

## **Abstract**

With the increasing admittance of students into colleges and universities across the nation, the need for alternate modes of transportation is becoming more pressing. College and university campuses, as well as small cities, in which there is a college or university, are being overloaded with student cars. In San Luis Obispo specifically, parking on campus as well as downtown can be extremely difficult to find. Traffic is also getting progressively worse, especially at the hour when class begins/ends and student arrive to or leave campus. Financial reasons are yet another deterrent for students at Cal Poly. Parking permits, gas, and costs associated with owning a car make it even more difficult for students to be able to afford driving. City busses have attempted to resolve this issue, but with their set schedules, routes, and capacity, they only provide a band-aid solution. BikeShare seeks to solve this problem by offering students an affordable means of transportation, which they will have access to at all times. San Luis Obispo is the town to start this new sustainable movement in, and when proven successful, others will follow in its wake.

SLO is constantly seeking to make the town a better place to live as seen through its implementation of a no plastic bag policy in grocery stores, elimination of drive-thrus, limiting outdoor smoking, and hosting a weekly farmers market. These are just a few of the successful policies and events that have been brought to SLO and have become part of its culture. As not only an innovative green idea, but also a practical means of transportation, the implementation of a BikeShare system in SLO will further this image that it is creating for itself. BikeSharing will give students and residents of SLO an alternate mode of transportation in the sharing of these communal bikes. After implementation and expansion of this program, financial success is expected as well. Through the acquisition of membership fees, payment from advertisements, government grants, and donations, BikeShare is believed to be a self-sustaining, if not profitable business.

After developing and analyzing various BikeShare models, the model in which the remote bike locking system which uses existing bike racks around San Luis Obispo to lock the bike up at was decided upon. This was due to its low start up cost paired with the relative security of the bikes and preferences over other models by both users as well as from the business' point of view.