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## ABSTRACT

In this Thesis we're trying to study the viability of the "Free Bike" project for the Barcelona city. If you have travelled to Copenhagen, Trondheim, Helsinki, Rennes, Vienna, ... in the last years, you will know what I'm talking about, because they have the project working from several years ago. The idea is to consider the free bikes as another public transport (like bus, metro, taxi...) and its last finality to promote the use of the bicycle in the city instead of the car for the ordinary trips. The free bikes would have some advantages in front of the other transports, for example, it would be totally free to use, you could avoid the overcrowded metro and bus, and the traffic jams at the pick hours of our city, and you wouldn't have to go to the gym. And in more serious concepts, you would contribute to create an image, an some reality, of a more ecological city (less pollution, less noise, more space for life...), and to create a more safety city, as it would mean a reduction of the car number in Barcelona city. The principal disadvantage would be that you are the one who must put the power on this transport, and you'll be wet when it rains, and that when it's warm weather and you don't take it easy you may arrive wet to your destination, but nothing further than this. How it works: the free bikes are parked in different points around the city, as if they were bus stops. If you want to take one, you just have to pass your VISA card, or your university card through a magnetic card lector, and the chain that blocks the bike will let it free (as the shopping trail do when you put a coin). We've thought about this system and not the common used in other cities because here the bike user has to imply himself with the bike. From the moment he picks a bike, this becomes totally on his responsibility, and if the bike would disappear, we would know where to go to find a responsible. Once you've used the bike, you must return it to the nearest parking place, and you can forget your link to the bike, because now it will be free for the next one who wants to use it. The parking web would be through the environmental zones of the city, and near the existing or proposed bike lanes of the city, because the safety is a very important element for the viability of the project. If the user wants to go out from a cycle lane it will be under his own responsibility. The web is only extended from the line Diagonal – Travessera de Gràcia to the sea, because is the flattest part of the city, where the slope of the streets is suitable for everybody's health. Above this line the physical effort is guaranteed, so people would prefer to take another kind of transport. Finally you must take out from your mind the image of a conventional bike, because these are totally different bikes. These are bikes with advertisements (this is the way to finance the project), and their components will be different from a conventional bike, to avoid the stealing of their different parts. If someone steal a bike, he must make a miracle to hide it through the city, because it is easily to know it is a public bike. Anyway, we always count on the citizen help, in case they see a bike out of his space, or broken somewhere, then you can call a phone number to advise of that. Then we can do their reparation. The system will a periodical maintenance of the bikes, in order to have the optimum quality at all moment. The real viability of the project will depend on the love the citizens give to the project.