

*The Experimental Group - BMFITT 2021 Team - Business Case & Plan*

Business Case & Plan

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The Experimental Group

*Bright Minds, Fresh Ideas Think Tank Summer Internship, Powered by FPP*

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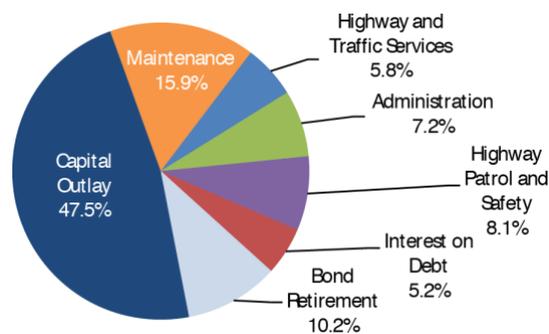
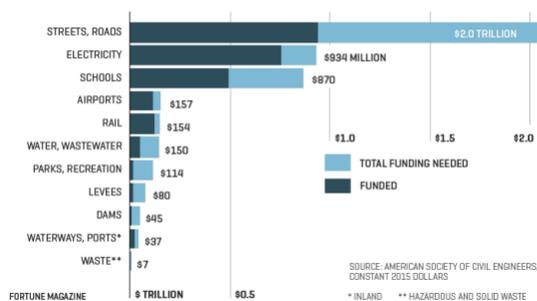
## **Executive Summary**

Our business, Report&Fix, is a business that focuses on improving the infrastructure of roads. The problem with infrastructure is that it is an unnoticed problem. Our country has a C- in their overall infrastructure's well - being. It's an issue that even the government doesn't know how to fix, and the money that they spend isn't being spent well. What is our solution as a business? Our solution is an app. Our company is basically like an app and a construction company put together. I know you are probably thinking...how does that work? Well, our app works like this, let me paint a picture... let say you are walking around your neighborhood and you trip. You look down and see this big crack on the sidewalk. Well, if you have our app you take a picture of the crack, upload it and our company will be notified immediately. Now a different scenario...you are driving and hit a pothole, you can easily tell the app to "Pin your location". So, when you go home you can report it. Now we know that there are apps like these that already exist. You've probably heard about them or you probably even use them. You take a picture and the app notifies the local government so they can fix it. And let's face it the government is not doing a good job. So, how is our app going to be unique? Instead of the government being the ones to fix it, we are going to have our own contractor and road inspectors that will fix the issue the citizens report. So, once a citizen reports a damaged road. Our app will notify us and we will notify our contractor and get the job done. Well get the job done quicker, and way better.

## The Problem

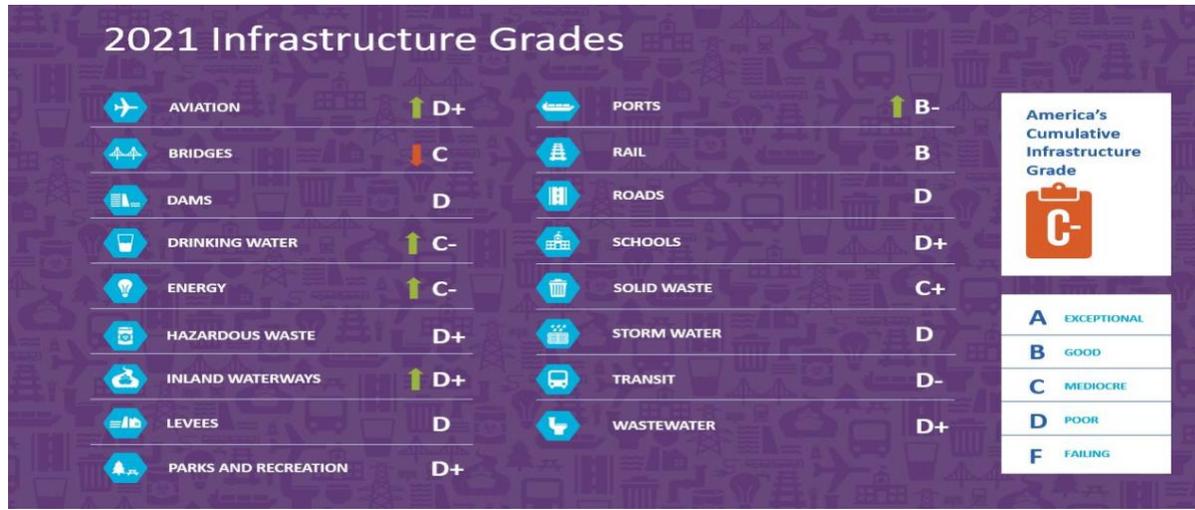
What's the problem with US infrastructure you may ask yourself? Well in reality you should ask yourself how can I help the community with US infrastructure? It's absurd that 617,000 bridges in America are more than 50 years old and only 46,000 of them are rated strictly deficient. It is disappointing that America has gained a C- due to poor infrastructure. A majority of infrastructure in America was built 100 years ago. Roads only last 30 years at most and water pipes maybe last 100 years. The problem is that the government isn't doing anything and there is a lack of investments. Democrats will say "we need more money" but with property tax it will triple the amount and people wouldn't want that to happen. While republicans will say the government is being inefficient, but you cannot be inefficient with the money you don't have.

U.S. INFRASTRUCTURE NEEDS OVER THE NEXT 10 YEARS



## **History**

In 1988 the United States National Council on Public Works created the concept of a report card to grade the nation's infrastructure. 10 years after the concept of a report card was made, the "American Society of Civil Engineers" also known as the ASCE used their methodology to make the first United States infrastructure report card. The National Council on the nation's Public Works Improvements rated the Nation's report card as a C in 1988 and in the Year of 1998 the ASCE Rated the nation's report card as a D. Through the years since 1988 not much has changed in the nation's infrastructure and because of this our nation's infrastructure is on the brink of collapse, as of 2021 our nation's infrastructure report card has a rating of a C-. Throughout history there have been many Infrastructure failures within the United States, one of the most devastating being the St. Francis dam burst of 1928. In the early morning hours of March 13, 1928, the St Francis dam burst which sent 12 billion gallons of water towards the Ocean. Those that happened to be in the way of the flood ended up meeting a tragic end, the St Francis Dam burst ended up resulting in 274 deaths and 700 missing people, most of which were never found. The main cause of the Dam's burst was the result of bad infrastructure and maintenance, if the infrastructure was more stable back then this tragedy could easily have been prevented.



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PART 1—TELEGRAMS SHEET—12 PAGES

Liberty Under  
WEDNESDAY MORNING, MARCH 14, 1925.  
True Industrial Freedom

DAILY, FIVE CENTS    SUNDAY, TEN CENTS

## 200 DEAD, 30 MISSING, \$7,000,000 LOSS IN ST. FRANCIS DAM DISASTER



Left—View of the wrecked St. Francis Dam taken from the air at a point just below the dam. Right—Santa Paula, as seen from the air. Directly in the path of the raging torrents; portions of the city were inundated. [Photographs taken by Harry C. Anderson, Times staff photographer.]

### THOUSANDS RUSH TO AID IN WORK OF RESCUE AND RELIEF

Red Cross Directs Gigantic Task of Succor in Devastated Area; Water Board Appropriates \$25,000; Food and Shelter Needed Immediately

"TIMES" FLOOD RELIEF FUND

### PARTIAL LIST OF PERSONS DEAD, INJURED AND MISSING IN FLOOD

The following is a partial and best obtainable list of identified dead, unidentified dead, missing and injured in the St. Francis dam break yesterday.

As well as the below listed persons the authorities are searching for hundreds of missing men, women and children in San Francisco, Fresno, Fillmore, Sausalito, Fresno, Santa Paula, Castaic, Oroya, Camanche and other sections.

According to figures from improvised morgues in the stricken area and from the Sheriff's office and police department more than 200 bodies of men, women and children have been recovered of which in the neighborhood of seventy-five have been identified.

Phillips Kolb, 1.

### SCORES MORE THOUGHT BURIED IN DEBRIS OF WILD WATERS

Darkness Halts Rescue as Crews Sight Other Bodies; Hundreds of Homes Crushed by Fatal Torrent and Many Bridges Washed Away

Approximately 200 persons dead, 300 others unaccounted for, and property damage estimated at \$7,000,000, according to the latest available figures, is the toll of the disaster following collapse of the St. Francis Dam Monday night which released an avalanche of water upon the sleeping

## **Solutions**

Infrastructure is not only roads and highways. It is bridges, dams, railways, airports, and waterways but it has always been an overlooked problem. First, to solve the problem we have to alert the public. The condition of infrastructure should be something the public cares about as it affects their daily lives. If the public demanded that their taxes be spent in the right way, the government would listen (Ferguson, C., & Ferguson, C. (2018, January 10). *5 Issues with America's Infrastructure*. Committee for Economic Development of The Conference Board.)

Another way to enhance the state of our infrastructure is that there has to be more investments in infrastructure. Investing in infrastructure is very important and it is also good to have shares in infrastructure as it gets bigger. It creates growth in the economy and it creates more jobs for people. One part of the investment can come from the government. The funding the federal government gives to cities and states gets a lot of infrastructure projects started. There is also money from private investors. Private investors look for long term investments and infrastructure is one of them. Duvall, T., Palter, R., & Rocca, M. D. (2017, March 30). *How to Really Fix America's Infrastructure Problem*. Time.)

## **Approach**

With more investments that go into infrastructure. The more we can strengthen infrastructure in rural areas. Especially in broadband infrastructure. There are many rural/ small town areas that struggle with having internet in their house. In the 21st century, having a good internet connection is a necessity. Another big and important type of infrastructure is water. In

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the US, water infrastructure is scored as a D+ (*Aging Water Infrastructure*. The NLC Service Line Warranty Program by HomeServe. (2020, September 28). Water is an important part of everyone's daily life, but many people aren't getting clean and safe water. Improving water infrastructure is very important. Our approach as a team to infrastructure is to look at broadband, water, and road infrastructure and come up with a service or a product that can implement the solutions.

### Broadband Infrastructure:

- Internet service provider, for rural areas.
- A program that provides free internet service for low-income families.

### Water Infrastructure:

- More UV filters in water systems instead of using chlorine.
- A filter that boils water to get rid of bacteria and germs.

### Road Infrastructure:

- Privatization of roads

## **Risks and Analysis**

Even though these are good ideas, they still have some limitations. For example, if we choose to provide an internet service for rural areas. That's really complicated because there is a lot of competition in broadband infrastructure already. There are big companies like, At&t, Spectrum, Verizon, etc.... If we choose to create a program that can provide internet to low-

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income families, the limitation with this idea is that these programs already exist. The government already has a program like that.

Filtering water is complex. There is already a lot of competition in the industry. Using UV water filters is a good idea but UV filters are more expensive than reverse osmosis filters. UV filter range in between \$70 - \$200+ (*How Expensive is a Home Water Filtration System? Isley's Home*. Isley's Home Service, Inc. (2017, October 6). Creating a filter that boils water, also creates some problems because boiling water doesn't get rid of all the chemicals and metals in water (Young, J. (n.d.). *Water Filter Bottles for Travel, Camping, Hiking, Travel*. Water.) It also does not improve the taste or smell of water.

Privatization of roads is also a bright idea. We can buy the road and fix it. We can charge tolls and that is where we would get our money from. However, this is complicated because the community won't be happy with paying more tolls.

### **Company Description**

Our company is an app called (report&fix) which incorporates a map, camera, and service feature. When spotting a crack or pothole on the road you download our app and take a picture of the pothole and upload the picture on where the map feature is telling you. Then the app notifies our company of the issue and we send our construction crew to fix the damage. There are apps that already do this, but do not have the proper road markings and do not cover the whole area of Florida. They are more mainstream. They focus only on urban cities. Our company will focus on urban cities as well, but our main focus will be in rural areas. The rural

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areas are the areas with the least coverage and the most damaged roads making this extremely dangerous for families and others in a vehicle. Most of the coverage is only on popular highways in our popular counties. In Florida there are over 67 counties and not even half of them have been covered by a government website. We do not encourage you to step out the car while driving to take a picture of a cracked road or a pothole. Instead go on our app and tell the app to "Pin my location" for it to pin where you last saw the pothole and you can go back to the app at your own safety and upload it to our agency and we will contact road fixers to cover up the pot hole. One of the many benefits of our app will consist of a prize system when taking a photo of a road that can be potentially dangerous. Our app will give you 5 points. As you accumulate these points you get prizes, like a gift card from a retail store.

### **Market Analysis**

Our target market for our app are counties within the state of Florida that work with the fixing of road infrastructure. Our product will help with the targeting of certain roads that need to be fixed by having citizens of that county report the location of the damaged road. The amount of people that live in Florida is an estimated 21.48 million with each county varying in population. Our plan is to sell our app to one county and then eventually have the use of the app spread throughout the state of Florida so that more counties will end up using the app. So our target market will be the counties buying the app and the people that will be using the app will be the citizens who report a damaged road within their county. We are hoping to be able to gain revenue by advertising and growing our app so that we could make the counties want to

put the app to use and pay for it. We will make a rewards program for using the app so that you can get rewards for the number of roads that you manage to report which eventually end up getting fixed.

### **Competitive Analysis**

Our app is not a brand-new idea. There are many programs that already exist that are similar to our app. For example, there is SeeClickfix, and PublicStuff. There are also websites made by the government that work to report road issues. SeeClickFix and PublicStuff are our main competition. The SeeClickFix and PublicStuff companies already provide apps where citizens can report a road issue. These companies are trying to achieve the same thing as our team. They want to help build better communities with better infrastructure.

SeeClickFix is a big and popular company as it started in 2008, they have solved over 7,642,856 issues (*SeeClickFix*. SeeClickFix.com. (n.d.) PublicStuff is similar to SeeClickFix, it just started 2 years later and it isn't as big as SeeClickFix. However, both of these apps have a very friendly user appearance and system. They also allow their users to talk amongst each other about the issues. The only problem with these apps is that they rely on the government to fix the issue and most of the issues don't get solved. Our app and business will run differently. Instead of relying on the local government to see if they will fix the issue, we will have our own road construction crew that will fix the issue. We will get the job done faster, and we will do a better job of listening to the communities about their concerns.



## **Management**

Our team will consist of app developers, web developers, digital designers, IT personnel. The app developers are basically computer software engineers that will be in charge of creating, testing, and programming the app. The web developers will run and direct our website. The digital design team will work with both the app and web developers to help with the design aspect of our app and website. Our IT personnel will maintain, install, and upgrade our company's IT infrastructure. Another important part of our company is our construction crew. They will be the ones to go out and fix the damages the citizens have reported. Along with them, there will be an inspector that will go and inspect the damaged area.

On the more business side there will be our finance/accounting team, also our marketing team. The finance/ accounting team will keep track of all of the company's spending, financial events, payroll, and money the company receives. They will also look at the company's

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future financial statistics. The marketing team will oversee and develop marketing campaigns, they will come up with strategies on how to promote the product. In our company we will also have a legal team, they will be in charge of contracts, and deals that we make with the counties. They are basically there to maintain a good relationship with the counties through legal properties. We also have a customer service department; they will be in charge of tending to any of the concerns the app user may have. The last department of our business will be HR/ Human Resources. They will be in charge of recruiting and hiring people. They will also manage training and firing employees.

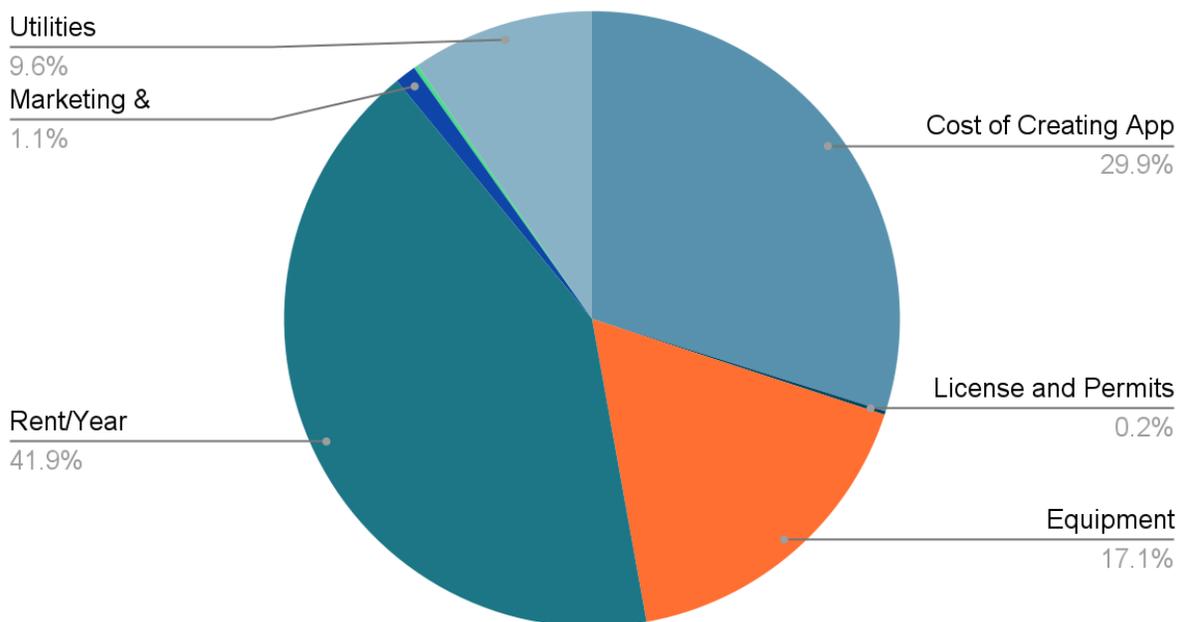
### **Marketing and Sales**

Marketing is a very important part of our business. Since, we will “sell” our app to counties and local governments, we will work with them to market the app. First, we will market our app using advertisements. We will put out the message of our app and business mainly through social media. We would also like to collaborate with GPS apps. Like WAZE, Google Maps, and Badger Maps, to promote the message of our business. For our sales, we will have a sales group that will essentially go to the counties and pitch the idea of our app and business to them.

## Financial Summary

When we first start our business, there will be many expenses that will be made but we also need funding. When we start our business part of the money will come from us as owners. We will bootstrap. We will take our personal savings and use that money to start our company. Asking family and friends to invest will be another strategy we will use to cover our startup cost. We'll also look for investors. Our last option for getting money to start our business will be to try to get a bank loan. For our start - up cost we estimate to need about \$135,200 dollars. This includes expenses like creating the app, license/permits, insurance, rent, equipment, marketing budget, website, and utilities.

### Start - Up Costs

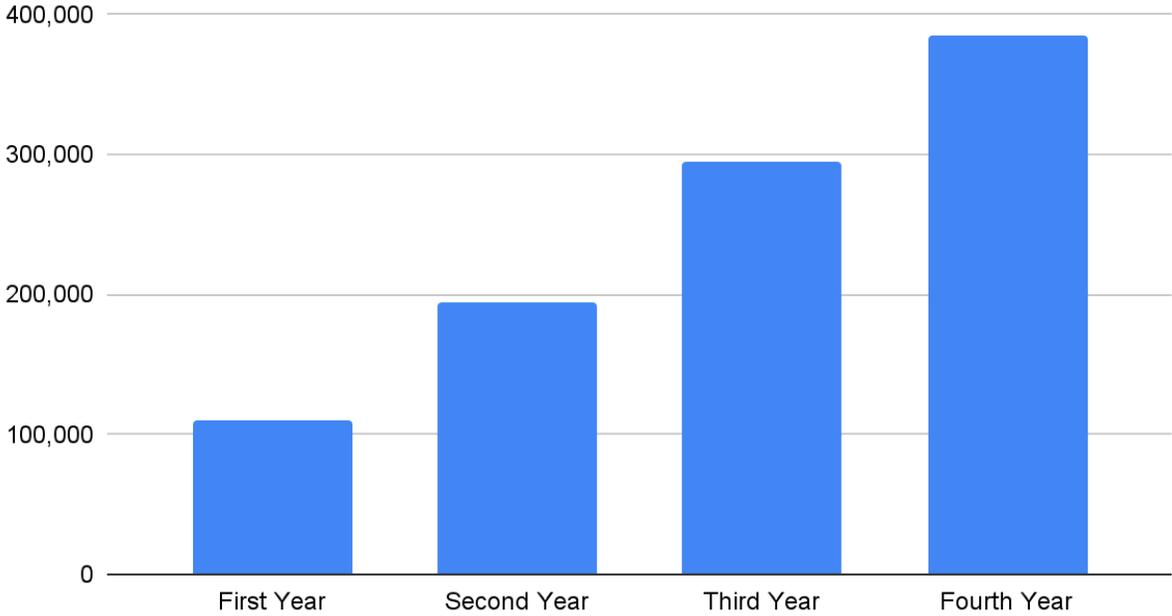


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Employees are a whole other thing. For the first few months of our business, we will only hire priority employees. For example, our app developer, road inspector, contractors, IT personnel, and accountant. Annually for payroll we will spend \$313,302. These are roles that are critical to our company. In the meantime, us as owners will have to work in certain roles like marketing, in the legal team, or developing our website. As we generate revenue, we will hire more employees to fill in these other roles.

Our company will sell our app software to the local government. We will charge them depending on their size. If they are a small rural town, we will charge them \$3,000 - \$5,000. If they are medium size towns, almost like cities we will charge them around \$8000 - \$10,000. If they are big cities, we will charge \$18,000 to \$20,000. In our first year we expect to have 7-10 clients. Maybe 13 clients. As we grow, our goal is to have at least 50 counties partnering with our business.

### Our Expected Revenue



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