

Social Venture Business Plan March 2024

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# Contents

1. Executive Summary	4
2. Introduction	5
2.1 Primary Issue	5
2.2 Main Solution	5
3. Social Impact	6
3.1 Theory of Impact	6
3.2 Metrics of Impact	6
3.3 Factors of Success	7
4. Market Research	7
4.1 Target Audiences	7
4.1.1 Disaster Relief Organizations	8
4.1.2 Homelessness Relief Organizations	8
4.1.3 Off-Grid Community	8
4.2 Competition	8
4.2.1 Pallet Homes	9
4.2.2 Large Emergency Tents	9
4.2.3 Tent Equipment Stores	9
4.3 Economic Factors	9
4.4 Social Factors	10
4.5 Political Factors	10
4.6 Advertising	10
5. Business Operations	11
5.1 Location	11
5.2 Deploy-A-Pad Design	
5.3 Business Structure	13
5.4 Employee Relations	14
5.5 Customer Relations	14
5.6 Website	14
5.7 Long-Term Operations	15
6. Finance and Risk Analysis	16
6.1 Feasibility	16
6.2 Initial Investment and External Investment Opportunities	16

6.3 Qualitative Risk Analysis	17
6.4 Quantitative Risk Analysis	17
Appendices	20
References	33
Appendices References	20 33

# 1. Executive Summary

We are solving the problem of a lack of shelter from disaster situations. After Floods, Earthquakes, and Tsunamis frequently infrastructure and people's homes are destroyed leaving many people unhoused. There is often not enough shelter, or the shelters are public spaces and do not provide significant privacy or comfort.

We are designing temporary homes which provide shelter for one individual for long enough for rebuilding to happen while protecting those who lost their homes. The shelter is easy to transport and provides protection from the elements, as well as lighting, and water access. They are designed to last for short to medium length periods between new shelters being built after a disaster.

Customers include three different groups FEMA, governments, and off-grid individuals. FEMA and governments are looking for our shelters as temporary emergency shelters to be quickly deployed. While off-grid individuals are purchasing our shelters to live off-grid while they design a more permanent home. After we make significant profits in year 5 and later, we plan to donate shelters to homeless organizations we have relationships with to have an impact on the homeless crises with our temporary homes.

Most of our revenue comes from large FEMA contracts and selling to governments looking to have their own supply of shelters. While in the first year we will mostly only be selling to individuals in the off-grid community to prove our ability to provide many reliable shelters to larger groups like FEMA and the Dominican Republic. After year 3 a new product will be developed by our engineering team which will provide a large enough shelter for two individuals instead of one. This new product will allow us to increase our revenue and potentially open the opportunity to more FEMA contracts that are looking to house larger groups.

We are seeking \$100,000 from investors to provide our initial funding. In addition to the investment, we are taking out a \$80,000 loan along with contributing \$45,000 of our own money into the business. This is because our business's initial cost of materials, equipment, and employees will cost a total of \$225,000. We are making about \$22,000 a month in our first year. We will be profitable starting year 3 with a net profit of \$669,238.

### Vision Statement

A world where shelter is accessible while communities recover from natural disasters.

### **Mission Statement**

Our mission is to provide ethically made shelters in disaster situations by creating affordable and easily deployable housing to assist in the recovery of those who have lost their homes.

# 2. Introduction

# **2.1 Primary Issue**

In the Dominican Republic alone, 1,415,000 were left without drinking water, 37,060 were displaced with 158 of them still needing shelter from a tropical storm in 2023 (UNICEF 2023). The shelters provided were close to 50% repurposed schools, which did not provide privacy and delayed the academic year (UNICEF 2022).

The key problem that we are addressing is the loss of homes due to natural disasters. Immediately after a disaster such as a hurricane, earthquake, or tsunami, homes are often destroyed, and residents need temporary shelter while infrastructure is rebuilt. From 2021 to 2023, the number of natural disaster events has averaged 412 per year. Specifically, storms, floods, and earthquakes account for 188 billion dollars of damage. Much of this damage causes destruction of public property and peoples' homes.

Another related problem is homelessness due to systematic social issues rather than more idiosyncratic events such as natural disasters. In 2022, there were 17,377 unsheltered people experiencing homelessness in the US, (US Department of Housing and Urban Development) (HUD 2022). During mild to extreme weather events such as heavy rain, sleet, and ice storms, shelter is essential to wait out a storm while maintaining well-being.

# 2.2 Main Solution

Our solution provides temporary portable emergency housing units that can be rapidly deployed to areas impacted by natural disasters or other housing crises. The units are designed to be compact for storage and transport but can be easily assembled on-site to provide immediate shelter. They are intended to provide private short to medium term shelter rather than a permanent housing solution. However, their versatility supports various disaster response scenarios. Once emergency needs have passed, the units can be easily disassembled and stored or returned through our recycling process, elaborated more in Business Operations.

We are producing our shelters to be sold to three different groups: FEMA, the Dominican Republic, and the off-grid community. Because FEMA and local governments have large bulk orders and require bidding on contracts during our first year, we are proving our ability to consistently deliver shelters and increase production by selling mostly to our individual off-grid community. This increases our chances of earning a FEMA contract because we have a proven reputation.

Our shelters have two main functions: use for disaster relief, and temporary living space. For disaster relief, we are selling them to governments organizations and FEMA, they will provide enough shelters to account for people where there is no space in emergency shelters and provide a more comfortable private living situation. While the temporary living space is for the off-grid community could benefit from a temporary outdoor shelter while constructing more permanent homes. These shelters will also be donated to homeless organizations as shelters that can be used to keep people experiencing homelessness safe from the elements during the colder seasons and while waiting for reduced income housing. After our 5<sup>th</sup> year of product, we plan to start donating 1 shelter for every 15 units that are sold. They will be sent to a collation of places like homeless shelters and local charily locations that we hope to grow a connection with. For this solution to be effective, we would need to have a relationship with organizations to deploy

on their land. Some of these organizations include Mary's place Seattle, Abundance of Hope Center, The Block Project, Attain Housing, Compass Housing Alliance.

To align with Sustainable Development Goal #12: Responsible Consumption and Production, we plan to keep manufacturing costs low through an efficient design optimized for portability by being lightweight while also having long-lasting materials to be able to reuse and redeploy for rapid on-site expansion. This will allow us to make our products affordable enough for government emergency agencies to stockpile and maintain a steady supply for rapid deployment. Furthermore, we will reinvest a portion of the profits into further research and development to design higher quality units with more sustainable materials and practices.

Additionally, because our shelters have a low price point and are designed for situations without readily available electricity. Shelters will also be sold to the off-grid community, which is estimated to be around 180,000 to 750,000 people (Smith-Cavros & Sunyak). Selling the shelters commercially will help to allow for providing more free shelters and give economic growth for further products.

# **3. Social Impact**

# **3.1 Theory of Impact**

Our product is a transitional shelter providing temporary shelter while a long-term solution is developed. Our product mainly aims to fill the gap between those who were unable to find space for shelter after a natural disaster and space for those experiencing homelessness during harsh weather events.

Within the first year of our business, we will conduct two case studies to cover natural disaster relief and unsheltered homelessness relief: The Dominican Republic and Williston, Vermont respectively.

Our natural disaster relief case study is the Dominican Republic where we are currently focusing our shelter efforts. Ecotourism and tourism are a large industry in the Dominican Republic and the community has high security and resilience allowing them to rebuild sooner. We plan to expand to the rest of the Caribbean islands and then slowly other climates.

Our shelters also have an impact on homelessness. Our other case study focuses on sheltering people experiencing homelessness during harsh weather events such as heavy precipitation. Deploy-A-Pad is a temporary solution that is quickly and easily deployable to shelter homeless people from precipitation in the case shelters or "Pallet" – like housing is full.

Besides our case studies, the off-grid community benefits from our shelter as it provides a better shelter for the intermediate period between the building of their long-term housing. Our shelter provides lighting, water access, and the ability to be raised above the ground. This is a significant improvement over having only a tent with a waterproofing attachment.

# **3.2 Metrics of Impact**

• Case Study #1

- Headcount of unsheltered individuals after all infrastructure is repurposed and all Deploy-A-Pads are deployed
- Improvement from original housing in privacy, comfort, and access to utilities like water and lighting.
- Time/speed of recovery between getting the first resident housed back into their permanent home
- Case Study #2
  - Headcount of unsheltered individuals before a weather event vs headcount of sheltered individuals during weather event
  - $\circ$   $\;$  Number of homeless organizations partnering with us
- Off-Grid Community
  - Engagement on posts in off-grid forums
  - $\circ$  Sales and returns ratio

# **3.3 Factors of Success**

We are measuring success based on two different metrics, taking a person from unhoused to housed, and improvement in living conditions. Improvement in living conditions includes a few different factors size of housing, access to water, access to lighting, privacy, and sleeping conditions. Our success is measured by collecting data on what the original housing situation of those the shelter is going to was like. This data will be collected from the government that we sell to as well as UNICEF (United Nations Children's Fund) and other organization situation reports to determine success.

Our success metric for the off-grid community and contribution to homeless organizations will be measured in a similar way. The off-grid community will instead be measured by user feedback as they often will already have access to comfortable living situations and using the metric of improved living conditions doesn't make sense. While contribution to homeless organizations will also be measured by improvement from original living conditions.

# 4. Market Research

# **4.1 Target Audiences**

Our business focuses on two main groups of customers. One of these groups is aid organizations, such as governments and FEMA. This will be our main source of income as we expect most of our orders to come from bidding on FEMA contracts and selling to governments. One of the contracts that is offered is Transportable Temporary Housing Unit (TTHU) Program - Manufactured Housing Units (MHU), which is a contract that sells temporary housing in advance to FEMA. Our product meets the goal of this contract, which is a small temporary housing unit that could be easily stored and transported. We estimate, based on the current temporary housing FEMA contracts, there is a total of 158 million dollars based on the 2023 FEMA award winners.

While working with government organizations such as the Dominican Republic, we would need to have a connection with someone in a government position to ensure that we have consistent sales. We estimate that selling to the Dominican Republic, there are 50,060 internally

displaced people who need shelter or could benefit from improved shelter. As we are selling each shelter for \$1100 the potential market earnings are \$50,060,000 (internal displacement)

Our second market is the off-grid community who normally either create their own housing or use camping equipment. Based on a study done on the number of off-grid people, there are 180,000 to 750,000 people in the US who live off-grid in these types of housing units. Each of these individuals are likely to purchase 1 to 2 of these shelters as we expect that they would use this housing as a temporary shelter while they make a more permanent home.

# 4.1.1 Disaster Relief Organizations

Our disaster relief audience is the Dominican Republic government and the US government organization FEMA. These organizations will be purchasing our shelters for immediate crises such as an ongoing disaster and for emergency preparedness of having shelters on hand to be able to immediately deploy.

# 4.1.2 Homelessness Relief Organizations

Our homeless relief audience is mostly focused on developing relationships with homeless organizations. Because our shelters can provide temporary shelter, we need to find a shelter that has land that can legally allow our shelters to be stored on. Additionally, our shelters are designed for short to medium-term so the organization would need to be working to find permanent homes for their residents.

# 4.1.3 Off-Grid Community

The off-grid community are individual customers who are using our product as temporary housing while they are building a more permanent home. This audience will require more marketing as they are not an organization that is looking to consistently purchase large numbers of shelters. Instead, we expect individuals to purchase 1 to 2 shelters from trade shows and camping stores that we are advertising in.

# 4.2 Competition

Because of our broad market for disaster relief, we are competing with other companies that sell to FEMA and relief organizations. Competitors are other designers of emergency relief shelters looking for Transportable Temporary Housing Unit (TTHU) Program - Mission Support (MS) FEMA contracts and grants for emergency housing. Some of these companies include Pallet, ShelterBox, Intershelter, Relief Tents, and Sprung structures. Many of them, instead of selling a shelter, sell tents which are more temporary than our design but still serve the same purpose and can house a much greater number of people. Pallet, Intershelter, and Spring structures focus slightly more on homelessness rather than disaster relief.

In our second market of the off-grid community, we are competing mostly with large tent manufacturers manufacturer companies such as Anchor Industries, Ambruster manufacturing, Yamaha. These companies sell in marketplaces such as REI and Dick's Sporting Goods. We will be competing for space in these marketplaces and will need to have advertising so that those who are living off-grid notice our product.

### 4.2.1 Pallet Homes

One of our main competitors in the small shelter market is Pallet Shelters which through government funding and donations provides smaller homes for homeless individuals along with resources to support them. This would be a competitor for our homelessness relief audience. We have a slightly different focus as our shelters have less amenities but are significantly smaller and cheaper to design. Though this would not impact on our profits it does impact on our social impact. Sprung Structures has a similar model to Pallet and would also fit into competition.

### 4.2.2 Large Emergency Tents

In our disaster relief competitors, we have companies like ShelterBox, Intershelter, and Relief Tents. Each of these companies design very large structures to support disaster relief, generally they are large tents to work as triage or public shelters. Our product meets the same needs but is designed for an individual rather than large groups. Our advantages are that we provide significantly more comfort and privacy while having a similar price point and the ability to be shipped. Our product is being sold for \$1100 while rooftop tents with similar functionality go for around \$2000 (REI).

# 4.2.3 Tent Equipment Stores

In our second market of the off-grid community, we are competing mostly with large tent manufacturers manufacturer companies such as Anchor Industries, Ambruster manufacturing, Yamaha. These companies sell in marketplaces such as REI and Dick's Sporting Goods. We will be competing for space in these marketplaces and will need to have advertising so that those who are living off-grid notice our product.

# **4.3 Economic Factors**

We are expecting growth in the temporary shelters market due to climate change getting worse. A report from the Disaster Resilience Framework, serving as a guide to analyze federal actions promoting natural disaster resilience, shows a rising number of natural disasters and federal spending on weather disasters is expected to increase (U.S. GAO). The global temporary shelters industry grew from \$44.8 billion to \$47.19 going from 2023 to 2024 and is projected to reach \$57.52 billion by 2028 which includes disaster relief, support for homeless, runaway youths, and victims of domestic violence (The Business Research Company). The temporary shelters market will likely continue to see growth as socio-economic challenges, such as homelessness, persist globally.

The current market dynamics show the main driving forces behind the projected growth of the industry are higher government funding and strategic partnerships to further improve the temporary accommodations during disaster relief responses (Yahoo Finance). The overall push

to use more eco-friendly materials and efficiently spaced shelters is leading to innovation and new solutions in the housing market. This is why Deploy-A-Pad will be contributing a large proportion to research and development in the long-run as we begin entering the market.

One of the current barriers in the market is restrictions on foreign funding to take initiative on temporary shelter, however one way to get over this barrier is establishing partnerships with homeless relief organizations as another stream of revenue (The Business Research Company). In the long-run, Deploy-A-Pad is planning to connect with both federal government agencies such as FEMA, NOAA, and CDC to provide natural disaster relief globally. We also plan to connect with homeless relief organizations or organizations that are working to combat housing crises such as the Red Cross, Salvation Army, and local state governments.

As concerns around leaving carbon footprints grow, there is a growing interest in off-grid shelters. Climate change is also leading to higher demands for energy, especially with days getting hotter. Areas with high per-capita income and high-population density demand much more energy compared to tropical areas that are usually home to developing economies and are poorer in comparison (van Ruijven, De cian & Sue Wing). Rising costs on energy and demand rapidly increases along with consciousness over energy consumption leads to some individuals to stray away from highly dense areas and becoming attracted to the off-grid lifestyle.

### **4.4 Social Factors**

Social factors need to be accounted for while launching a business that will have relations to foreign countries. Given how shaken a community can be after a natural disaster event, we believe in promoting a warm and safe space for residents we are serving and expect our employees from the top-down and bottom-up to be open to different cultures and have humility as we aid those who are suddenly thrusted into unfortunate circumstances.

We strive to promote stewardship between cultures to further our mission of sheltering those from harsh elements and providing a space for transitional parts of their life whether it was idiosyncratic from a storm, systematic from a failed social safety net, or they are looking for a new lifestyle healthier for our planet.

# **4.5 Political Factors**

Our case study for natural disaster relief is in the Dominican Republic due to how there are already established relief efforts and its relatively more stable political climate. The government has previously shown how receptive they are with disaster relief responders from the U.S. and would be a healthy environment for Deploy-A-Pad to bloom. Some of our other potential countries such Hati do not have as stable of governments and would potentially not put our resources to as good of use.

# 4.6 Advertising

Most of our marketing will be targeted at the off-grid community as this is the only revenue stream that is based on individual sales rather than interacting with the government. We will be marketing by sending employees out to visit tradeshows and display our shelter's functionality along with displaying our products in marketplaces such as REI and Dicks Sporting Goods. To market to the off-grid community, we also intended to have a presentation booth to show the shelter and advertise to individuals looking for camping equipment and longer-term portable shelters. Additionally, we will send representatives to stores such as REI and Dick's Sporting Goods to show our product and its capabilities to the store owners. Social media presence will allow us to connect with more of the off-grid community and let them know about our product. Most of this Marketing is done between April and September due to those being are highest sales months. We have also accounted for Travel expenses like flights and other transport and as well as food and hotels for 2 weeks each month per employee at \$2,650 per month.

# **5. Business Operations**

Our main revenue stream is from being awarded FEMA contracts for providing temporary housing for disaster relief. To create sales with government emergency aid agencies such as FEMA, The Red Cross, and the Salvation Army, we have hired government awards liaison who are focused on building and maintaining a relationship with FEMA and working through the sam.gov website to bid on FEMA contracts.

Working with the Dominican Republic government, we will have a customer service supervisor who is from and based in the Dominican Republic to create relations with the government and to ensure that our product is well maintained. This is our main method of marketing to the Dominican Republic government as having connections to make sure that they are aware of our product and its ability to provide immediate shelter in the event of a disaster.

# 5.1 Location

Our central production and storage location will be located at 115 Wellness Dr Williston, VT. This location gives us multiple advantages, laying the foundation for long-term success and sustainable growth. We have chosen Vermont as our base of operations because it has anti-flooding mitigation and has a similar time zone to the Dominican Republic. We also have an office in the Dominican Republic in Piantini, Santo Domingo.

### Geographic Advantage

Situated less than 5 minutes from the interstate, our location provides seamless connectivity for transportation and logistics. This not only facilitates the movement of goods but also ensures quick access to key supply chain routes, streamlining our distribution network. Vermont's commitment to anti-flooding mitigation aligns seamlessly with our dedication to sustainable and secure business practices.

### Time Zone Alignment

Our chosen location shares a similar time zone with the Dominican Republic, a potential candidate for our solutions. This synchronicity will foster efficient communication and coordination between our teams, enhancing overall productivity and collaboration. Our engineers will be able to quickly communicate with our liaisons in the Dominican Republic along with our sales team.

### Accessibility to Burlington International Airport

With a mere 7-minute drive to Burlington International Airport, our company enjoys excellent connectivity with both domestic and international business operations. This proximity enhances our capacity for quick shipping and facilitates potential partnerships with global stakeholders.

#### Nearby Recycling Plant

Our commitment to sustainability is reinforced by the proximity to a recycling plant. This not only aligns with our environmental goals but also opens avenues for potential collaboration and resource optimization in waste management. Older shelters that no longer meet our standards for use can be broken down and have their parts sustainably removed or reused.

#### Large Capacity

Having a warehouse with a height of 28 feet would significantly benefit your business by providing ample storage space and facilitating integrated manufacturing processes within the same facility. This vertical storage optimization not only enhances inventory management but also contributes to cost-effective operations. Additionally, the ability to combine storage and manufacturing in a single building streamlines logistical processes, reducing transportation costs and minimizing the time and effort required to transfer goods between different locations.

### Dominican Republic location

In addition to our Vermont location, we will also require a location based in the Dominican Republic specifically in Piantini, Santo Domingo to supply both customer service and to be able to sustain a quality reputation within the local community. This property will cost \$800 a month and provide a space for our team in the Dominican Republic to meet and perform marketing operations. This location has multiple offices to allow calls with everyone in Vermont to keep companywide transparency.

# 5.2 Deploy-A-Pad Design

Our emergency shelter has four main subsystems, the electrical system, The pulley system, the water filter, and the housing. This section will briefly go over the design of each of these subsystems, including their components, manufacturing processes, and function. Valentino Guevara will lead shop technician to ensure production on the floor goes smoothly and Thomas Morton will be responsible for a majority of our designs given their qualifications (see Appendix C).

### Electrical Subsystem

The electrical components include an Arduino Nano, two 3.15 inch cooling 5V fans, 3 ft of LED string lights, an LCD display, temperature sensor, buttons, 2 2.4 Nm Stepper Motor, and a 24 V 100-amp hours Battery which we expect to last around 2 months without recharge. The Arduino Nano is the microcontroller for the system which will allow the shelter to recognize user input, to collapse and assemble the shelter, turn on and off the lights, adjust the cooling from the fans, and view the remaining battery life. The fans are set up to have one as an intake fan bringing in new cool air and one as an exhaust fan which removes the hot air inside the shelter.

#### **Pulley Subsystem**

To allow the assembly and collapse of the shelter there is the pulley system. This system includes 2 3-inch diameter pulleys, 4 1.5-inch pulleys, and 4 1-inch pulleys, 25 ft of steel wire, two 45-inch aluminum support beams, 4 1500-mm cart and rail assemblies, 4 cart to support beam hinges, and two stepper motors. The system operates by having the motor spin the steel wire on the 3-inch pulley. This causes the wire to apply a force to the support beams moving them along the rail system. The angle between the support beams and the base of the shelter becomes very small bringing the top of the support beams that are supporting the roof low enough for the outer casing to close. This process can be done automatically with the electrical system or manually by spinning the main pulley in the event of a dead battery or an emergency.

#### Water Filter Subsystem

The shelter includes a water filter system which collects rainfall from the exterior of the shelter and can have water poured into it. The system includes a LifeStraw, 1 ft PCV tubing, a 4-liter watertight bag, and an open close valve. The shelter has a gutter system on the hard casing which allows rainfall to enter the watertight bag. With the on/off valve the water clean water can be accessed from the interior of the shelter. The LifeStraw will need to be cleaned after a week of use and can be easily detached for this purpose.

### Housing Subsystem

The exterior of the shelter is made from a hard plastic material which is the portion that can be collapsed to allow for easier shipping. The housing system also includes wood supports which hold the base floor of the shelter above the bottom of the hard plastic casing and provides space to store the electronic equipment. On top of the base floor is an air mattress which can be inflated after the housing is fully assembled.

#### Manufacturing Process

The shelter is assembled by a team of engineers, they first cut the metal support beams into 45-inch lengths, then they cut the wood platforms for the shelter. The pulley system is 3D printed and then glued into place in the shelter. The cart and rail system are screwed into the wood platforms and then the support beams are attached to the cart and rail system. The electronics are then placed into the shelter. A tarp cover is attached to the top and bottom of the hard casing to provide privacy and protect from the elements. Finally, everything is secured to the hard outer casing and the water filter is attached to the outside of the shelter. The electrical components ca be accessed from a panel on the floor of the wooden supports to make any maintenance changes required.

# **5.3 Business Structure**

Deploy-A-Pad is a Limited Liability Corporation where Valentino Guevara and Thomas Morton own 24% each of the company while Cynthia Nguyen owns 52%. The corporation is its own liable entity, separate from its members. Should serious legal action need to take place, specific owners will be protected and not significantly affected by such legal action. Another benefit of an LLC is that they require less state-imposed compliance requirements relative to corporations, partnerships, and proprietorships.

## **5.4 Employee Relations**

Deploy-A-Pad aims to align with Sustainable Development Goal #8: Decent Work and Economic Growth through our recruitment of our liaisons. While working with the Dominican Republic, we would prioritize hiring local residents from areas of various urbanization to keep in touch with those we are serving. We are looking to hire up to 5 employees in these positions by 2029 to be able expand our reach in the area. All employees for the first five years will get a raise of 7% each year. For more detail on employee pay see Appendix E.

### **5.5 Customer Relations**

Deploy-A-Pad understands how critical it is to understand and be open to culture as we work with foreign governments in preparation for and during disaster events. A portion of our training before any technicians or engineers arrive on-site is to have them interact with our liaisons to begin understanding details within the culture they will soon be interacting with.

For homelessness relief, besides reviews of technical routines, we would also emphasize to our on-site employees how important it is to humanize those who are experiencing homelessness. Our company believes in essential shelter in relation to life conservation and human dignity. We will be able to expand this by ensuring that the homeless shelters that we work with have strong communication with and are able to repair or supply any necessary information for our customers.

Our customer relations will also be available to communicate with off-grid customers. These customers will likely have questions on the emergency shelter's use case and ask for potential repairs if our shelter has a feature that is not working. We would be able to meet these needs by contacting our customer service department and they could send in a team of engineers.

# 5.6 Website

Our website will be one way to contact Deploy-A-Pad and get information regarding who we are contracted to, what we are developing, and quick information on the importance of emergency accommodation such as temporary housing. As one of core values is transparency, we believe it is crucial to inform any organizations and individuals interested in our work (see Appendix A).

- *Homepage:* The homepage welcomes visitors with an introduction to Deploy-A-Pad's mission and values. It offers a glimpse into the core principles of transparency and innovation. A scrolling banner showcases real-world deployment scenarios, emphasizing the practicality and versatility of our temporary shelters.
- **Product Showcase:** A dedicated section showcases the Deploy-A-Pad housing unit, highlighting its features, benefits, and versatility. Visitors can explore detailed descriptions, high-quality images, and interactive 3D models to gain a deeper understanding of the product's design and functionality.
- *News and Updates:* Stay informed about the latest developments, announcements, and events related to Deploy-A-Pad and its ongoing initiatives. A dedicated news section

features press releases, blog posts, and multimedia content, keeping visitors up-to-date with the organization's impact, achievements, and future plans.

• *Contract Awards:* Transparency is paramount at Deploy-A-Pad, and the website features a section dedicated to highlighting the organization's awarded contracts.

# **5.7 Long-Term Operations**

No one left in harsh weather or unsheltered natural disasters is the main vision Deploy-A-Pad works towards. Through expansion of product lines and clients, Deploy-A-Pad will eventually have a global presence. Below is a table outlining our main goals for each year for each of our target audiences.

Year	Natural Disaster Relief	Homelessness Relief	Off-Grid Community						
1	Service the Dominican Republic	Service city we are currently located in	Advertise to the community through forums and other forms of social media						
2	Gain contracts from governments and disaster relief organizations at various levels	Partner and/or gain contracts from homeless shelter organizations in the state of Vermont	Attend tradeshow events to continue advertising to the community						
3	Begin producing two- person shelters and expand to government contracts in all of the Caribbean	Partner and/or gain contracts from homeless shelter organizations along the East Coast	Continue attending tradeshows while contacting large influencers within the community						
4	Develop shelters for cooler climates and their weather during natural disasters	Continue reaching out to homeless shelter organizations within the U.S.	Begin selling the two- person units						
5	Continue research and development based on analysis of results and feedback of our previous shelters to produce shelters with a minimal carbon footprint and sturdy structure								

# 6. Finance and Risk Analysis

# 6.1 Feasibility

The financial goals for Deploy-A-Pad are made possible by our identification as a small business owned by a woman of color and supplemental income from revenue generated by the off-grid community. Deploy-A-Pad undertakes high material costs in Year 1 for equipment and run at full capacity, and then double our equipment in Year 2 to increase production. However, these ensure future profitability as contracts grow and we reach out to more organizations, which will lead to financial success.

Our company is financially feasible, given these key assumptions: There are willing residents and government employees willing to be our liaisons, we can secure spots at trade shows, and relief organizations of at a multitude of levels in the U.S. are interested in contracting us for our work and mission.

Within our first year, we would be capable of producing 120 single-person units per month given our technicians and founders' industry skills. A more detailed breakdown of production can be seen below.



# 6.2 Initial Investment and External Investment Opportunities

Deploy-A-Pad believes that shelter, let alone from extreme weather, is a beyond worthwhile venture. Each of the founding members will be taking out an \$80,000 loan and ask for \$100,000 from investors. In return for the \$100,000 from investors, we will allocate 20% of our company to investors once we no longer qualify as a small business according to the U.S. Small Business Administration.

Deploy-A-Pad is a small business eligible for government contracting in the Temporary Shelter industry, with the NAICS Code of 624221. We qualify as a small business given our annual revenue is not \$13.5 million on average within the first five years. Furthermore, since Cynthia Nguyen owns at least 51% of the company, we will fall under 8(a) Set Aside where government contracts worth less than \$150,000 are set aside for small businesses whose owners are socially and economically disadvantaged by identity and we also qualify to compete for the Women-Owned Small Business Federal Contract Program which awards at least 5% of all federal contracting dollars to small women-owned businesses each year (U.S. Small Business Administration).

# 6.3 Qualitative Risk Analysis

There are two circumstances that can be seen as threats to Deploy-A-Pad and both are dependent on climate change. There is a possibility that effects of climate change are rapid and disasters increase in severity sharply. And, there is the possibility that climate change is mitigated as humanity makes significant changes in lifestyle and production practices. However, we do not view the latter as a threat as we are also working to practice sustainable practices. Deploy-A-Pad views ourselves as more of a company producing transitional products as the world works to manage climate change.

Even in the case of climate change being mitigated or even reversed, natural disasters will always be a threat to humanity as we grow and end up building on zones that have higher risks of disasters. We would also likely shift to have a higher proportion of shelters produced for homelessness relief and off-grid consumers if disaster relief contracts grow smaller.

# 6.4 Quantitative Risk Analysis

Our initial costs require us to take out \$80,000 per founder from our own assets and take out a \$250,000 loan. Referencing the Projected Profit & Loss table below, while we will not reach profitability until Year 3, we do breakeven in Year 2. This is somewhat compensated for by our different sources of income from contract sales, government sales, and the off-grid community. It is possible that one of these revenue sources could be slow for a year as the number of displaced people from disasters could be lower by year. But it is unlikely that all these revenues will concurrently have a dip which leaves us with some sources of income at all times.





Projected Profit & Loss	2025	2026	2027	2028	2029
Revenue	\$291,500	\$984,500	\$2.4M	\$3.3M	\$4.7M
Private consumer Shelter sales	\$291,500	\$434,500	\$1.2M	\$1.6M	\$2.2M
Unit Sales	265	395	1,100	1,500	2,000
Unit Prices	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100
Two-Person Shelter	\$0	\$0	\$400,000	\$500,000	\$800,000
Unit Sales	0	0	200	250	400
Unit Prices	\$0	\$0	\$2,000	\$2,000	\$2,000
Contract Orders (1-Person Shelters)	\$0	\$550,000	\$770,000	\$1.1M	\$1.6M
Unit Sales	0	500	700	1,000	1,500
Unit Prices	\$0	\$1,100	\$1,100	\$1,100	\$1,100
Direct Costs	\$190,800	\$243,960	\$303,629	\$370,451	\$445,150
Direct Labor	\$190,800	\$243,960	\$303,629	\$370,451	\$445,150
Salaries & Wages	\$159,000	\$203,300	\$253,024	\$308,709	\$370,958
Engineering Team	\$35,000	\$37,450	\$40,072	\$42,877	\$45,878
Shop Technicians (6)	\$124,000	\$165,850	\$212,952	\$265,832	\$325,080
Employee Related Expenses	\$31,800	\$40,660	\$50,605	\$61,742	\$74,192
Gross Margin	\$100,700	\$740,540	\$2.1M	\$2.9M	\$4.2M
Gross Margin %	35%	75%	87%	89%	90%
Operating Expenses	\$370,860	\$735,288	\$1.3M	\$1.6M	\$2.2M
Salaries & Wages	\$134,000	\$217,540	\$276,311	\$303,934	\$321,577
Government Awards Liaison (1.8)	\$31,000	\$63,860	\$65,776	\$67,750	\$69,782

# Projected Profit & Loss (1 of 2)

# Projected Profit & Loss (2 of 2)

...continued from previous page

Projected Profit & Loss	2025	2026	2027	2028	2029
Legal Team and HR Department (2)	\$62,000	\$66,340	\$70,984	\$75,952	\$81,270
Customer Service Supervisor (Dominican Republic) (2.8)	\$10,000	\$21,000	\$33,075	\$46,304	\$48,620
Marketing Department (2.4)	\$31,000	\$66,340	\$106,476	\$113,928	\$121,905
Employee Related Expenses	\$26,800	\$43,508	\$55,262	\$60,787	\$64,315
Annual Rent	\$54,000	\$60,000	\$70,000	\$80,000	\$80,000
Electricity (\$0.15 per sq. ft)	\$900	\$1,200	\$1,400	\$1,600	\$1,800
Technology	\$7,500		\$7,500		\$7,500
Dominican Republic Office Space	\$9,600	\$9,600	\$9,600	\$9,600	\$9,600
Nationwide Insurance (Under 20 Employees)	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200
Utilities for Dominican Republic Office	\$420	\$420	\$420	\$420	\$420
Rental Forklift	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000
Pallets for Shipping	\$3,600	\$3,600	\$3,600	\$3,600	\$3,600
Travel Marketing Budget (Flights, Amenities)	\$15,900	\$31,800	\$47,700	\$47,700	\$47,700
Material Cost for 1-Person Shelter	\$104,940	\$156,420	\$435,600	\$594,000	\$792,000
Material Cost 2-Person Shelter	\$0	\$0	\$108,000	\$135,000	\$216,000
Material Cost for Contract Orders	\$0	\$198,000	\$277,200	\$396,000	\$594,000
Amortization of Other Current Assets	\$0	\$0	\$0	\$0	\$0
Operating Income	(\$270,160)	\$5,252	\$770,578	\$1.2M	\$2.1M
Interest Expense	\$11,185	\$8,223	\$5,109	\$1,836	
Income Taxes	\$0	\$0	\$96,231	\$246,374	\$410,628
Depreciation and Amortization	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$572,845	\$987,471	\$1.7M	\$2.3M	\$3M
Net Profit	(\$281,345)	(\$2,971)	\$669,238	\$985,498	\$1.6M
Net Profit %	(97%)	0%	28%	30%	35%

# Appendices

### **Appendix A: Core Values**

### • Affordability

Our shelters will be easily accessible to aid organizations and individuals. They are made to be affordable by using sustainable and recycled materials.

### • Compassion

We put those who have suffered from disasters ahead of profits. In addition to providing shelter, we partner with aid organizations who can continue to support those who are in need past providing shelter.

### • Fairness

We provide equal aid to all in need without preferential treatment for socioeconomic status, affiliations, or identities. Transparency over our business operations, research, and affiliations to the public and countries we send aid to will ensure accountability and awareness of our network.

### • Life Conservation

We deliver a product that can protect its users and are always open to making necessary modifications to increase efficacy. Beyond shelter shielding from the elements, we also provide comfort through amenities such as a water collection mechanism and thermal blankets in each unit.

### • Stewardship

Before any affiliates are sent over, there are briefings held to go over standard procedures and local culture. We will also partner with disaster relief organizations to have on-site agents who can aid with emergency shelter sites.

### • Sustainability

Our materials will leave the smallest carbon footprint without sacrificing constitution. Material science research will be continuously done to understand how to best source our materials and their lasting impact once victims are back on their feet.

### **Appendix B: Property Layout**

Schematics provided by Vermont Commerical Real Estate



### **Appendix C: Qualifications**

#### Figure C1 – Valentino Guevara's Resume

### VALENTINO GUEVARA

+1 (360) 602-5612 | valentinoguevara1@gmail.com | LinkedIn.com/in/valentino-guevara

#### QUALIFICATIONS

- · Proficient with SolidWorks, AutoCAD, Ultimaker Cura, MATLAB, Excel, and the Microsoft Office Suite
- · Experienced in welding, soldering, and a multitude of power tools
- Collaborated with teams from two to four engineers from other disciplines to produce a variety of prototypes
- Designed circuits during team projects that lacked an electrical engineer
- · Highly motivated to innovate and solve complex problems independently and collaboratively

#### EDUCATION

#### **Bachelor of Science in Mechanical Engineering**

Seattle Pacific University (Seattle, WA)

Senior Capstone: Designed emergency housing for warmer climates which provides temporary shelter after a natural disaster with a cooling system, water filtration, and lighting included

#### Relevant Coursework

- Mechanics
  - Mechanical Design
  - System Design
  - System Dynamics
- Force Analysis
  - Mechanics of Materials
  - Thermodynamics
- Fluid Mechanics
  - Electronics
    - Circuits I & II

#### RELEVANT EXPERIENCE

#### Gear Box Design for Mechanics Design

Seattle Pacific University (Seattle, WA)

- · Produce a pinion, gear, shaft, and bearings to be assembled into a gear box
- · Research standard sizes of component to begin stress analysis and adjust based on results

#### Junior Design Project

Seattle Pacific University (Seattle, WA)

- Built a vehicle analyzer able to measure speed, acceleration, pitch, tilt, suspension, compression
- · Collaborated with engineers with different specialties to design, model, and build the product within 3 months

#### American Society of Mechanical Engineers (ASME) Leadership

Seattle Pacific University (Seattle, WA)

- · Prepared engineering-related design products for students to learn engineering principals
- · Coordinated with three industry engineers to share their experiences with members
- · Engaged students in ASME events to open career opportunities and guided them to career-building resources

#### Senior Representative for Engineering Computer Science (ECS) Student Council

Seattle Pacific University (Seattle, WA)

- Frequently met with other representatives to discuss methods to assist the engineering student body best
- Organize events for ECS students to recruit members and welcome students into the engineering department
- · Facilitate connections between students, engineering professors, and people in the industry

Anticipated Graduation June 2024

January 2024 - Present

March 2023 - June 2023

January 2023 - Present

January 2020 – Present

#### Figure C2 – Thomas Morton's Resume

### THOMAS MORTON

+1 (503) 935-9717 | thomasegnprofessional@gmail.com | LinkedIn.com/in/thomas-morton-ase

#### QUALIFICATIONS

- Proficient with SolidWorks, AutoCAD, Ultimaker Cura, MATLAB, Excel, and the Microsoft Office Suite
- Collaborated with a team to design and build wooden turbine blades used to generate power
- Partnered with engineers from other disciplines to design a continuously charging electric road plan
- · Programmed during team projects that lacked an electrical engineer or an computer program engineer
- Certified SolidWorks Associate (CSWA)

#### EDUCATION

#### Bachelor of Science in Mechanical Engineering

Bachelor of Science in Appropriate and Sustainable Engineering Seattle Pacific University (Seattle, WA)

Senior Capstone: Designed emergency housing for warmer climates which provides temporary shelter after a natural disaster with a cooling system, water filtration, and lighting included

#### Relevant Coursework

- Mechanics
  - Mechanical Design
  - System Design
  - System Dynamics
- Force Analysis
  - Mechanics of Materials
  - Thermodynamics
  - Fluid Mechanics

#### RELEVANT EXPERIENCE

#### Gear Box Design for Mechanics Design

Seattle Pacific University (Seattle, WA)

- · Produce a pinion, gear, shaft, and bearings to be assembled into a gear box
- Research standard sizes of component to begin stress analysis and adjust based on results

### American Society of Mechanical Engineers (ASME) Leadership

Seattle Pacific University (Seattle, WA)

- Prepared engineering-related design products for students to learn engineering principals
  - Coordinated with three industry engineers to share their experiences with members
- Engaged students in ASME events to open career opportunities and guided them to career-building resources

#### Social Venture Plan Competition

Seattle Pacific University (Seattle, WA)

- Produced a five-year business plan for a Fog Harp that collects water from the surrounding air
- Researched, designed, and modeled a prototype with engineers from other disciplines to present within 2 months Placed 2nd overall and won \$3000

#### Senior Representative for Engineering Computer Science (ECS) Student Council

Seattle Pacific University (Seattle, WA)

- Frequently met with other representatives to discuss methods to assist the engineering student body best
- Organize events for ECS students to recruit members and welcome students into the engineering department
- Facilitate connections between students, engineering professors, and people in the industry

January 2024 - Present

Anticipated Graduation June 2024

January 2023 - Present

January 2023 - April 2023

January 2020 - Present

#### Figure C3 – Cynthia Nguyen's Resume

### CYNTHIA NGUYEN

+1 (971) 218-2745 | nguyen.cynthia.school@gmail.com | LinkedIn.com/in/nguyencyn

#### SKILLS

- · Experienced in R, Tableau, and Power BI for data analysis, cleaning, modeling, and visualization
- Proficient with Microsoft Office and Google applications
- Fluent in English, literate in Spanish, and conversational in Vietnamese
- Studying MATLAB, Python, and SQL

#### EDUCATION

#### Bachelor of Science in Applied Mathematics Bachelor of Arts in Economics – Financial Economics

Bachelor of Arts in Honors Liberal Arts Seattle Pacific University (Seattle, WA) Minor: Data Analytics

Economics Senior Capstone: Evaluating the Impact of Income, Educational Attainment, and Relationships on the Likelihood of Intra- and Interstate Migration

#### WORK EXPERIENCE

#### Teaching Assistant for Department of Economics

Seattle Pacific University (Seattle, WA)

- Grade assignments for Intermediate Microeconomics
- · Provide detailed feedback on homework assignments on the application of theories
- · Maintain close contact with the professor to communicate trends in student performance

#### Teaching Assistant for Department of Mathematics

Seattle Pacific University (Seattle, WA)

- Assist professor during in-class work time and grading all assignments for Calculus I and Vector Calculus
- · Create videos going through homework assignment problems step-by-step for students to study
- Manage in-person and virtual study sessions every week

#### Math Tutor for Learning Support Services

Seattle Pacific University (Seattle, WA)

- Give in-person guidance to 12+ students on average every week for 6 hours per week in calculus and statistics
- Guide students to make connections between concepts and real-world applications
- · One of only two students endorsed by the Math Department out of the entire campus to tutor

#### RECENT PROJECTS

#### Independent Study

Seattle Pacific University (Seattle, WA) Categorize a year's worth of New York Times' Wordle words into three difficulty levels by creating a clustering algorithm after testing a variety of dimensionality reduction techniques

#### Introduction to HPC Bootcamp

Sustainable Horizons Institute (Berkeley, CA)

Analyzed power outage and heat wave data provided by ORNL to understand the possible connections between energyburdened residents and poverty levels at the county level in a team as partial fulfillment of a bootcamp at LBLL

#### Economics Senior Capstone

Seattle Pacific University (Seattle, WA)

Researched and analyzed data to understand the likelihood of an individual in the U.S. migrating within a state or between states from 2015 to 2019 based on personal income, highest educational attainment, and personal relationships as partial fulfillment of the Economics major

September 2023 - Present

January 2022 - Present

Anticipated Graduation June 2024

September 2023 - Present

June 2023 - Present

August 7, 2023 - August 11, 2023

March 2023 - June 2023

### **Appendix D: Single-Person Units Base**

Figures developed in SolidWorks by Valentino Guevara and Thomas Morton and do not include the mentioned amenities nor the tarp cover for viewing purposes

Figure D1 – Side View (Closed)



Figure D2 – View from Above (Closed)



Figure D3 – Extended <sup>3</sup>/<sub>4</sub> Turn View (Fully Rendered)



# Figure D4 – Extended Side View



Figure D5 – Extended View from Above



Personnel

### **Appendix E: Employee Pay**





Personnel	2025	2026	2027	2028	2029
Head Count	10	14	17	19	20
Average Salary	\$29,300	\$30,060	\$31,137	\$32,244	\$34,627
Revenue Per Employee	\$29,150	\$70,321	\$140,000	\$171,053	\$232,500
Net Profit Per Employee	(\$28,135)	(\$212)	\$39,367	\$51,868	\$82,126
Direct Labor	\$190,800	\$243,960	\$303,629	\$370,451	\$445,150
Salaries & Wages	\$159,000	\$203,300	\$253,024	\$308,709	\$370,958
Engineering Team	\$35,000	\$37,450	\$40,072	\$42,877	\$45,878
Shop Technicians (6)	\$124,000	\$165,850	\$212,952	\$265,832	\$325,080
Employee-Related Expenses	\$31,800	\$40,660	\$50,605	\$61,742	\$74,192
Other Labor	\$160,800	\$261,048	\$331,573	\$364,721	\$385,892
Salaries and Wages	\$134,000	\$217,540	\$276,311	\$303,934	\$321,577
Government Awards Liaison (1.8)	\$31,000	\$63,860	\$65,776	\$67,750	\$69,782
Legal Team and HR Department (2)	\$62,000	\$66,340	\$70,984	\$75,952	\$81,270
Customer Service Supervisor (Dominican Republic) (2.8)	\$10,000	\$21,000	\$33,075	\$46,304	\$48,620
Marketing Department (2.4)	\$31,000	\$66,340	\$106,476	\$113,928	\$121,905
Employee-Related Expenses	\$26,800	\$43,508	\$55,262	\$60,787	\$64,315
Totals	\$351,600	\$505,008	\$635,202	\$735,172	\$831,042

**Appendix F: Financials** 



# Revenue



Revenue	2025	2026	2027	2028	2029
Private consumer Shelter sales	\$291,500	\$434,500	\$1.2M	\$1.6M	\$2.2M
Unit Sales	265	395	1,100	1,500	2,000
Unit Prices	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100
Two-Person Shelter	\$0	\$0	\$400,000	\$500,000	\$800,000
Unit Sales	0	0	200	250	400
Unit Prices	\$0	\$0	\$2,000	\$2,000	\$2,000
Contract Orders (1-Person Shelters)	\$0	\$550,000	\$770,000	\$1.1M	\$1.6M
Unit Sales	0	500	700	1,000	1,500
Unit Prices	\$0	\$1,100	\$1,100	\$1,100	\$1,100
Totals	\$291,500	\$984,500	\$2.4M	\$3.3M	\$4.7M

## Table D2 – Assets

SINGLE UNITS	SINGLE UNITS										
year		2025		2026		2027		2028		2029	
produced per month		40		80		120		200		300	
produced per year		480		960		1440		2400		3600	
total value	\$	528,000.00	\$	1,056,000.00	\$	1,584,000.00	\$	2,640,000.00	\$	3,960,000.00	
sold		265		395		1100		1500		2000	
excess supply		215		780		1120		2020		3620	
inventory value	\$	236,500.00	\$	858,000.00	\$	1,232,000.00	\$	2,222,000.00	\$	3,982,000.00	
TWO-PERSON UNIT	rs										
year		2025		2026		2027		2028		2029	
produced per month		0		0		17		21		35	
produced per year		0		0		204		252		420	
total value	\$	-	\$	-	\$	408,000.00	\$	504,000.00	\$	840,000.00	
sold		0		0		200		250		300	
excess supply		0		0		4		6		126	
inventory value	\$	-	\$	-	\$	4,400.00	\$	6,600.00	\$	138,600.00	
SINGLE UNITS (Contract)											
year		2025		2026		2027		2028		2029	
produced per month		0		0		0		0		0	
produced per year		0		0		0		0		0	

total value	\$ -	\$ -	\$	-	\$ -	\$ -
sold	0	70	D	1000	1500	3000
excess supply	0	8	D	120	520	620
inventory value	\$ -	\$ 88,000.00	\$	132,000.00	\$ 572,000.00	\$ 682,000.00

year	2025	2026	2027	2028	2029
produced per month	0	0	20	20	25
produced per year	0	0	240	240	300
total value	\$ -	\$ -	\$ 480,000.00	\$ 480,000.00	\$ 600,000.00
sold	0	0	100	200	300
excess supply	0	0	144	46	126
inventory value	\$ -	\$ -	\$ 158,400.00	\$ 50,600.00	\$ 138,600.00

*Note:* Our excess supply from non-contracted production is calculated using how many we plan to produce within the year minus the amount we project to sell within a year plus the amount of excess units in the previous year. We then account for this calculated excess in contracted

production where we also add those units into units available to be sold along with any extra production needed to fulfill contracts to then get our final excess supply to calculate inventory.





Projected Cash Flow	2025	2026	2027	2028	2029
Net Cash from Operations	(\$278,705)	\$2,309	\$735,348	\$1M	\$1.7M
Net Profit	(\$281,345)	(\$2,971)	\$669,238	\$985,498	\$1.6M
Depreciation and Amortization	\$0	\$0	\$0	\$0	\$0
Change in Accounts Receivable	\$0	\$0	\$0	\$0	\$0
Change in Inventory	\$0	\$0	\$0	\$0	\$0
Change in Accounts Payable	\$0	\$0	\$0	\$0	\$0
Change in Income Tax Payable	\$0	\$0	\$38,330	\$23,469	\$40,850
Change in Sales Tax Payable	\$2,640	\$5,280	\$27,780	\$13,110	\$20,940
Net Cash from Investing	(\$236,500)	(\$88,000)	(\$212,000)	(\$652,000)	(\$782,000)
Assets Purchased or Sold	(\$236,500)	(\$88,000)	(\$212,000)	(\$652,000)	(\$782,000)
Net Cash from Financing	(\$57,899)	(\$60,861)	(\$63,975)	(\$67,265)	\$0
Change in Short-Term Debt	\$2,962	\$3,114	\$3,290	(\$67,265)	
Change in Long-Term Debt	(\$60,861)	(\$63,975)	(\$67,265)	\$0	\$0
Cash at Beginning of Period	\$240,000	(\$333,104)	(\$479,656)	(\$20,283)	\$282,529
Net Change in Cash	(\$573,104)	(\$146,552)	\$459,373	\$302,812	\$922,300
Cash at End of Period	(\$333,104)	(\$479,656)	(\$20,283)	\$282,529	\$1.2M

# References

- Designs, M. (n.d.). Office furnished in Piantini, Santo domingo. InDominicana.com. https://indominicana.com/en/property/office-in-santo-domingo-piantini/51109/
- Dominican Republic: Floods and landslides Nov 2023. ReliefWeb. (n.d.). https://reliefweb.int/disaster/fl-2023-000236-dom
- Dominican-Republic-hurricane-humanitarian- ... (n.d.-a). https://www.unicef.org/media/128116/file/Dominican-Republic-Hurricane-Humanitarian-SitRep-22-September-2022.pdf
- Duthel, H. (2017, March 9). Homelessness in the United States. the United States government determined that somewhere between 200,000 and 500,000 Americans were then homeless. Academia.edu.
  https://www.academia.edu/4166429/Homelessness\_in\_the\_United\_States\_The\_United\_States\_government\_determined\_that\_somewhere\_between\_200\_000\_and\_500\_000\_America ns\_were\_then\_homeless
- Household energy choices, intra-community effects, and ... (n.d.-b). https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=1214&context=jea
- Listings. VT Commercial. (n.d.). https://www.vtcommercial.com/listings/115-wellness-drivewilliston-for-lease/
- Itd, R. and M. (n.d.). Temporary Shelters Global Market Report 2024 Research and Markets. Research and Markets - Market Research Reports - Welcome. https://www.researchandmarkets.com/report/temporary-shelters
- Natural disasters. Statista. (n.d.). https://www.statista.com/study/10156/natural-disasters-statista-dossier/
- Office, U. S. G. A. (2019, October 24). *Disaster resilience framework: Principles for analyzing federal efforts to facilitate and promote resilience to natural disasters*. Disaster Resilience Framework: Principles for Analyzing Federal Efforts to Facilitate and Promote Resilience to Natural Disasters | U.S. GAO. https://www.gao.gov/products/gao-20-100sp
- Published by Statista Research Department, & 3, N. (2023, November 3). *Individuals below poverty line by gender U.S. 2022*. Statista. https://www.statista.com/statistics/233145/number-of-people-living-below-the-poverty-inthe-us-by-gender/
- Roof-top tents: Car-top, Truck-Top & Roof Rack Tents: Rei Co-op. REI. (n.d.).
- Salas, E. B. (2023, December 8). *Dominican Republic: Count of internal displacements of people* 2022. Statista. https://www.statista.com/statistics/1426483/internal-displacements-of-people-from-weather-related-disasters-in-the-dominican-republic/

Small business size standards. (n.d.). https://www.sba.gov/size-standards/index.html

- van Ruijven, B. J., De Cian, E., & Sue Wing, I. (2019, June 24). *Amplification of future energy demand growth due to climate change*. Nature News. https://www.nature.com/articles/s41467-019-10399-3
- *Women-Owned Small Business Federal Contract Program.* U.S. Small Business Administration. (n.d.). https://www.sba.gov/federal-contracting/contracting-assistance-programs/women-owned-small-business-federal-contract-program
- Yahoo! (n.d.). *Temporary Shelters Global Market Report 2024: Market to reach \$57.52 billion by 2028 with advanced modular solutions driving growth - long-term forecasts to 2033.* Yahoo! Finance. <u>https://finance.yahoo.com/news/temporary-shelters-global-market-report-083400898.html</u>