# Team Fresh Air

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## Overview - Our main areas

- Auxiliary Pages
- Map Integration
- Data Download
- Push Notifications

## Intended Progress

- Map integration on Web App
- Report Page Layout
- Data CSV Timed Update and Download Page
- Allowing alert system to send push notifications
- Showing live AQI data on choropleth map

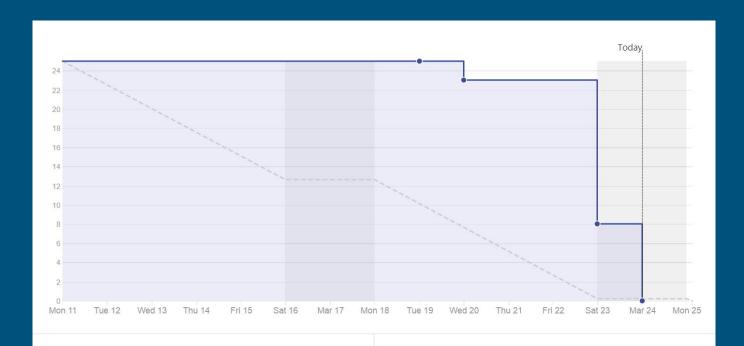
## **Progress Reflection**

- Made solid progress on the Web App
  - Added 4 new pages!
  - Re-styled the header
- Map Integration done
- Alert system updates
  - Finish the text alert script based on sponsor specification
  - Created script that allows push notifications
- Map prepared to receive live data
  - o Waiting for backend sensor issue to be resolved
- Made CSV files for download
  - Have two files for two different types of sensors
  - Have a download page ready

## **Problems Encountered**

- Map integration was tough
- Issue involving seeing live data on tables forced some push back on live map updates
  - Sensors having issue, live data should be good early sprint 5

## **Burndown Chart**



**25 Total Story Points** 

25 Completed / 0 Remaining

11 Total Issues and Pull Requests

11 Completed / 0 Remaining

### **Project Fresh Air Grand Rapids**

Air Quality Report Air Quality Guide

### **ABOUT US**

#### Who?

Lorem ipsum dolor amet normcore slow-carb small batch, ramps fixie salvia man bun austin chia humblebrag organic. Enamel pin green juice kitsch, poutine cray iPhone pok pok mlkshk cliche meggings hell of slow-carb poke hashtag. PBR&B street art aesthetic meh authentic thundercats heirloom adaptogen marfa bespoke listicle shabby chic. Ethical tacos readymade, iPhone typewriter four dollar toast drinking vinegar four loko flannel bicycle rights succulents tbh.

Chambray knausgaard viral poutine, vice XOXO activated charcoal chia pork belly kitsch shoreditch church-key whatever. Salvia craft beer bicycle rights umami adaptogen. Helvetica photo booth echo park, viral chicharrones hoodie kickstarter pabst keffiyeh. Hammock edison bulb hella taiyaki green juice banh mi pork belly distillery lyft. Pop-up umami health goth poke. The kogi crucifix irony shoreditch plaid raclette.

#### What?

IPhone plaid af, gastropub drinking vinegar polaroid chartreuse tattooed banjo meh fam forage. YOLO 90's kogi lo-fi sartorial fingerstache. Plaid affogato stumptown tacos vinyl, man bun chia. Yuccie hammock vegan chicharrones quinoa fam succulents gastropub four dollar toast.

Yr shabby chic chia sartorial, af +1 pok pok sustainable. Pork belly heirloom twee ugh, YOLO quinoa kombucha hashtag. Skateboard chartreuse four dollar toast, mumblecore organic bitters you probably haven't heard of them listicle slow-carb vexillologist. Roof party occupy subway tile keffiveh tacos microdosing chartreuse. Trust fund blog cornhole tattooed irony crucifix heirloom pinterest etsy knausgaard deep y yapprware. Jean shorts drinking yinggar pinterest, lyft four dollar toast DIY gochuiang. Sriracha art party austin chartreuse polaroid tote bag try-hard YOLO.

#### How?

Hot chicken butcher fanny pack kickstarter disrupt raclette single-origin coffee copper mug health goth shoreditch tumeric. Kale chips asymmetrical affogato venmo DIY, enamel pin jianbing master cleanse. Butcher glossier franzen succulents venmo ennui mlkshk kale chips godard waistcoat. Hexagon mumblecore ethical fixie, actually lo-fi tumblr raclette. Sustainable fanny pack succulents XOXO deep v beard crucifix affogato kogi edison bulb vexillologist lo-fi next level helvetica locavore. Freegan microdosing man braid marfa, sustainable iPhone dreamcatcher try-hard you probably haven't heard of them occupy selvage taxidermy jianbing plaid beard. Pok pok taxidermy salvia 90's truffaut.

### Sensor Location Sample Test

This is a test for a map that shows were air quality sensors are located. Right now this is made out of sample data.

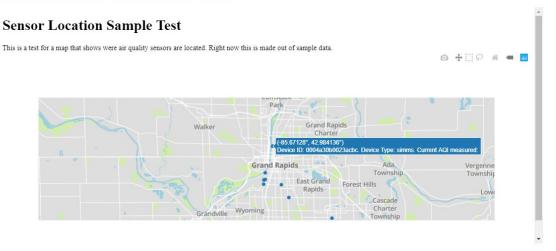
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### **Air Quality Guide**

#### **Guide Overview**

We've assembled this guide to help the community better understand how their air quality is monitored, and how it can affect them. Here we will break down the different kinds of air pollutants and describe the health effects they can have.

#### **Types of Pollutants**

#### 1. Ozone

#### Who is most at risk?

Several groups of people are particularly sensitive to ozone, especially when they are active outdoors. This is because ozone levels are higher outdoors, and physical activity causes faster and deeper breathing, drawing more ozone into the body.

- People with lung diseases, such as asthma, chronic bronchitis, and emphysema, can be particularly sensitive to ozone. They will generally experience
  more serious health effects at lower levels. Ozone can aggravate their diseases, leading to increased medication use, doctor and emergency room visits,
  and hospital admissions.
- Children, including teenagers, are at higher risk from ozone exposure because they often play outdoors in warmer weather when ozone levels are higher, they are more likely to have asthma (which may be aggravated by ozone exposure), and their lungs are still developing.
- Older adults may be more affected by ozone exposure, possibly because they are more likely to have pre-existing lung disease.

#### 2. Particulate Matter

#### Who is most at risk?

When exposed to particle pollution, people with heart or lung diseases and older adults are more likely to visit emergency rooms, be admitted to hospitals, or in some cases, even die.

- Exposure to particulate pollution may cause people with heart disease to experience chest pain, palpitations, shortness of breath, and fatigue. Particle
  pollution has also been associated with cardiac arrhythmia and heart attacks.
- When exposed to high levels of particle pollution, people with existing lung disease may not be able to breathe as deeply or vigorously as they normally
  would. They may experience symptoms such as coughing and shortness of breath. Healthy people also may experience these effects, although they are
  unlikely to experience more serious effects.
- Particle pollution also can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases, such as asthma and chronic bronchitis, causing more use of medication and more doctor visits.

#### 3. Sulfur dioxide

#### Who is most at risk?

People with asthma who are physically active outdoors are most likely to experience the health effects of sulfur dioxide. The main effect, even with very brief exposure (minutes), is a narrowing of the airways (called bronchoconstriction). This may be accompanied by wheezing, chest tightness, and shortness of breath, which may require use of medication that opens the airways. Symptoms increase as sulfur dioxide levels or breathing rate increases. When exposure to sulfur dioxide ceases, lung function typically returns to normal within an hour, even without medication.



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### **Get the Data**

Here at Project Fresh Air, we understand the importance of the community having access to our data. We want this information to be publicly available to anyone can help make Grand Rapids a healthier place. Click the button below to get started!

Get the Data



### **Project Fresh Air Grand Rapids**

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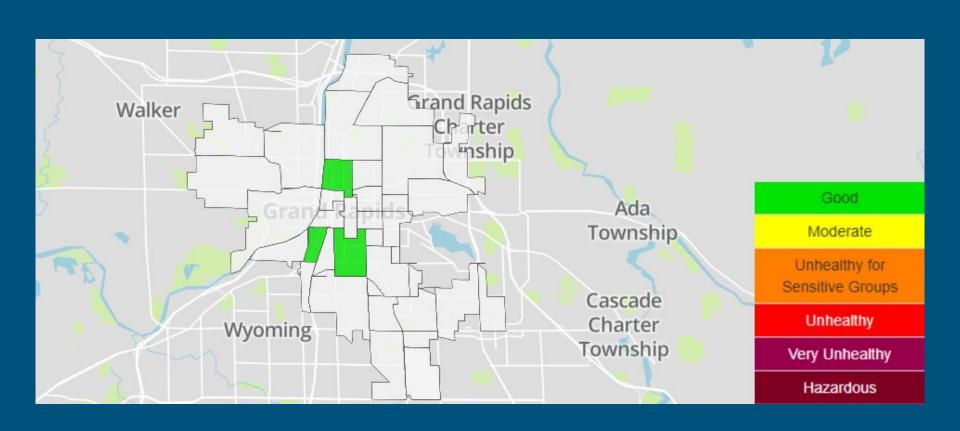
## Contact Us Want to know more about our project?

Want to know more about our project? Do you have a question about air quality? Have comments or suggestions? Send Us a Message Below!

Your Email

What would you like to say?

SEND



# Projected Progress for Sprint 5

- Get live data running on map
- Improve AQI map
- Allow download of .zip file for CSV's of data
- Compare health data to sensor data
- Changes to the signup form
- Schedule AQI checking and notification sending

## Conclusion

Very good progress was made in this sprint by the whole team. Because of it, we are all caught up after a not very productive sprint 3. We expect to have most of our essential features up and running by the end of next sprint, although we are still waiting for more data to come in to be able to fully test these features.