**Intake App Proposal Description**

According to the Centers for Disease Control, pulmonary disease is the third leading cause of death in the United States. Last year over 140,000 people died from lung-related afflictions.

Although California has some of the strictest air quality regulations in the country, vehicle and industrial air pollution continue to pose health risks for millions of people. Tail pipe emissions are laden with pulmonary irritants, toxic chemicals, and carcinogens. The effect of breathing these pollutants is cumulative, so the more these can be avoided, the less stress is put on the lungs and the body to clear these toxins.

Our app will route your walk, run, or bike ride in such a way as to minimize your exposure to air pollution. It’s core algorithm will work in similar fashion as the Waze app, which reports real-time traffic data by correlating the number of pinging cell phones in a particular area. Our algorithm will correlate this traffic data with air pollution density. In other words, more cars, more air pollution along that stretch of road. Thus, our app will route you along streets with the best air quality, rather than necessarily finding the quickest route. We also plan to add safety features to the interface such as user-reporting of sidewalk hazards, dangerous intersections, and avoid high crime areas.