Memorandum
To: Professor Beth Noveck
From: Annabelle Eliashiv
RE: Homeless Helper
Date: May 15, 2013

The purpose of this mobile application is to create a vehicle by which neighbors can help their less fortunate neighbors. Homeless Helpers not only organizes a casual way for people to help other people, it also collects useful information to develop policies and informs local shelters of high-risk areas where their services could be put to use.

Scope of Homelessness in New York City

The Coalition for the Homeless reports that every night, more than 55,000 people in New York City experience homelessness. Even more disturbing is the fact that 21,000 of those people are children. Creating mechanisms to address the needs of homeless people is more pressing than ever as the number of people experiencing homelessness has risen by more than fifty percent over the last decade.[1] Although it is important to invest resources and research into understanding the source of this escalation in homelessness and create policies to prevent people from experiencing homelessness, effective tools must also be designed to provide immediate assistance to those currently experiencing homelessness.

How does it work?

Through the Homeless Helper application, users can identify the location of homeless people they see around New York City. In a manner similar to the iPhone's drop-a-pin function that captures a user's location, users would tap a button on their cellphones or other GPS equipped devices whenever they notice a homeless person.   This information will be used in a number of ways.

First, it allows people to help other people by creating a map that pinpoints locations for people to leave their unwanted leftovers or clothes for a homeless person. Second, it helps the city collect information about the state of homelessness. And lastly, it assists homeless shelters and other service providers locate and reach people in need of their help.

In order for the mobile application to have its desired effect, the public must be cognizant of their surroundings and willing to stop for a couple moments to allow the system to identify the user's location. Although there is no direct incentive integrated in the mobile application, users may feel empowered by their contribution to the public. This is a particularly powerful incentive in a metropolitan setting like New York City where people rely heavily on walking and public transportation and are constantly reminded of the plight of others, such as those who are homeless.

Taking into consideration the transitory nature of homeless people, Homeless Helper will aggregate the publicly provided information. The aggregated information will then be inputted into a map that calculates the likelihood of there being a homeless person in the

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[1] Coalition for the Homeless http://www.coalitionforthehomeless.org/pages/basic-facts

vicinity. Having this information will be useful to people who have food or clothing they want to leave for a homeless person. For example, if a woman has half a sandwich left over from lunch that she knows she will not eat later, she can log onto Homeless Helper to find the nearest location with a high likelihood of homelessness and leave her sandwich there for a homeless person. Additionally, if a father wants to teach his son a lesson about giving back to others, he can buy an extra slice of pizza and log on to Homeless Helper to see where there is a high likelihood that there will be someone to give it to.

In addition, the aggregated information will be sent to nearby homeless shelters and the New York City Department of Homeless Services. This information will help homeless shelters increase their outreach in areas with high reports of homelessness.   For example, a local shelter with available beds can send a representative out to a location with high reports of homelessness, such as a nearby park, to inform people of the services available to them.

Furthermore, the NYC Department of Homeless Services can use this information to better understand the scope of homelessness in New York City, direct funding towards homeless services and develop policies that lower the incidence of homelessness in New York City. If, for example, the NYC Department of Homeless Services received an influx of reports of homelessness in a particular neighborhood, they can increase their preventative services in that neighborhood. Alternatively, the NYC Department of Homeless Services can take a deeper look at the driving factors of homelessness in that neighborhood and address those concerns.

Costs and Partnerships
Because the mobile application predominantly functions as a mechanism by which the government can crowdsource information on the incidence and hubs of homelessness in New York City, the only direct cost is a mobile application developer fee, which can range anywhere between $8,000 and $50,000.[2]   The mobile application will be designed such that it can aggregate the data on its own to output areas with high risks of homelessness. This information can be accessed by private users who may be inclined to donate food or clothing to homeless people along with public and non-profit organizations invested in homeless services.

Additional administrative burdens related to analyzing data or increasing outreach, will be absorbed by the NYC Department of Homeless Services and local homeless shelters. These partnerships are integral factors in Homeless Helper's two larger scale goals. The goals include ensuring that people experiencing homelessness are getting the services available to them and helping the government better understand the scope of homelessness so that it can create and implement policies to reduce homelessness in New York City.

The anticipated additional burden will be minimal for the NYC Department of Homeless Services because it already has the administrative power to process this information.

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[2] Thomas, Carter. *How Much Does It Cost To Develop an App.* http://www.bluecloudsolutions.com/blog/cost-develop-app/

Additionally, the information gathered from Homeless Helper will further the NYC Department of Homeless Service's current mission of, "[preventing] homelessness when possible and [providing] short-term, emergency shelter for individuals and families who have no other housing options available." [3]

Currently, New York City's main source of government information and intake processing office, 311, fields calls from people reporting incidences of homelessness.[4] Aside from providing a platform for the public to report the location of homeless people who might benefit from New York City outreach services, 311 is also an important resource homeless people can use. 311 offers information about local homeless shelters, screens complaints about the state of shelters in New York City and helps individuals communicate with someone who is in a homeless shelter.[5] Combining the data received by 311 and that collected through Homeless Helper will provide government officials with a helpful and comprehensive dataset of incidences of homelessness in New York City. In addition, the combined information can better identify areas with high risks of homelessness.

Establishing partnerships with local restaurants, bakeries and cafes looking to donate their leftovers would expand Homeless Helper's scope beyond the neighbor-to-neighbor interaction the mobile application encourages. Instead of throwing out uneaten food at the end of the day, restaurants can log on to Homeless Helper and see where there is a high risk of homelessness nearby.

Measuring Success
Success will be measured on a number of levels. One indicator of success will be the amount of data collected. The more data collected through Homeless Helper, the more robust the information about the incidence of homelessness in New York City will be.

Another marker of success will be a lower incidence of people experiencing homelessness in New York City. This relates to Homeless Helper's long-term goals of increasing outreach about homeless shelters and services and providing the New York City government with the tools it needs to develop policies that prevent homelessness. Though success will be harder to discern from this measure, it is important to consider both the mobile application's short-term and long-term goals.

Media Outreach
A critical element to ensuring Homeless Helper has its desired impact is developing effective outreach to the community. This can be done in a number of ways. For one, traditional news sources, such as the *New York Times* and the *New Yorker* can publish informational pieces on the public's role in helping combat homelessness through Homeless Helper. If Homeless Helper expands to other cities, it is important to keep the local news publications informed.

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[3] New York City Department of Homeless Services http://www.nyc.gov/html/dhs/html/home/home.shtml
[4] New York City Government 311 Online http://www.nyc.gov/apps/311/about.htm
[5] New York City Government 311 Online...

Social media outlets, such as Twitter and Facebook, are another integral part of keeping the public informed through daily updates and reminders to use the application. Since the application relies heavily on public use, it is important to keep Homeless Helpers on the public's radar. Additionally, integrating a social media campaign might streamline the application download process. Because people tend to look at Twitter and Facebook on their phones, they can easily be pushed to download the mobile application or reminded to input data through Tweets and Facebook posts. Listed below are a suggested publication headline and a formatted Tweet:

- *New York Times* headline: Thumbs Fight Homelessness in New York City

- *Tweet*: @homelesshelper feeds and shelters homeless with a tap! Help end homelessness in NYC by downloading the app today!

Potential Obstacles and Further Considerations

There are a number of obstacles and considerations to bear in mind. For one, the underlying characteristic of homeless people is that they do not have an established residence and are likely to change in location over time. Homeless Helper would have to develop a system by which it could triangulate the veracity of a problem in a certain area. One way to address this issue is to classify the likelihood of there being a homeless person at that location based off the number of reports received. This could be further improved by incorporating the information 311 collects, as well.

Additionally, developing a mechanism by which people can more easily donate food or clothing to homeless people might keep more homeless people on the street rather than encourage them to go to a homeless shelter. Hopefully, the integration of homeless shelter outreach and the NYC Department of Homeless Services will help mitigate this concern and ensure homeless people know about the resources available in New York City even sooner than before.

This mobile application is particularly relevant given the state of homelessness in New York City. An article in the *Wall Street Journal* reported that in the past year homelessness has become increasingly present among families, with the rates of children experiencing homelessness up by 22 percent (see Figure 1). This is in line with observed homeless trends in New York City over the past ten years, leading Mary Brosnahan, president of the Coalition for the Homeless to exclaim that, "New York is facing a homeless crisis worse than any time since the Great Depression."[6] Perhaps this unprecedented peak in homelessness in children calls for an additional partnership with the NYC Department of Education to help track homelessness among children and ensure they have the resources to get the education entitled to them.
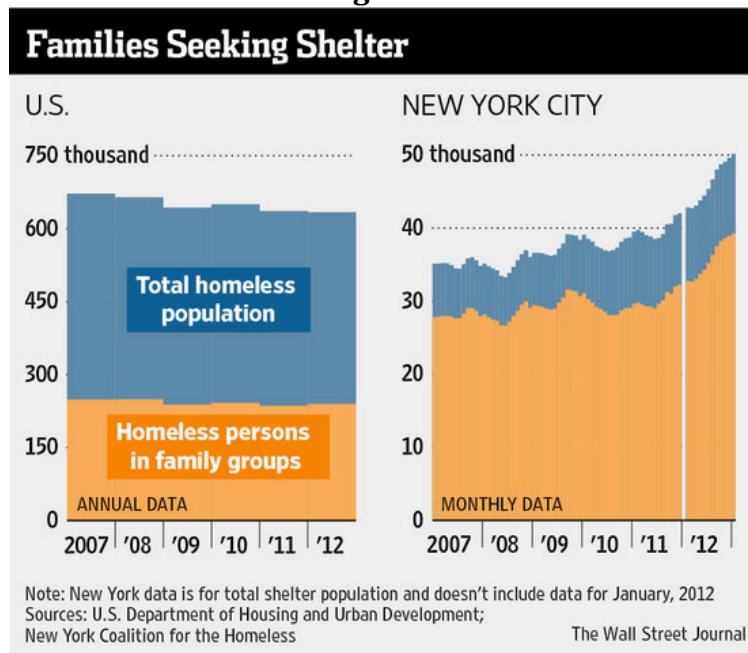
In addition to the increased rates of homelessness among children and families, people are also staying in homeless shelter for longer periods of time, adding yet another complexity

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[6] Saul, Michael Howard. *New York City Leads Jump in* Homeless. March 4, 2013.
http://online.wsj.com/article/SB10001424127887324539404578340731809639210.html

to the issue at hand. This added element pushes for policies to be developed and implemented that prevent people, and in particular families, from experiencing homelessness in the first place.

Figure 1

Families Seeking Shelter

U.S. — Total homeless population; Homeless persons in family groups; ANNUAL DATA; 750 thousand, 600, 450, 300, 150, 0; 2007 '08 '09 '10 '11 '12

NEW YORK CITY — MONTHLY DATA; 50 thousand, 40, 30, 20, 10, 0; 2007 '08 '09 '10 '11 '12

Note: New York data is for total shelter population and doesn't include data for January, 2012
Sources: U.S. Department of Housing and Urban Development;
New York Coalition for the Homeless   The Wall Street Journal

Lastly, it is important to consider how crowdsourced and open data could be used to combat homelessness in New York City. Although the NYC Department of Homeless Services data already collects information on homeless shelter inhabitants that it posts daily through New York City Open Data, perhaps the additional information about location will help city officials develop more localized approaches.[7]

Technological Initiatives Related to Homelessness
There are a limited number of mobile applications currently available to assist homeless people. The available mobile applications include features that help homeless people locate nearby shelters or clinics. One mobile application, *Homeless Solidarity*, had a similar platform to Homeless Helper. Through *Homeless Solidarity* people can input the location of a homeless person to, "let authorities know where homeless are and what are their current conditions." [8] This mobile application does not encourage users to personally leave food or supplies for homeless people. However, it does integrate a space where people can donate to a charity that supports homeless people.

In 2012, the Department of Veteran Affairs in conjunction with homeless activist and philanthropist Jon Bon Jovi announced a mobile application challenge called Project Real-time Electronic Access for Caregivers and the Homeless (REACH). This competition calls on

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[7] New York City Open Data https://data.cityofnewyork.us/Social-Services/Daily-Report-of-Homeless-Shelter-Census/x32n-k96w
[8] Homeless Solidarity http://download.cnet.com/Homeless-Solidarity/3000-12941_4-75845058.html

innovators to create mobile applications that provide information about services available to homeless veterans.[9] The Department of Veteran Affairs articulated that long-term goal of the project is to create a platform that will be easy to implement in any city in the United States and that even though its original focus is on homeless veterans, it will ultimately be accessible to all people experiencing homelessness.

Submissions will be judged on the following four criteria: completeness, user experience, scalability and sustainability. Pictured below are examples of the interfaces developed for three submissions (Figure 2). According to the Veterans Affairs Innovations Team, the five finalists selected on December 31, 2012 will be announced to the public June 5, 2013.

Figure 2
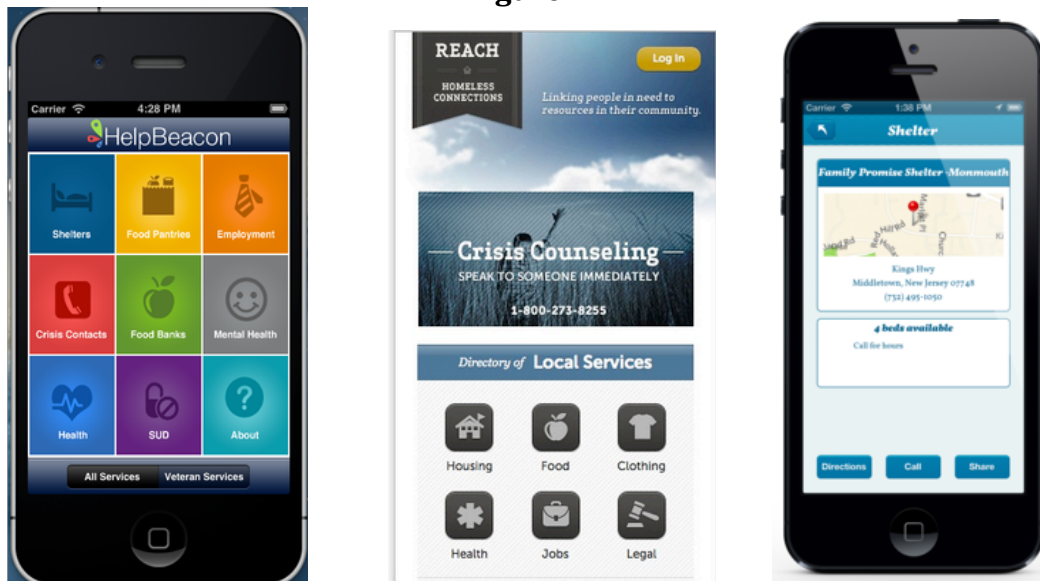
Closing Remarks

Homeless Helper is an innovative way to collaborate technology, crowdsourced information and neighbor-to-neighbor altruism. Although the mobile application does not provide a direct service, it plays a role in connecting people experiencing homelessness to the benevolence of strangers and the services available to them while supporting the development of policies to end homelessness.

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[9] Project REACH Mobile App Challenge http://reachthehomeless.challenge.gov/rules