StayNeighbor: Community Platform for Essential Supplies and Services During the COVID-19 Pandemic

Samuel Archbold

Follow this and additional works at: https://scholarworks.gsu.edu/iph_capstone

Recommended Citation
doi: https://doi.org/10.57709/17627769

This Capstone Project is brought to you for free and open access by the School of Public Health at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Public Health Capstone Projects by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.
ABSTRACT

StayNeighbor: Community Platform for Essential Supplies and Services During the COVID-19 Pandemic
By
Samuel B Archbold
April 2020

Coronavirus Disease 2019 (Covid-19) is a novel coronavirus that first emerged in December of 2019 in Wuhan, China. Since its emergence it has rapidly spread across the world and has left nations struggling to develop containment and prevention strategies. A chief strategy in fighting this pandemic has been the implementation of shelter in place orders aimed at lowering the incidence of COVID-19 to reduce strain on medical infrastructure. As COVID-19 continues to spread, people with non-severe cases will be quarantined in their homes, high risk individuals must practice extreme social distancing and isolation measure, and many will be out of work. People will inevitably run out of food and supplies and may find themselves without the means or resources to acquire what they need. In order to identify these needs and connect them to resources, StayNeighbor was created in conjunction with Crisis Cleanup to provide a logistical support tool for organizations and individuals so that they may divert resources where they are needed most. This is accomplished through a fully functional browser-based web app that allows anyone to request goods and services. This creates a centralized location of aggregated needs that is accessible to community organizations and agencies with the capacity to fulfill those needs, as well as coordinate the delivery of the required goods/services. StayNeighbor is an entirely volunteer made, open source tool that is available to any organization, agency and/or individual.
STAYNEIGHBOR: A COMMUNITY PLATFORM FOR ESSENTIAL SUPPLIES—ROUTING YOUR NEEDS TO LOCAL RESOURCES DURING THE COVID-19 PANDEMIC

by

Samuel B Archbold

B.S., GEORGIA COLLEGE & STATE UNIVERSITY

A Capstone Submitted to the Graduate Faculty of Georgia State University in Partial Fulfillment of the Requirements for the Degree

MASTER OF PUBLIC HEALTH

ATLANTA, GEORGIA
30303
STAYNEIGHBOR: A COMMUNITY PLATFORM FOR ESSENTIAL SUPPLIES—ROUTING YOUR NEEDS TO LOCAL RESOURCES DURING THE COVID-19 PANDEMIC

by

Samuel B Archbold

Approved:

Dr. Monica Swahn
Committee Chair

Dr. Rachel Culbreth
Committee Member

27 April 2020
Date
Acknowledgments

I would like to thank Dr. Swahn for her support and guidance throughout this project. As research changed to projects, her willingness to support this endeavor. My gratitude goes towards the entire team of brilliant individuals I was fortunate enough to work alongside of in the development of StayNeighbor. I also must thank the entire group at Crisis Cleanup for allowing myself and the StayNeighbor team to create our project weeks ahead of schedule thanks to the resources provided. Lastly I would like to thank my family for their kindness and patience throughout this part of my academic journey.
Author’s Statement Page

In presenting this capstone as a partial fulfillment of the requirements for an advanced degree from Georgia State University, I agree that the Library of the University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote from, to copy from, or to publish this capstone may be granted by the author or, in his/her absence, by the professor under whose direction it was written, or in his/her absence, by the Associate Dean, School of Public Health. Such quoting, copying, or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this capstone which involves potential financial gain will not be allowed without written permission of the author.

Samuel Bernard Archbold
Signature of Author
# TABLE OF CONTENTS

ACKNOWLEDGMENTS ........................................................................................................... iv

Author’s Statement Page ........................................................................................................ v

Chapter I: INTRODUCTION ................................................................................................. 1
  1.1. Background of Coronaviruses ....................................................................................... 1
  1.2. Background of COVID-19 ............................................................................................ 4
  1.3. Importance of Quarantine and Social Distancing .......................................................... 5
  1.4. Economic Challenges .................................................................................................. 7

CHAPTER II: ADDRESSING THE ISSUE .............................................................................. 10
  2.1. Project Overview ......................................................................................................... 10
  2.2. Technical Aspects ....................................................................................................... 11
    2.2.1. User Interface ......................................................................................................... 12
    2.2.2. User Privacy ........................................................................................................... 14
    2.2.3. Backend Development ........................................................................................... 15
  2.3. How it Works ............................................................................................................... 15
    2.3.1. Community Organizations ...................................................................................... 16
    2.3.2. Community Members in Need ............................................................................... 16
    2.3.3. Community Volunteers .......................................................................................... 17
    2.3.4. Services Offered ..................................................................................................... 18

CHAPTER III: CURRENT STATE AND NEXT STEPS .......................................................... 20
  3.1. Program Rollout .......................................................................................................... 20
  3.2. Next Steps .................................................................................................................. 21
    3.2.1. COVID-19 Period .................................................................................................... 21
    3.2.2. Post-COVID-19 ...................................................................................................... 22
  3.3. Conclusion ................................................................................................................... 23

REFERENCES ....................................................................................................................... 24

APPENDICES ......................................................................................................................... 29
  Appendix 1: StayNeighbor Privacy Policy ........................................................................ 29
  Appendix 2: StayNeighbor Terms of Service .................................................................. 31
  Appendix 3: Recommendations for Best Practice .............................................................. 33
List of Figures

Figure 2.1 StayNeighbor Request A Need form on front page (Desktop view) ......................... 13

Figure 2.2 StayNeighbor Request A Need form on front page (Mobile view) ......................... 14

Figure 2.3 Service Map ............................................................................................................. 17
Chapter I: Introduction

Coronavirus Disease 2019 (Covid-19) is the disease caused by the novel coronavirus; SARS-COV-2. The disease name COVID-19, is derived from its causative agent and when it first emerged, (CO) corona (VI) virus (D) disease (19) 2019. Prior to the official decision to name the disease COVID-19, it was referred to as “2019 novel coronavirus” or “2019-nCoV, therefore any reference to either of these names throughout this paper should be taken as a reference to COVID-19 (Centers for Disease Control and Prevention[CDC], 2020).

This disease was first identified in December of 2019 in Wuhan, China. Since then it has spread to 213 countries, areas and/or territories across the globe, with 2,810,325 million confirmed cases and 193,825 confirmed deaths as of April 25, 2020 (World Health Organization [WHO], 2020). Since its emergence it has rapidly spread across the world and has left nations struggling to develop containment and prevention strategies. A chief strategy in fighting this pandemic has been the implementation of shelter in place orders aimed at lowering the incidence of COVID-19 to reduce strain on medical infrastructure.

1.1 Background of Coronaviruses

In order to best develop interventions to combatting the spread of COVID-19 it is imperative that to understand as much about the disease as possible. First off it is important to understand just what a coronavirus is. The name coronavirus is drawn from the appearance of the virus itself as corona is another word for crown and the virus type bears crown-like spikes scattered across its surface. The first identification of a coronavirus in animals occurred in the 1930s with avian bronchitis virus (IBV), since then coronaviruses have been characterized in a
broad range of hosts (Wevers & Van Der Hoek, 2009).

Human coronaviruses (HCoVs) were first identified in 1965 when scientists Tyrrell and Bynoe managed to passage the virus B814, while conducting studies on adults with the common cold. Later on, in the 1960s Tyrrell along with a group of virologists were working on studies with human and animal viruses including infectious bronchitis virus, transmissible gastroenteritis virus of swine, and mouse hepatitis virus. These viruses all bore strong morphological similarities when observed via electron microscopy. This discovery led to the creation of the new corona genus of viruses (Kahn & McIntosh, 2005). With the emergence of SARS-CoV-2, there are now a total of 7 human coronaviruses:

- 229E (alpha coronavirus)
- NL63 (alpha coronavirus)
- OC43 (beta coronavirus)
- HKU1 (beta coronavirus)

These 4 human coronaviruses are considered common coronaviruses and circulate globally. They are the causative agent of approximately one third of common cold infections in humans. In the most severe cases these common coronaviruses can lead to life-threatening complications such as pneumonia and bronchiolitis (Van der Hoek, 2007), as well as possible enteric and neurological disease (Arbour et al., 2000).

- SARS-CoV (beta coronavirus)
- MERS-CoV (beta coronavirus)
- SARS-CoV-2 (beta coronavirus)

These 3 coronaviruses are all novel coronaviruses of the 21st century. SARS-CoV was the virus responsible for the Severe Acute Respiratory Syndrome (SARS) epidemic in 2002-2003. This epidemic was marked with a case-fatality rate of 14% to 15% across all ages, but one’s age group and preexisting conditions could greatly influence this number. People over the age of 60
were at a faced a case-fatality rate of approximately 55%, whereas those who were under the age of 25 had a case-fatality rate of less than 1% (Roos, 2003).

Within weeks of the suspected index case from Guangdong Province, China, SARS had spread to more than 8000 people across 25 countries, with 774 of the infected dying from SARS (Peiris et al., 2004). It is thought that SARS-CoV likely originated in bats and became an HCoV via zoonoses. Coronaviruses often infect various bat and other animal species, and the virus makeup in several of these animal infections are phylogenetically similar to HCoVs, this suggests that is likely for additional zoonotic coronavirus events to emerge over time (Lau et al., 2005).

The second major coronavirus epidemic to be observed was that of Middle East respiratory syndrome (MERS) caused by (MERS-CoV) in 2012. This disease was found to have a morality rate of approximately 35%, but much lower rates of transmission than SARS leading to less than 2500 global infections (Graham et al., 2013). As for the source of MERS-CoV, it is not entirely known, but it is believed to have been a zoonotic product resulting from viral interactions between bats and camels, these interactions led to genomic mutations of the virus that ultimately allowed it to cross the special barrier to humans (Ramadan & Shaib, 2019).

The current COVID-19 pandemic is caused by the SARS-CoV-2 virus and the first reports of it occurred in China hospitals began seeing clusters of patients with pneumonia of unknown etiology, that was possibly related to contact with a seafood market in Wuhan, China (Bogoch et al., 2020). As of February 11th, 2020, leading experts believed this disease to be a potential coronavirus due to its symptoms and estimated reproduction number thought to be between 2.24 and 3.58 (Zhao et al., 2020). Much like SARS and MERS COVID-19 saw those with severe
infections developing acute respiratory distress syndrome (ARDS), with other symptoms of COVID-19 including fever, cough fatigue and shortness of breath (CDC 2020). Due to the similarity of symptoms and more than 87.6% to 87.7% similarity in nucleotide identity to SARS-CoV this disease was initially thought to be a resurgence of SARS from a variant, but in fact varies enough from SARS-CoV based on its genetic identity and phylogenetic reports to be considered its own coronavirus (Ren et al., 2020).

1.2. Background of COVID-19:

Given the novel aspect of COVID-19, new information is being discovered every day regarding this virus, but due to the complex nature of this disease being able to ascertain values such as its incubation and latency period is a major obstacle to understanding how effective interventions can be developed.

One study that aimed to glean knowledge on the incubation period utilized case data from Hubei province in China, a hotspot for cases, in order to establish baseline data on a possible incubation period. This study found that the median incubation period for COVID-19 was 5.1 days (95% CI: 4.5 to 5.8 days) and that 97.5 of the 181 cases studied developed symptoms within 11.5 days (95% CI: 8.2 to 15.6 days). Bearing these numbers in mind when making conservative assumptions about necessary quarantine times, it can be determined that 101 out of every 10,000 cases will develop symptoms after 14 days. Taking these numbers into consideration it has become advised that those who were possibly exposed to SARS-COV-2 should be quarantined for a period of 14 days as nearly 99% of all individuals that were infected would develop symptoms over that 2-week period (Lauer et al., 2020). The need for this
quarantine is two-fold. One, as an individual develops symptoms, they may dismiss them at first and spread the disease while they are mildly symptomatic, and two, they could be an asymptomatic/presymptomatic source of COVID-19 spread.

Similar to SARS and MERS, COVID-19 also has certain groups that are at higher risk for severe outcomes from the disease. As reported by the Centers for Disease Control and Prevention, these groups include:

- People 65 years and older
- People who live in a nursing home or long-term care facility
- People with chronic lung disease or moderate to severe asthma
- People with serious heart conditions
- People who are immunocompromised
- People with severe obesity
- People with diabetes
- People with chronic kidney diseases undergoing dialysis
- People with liver disease

(CDC, 2020)

The first case of asymptomatic spread of COVID-19 was reported on February 21st in Wuhan China (Bai et al., 2020), as well as a report made on asymptomatic transmission in Germany being released on March 5th (Rothe et al., 2020). Later on, in an interview on March 30th, the director of the Centers for Disease Control and Prevention, Dr. Robert Redfield stated that as many as 25% of infected individuals may be asymptomatic, and those that do become symptomatic could be transmitting the virus up to 48 hours before their first symptoms manifest (Feibel, 2020). The fact that COVID-19 is seeing asymptomatic and presymptomatic transmissions is an indicator that the latency period, the period between exposure and infectiousness is likely shorter than the disease aforementioned incubation period (median= 5 days) (Laurer et al., 2020).
1.3. Importance of Quarantine and Social Distancing:

A study done by the Centre for the Mathematical Modelling of Infectious Diseases COVID-19 Working Group aimed to assess if isolation and contact tracing could be used to control onward transmission of COVID-19 through mathematical modelling. By utilizing variables such as: number of initial cases, basic reproduction number, delay from symptom onset to isolation, probability of contact tracing, proportion of transmission that occurred before symptom onset and the proportion of subclinical infections, researchers developed a stochastic transmission model to predict outbreak control. Key findings from this study indicated that highly effective contact tracing and case isolation was enough to control a COVID-19 outbreak within 3 months. The two factors with the greatest influence on whether or not the outbreak could be controlled was the delay between symptom onset and isolation (Hellewell, 2020).

An additional study conducted in Singapore adapted an influenza epidemic simulation model to estimate how likely COVID-19 transmission would be when acted upon by varying parameters. They found the most effective model for reducing COVID-1 transmission to be one where quarantines, school closures and workplace distancing practices were implemented. In models where the basic reproductive number was 1.5, the median number of infections decreased by 99.3%, by 93% when the basic reproductive number was 2.0, and by 78.2% when the basic reproductive number was 2.5 (Koo et al., 2020).

It is evident that distancing and isolation are the most effective ways for controlling the spread of COVID-19. In the United States stay at home/shelter in place orders have been issued as statewide directives in an increasing number of states and territories as well as in specific
cities that have not had state-wide orders. These orders vary state to state, but similar aspects of all orders is to have residents no longer go to school, work remotely where possible/or not work at all unless you perform an “essential” role, and to generally not leave the house unless absolutely necessary to reduce the possibility of transmission of COVID-19. From March 23rd to March 30th the US jumped from just 9 statewide stay at home orders to 30, as of April 7th that number has increased to 42 states, 3 counties, nine cities, Washington D.C. and Puerto Rico (Mervosh et al., 2020).

Studies (Hellewell et al., 2020; Koo et al., 2020) show the effectiveness of quarantines and distancing and that wider adoption will yield much better prevention and control. This prevention and control are precisely what is needed to mitigate the potentially catastrophic strain and damage COVID-19 could put on the US healthcare system. A study published on April 3rd 2020 addressing projected hospital utilization during COVID-19 outbreaks in the United States estimated that in a scenario where the isolation was not practiced and basic reproductive value of COVID-19 was 2.5, in order to treat critically ill patients at the peak of the outbreak there would need to be 3.8 times as many ICU bed than there currently exists in the United States. However, in the models that were run, when 20% of individuals self-isolate 24 hours following symptom onset the peak number of ICU beds needed would decrease by approximately 48.4% (Moghadas et al., 2020). In order to reduce the strain that is put on medical infrastructure and drastically improve COVID-19 outcomes quarantines and isolation are the most effective tool at our disposal.
1.4. Economic Challenges

One uniquely devasting facet of COVID-19 are the intense measures needed to stifle its spread, due to its high infectivity and ability to be spread in asymptomatic and presymptomatic individuals (Lauer et al., 2020; Feibel, 2020). These measures of necessary isolation and distancing has caused many areas of employment to lose nearly all business forcing them to lay off and furlough staff excessively if not entirely shutting down. Now within 5 weeks of the declaration of COVID-19 as a national emergency on March 13th, there have been more than 26 million Americans filing for unemployment (Zarroli & Schneider, 2020). Additionally, a Gallup poll published on April 22nd recorded a record high of 25% of Americans believe that they will be laid off in the next 12 months. The same poll also collected data on how long Americans felt they could last before facing significant financial hardship after being laid off, with 41% stating they would face hardship within the first month and 75% within the first 4 months (Gallup, 2020). These current spikes in unemployment paired with the potential for future job less creates a grim outlook for the financial security of many Americans.

Efforts have been made to alleviate the burdens placed on businesses and states through Congressional relief funds. This has been seen largely in the $2 trillion Coronavirus relief package. Key aspects of this program include providing rush financial assistance in the form of direct checks, with most Americans in lower- and middle-income brackets qualifying for $1200. The program also seeks to expand unemployment benefits, increasing the unemployment insurance plan by 1 month and increasing maximum insurance benefits by $600 per week. The plan also provides more than $150 billion for health care systems, over $330 billion for state and local governments, $500 billion for big corporations and $377 billion in
loans for and grants for small businesses (Snell, 2020). One way these loans and grants manifested was in the form of the Paycheck Protection Act, a $349 billion program that gives companies money if they retain or rehire workers. However, the funds from this allotment were depleted within 2 weeks leaving many high-need companies not receiving any of the much-needed funds to take care of employees (Zarroli & Schneider, 2020).

Between the need for isolation and the drastic economic hardships that are ever-growing as a result of the COVID-19 pandemic, barriers to accessing essential goods and services will persist at extremely high levels. These barriers will be even more so problematic for those that are at a higher risk for acquiring or developing severe complications from COVID-19 and those facing excessive financial hardships. In order to lessen the burden of these challenges it is important for communities to come together and support one another in smart and safe ways. In order to assist in these efforts StayNeighbor has been created as an application to coordinate the logistics of compassion, by providing a resource to aggregate needs in a centralized location and coordinate the fulfillment of needs in a controlled and efficient manner through the engagement of community organizations and members.
Chapter II: Addressing the Issue

2.1 Project Overview:

StayNeighbor is a completely free, open-source, logistics tool for community mobilization made by volunteers for volunteers. It is designed to connect those with means, to those with needs in a safe, healthy and organized way during the COVID-19 pandemic. As the spread of COVID-19 continues to increase at an exponential rate (WHO, 2020), it is imperative that preventative measures be widely adopted to reduce the burden of disease on our communities and flatten the curve. Social distancing and self-quarantining are highly effective measures for lowering incidences of COVID-19 cases (Maragakis, 2020). However, in order to optimize their effectiveness, they must be consistently and thoroughly implemented across entire communities to mitigate transmission. Because of this, supplies will dwindle over time and financial resources will run low, given the sharp decrease in employment across the nation. It has been during this time of crisis that we have seen champions emerge, seeking ways to serve their communities wherever they can. StayNeighbor aims to take that drive to serve and mobilize it to where it can do the most good.

StayNeighbor’s network allows communities to aggregate data on both the availability of resources, such as food, personal protective equipment, wellness checks and shopping pickups, as well as where resources are needed, into one centralized location. From there, community organizations are able to see where needs exist so that goods and services can be dispatched via vetted volunteer delivery drivers. Through this system, we aim to protect populations that are most vulnerable to COVID-19 by ensuring that they are provided for in a way that reduces their risk of COVID-19 exposure to an incredibly low degree. We aim to make
effective prolonged quarantines more feasible by providing the most vulnerable individuals, and those with possible or confirmed cases, the resources needed to go about life without compromising their personal safety or the safety of others. We strongly believe in this vital component, because by staying home the likelihood of exposure or transmission of COVID-19 for them falls to miniscule levels (CDC, 2020).

Our system focuses on a lean design approach that connects providers and recipients in a simple, yet effective management system. In order to expand reach StayNeighbor has partnered with the organization Crisis Cleanup to utilize aspects of their backend development as well as their organization vetting process. This allows the StayNeighbor platform to be powered by Crisis Cleanup optimizing data collection and increasing outreach. Above all, StayNeighbor has been designed as a versatile tool that any qualified organization or agency can immediately take ownership of and run independently through volunteers in their own communities to find and meet the needs that exist in their own communities.

2.2 Technical Aspects:

In designing this utility, it was important to first understand the populations that would be targeted by it, and what features would need to be incorporated to best serve them. Populations that are most risk by this disease as stated in chapter 1 are the elderly and those with pre-existing conditions (CDC, 2020), it is those groups in particular that must be accounted for when developing this tool.

The aging population is one that requires particular attention in regard to the application and development of technologically based solutions. This is why StayNeighbor was
created with a human-centered design. Before development began, the team strategized who would benefit most from the application, the obstacles they may face to access and usability, as well as what concerns they may have about the application so they could be planned for in advance.

In developing the user focused design, a study from April of 2019 conducted by the University of California San Diego that gave the perspective of older adults on how technology can support aging populations (Wang et al., 2020).

2.2.1. User Interface

One of the most glaringly apparent matters to address in regard to user centered design is the user interface. To ease access, the interface where those looking to request supplies can be located on the front page of the site (Desktop view: Figure 2.1) (Mobile view: Figure 2.2, so there is no need for any additional navigation in order to find where requests can be made. The ability to make requests is the most important component of this system so keeping that centered is a priority, additional information can be navigated to via a pinned banner for those looking for more information or to connect with StayNeighbor on how to volunteer.

In choosing the design for a user interface, visual accessibility was another paramount concern. For the request form, the layout was kept simple, with a white background and primarily black text to provide contrast. All text is modular as well so that it can be zoomed in on for easier viewing. All text fields also support word diction technology if the user’s device allows it, meaning that those who may not be able to type can speak to fill out the form. An additional feature is the use of geocoding via google maps when filling out address information. This saves the user on time filling out the form and ensures that address information is
accurately provided. StayNeighbor is also currently working with Crisis Cleanup on developing dedicated over the phone support through remote call centers, where volunteers can take calls from those in need of help and fulfill request forms over the phone.

Stay Neighbor is currently in its beta stage as of April 17, 2020 and as user feedback is generated additional design changes are expected to be made in order to optimize the program’s user interface.

Figure 2.1 StayNeighbor Request A Need form on front page (Desktop view)
2.2.2. User Privacy:

When it comes to tech-based services privacy is a matter of paramount concern, particularly when aiming to serve vulnerable populations. The extent of data that is collected through using StayNeighbor is only what is necessary to deliver the required service. Additionally, the only field that is validated when generating a request is the address. Because of this if an individual does not have or does not feel comfortable providing their phone number then can provide their email instead or do the same thing if they would rather provide a phone number and not email.

A founding principle of StayNeighbor was a desire to provide a resource that would come at no cost to the user, and that no one developing the tool expected to gain anything in
return. This allowed us to design StayNeighbor and the framework in which it operates in, in such a way that user information will never be sold or transferred to any other organizations, parties, or entities (See Appendix 1: Privacy Policy and Appendix 2: Terms of Service).

2.2.3. Backend Development

The back-end platform for StayNeighbor was developed utilizing a Mongo DB Stitch architecture with 8 developers volunteering their time to construct the framework. GitHub was used to share the StayNeighbor repository across volunteers for seamless collaborative efforts. In order to supplement the work on this project, Google provided a $5,000 grant in the form of Google Cloud Platform Credits, allowing the project to be scaled at a quicker pace.

The previously described framework is what was used to conduct StayNeighbor’s alpha testing. This structure accomplished the goal but did require an individual to route fulfillment updates manually. This was to be corrected, however at the end of alpha testing StayNeighbor began its relationship with Crisis Cleanup. Crisis Cleanup had a similar goal in aiding communities via its “Corona Community” program, but their program was powered by a backend that had been developed and improved upon over the course of six years. Because of the refinement and capacity of their backend, StayNeighbor now routes requests through Crisis Cleanup. This allows for a more unified system that takes advantage of the powerful backend of Crisis Cleanup and the user-friendly interface of StayNeighbor.

2.3. How It Works:

At its root StayNeighbor is a tool to collect information on where needs are, provide that information to parties that can fulfill them and coordinate how to best fulfill those needs. To
cover this operation, there are three main parties to look at; community organizations, community members in need, and community volunteers.

2.3.1. Community Organizations:

Community organizations are the engines that make this system run and are the entities that will have the most contact with StayNeighbor. Many of these organizations have been helping their communities long before COVID-19 and will continue to do so long after the disease has passed. At this stage, StayNeighbor is transitioning from reaching out to potential partner organizations to now having organizations reach out to StayNeighbor, as this platform has garnered support from media outlets and a variety of agencies. Once a partnership is formed with an organization, we work with them on training volunteer “dispatchers.” These are vetted individuals who are able to see a special “dispatcher view” of StayNeighbor which let’s them see where requests are being made and what those requests are for. Dispatcher then can assign the need to an organization or individual in their network with the ability to fulfill that need and provide support on the delivery of that request. In order to have the best possible impact, community engagement is a top priority. With more organizations and individuals using StayNeighbor, that increases the number of requests being made as well as increases the capacity to field these requests.

2.3.2. Community Members in Need:

Those in need of a good or supported service are able to search for StayNeighbor and once they access the site, they simply need to scroll down to our request form, fill it out and submit it. This then generates an application programming interface (API) call, sending the information the user submitted to a secure cloud server. Not long after submitting the form,
the requester will receive a phone call to confirm the details of the form and validate the request so it can then be assigned to a party able to fulfill the request. Currently calls can take up to 2 days due to the volume of requests, but once a dedicated call center the goal is to validate requests within 5 hours of them being made. Once the request is validated, it is moved on to the service map (figure 2.3) hosted by Crisis Cleanup, where it can be delegated via a dispatcher. Now the individual who made the request then waits for it to be fulfilled. They will receive automatic updates via their preferred method of communication informing of them when the order has been assigned, who will be handling the order and when it will be fulfilled.

**Figure 2.3: Service Map**

*Visualize the Disaster in Real Time*

Choose an incident from the drop down to see cases

COVID-19 Response

The map shows different case statuses and types. The Legend and Case Status are provided on the right side of the map. The map is interactive and allows users to select different incidents to view cases.

**2.3.3. Community Volunteers**

These are the hands and feet of the organizational structure. Currently Community volunteers serve in two primary roles, that of drivers, and dispatch support. The drivers are the boots on the ground and they are able to take assignments relayed to them by dispatchers
which inform them of where a need is, where they pick up the supplies to fulfill, and other pertinent information in order to successfully complete the task, such as how and when the recipient would like the supplies delivered. These communications are currently able to be relayed through email and text, but progress is being made towards adopting a third-party communication system to streamline the operation. With these volunteers serving on the frontline, a set of best practices has been developed to aid volunteers in ensuring they can do everything in their power to protect both themselves and those they are serving (Appendix 3: Recommendations for Best Practices). While these practices do have benefit and are drawn from recommendations from official health organizations, StayNeighbor advises all volunteers to work with their own local health agencies as hazards can differ across communities.

2.3.4. Services offered

In its current state there are 7 services that are able to be requested via StayNeighbor.

1. Meals
2. Personal Protective Equipment (PPE)
3. Wellness Check
4. Prescription Pickup
5. Shopping Pickup
6. Animal Services
7. Domestic Services

Meals are the largest focus item for StayNeighbor, with food security a great concern for so many during this time proving either a ready-made meal or everything needed for a meal/(s) can alleviated significant stressors on those in need.

Personal Protective Equipment is intended for connecting those fighting this disease in hospitals to the PPE (gloves, masks and face shields) that is so vital to their own safety. Community members may have excess of PPE, have an ability to acquire or in some cases make
it themselves. With this category those in greatest need of PPE have one more channel that could connect them to it.

Wellness Checks could be as simple as having a volunteer regularly call an individual in need or want of a check in/general companionship call. To more complicated measures such as connecting an at-need individual to a certified professional capable of assisting them in their activities of daily life (ADLs).

With prescriptions generally given at regular intervals it is important that everyone is never going to be without medication they need. This will fall under a task that must be done by a vetted professional given the complex nature and protective measures that must be taken when dealing with medical information and products.

Shopping pickup services would be more directed towards the individual/group with the ability to afford goods but is forced to or wishes to stay in and not pickup groceries themselves. In these scenarios, participants could utilize store services that would prepare their products, so a volunteer only has to go to the store, pick up the already prepared items and then deliver it, or provide a list of items and a volunteer could conduct the shopping for them at no extra charge.

Animal and domestic services are able to be done by any volunteer and could consist of tasks such as taking an individual’s dog for a walk/caring for a pet should the owner not be able to for a time period. To domestic tasks like requesting yard work or seeking help with a leak or broken appliance.
Chapter III: Current State and Next Steps

3.1. Program Rollout

After spending two weeks conducting internal testing across the country to discover and correct any bugs that could be found, the “soft” launch of StayNeighbor will begin in New Hanover County in North Carolina on April 20th. The majority of volunteers on the StayNeighbor live and work in this area and that has played a major role in platform adoption and getting community organizations on board with the program. StayNeighbor currently has over 50 organizations that will be utilizing and promoting the program in this soft launch. In this phase StayNeighbor will be collecting requests from actual individuals in need and connecting them to the organizations capable of serving them. There is a core team of 14 leaders in this county that are serving as a panel of key stakeholders and will meet for program reviews every week to go over how the program is operating and develop recommendations for improvement.

There is currently progress being made on developing a hotline for order validation and fielding requests via phone. The current route being pursued is leveraging resources for the county disaster coalition as they already have the infrastructure for managing a call system. Additionally, the 2-1-1 hotline is also opening as an avenue for further outreach and management thanks to interested volunteers from United Way.

When it comes to the promotion of StayNeighbor, each organization will be responsible for marketing and building awareness of the platform with their current clients, patients, citizens, volunteers, etc. There has been a number of articles and interviews in newspapers, and on cable news networks in the New Hanover county area as well as on nationwide outlets,
which has helped garner support and awareness for the program, but community engagement is expected to be the greatest challenge in getting this program up and off the ground.

While New Hanover county is currently the area of focus, the application is capable of operating anywhere in the United States. As evident by figure 2.3 there are requests being made in pockets throughout the country with a large hotspot currently in Louisiana. This hot spot is due to the presence of Crisis Cleanup in Louisiana. Due to the frequency with which this location faces disasters such as hurricanes, Crisis Cleanup has relationships with many groups in the area and has a trustworthy reputation as an organization aiming to do good in the area. Ultimately the hope is to have organizations run this program completely autonomously with StayNeighbor focusing on platform upkeep and optimization.

3.2. Next Steps

3.2.1 COVID-19 Period

With the soft launch in New Hanover county beginning on April 20th, evaluation will be the highest priority to understand the impact StayNeighbor is currently able to have and to determine what changes can be made to expand and improve upon what currently exists. Currently the StayNeighbor team will remain heavily hands on in this area as the program starts off, but as time passes StayNeighbor will phase out its direct involvement until it is able to fully leave the running of the program in the hands of community leaders.

As attention is shifted away from New Hanover county StayNeighbor’s human resources will be freed up to build up the program in new communities. The basis for selecting new communities to invest in will be directly proportional to the connections StayNeighbor has with
organizations and leaders capable of operating and eventually taking ownership of the platform in their community. Currently expansion intentions exist for New York City, given support from the non-profit organization New York Cares, that has already distributed over 165,000 meals to New Yorkers with the help from over 2,000 volunteers (New York Cares, 2020). The impact they have had is substantial, but they have requested assistance in the coordination of their meal delivery logistics in a manner that makes StayNeighbor an ideal fit for their needs.

As the situation surrounding COVID-19 evolves so will StayNeighbor. One additional perk with keeping the application lean and simple is that it remains highly modular, so as new needs arise, StayNeighbor can be adapted as a tool to solve problems within a wide scope.

3.2.2. Post-COVID-19

While COVID-19 served as the catalyst for the creation of StayNeighbor its uses will not cease with the decline of the disease. The ways which StayNeighbor is used may change, but at its core, StayNeighbor is able to provide valuable data for community organizations on what needs exist in their communities, where they are and how the organizations can interface with the individual. This could exist in a similar form to the current state, where an individual unable to access food could submit requests and an organization could respond to it. If widespread adoption occurred StayNeighbor could expand to be a centralized location for “needs” data to be aggregated and could assist in the development of interventions to ensure they are implemented in areas where they may have the highest degree of impact.

Additionally, a feature for future use was that in expanding what Crisis Cleanup currently does and providing a support system for disaster relief efforts. The back-end platform for this already exists and with proper promotion and community integration it has the
potential to increase the effectiveness of numerous disaster relief programs. Whether that be in the form of getting supplies to those in need, marking houses that need roof fixes or mud-outs, or serving as an SOS if someone is in need of an evacuation. The uses of StayNeighbor will not be confined to this event alone and can play a role in benefitting communities in both times of peace and times of crisis.

3.3 Conclusion

Pandemics are not new to this world, but they are new to this technologically immersed generation. From location tracking data that can aid in contact tracing, to 3-d printers giving the everyday person the ability to make face shields and even ventilators. Technology has drastically changed the way we approach challenges and develop interventions. Through the careful and efficient leveraging of resources the damages brought about by COVID-19 can be greatly mitigated. StayNeighbor is not a tool that will solve every issue, but it is able to optimize how needs are assessed and resources are distributed, by supporting the community organizations that are serving their populations every day. Ideally, this will streamline the aid work community organizations are already doing so that they can get to the truly important matters of taking care of their neighbors how and where they need it most.
References


https://doi.org/10.1093/jtm/taaa008


Wang, S., Bolling, K., Mao, W., et al. (2019, February 28). “Technology to Support Aging in Place: Older Adults’ Perspectives”. Healthcare, 7(2), 60. https://doi.org/10.3390/healthcare7020060

https://doi.org/10.1016/j.cll.2009.07.007


Appendices

Appendix 1: Privacy Policy

Privacy Policy

Last updated: March 24, 2020

This application is operated by StayNeighbor. We understand that the information you share is private to you and we are committed to respecting the privacy and security of your personal information. Please read this Privacy Policy to understand how we use and look after the personal information that you provide to us.

All references in this Privacy Policy to the “website” or “Website” refer to this website stayneighbor.com; to “we”, “us”, “our” and “StayNeighbor” refer to StayNeighbor; and to “you” and “your” are to you, the user.

We use Your Personal data to provide and improve the Service. By using the Service, You agree to the collection and use of information in accordance with this Privacy Policy.

Types of Data Collected

Personal Data

In order to provide services through StayNeighbor, We may ask You to provide Us with certain personally identifiable information that can be used to contact or identify You including but not limited to:

- Email address
- First name and last name
- Phone number
- Address, State, Province, ZIP/Postal code, City
- Usage Data
- Browser cookies

Usage Data

Usage Data is collected automatically when using the Service.

Usage Data may include information such as Your Device's Internet Protocol address (e.g. IP address), browser type, browser version, the pages of our Service that You visit, the time and date of Your visit, the time spent on those pages, unique device identifiers and other diagnostic data.
When You access the Service by or through a mobile device, We may collect certain information automatically, including, but not limited to, the type of mobile device You use, Your mobile device unique ID, the IP address of Your mobile device, Your mobile operating system, the type of mobile Internet browser You use, unique device identifiers and other diagnostic data.

We may also collect information that Your browser sends whenever You visit our Service or when You access the Service by or through a mobile device.

**Use of Your Personal Data**

StayNeighbor may use Personal Data for the following purposes:

- **To provide and maintain our Service**, including to monitor the usage of our Service.
- **To manage Your Account**: to manage Your registration as a user of the Service. The Personal Data You provide can give You access to different functionalities of the Service that are available to You as a registered user.
- **To contact You**: To contact You by email, telephone calls, SMS, or other equivalent forms of electronic communication, such as a mobile application's push notifications regarding updates or informative communications related to the functionalities, products or contracted services, including the security updates, when necessary or reasonable for their implementation.
- **To provide You** with news, special offers and general information about other goods, services and events which we offer that are similar to those that you have already purchased or enquired about unless You have opted not to receive such information.
- **To manage Your requests**: To attend and manage Your requests to Us.

**Retention of Your Personal Data**

The Company will retain Your Personal Data only for as long as is necessary for the purposes set out in this Privacy Policy. We will retain and use Your Personal Data to the extent necessary to comply with our legal obligations (for example, if we are required to retain your data to comply with applicable laws), resolve disputes, and enforce our legal agreements and policies.

The Company will also retain Usage Data for internal analysis purposes. Usage Data is generally retained for a shorter period of time, except when this data is used to strengthen the security or to improve the functionality of Our Service, or We are legally obligated to retain this data for longer time periods.

**Transfer of Your Personal Data**
Your information, including Personal Data, is processed at the StayNeighbor’s central system and in any other places where the parties involved in the processing are located including community dispatch entities. It means that this information may be transferred to — and maintained on — computers located outside of Your state, province, country or other governmental jurisdiction where the data protection laws may differ than those from Your jurisdiction.

Your consent to this Privacy Policy followed by Your submission of such information represents Your agreement to that transfer.

The Company will take all steps reasonably necessary to ensure that Your data is treated securely and in accordance with this Privacy Policy and no transfer of Your Personal Data will take place to an organization or a country unless there are adequate controls in place including the security of Your data and other personal information.

**Disclosure of Your Personal Data**

**Business Transactions**

If the Company is involved in a merger, acquisition or asset sale, Your Personal Data may be transferred. We will provide notice before Your Personal Data is transferred and becomes subject to a different Privacy Policy.

**Law enforcement**

Under certain circumstances, the Company may be required to disclose Your Personal Data if required to do so by law or in response to valid requests by public authorities (e.g. a court or a government agency).

**Other legal requirements**

The Company may disclose Your Personal Data in the good faith belief that such action is necessary to:

- Comply with a legal obligation
- Protect and defend the rights or property of the Company
- Prevent or investigate possible wrongdoing in connection with the Service
- Protect the personal safety of Users of the Service or the public
- Protect against legal liability

**Security of Your Personal Data**

The security of Your Personal Data is important to Us but remember that no method of transmission over the Internet, or method of electronic storage is 100% secure. While We strive to protect Your Personal Data to the best of Our abilities, We cannot guarantee its absolute security.
Children's Privacy

Our Service does not address anyone under the age of 13. We do not knowingly collect personally identifiable information from anyone under the age of 13. If You are a parent or guardian and You are aware that Your child has provided Us with Personal Data, please contact Us. If We become aware that We have collected Personal Data from anyone under the age of 13 without verification of parental consent, We take steps to remove that information from Our servers.

We also may limit how We collect, use, and store some of the information of Users between 13 and 18 years old. In some cases, this means We will be unable to provide certain functionality of the Service to these users.

If We need to rely on consent as a legal basis for processing Your information and Your country requires consent from a parent, We may require Your parent's consent before We collect and use that information.

Links to Other Websites

Our Service may contain links to other websites that are not operated by Us. If You click on a third-party link, You will be directed to that third party's site. We strongly advise You to review the Privacy Policy of every site You visit.

We have no control over and assume no responsibility for the content, privacy policies or practices of any third-party sites or services.

Changes to this Privacy Policy

We may update our Privacy Policy from time to time. We will notify You of any changes by posting the new Privacy Policy on this page.

We will let You know via email and/or a prominent notice on Our Service, prior to the change becoming effective and update the "Last updated" date at the top of this Privacy Policy.

You are advised to review this Privacy Policy periodically for any changes. Changes to this Privacy Policy are effective when they are posted on this page.

Contact Us

If you have any questions about this Privacy Policy, You can contact us:

- By email: support@stayneighbor.com
STAYNEIGHBOR TERMS OF SERVICE
Last updated March 28, 2020

AGREEMENT TO TERMS

These Terms of Service constitute a legally binding agreement made between you, whether personally or on behalf of an entity (“you”) and StayNeighbor (“we,” “us” or “our”), concerning your access to and use of the stayneighbor.com website as well as any other media form, media channel, mobile website or mobile application related, linked, or otherwise connected thereto (collectively, the “Site”).

You agree that by accessing the Site, you have read, understood, and agree to be bound by all of these Terms of Service. If you do not agree with all of these Terms of Service, then you are expressly prohibited from using the Site and you must discontinue use immediately.

Supplemental Terms of Service or documents that may be posted on the Site from time to time are hereby expressly incorporated herein by reference. We reserve the right, in our sole discretion, to make changes or modifications to these Terms of Service at any time and for any reason.

We will alert you about any changes by updating the “Last updated” date of these Terms of Service, and you waive any right to receive specific notice of each such change.

It is your responsibility to periodically review these Terms of Service to stay informed of updates. You will be subject to, and will be deemed to have been made aware of and to have accepted, the changes in any revised Terms of Service by your continued use of the Site after the date such revised Terms of Service are posted.

The information provided on the Site is not intended for distribution to or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to law or regulation or which would subject us to any registration requirement within such jurisdiction or country.

Accordingly, those persons who choose to access the Site from other locations do so on their own initiative and are solely responsible for compliance with local laws, if and to the extent local laws are applicable.

The Site is intended for users who are at least 18 years old. Persons under the age of 18 are not permitted to register for the Site.

INTELLECTUAL PROPERTY RIGHTS

Unless otherwise indicated, the Site is our proprietary property and all source code, databases, functionality, software, website designs, audio, video, text, photographs, and graphics on the Site (collectively, the “Content”) and the trademarks, service marks, and logos contained therein (the “Marks”) are owned or controlled by us or licensed to us, and are protected by copyright
and trademark laws and various other intellectual property rights and unfair competition laws of the United States, foreign jurisdictions, and international conventions.

The Content and the Marks are provided on the Site “AS IS” for your information and personal use only. Except as expressly provided in these Terms of Service, no part of the Site and no Content or Marks may be copied, reproduced, aggregated, republished, uploaded, posted, publicly displayed, encoded, translated, transmitted, distributed, sold, licensed, or otherwise exploited for any commercial purpose whatsoever, without our express prior written permission.

Provided that you are eligible to use the Site, you are granted a limited license to access and use the Site and to download or print a copy of any portion of the Content to which you have properly gained access solely for your personal, non-commercial use. We reserve all rights not expressly granted to you in and to the Site, the Content and the Marks.

**USER REPRESENTATIONS**

By using the Site, you represent and warrant that:

(1) you have the legal capacity and you agree to comply with these Terms of Service;

(2) you are not under the age of 13

(3) not a minor in the jurisdiction in which you reside, or if a minor, you have received parental permission to use the Site

(4) you will not access the Site through automated or non-human means, whether through a bot, script, or otherwise;

(5) you will not use the Site for any illegal or unauthorized purpose;

(6) your use of the Site will not violate any applicable law or regulation.

If you provide any information that is untrue, inaccurate, not current, or incomplete, we have the right to suspend or terminate your account and refuse any and all current or future use of the Site (or any portion thereof).

**PROHIBITED ACTIVITIES**

You may not access or use the Site for any purpose other than that for which we make the Site available. The Site may not be used in connection with any commercial endeavors except those that are specifically endorsed or approved by us.

As a user of the Site, you agree not to:

1. systematically retrieve data or other content from the Site to create or compile, directly or indirectly, a collection, compilation, database, or directory without written permission from us.

2. make any unauthorized use of the Site, including collecting usernames and/or email addresses of users by electronic or other means for the purpose of sending unsolicited email, or creating user accounts by automated means or under false pretenses.
3. use a buying agent or purchasing agent to make purchases on the Site.
4. use the Site to advertise or offer to sell goods and services.
5. circumvent, disable, or otherwise interfere with security-related features of the Site, including features that prevent or restrict the use or copying of any Content or enforce limitations on the use of the Site and/or the Content contained therein.
6. engage in unauthorized framing of or linking to the Site.
7. trick, defraud, or mislead us and other users, especially in any attempt to learn sensitive account information such as user passwords;
8. make improper use of our support services or submit false reports of abuse or misconduct.
9. engage in any automated use of the system, such as using scripts to send comments or messages, or using any data mining, robots, or similar data gathering and extraction tools.
10. interfere with, disrupt, or create an undue burden on the Site or the networks or services connected to the Site.
11. attempt to impersonate another user or person or use the username of another user.
12. sell or otherwise transfer your profile.
13. use any information obtained from the Site in order to harass, abuse, or harm another person.
14. use the Site as part of any effort to compete with us or otherwise use the Site and/or the Content for any revenue-generating endeavor or commercial enterprise.
15. decipher, decompile, disassemble, or reverse engineer any of the software comprising or in any way making up a part of the Site.
16. attempt to bypass any measures of the Site designed to prevent or restrict access to the Site, or any portion of the Site.
17. harass, annoy, intimidate, or threaten any of our employees or agents engaged in providing any portion of the Site to you.
18. delete the copyright or other proprietary rights notice from any Content.
19. copy or adapt the Site’s software, including but not limited to Flash, PHP, HTML, JavaScript, or other code.
20. upload or transmit (or attempt to upload or to transmit) viruses, Trojan horses, or other material, including excessive use of capital letters and spamming (continuous posting of repetitive text), that interferes with any party’s uninterrupted use and enjoyment of the Site or modifies, impairs, disrupts, alters, or interferes with the use, features, functions, operation, or maintenance of the Site.
21. upload or transmit (or attempt to upload or to transmit) any material that acts as a passive or active information collection or transmission mechanism, including without limitation, clear graphics interchange formats (“gifs”), 1×1 pixels, web bugs, cookies, or other similar devices (sometimes referred to as “spyware” or “passive collection mechanisms” or “pcms”).
22. except as may be the result of standard search engine or Internet browser usage, use, launch, develop, or distribute any automated system, including without limitation, any spider, robot, cheat utility, scraper, or offline reader that accesses the Site, or using or launching any unauthorized script or other software.
23. use the Site in a manner inconsistent with any applicable laws or regulations.

**MOBILE APPLICATION LICENSE**

**Use License**
If you access the Site via a mobile application, then we grant you a revocable, non-exclusive, non-transferable, limited right to install and use the mobile application on wireless electronic devices owned or controlled by you, and to access and use the mobile application on such devices strictly in accordance with the Terms of Service of this mobile application license contained in these Terms of Service.

You shall not:

1. decompile, reverse engineer, disassemble, attempt to derive the source code of, or decrypt the application;
2. make any modification, adaptation, improvement, enhancement, translation, or derivative work from the application;
3. violate any applicable laws, rules, or regulations in connection with your access or use of the application;
4. remove, alter, or obscure any proprietary notice (including any notice of copyright or trademark) posted by us or the licensors of the application;
5. use the application for any revenue generating endeavor, commercial enterprise, or other purpose for which it is not designed or intended;
6. make the application available over a network or other environment permitting access or use by multiple devices or users at the same time;
7. use the application for creating a product, service, or software that is, directly or indirectly, competitive with or in any way a substitute for the application;
8. use the application to send automated queries to any website or to send any unsolicited commercial e-mail;
9. use any proprietary information or any of our interfaces or our other intellectual property in the design, development, manufacture, licensing, or distribution of any applications, accessories, or devices for use with the application.

**Apple and Android Devices**
The following terms apply when you use a mobile application obtained from either the Apple Store or Google Play (each an "App Distributor") to access the Site:

1. the license granted to you for our mobile application is limited to a non-transferable license to use the application on a device that utilizes the Apple iOS or Android operating systems, as applicable, and in accordance with the usage rules set forth in the applicable App Distributor’s Terms of Service;
(2) we are responsible for providing any maintenance and support services with respect to the mobile application as specified in the Terms of Service of this mobile application license contained in these Terms of Service or as otherwise required under applicable law, and you acknowledge that each App Distributor has no obligation whatsoever to furnish any maintenance and support services with respect to the mobile application;

(3) in the event of any failure of the mobile application to conform to any applicable warranty, you may notify the applicable App Distributor, and the App Distributor, in accordance with its terms and policies, may refund the purchase price, if any, paid for the mobile application, and to the maximum extent permitted by applicable law, the App Distributor will have no other warranty obligation whatsoever with respect to the mobile application;

(4) you represent and warrant that (i) you are not located in a country that is subject to a U.S. government embargo, or that has been designated by the U.S. government as a “terrorist supporting” country and (ii) you are not listed on any U.S. government list of prohibited or restricted parties;

(5) you must comply with applicable third-party terms of agreement when using the mobile application, e.g., if you have a VoIP application, then you must not be in violation of their wireless data service agreement when using the mobile application;

6) you acknowledge and agree that the App Distributors are third-party beneficiaries of the Terms of Service in this mobile application license contained in these Terms of Service, and that each App Distributor will have the right (and will be deemed to have accepted the right) to enforce the Terms of Service in this mobile application license contained in these Terms of Service against you as a third-party beneficiary thereof.

THIRD-PARTY WEBSITES AND CONTENT

The Site may contain (or you may be sent via the Site) links to other websites ("Third-Party Websites") as well as articles, photographs, text, graphics, pictures, designs, music, sound, video, information, applications, software, and other content or items belonging to or originating from third parties ("Third-Party Content").

Such Third-Party Websites and Third-Party Content are not investigated, monitored, or checked for accuracy, appropriateness, or completeness by us, and we are not responsible for any Third-Party Websites accessed through the Site or any Third-Party Content posted on, available through, or installed from the Site, including the content, accuracy, offensiveness, opinions, reliability, privacy practices, or other policies of or contained in the Third-Party Websites or the Third-Party Content.

Inclusion of, linking to, or permitting the use or installation of any Third-Party Websites or any Third-Party Content does not imply approval or endorsement thereof by us. If you decide to leave the Site and access the Third-Party Websites or to use or install any Third-Party Content, you do so at your own risk, and you should be aware these Terms of Service no longer govern.

You should review the applicable terms and policies, including privacy and data gathering practices, of any website to which you navigate from the Site or relating to any applications you use or install from the Site. Any purchases you make through Third-Party Websites will be
through other websites and from other companies, and we take no responsibility whatsoever in relation to such purchases which are exclusively between you and the applicable third party.

You agree and acknowledge that we do not endorse the products or services offered on Third-Party Websites and you shall hold us harmless from any harm caused by your purchase of such products or services. Additionally, you shall hold us harmless from any losses sustained by you or harm caused to you relating to or resulting in any way from any Third-Party Content or any contact with Third-Party Websites.

SITE MANAGEMENT

We reserve the right, but not the obligation, to:

1. monitor the Site for violations of these Terms of Service;
2. take appropriate legal action against anyone who, in our sole discretion, violates the law or these Terms of Service, including without limitation, reporting such user to law enforcement authorities;
3. in our sole discretion and without limitation, refuse, restrict access to, limit the availability of, or disable (to the extent technologically feasible) any of your Contributions or any portion thereof;
4. in our sole discretion and without limitation, notice, or liability, to remove from the Site or otherwise disable all files and content that are excessive in size or are in any way burdensome to our systems;
5. otherwise, manage the Site in a manner designed to protect our rights and property and to facilitate the proper functioning of the Site.

PRIVACY POLICY

We care about data privacy and security. Please review our Privacy Policy posted on the Site. By using the Site, you agree to be bound by our Privacy Policy, which is incorporated into these Terms of Service. Please be advised the Site is hosted in the United States.

If you access the Site from the European Union, Asia, or any other region of the world with laws or other requirements governing personal data collection, use, or disclosure that differ from applicable laws in the United States, then through your continued use of the Site, you are transferring your data to the United States, and you expressly consent to have your data transferred to and processed in the United States.

Further, we do not knowingly accept, request, or solicit information from children or knowingly market to children. Therefore, in accordance with the U.S. Children’s Online Privacy Protection Act, if we receive actual knowledge that anyone under the age of 13 has provided personal information to us without the requisite and verifiable parental consent, we will delete that information from the Site as quickly as is reasonably practical.
DIGITAL MILLENNIUM COPYRIGHT ACT (DMCA) NOTICE AND POLICY

Notifications

We respect the intellectual property rights of others. If you believe that any material available on or through the Site infringes upon any copyright you own or control, please immediately notify our Designated Copyright Agent using the contact information provided below (a “Notification”).

A copy of your Notification will be sent to the person who posted or stored the material addressed in the Notification. Please be advised that pursuant to federal law you may be held liable for damages if you make material misrepresentations in a Notification. Thus, if you are not sure that material located on or linked to by the Site infringes your copyright, you should consider first contacting an attorney.

All Notifications should meet the requirements of DMCA 17 U.S.C. § 512(c)(3) and include the following information:

(1) A physical or electronic signature of a person authorized to act on behalf of the owner of an exclusive right that is allegedly infringed;

(2) identification of the copyrighted work claimed to have been infringed, or, if multiple copyrighted works on the Site are covered by the Notification, a representative list of such works on the Site;

(3) identification of the material that is claimed to be infringing or to be the subject of infringing activity and that is to be removed or access to which is to be disabled, and information reasonably sufficient to permit us to locate the material;

(4) information reasonably sufficient to permit us to contact the complaining party, such as an address, telephone number, and, if available, an email address at which the complaining party may be contacted;

(5) a statement that the complaining party has a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, its agent, or the law;

(6) a statement that the information in the notification is accurate, and under penalty of perjury, that the complaining party is authorized to act on behalf of the owner of an exclusive right that is allegedly infringed upon.

Counter-Notification

If you believe your own copyrighted material has been removed from the Site as a result of a mistake or misidentification, you may submit a written counter-notification to [us/our Designated Copyright Agent] using the contact information provided below (a “Counter Notification”).
To be an effective Counter Notification under the DMCA, your Counter Notification must include substantially the following:

1. identification of the material that has been removed or disabled and the location at which the material appeared before it was removed or disabled;
2. a statement that you consent to the jurisdiction of the Federal District Court in which your address is located, or if your address is outside the United States, for any judicial district in which we are located;
3. a statement that you will accept service of process from the party that filed the Notification or the party’s agent;
4. your name, address, and telephone number;
5. a statement under penalty of perjury that you have a good faith belief that the material in question was removed or disabled as a result of a mistake or misidentification of the material to be removed or disabled;
6. your physical or electronic signature.

If you send us a valid, written Counter Notification meeting the requirements described above, we will restore your removed or disabled material, unless we first receive notice from the party filing the Notification informing us that such party has filed a court action to restrain you from engaging in infringing activity related to the material in question.

Please note that if you materially misrepresent that the disabled or removed content was removed by mistake or misidentification, you may be liable for damages, including costs and attorney’s fees. Filing a false Counter Notification constitutes perjury.

COPYRIGHT INFRINGEMENTS

We respect the intellectual property rights of others. If you believe that any material available on or through the Site infringes upon any copyright you own or control, please immediately notify us using the contact information provided below (a “Notification”). A copy of your Notification will be sent to the person who posted or stored the material addressed in the Notification.

Please be advised that pursuant to federal law you may be held liable for damages if you make material misrepresentations in a Notification. Thus, if you are not sure that material located on or linked to by the Site infringes your copyright, you should consider first contacting an attorney.

TERM AND TERMINATION

These Terms of Service shall remain in full force and effect while you use the Site. WITHOUT LIMITING ANY OTHER PROVISION OF THESE TERMS OF SERVICE, WE RESERVE THE RIGHT TO, IN OUR SOLE DISCRETION AND WITHOUT NOTICE OR LIABILITY, DENY ACCESS TO AND USE OF THE SITE (INCLUDING BLOCKING CERTAIN IP ADDRESSES), TO ANY PERSON FOR ANY REASON OR FOR NO REASON, INCLUDING WITHOUT LIMITATION FOR BREACH OF ANY REPRESENTATION, WARRANTY, OR COVENANT CONTAINED IN THESE TERMS OF SERVICE OR OF ANY APPLICABLE LAW OR REGULATION. WE MAY TERMINATE YOUR USE OR PARTICIPATION IN THE SITE OR
DELETE ANY CONTENT OR INFORMATION THAT YOU POSTED AT ANY TIME, WITHOUT WARNING, IN OUR SOLE DISCRETION.

If we terminate or suspend your use or participation for any reason, you are prohibited from registering and creating a new account under your name, a fake or borrowed name, or the name of any third party, even if you may be acting on behalf of the third party.

In addition to terminating or suspending your use or participation, we reserve the right to take appropriate legal action, including without limitation pursuing civil, criminal, and injunctive redress.

MODIFICATIONS AND INTERRUPTIONS

We reserve the right to change, modify, or remove the contents of the Site at any time or for any reason at our sole discretion without notice. However, we have no obligation to update any information on our Site. We also reserve the right to modify or discontinue all or part of the Site without notice at any time.

We will not be liable to you or any third party for any modification, price change, suspension, or discontinuance of the Site.

We cannot guarantee the Site will be available at all times. We may experience hardware, software, or other problems or need to perform maintenance related to the Site, resulting in interruptions, delays, or errors.

We reserve the right to change, revise, update, suspend, discontinue, or otherwise modify the Site at any time or for any reason without notice to you. You agree that we have no liability whatsoever for any loss, damage, or inconvenience caused by your inability to access or use the Site during any downtime or discontinuance of the Site.

Nothing in these Terms of Service will be construed to obligate us to maintain and support the Site or to supply any corrections, updates, or releases in connection therewith.

GOVERNING LAW

These Terms of Service and your use of the Site are governed by and construed in accordance with the laws of the State of North Carolina applicable to agreements made and to be entirely performed within the State of North Carolina, without regard to its conflict of law principles.

DISPUTE RESOLUTION

To expedite resolution and control the cost of any dispute, controversy, or claim related to these Terms of Service (each a "Dispute" and collectively, the "Disputes") brought by either you or us (individually, a “Party” and collectively, the “Parties”), the Parties agree to first attempt to negotiate any Dispute (except those Disputes expressly provided below) informally for at least 40 days before initiating arbitration. Such informal negotiations commence upon written notice from one Party to the other Party.
Restrictions

The Parties agree that any arbitration shall be limited to the Dispute between the Parties individually. To the full extent permitted by law, (a) no arbitration shall be joined with any other proceeding; (b) there is no right or authority for any Dispute to be arbitrated on a class-action basis or to utilize class action procedures; and (c) there is no right or authority for any Dispute to be brought in a purported representative capacity on behalf of the general public or any other persons.

Exceptions to

The Parties agree that the following Disputes are not subject to the above provisions concerning informal negotiation: (a) any Disputes seeking to enforce or protect, or concerning the validity of, any of the intellectual property rights of a Party; (b) any Dispute related to, or arising from, allegations of theft, piracy, invasion of privacy, or unauthorized use; and (c) any claim for injunctive relief.

If this provision is found to be illegal or unenforceable, then neither Party will elect to arbitrate any Dispute falling within that portion of this provision found to be illegal or unenforceable and such Dispute shall be decided by a court of competent jurisdiction within the courts listed for jurisdiction above, and the Parties agree to submit to the personal jurisdiction of that court.

CORRECTIONS

There may be information on the Site that contains typographical errors, inaccuracies, or omissions that may relate to the Site, including descriptions, pricing, availability, and various other information. We reserve the right to correct any errors, inaccuracies, or omissions and to change or update the information on the Site at any time, without prior notice.

DISCLAIMER

THE SITE IS PROVIDED ON AN AS-IS AND AS-AVAILABLE BASIS. YOU AGREE THAT YOUR USE OF THE SITE AND OUR SERVICES WILL BE AT YOUR SOLE RISK. TO THE FULLEST EXTENT PERMITTED BY LAW, WE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, IN CONNECTION WITH THE SITE AND YOUR USE THEREOF, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. WE MAKE NO WARRANTIES OR REPRESENTATIONS ABOUT THE ACCURACY OR COMPLETENESS OF THE SITE’S CONTENT OR THE CONTENT OF ANY WEBSITES LINKED TO THE SITE AND WE WILL ASSUME NO LIABILITY OR RESPONSIBILITY FOR ANY (1) ERRORS, MISTAKES, OR INACCURACIES OF CONTENT AND MATERIALS, (2) PERSONAL INJURY OR PROPERTY DAMAGE, OF ANY NATURE WHATSOEVER, RESULTING FROM YOUR ACCESS TO AND USE OF THE SITE, (3) ANY UNAUTHORIZED ACCESS TO OR USE OF OUR SECURE SERVERS AND/OR ANY AND ALL PERSONAL INFORMATION AND/OR FINANCIAL INFORMATION STORED THEREIN, (4) ANY INTERRUPTION OR CESSATION OF TRANSMISSION TO OR FROM THE SITE, (5) ANY BUGS, VIRUSES, TROJAN HORSES, OR THE LIKE WHICH MAY BE TRANSMITTED TO OR THROUGH THE SITE BY ANY THIRD PARTY, AND/OR (6) ANY ERRORS OR OMISSIONS IN ANY CONTENT AND MATERIALS OR FOR ANY LOSS OR DAMAGE OF ANY KIND INCURRED AS A RESULT OF THE USE OF
ANY CONTENT POSTED, TRANSMITTED, OR OTHERWISE MADE AVAILABLE VIA THE SITE. WE DO NOT WARRANT, ENDORSE, GUARANTEE, OR ASSUME RESPONSIBILITY FOR ANY PRODUCT OR SERVICE ADVERTISED OR OFFERED BY A THIRD PARTY THROUGH THE SITE, ANY HYPERLINKED WEBSITE, OR ANY WEBSITE OR MOBILE APPLICATION FEATURED IN ANY BANNER OR OTHER ADVERTISING, AND WE WILL NOT BE A PARTY TO OR IN ANY WAY BE RESPONSIBLE FOR MONITORING ANY TRANSACTION BETWEEN YOU AND ANY THIRD-PARTY PROVIDERS OF PRODUCTS OR SERVICES.

AS WITH THE PURCHASE OF A PRODUCT OR SERVICE THROUGH ANY MEDIUM OR IN ANY ENVIRONMENT, YOU SHOULD USE YOUR BEST JUDGMENT AND EXERCISE CAUTION WHERE APPROPRIATE.

LIMITATIONS OF LIABILITY

IN NO EVENT WILL WE OR OUR DIRECTORS, EMPLOYEES, OR AGENTS BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, EXEMPLARY, INCIDENTAL, SPECIAL, OR PUNITIVE DAMAGES, INCLUDING LOST PROFIT, LOST REVENUE, LOSS OF DATA, OR OTHER DAMAGES ARISING FROM YOUR USE OF THE SITE, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

INDEMNIFICATION

You agree to defend, indemnify, and hold us harmless, including our subsidiaries, affiliates, and all of our respective officers, agents, partners, and employees, from and against any loss, damage, liability, claim, or demand, including reasonable attorneys’ fees and expenses, made by any third party due to or arising out of: (1) use of the Site; (2) breach of these Terms of Service; (3) any breach of your representations and warranties set forth in these Terms of Service; (4) your violation of the rights of a third party, including but not limited to intellectual property rights; or (5) any overt harmful act toward any other user of the Site with whom you connected via the Site.

Notwithstanding the foregoing, we reserve the right, at your expense, to assume the exclusive defense and control of any matter for which you are required to indemnify us, and you agree to cooperate, at your expense, with our defense of such claims. We will use reasonable efforts to notify you of any such claim, action, or proceeding which is subject to this indemnification upon becoming aware of it.

USER DATA

We will maintain certain data that you transmit to the Site for the purpose of managing the Site, as well as data relating to your use of the Site. You are solely responsible for all data that you transmit or that relates to any activity you have undertaken using the Site.
You agree that we shall have no liability to you for any loss or corruption of any such data, and you hereby waive any right of action against us arising from any such loss or corruption of such data.

**ELECTRONIC COMMUNICATIONS, TRANSACTIONS, AND SIGNATURES**

Visiting the Site, sending us emails, and completing online forms constitute electronic communications. You consent to receive electronic communications, and you agree that all agreements, notices, disclosures, and other communications we provide to you electronically, via email and on the Site, satisfy any legal requirement that such communication be in writing.

YOU HEREBY AGREE TO THE USE OF ELECTRONIC SIGNATURES, CONTRACTS, ORDERS, AND OTHER RECORDS, AND TO ELECTRONIC DELIVERY OF NOTICES, POLICIES, AND RECORDS OF TRANSACTIONS INITIATED OR COMPLETED BY US OR VIA THE SITE.

You hereby waive any rights or requirements under any statutes, regulations, rules, ordinances, or other laws in any jurisdiction which require an original signature or delivery or retention of non-electronic records, or to payments or the granting of credits by any means other than electronic means.

**CALIFORNIA USERS AND RESIDENTS**

If any complaint with us is not satisfactorily resolved, you can contact the Complaint Assistance Unit of the Division of Consumer Services of the California Department of Consumer Affairs in writing at 1625 North Market Blvd., Suite N 112, Sacramento, California 95834 or by telephone at (800) 952-5210 or (916) 445-1254.

**MISCELLANEOUS**

These Terms of Service and any policies or operating rules posted by us on the Site constitute the entire agreement and understanding between you and us. Our failure to exercise or enforce any right or provision of these Terms of Service shall not operate as a waiver of such right or provision.

These Terms of Service operate to the fullest extent permissible by law. We may assign any or all of our rights and obligations to others at any time. We shall not be responsible or liable for any loss, damage, delay, or failure to act caused by any cause beyond our reasonable control.

If any provision or part of a provision of these Terms of Service is determined to be unlawful, void, or unenforceable, that provision or part of the provision is deemed severable from these Terms of Service and does not affect the validity and enforceability of any remaining provisions.

There is no joint venture, partnership, employment or agency relationship created between you and us as a result of these Terms of Service or use of the Site. You agree that these Terms of Service will not be construed against us by virtue of having drafted them.
You hereby waive any and all defenses you may have based on the electronic form of these Terms of Service and the lack of signing by the parties hereto to execute these Terms of Service.

CONTACT US

In order to resolve a complaint regarding the Site or to receive further information regarding use of the Site, please contact us at:

StayNeighbor
community@stayneighbor.com
Appendix 3: Recommendations for Best Practices

Recommendations for Best Practices

Given the nature of COVID-19, it is vital to take as many precautions as possible in order to protect both volunteers and those we aim to serve. We advise all communities to follow official recommendations from their local health agencies, the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO).

Below are several recommendations we encourage all community organizers to follow in order to reduce risks associated with COVID-19 as much as possible:

- Deliveries should be non-contact -- this helps protect both the deliverer and the recipient from possible COVID-19 exposure.

- Deliverers should refrain from volunteering if they are experiencing any symptoms related to COVID-19, including but not limited to fever, cough, shortness of breath, cold or flu-like symptoms, and diarrhea (additional information can be found on the WHO Coronavirus page).

- Deliverers should refrain from volunteering if they have been exposed to anyone with a confirmed or suspected case of COVID-19.

- Deliverers will maintain the privacy of recipients at all times, as much as possible.

- Encourage deliverers to wash hands with soap and water for 20 seconds whenever possible, in particular just before and after deliveries. When soap and water are not available, promote the use of hand sanitizer as an alternative. Disposable gloves may be used if no hand sanitizer is available; a clean pair should be utilized for each delivery.

- Ensure any coughs/sneezes are covered by a tissue, or with an upper sleeve when tissues are unavailable. Never cough/sneeze into hands.

- Have vehicles and delivery equipment regularly sanitized with cleaning spray/disinfecting wipes.