anything however, they replied back to let me know that they didn't need my assistance. So I searched the internet for opportunities that would give me the chance to make an impact, stand out, and let me use what I know from my courses. Eventually, I got into contact from a brilliant young lady by the name of Whitney Fung who worked for Feeding Tampa Bay.

To start off, after my initial emails explaining the premise of the project and my skills I could offer to non-profit organization, it was time to meet in person. We decided to meet in mutual place over at the CPH building on campus since she was in the area. In our meeting she handed me a pamphlet that discussed the main goals of Feeding Tampa Bay. Before I go over these goals, I should try to describe what Feeding Tampa does. Their organization essentially

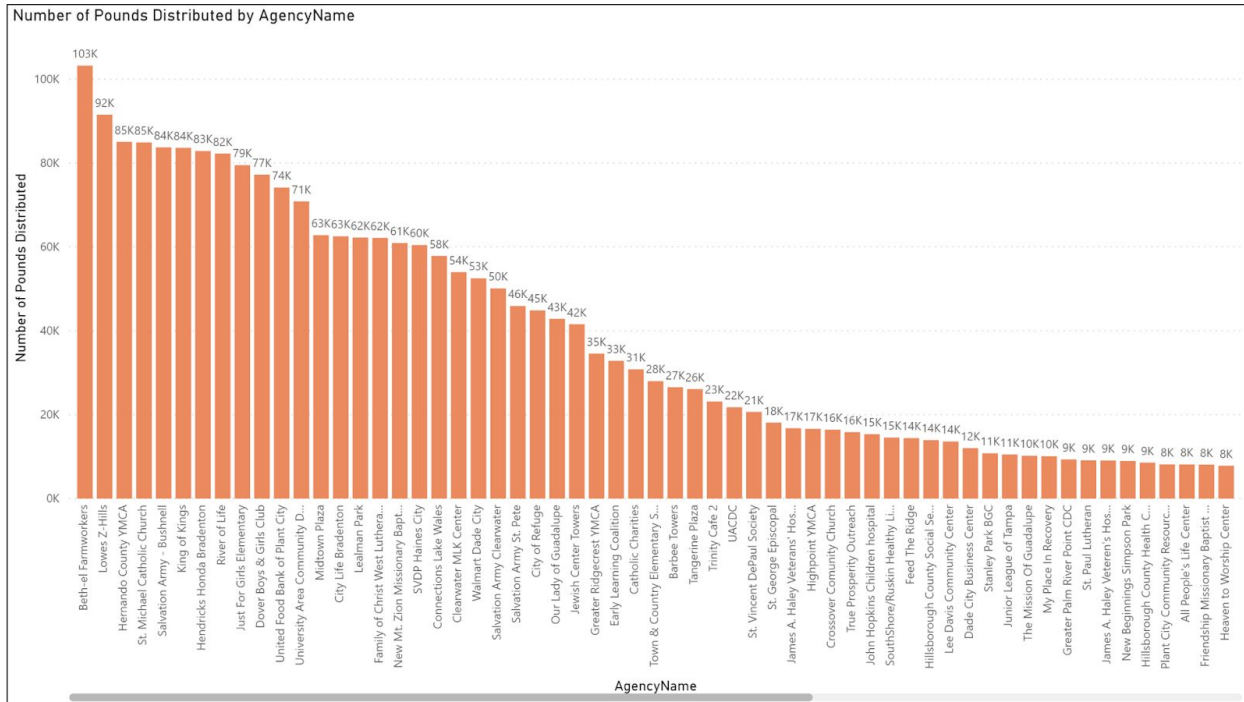
collects donated food and sometimes buys food to help feed families in need around 10 counties and support 500 agencies . Their mission is to make sure that no one goes hungry in Tampa Bay area and to provide 115 million meals per year by 2025, with around 80% of the packaged content containing foods that support a healthy lifestyle. Their impact can be felt all over Tampa and the surrounding area with around \$143 million gathered annually. This is accomplished by taking 98 cents of every dollar donated and plugging this number back into their programs, this translates \$1 into 10 meals. Lastly, a fact that I found truly inspiring was that Feeding Tampa Bay is the largest Recycler in the Tampa Bay area, securing millions of pounds that would have ended up in landfills. Now that you know who Feeding Tampa Bay is and what they do, the four ideas that they strive to complete for their goal of a hunger free Tampa Bay is Evolve, Energize Engage, and Empower. Whitney explained these ideas in depth about how they wish to evolve with new solutions to problems, energize the community with healthy food, engage the community for support, and empower people to have future prosperity. She then gave me a four page report that was a collection of vibrant dashboards of different analyses that she had run. Then she proceeded to break down what each visualization meant and how the data was gathered. After about an hour of explaining the visualizations of how the food was brought in, who the food was donated to, and the economic impact of their organization, it was my turn to decide what exactly I would do. I was prompted to look at the Mobile Pantry data which she had been curious about herself and I decided I would target this area of their operations. The Mobile Pantry according to their website is a collection of donated food that is dropped off at a location that can be picked up by those in need. After we decided this was the area I would target, she sent me the data in a CSV and we said our goodbyes.

From here, it was up to me to come up with a project that would give a meaningful insight. I looked over the CSV and concluded that I needed to use a visualization software and I opted to use Microsoft PowerBI, which is similar to the Tableau tool we use for a Data Science Certification assignment in class. Some of the columns of data were Number of Pounds Distributed, Agency, Address, and Volunteers, just so you have an idea on what I was looking at. The data on the spreadsheet was not necessarily “clean”, meaning that I had to fill in a few missing addresses as well as fix a couple of county locations that were filled out incorrectly. The first graph I decided to create was a simple Bar Graph that displayed the Number of Pounds Distributed by Agency name. This graph was interesting because it showed which agency was getting the most pounds and by how much. The leading agency with 103,000 pounds distributed to them was the Beth-El FarmWorkers organization, and overall 22 organizations all over 50K pounds distributed to them. Considering this data is logged from July 2018 to September 2019, that is astonishing to see their impact. The next step was to come up with a visualization that utilized maps since that is powerful to the audience. This is where I started to run into issues with the dataset and how PowerBI would interpret what I selected. Using the columns of Address, and City I wanted to display the data of the Florida area however, PowerBi kept trying to display values from all over the country and even world at one point when County was selected. I knew there had to be a way to fix this issue and after hours of research I found a way to fix this issue. I decided that I needed to create a column of State and Country to have on the dataset. I would then have to create a new column in PowerBi and write a query that combined Address, City, and State into one column that can be selected and used for a visualization. This fix allowed me to only focus on the state of Florida so now I was cooking with grease. For page 2 of my

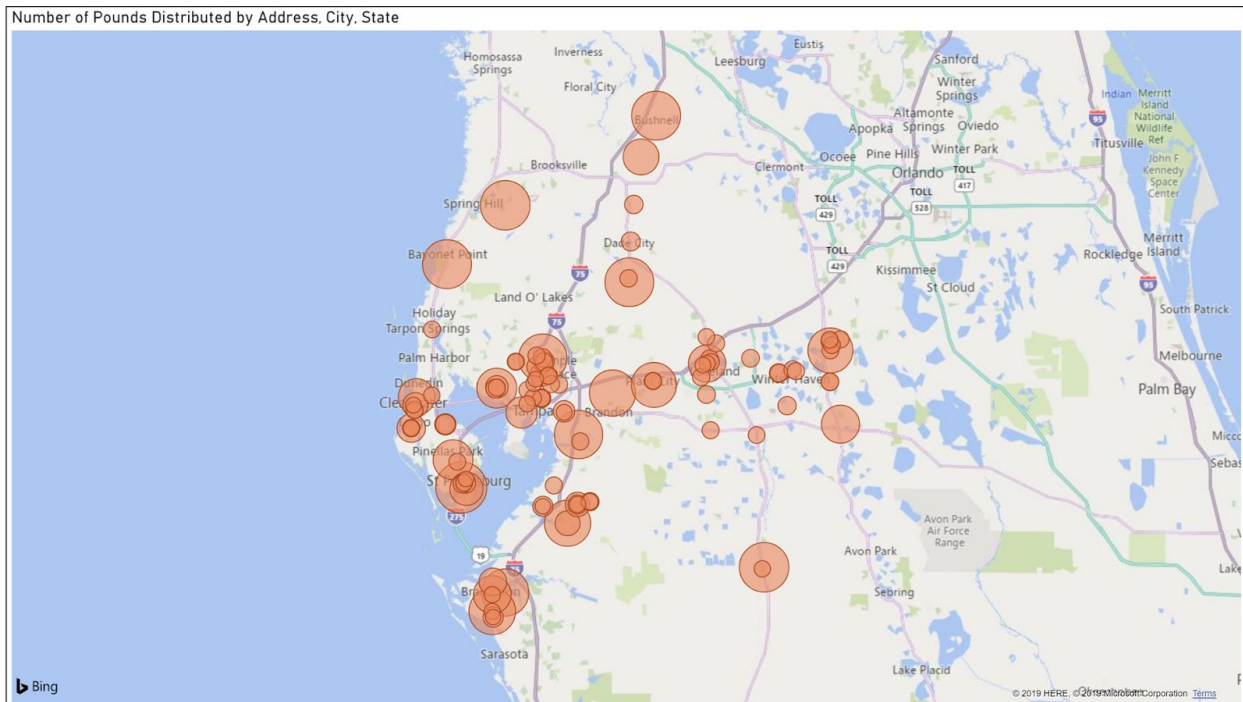
visualizations I used the newly created column Address City State, and selected Number of Pounds Distributed again to display the locations that were getting the most food on a map. The size of bubbles also correlates to how much pounds were distributed. Next, I used the same column Address City State but this time I selected Households, which is the number of households fed with the food that was distributed by the Mobile Market Pantry. From the map visualizations, it became apparent that Hillsborough, Manatee, Pinellas, and Polk counties were the main receivers of donated food. Furthermore, I knew that I wasn't done because I wanted to show another interesting insight that was not from the dataset that Whitney sent me. I once again hopped on the internet to try to find a CSV of the poverty levels in the State of Florida, however this proved to be quite difficult because either the data was from 2013 or it did not display what I needed. Finally, on FactFinder.gov I was able to find what I needed to create an interesting visualization again. I then imported that dataset into PowerBi, selected the State County column and filtered to the 10 counties that I needed to see while also selecting the Percent of Poverty from 2017. The insights that can be gained from visualizations and the dashboard that I created is one can see how many pounds of food have been distributed in an area, to how many households in an area, and look at the poverty levels to see if the organization is hitting the county that needs the most help. The next step was something that I was unable to accomplish and that was to overlay the maps so a user did not have use multiple visualizations to view the poverty levels and pounds distributed or households fed. But this proved to be very challenging, if not impossible, and I would have had to create a relationship between the two datasets and this would have been complicated to do. I decided to cut my losses, create a powerpoint and send my findings over to Whitney who was very impressed with what I was able to accomplish.

Overall, this was the most entertained I had been volunteering since back at my days working for the American Legion. I found this exciting because I got apply my skills that I learned to make an impact for another organization and I personally love solving problems with technology when I run into them because it feels great to solve them. I guess what surprised me about the volunteering was how easy it was to get involved. At first, I was really worried that I would be unable to find a place to use my major and volunteer simultaneously, but only after one rejection I was able to find a place that needed my help. Also what was surprising was the eagerness of Whitney and the Feeding Tampa Bay organizations to put me to work and have me help, so in the future I may collaborate with them again so more beneficial insights can be gained. This opportunity really opened my eyes to the number of people in the area that need help and who may not know where their next meal is coming from if it wasn't for Feeding Tampa Bay. Looking back on the first meeting I had with Whitney, it was incredible to see the number of analytics and data they were collecting on their operations and even more astonishing to think about the impact they are having by analyzing this data to make better business decisions. I'm very lucky that I got the chance to serve an organization that is changing the Tampa Bay area and helping those who really need it. Below on the next few pages are the results of the work I did, please look over them whenever you get a chance to better understand what I was describing in the paper.

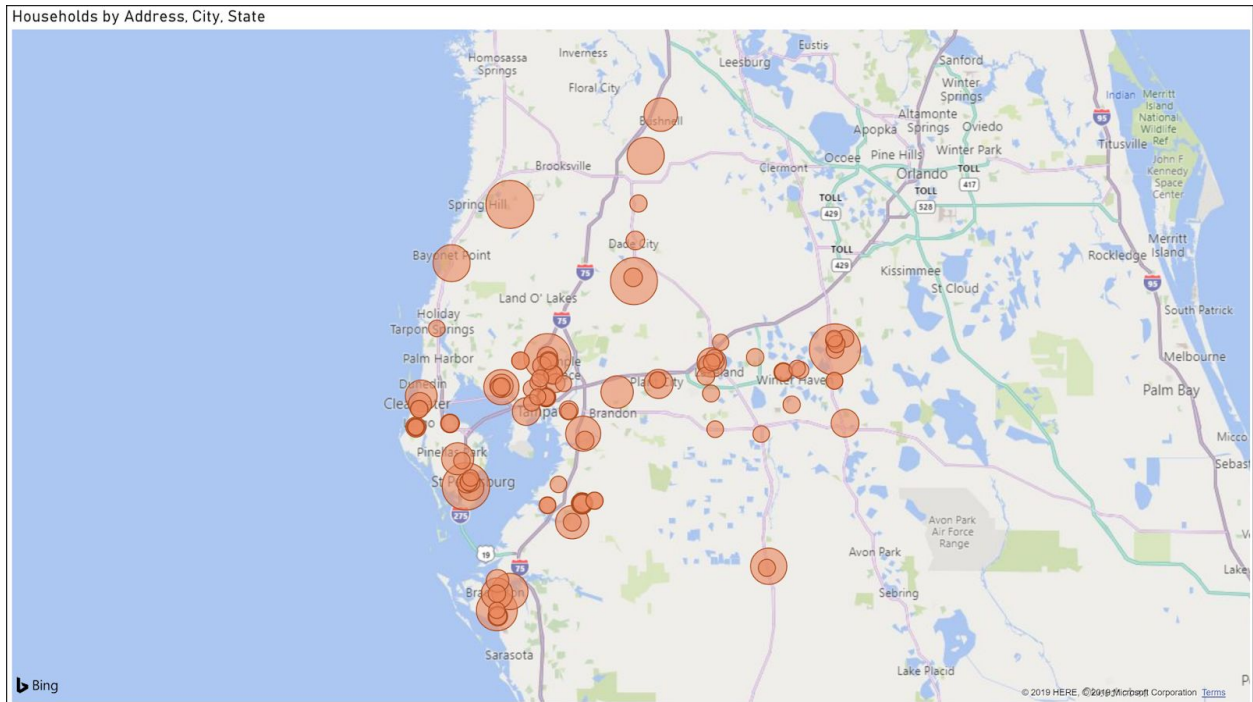
Bar Graph (Sheet 1)



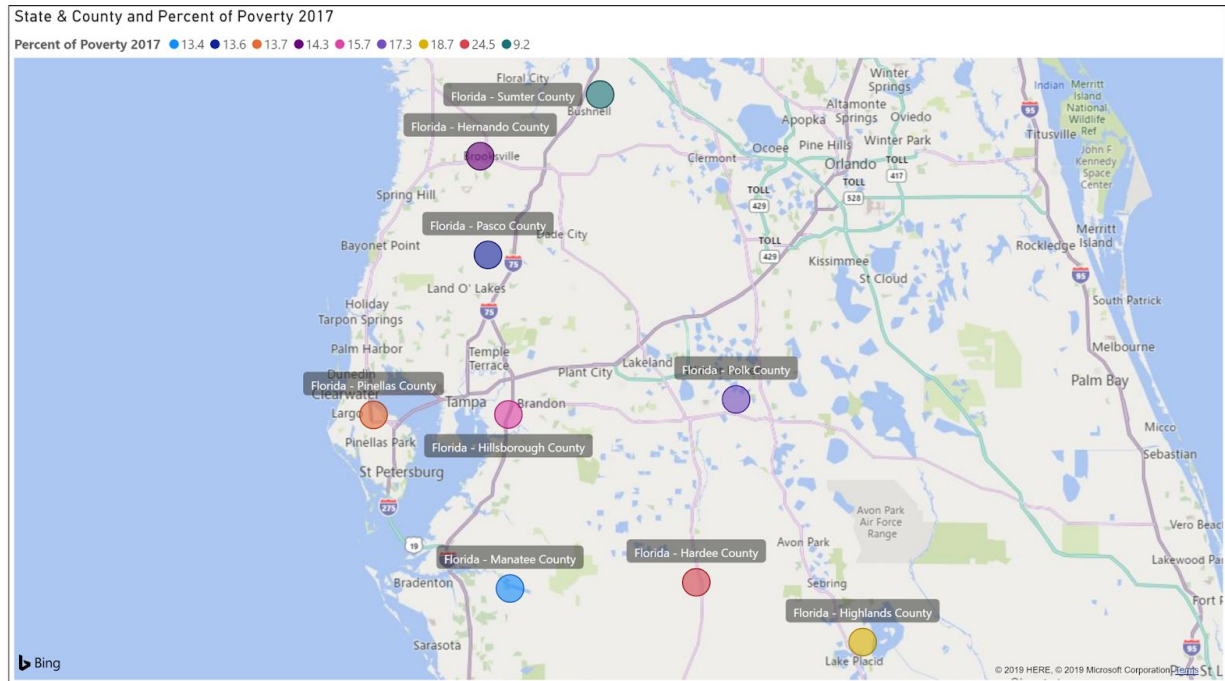
Number of Pounds Distributed by Address City State (Sheet 2)



Household served by Address City State (Sheet 3)



County & Poverty Levels



CSV used

PantryDate	AgencyName	Time	Address	City	Zip	County	FTB Staff or Drop	Number of Pounds from Facility	Number of Pounds returned to Facility	Number of Pounds Distributed	Households	Individuals in Household	Children	Volunteers
8/28/2018	St. Vincent DePaul Society		1001 S. 10th St.	Haines City	33844	Polk		6351	0	6351	313	1184	472	0
8/27/2018	St. Michael Catholic Church		408 Heard Bridge Rd.	Wauchula	33873	Hardee		10,655	2152	8503	149	540	250	0
8/24/2018	Hendricks Honda Bradenton		5515 14th St. W.	Bradenton	34207	Manatee		6690	220	6470	215	610	396	0
8/23/2018	Lowes Z-Hills		7291 Gail Blvd.	Zephyrhills	33541	Pasco		6213	0	6213	293	986	309	0
8/22/2018	Dover Boys & Girls Club		2820 Gallagher Rd.	Dover	33852	Hillsborough		7355	0	7355	149	647	311	0
8/22/2018	Town N' Country Commons		7606 Paula Dr.	Tampa	33615	Hillsborough		5562	1429	4133	155	476	145	0
8/21/2018	United Food Bank of Plant City		702 E. Alsobrook St.	Plant City	33563	Hillsborough		5940	0	5940	146	480	No Data	0
8/21/2018	Lealman Park Stanley Park BGC		3875 54th Ave. N.	St. Petersburg	33714	Pinellas		7866	0	7866	212	525	235	0
8/16/2018			38724 Mudcat Grant Blvd.	Lacoochee	33537	Pasco		6153	3261	2892	59	205	79	0
8/15/2018	UACDC		14013 N. 22nd St.	Tampa	33613	Hillsborough		6700	0	6700	295	1007	366	0
8/14/2018	Tangerine Plaza		1794 22nd St. S.	St. Petersburg	33712	Pinellas		11928	0	11928	381	1068	652	0
8/11/2018	Just For Girls Elementary		1011 21st E.	Bradenton		Manatee		7843	0	7843	179	728	389	0
8/10/2018	Salvation Army - Bushnell		870 North Main St.	Bushnell	33513	Sumter		7270	0	7270	130	374	115	0
8/9/2018	King of Kings		10337 US-19	Port Richey	34668	Pasco		5354	0	5354	188	249	158	0
8/8/2018	River of Life		6605 Krycul Ave.	Riverview	33568	Hillsborough		5053	0	5053	155	572	198	0
8/7/2018	Clearwater MLK Center		1201 Douglas Ave.	Clearwater	33760	Pinellas		6898	0	6898	192	605	201	0
8/4/2018	SouthShore Community Resource Center		201 14th Ave. SE	Ruskin		Hillsborough		6243	2278	3965	92	380	166	0
8/4/2018	Swiss Center		300 E. Sligh Ave.	Tampa	33604	Hillsborough		5528	650	4878	182	692	336	0
8/4/2018	New Beginnings Simpson Park		2122 Martin Luther King Jr. Ave.	Lakeland	33805	Polk		13026	4058	8968	166	765	470	0
8/3/2018	Bethel Farmworkers		18240 US Hwy 301 S.	Wimauma	33598	Hillsborough		6608	0	6608	272	1553	620	0
2-Aug	Hernando County YMCA		1300 Mariner Blvd.	Spring Hill	34609	Hernando		6206	0	6206	261	827	273	0
8/1/2018	Town & Country Elementary School		6039 Hanley Rd.	Tampa	33634	Hillsborough		6116	0	6116		1070	399	0

HOURS

HOURS For Service Learning Project

- 1 hour: Searched and Contacted organizations.
- 30 Minutes: Emails (This amount is summed)
- 1 hour and 1/2 : Meeting with Whitney
- 1 hour: Cleaning the data
- 10 hours: Creating the visualizations and working to solve problems
- 1 hour: Fine tuning project

Screenshot

Letter of Service



Feeding Tampa Bay
4702 Transport Drive, Building #6
Tampa, FL 33605

November 20, 2019

Dear Dr. Rick Kelso:

On behalf of Feeding Tampa Bay, I want to thank you for encouraging your students to complete service projects in the Tampa Bay community. It is wonderful to see university professors and students engaged in service-learning, and we would be happy to work with any future students that may interested in learning at Feeding Tampa Bay.

I had the pleasure of working with Mr. Justin Hartman. Though it was only for a short time, Mr. Hartman was a quick learner and open to suggestions and feedback. Mr. Hartman seems familiar with a variety of business analytics tools and was able to apply course concepts using Power BI to develop a useful map of Feeding Tampa Bay's Mobile Pantry distributions in fiscal year 2018-2019. He also added components that would inform this program by providing poverty rates by county and the organizations that distributed the most mobile pantries by pounds of food. I was satisfied with Mr. Hartman's performance and enjoyed being able to brainstorm ways in which we can use data to improve our programs.

Again, thank you for your interest in Feeding Tampa Bay. Please feel free to contact me with any questions at wfung@feedingtampabay.org.

Sincerely,

Whitney Fung Uy, M.S.
Data Insights Manager