Bike-Friendly State College

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Executive Summary

Overview of the Problem

The bike league of America provides evaluations of different cities and as of 2016 State College only receives a Bronze rating. The objective of the programs being put in place is to improve that rating. Throughout this report, there will be steps taken to build these programs. The State College borough will entertain multiple improvements throughout the city including a denser bike network, safer commute for work, and protections that will ensure these bikers safety.

Engineering Design Process

This includes the preliminary research that developed the customer needs and how meeting these needs will greatly improve the rating of the borough. Also, by implementing these programs there will be a decrease in automotive traffic which will lower the overall pollution created by this borough. These results are not isolated to one area of the world, across the nation there has been an increase in the motivation to create a larger bicycle centered culture. It’s projected that due to the increased cycling there could be health savings of 87 million dollars [5]. Using this research, customer
needs were able to be formed and design requirements quickly followed them. The requirements that govern how this project will proceed are cost, ease of integration, ease of maintenance, durability, how it will create a healthier lifestyle, and how it will lower the pollution in State College. The final concept solution that was derived from this research is a combination of multiple practices including improvement of infrastructure for cyclists that range from adding buffer bike lanes on major roads to increase the number and quality lights, trash cans and bike locks to keep the paths maintained and safe. The second part of the final project will include legal legislation that improves the safety of those using a bike as their main way to commute around the town. These solutions were generated straight from the needs of the public so that there is an opening in the market and a benefit to the entire population.

**Outcomes and Recommendations**

The visible results that will be the result of these programs will not be visible in the instant future, but the effects will be evident long term. The people of State College borough will be able to save the money in their pocket. If they take advantage of the processes they will benefit from lower gasoline costs and lower health care costs. The University has already expressed interest in partnering with the group to create benefits for University Students. With all these programs being put in place the borough will experience economic prosperity in the long run due to health and economic savings.