#### A23-Social and Economics Value

# **Economics Impact:**

list of all costs:

- 1. Research and Development fees.
  - a. Development of track system
  - b. Development of car hook system
  - c. Part-testing expenses
  - d. System-testing expenses

# 2. Construction fees

a. Construction fee of rail system, signaling system, substations, electrical grid system, bridges and tunnels if necessary.

# 3. Operating fees

- a. Comsumption of the electricity.
- b. The paycheck to the employees.
- c. The maintenance cost of the train
- d.Royalty on the patent
- e. Advertisements expense.

### 4. Other expenses

a. Subsidies to car and truck manufacturers for making adaptation to the car hook. b. Cost of subsidizing and migrating residents alongside the designed routes of rail system. Including costs of legal issues, subsidies to affected people, etc.

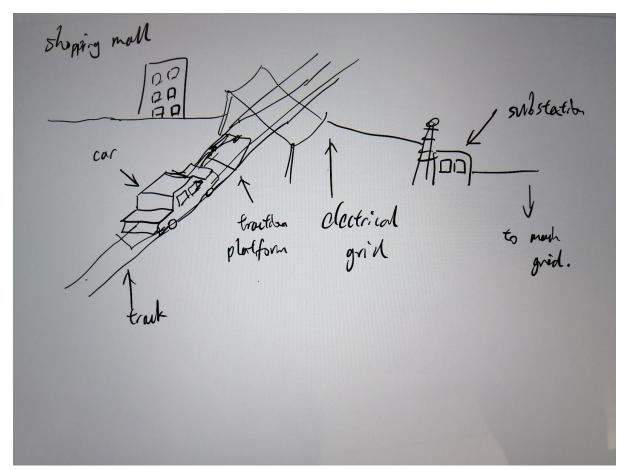
#### List of all Revenues:

- 1. Selling car hooks to the consumers
- 2. When the track system is lucrative enough, we could make money from that car manufactures pay money for permission to adapt our hook system.
- 3. Selling license permissions of entering the track system to customers.
- 4. Accepting advertisements of other companies alongside the track.
- 5. Comsumers annually pay to us for using the system.

#### **List of Social Impacts:**

- 1. For the commuters who live far away form their company, the system helps saving their time.
- 2. For the students and teenages, the system drive the rise of the surrounding business district and offer them more places for entertainment.
- 3. For the poor people, out system fasten logistics, thus decreasing cost of daily goods.
- 4. For the disabled, the system enables them to drive, since the speed and status of every car is centrally controlled.
- 5. For the most of people who live in the city, the system help to improve the environment and rise their living quality.

6. For labors, this project could also create more opportunities and jobs.



Our full-scale system features a system of rail tracks and cars with hooks. The cars can drive onto the rail, hook on it, then the centralized control center managed flows of all vehicles on the system. The economic impacts are various. The cost of this includes the R&D costs. Researching such a large complex and advanced system is not an easy and inexpensive task. We need to hire the scientists and engineering, which cost a lot. Also, the expense of purchasing and running of research facilities is significant, and we may need to pay for testing the system in order to make it absolutely safe.

Once the system is researched and developed, we would pay for constructing it. This involves manufacturing rails and installing them, building bridges or digging tunnels, building substations to convert electricity to appropriate voltage, building electrical grid, and choose the suitable material to build the vehicle's traction table, making it light and strong enough. Also, during the process of construction, our project have to take up plenty of public resources and facilities which is also a hidden expense.

After our system is up and running,a huge amount of cost should be another consideration. Due to the pure electric energy design, in the environment protection at the same time is bound to produce a huge cost of electricity. It also means we have to strengthen management to avoid unnecessary waste. And long-term operations must inevitably bring wear and tear to facilities, including tracks, brakes. traction platforms, which represents a huge maintenance cost. At the beginning of operation, we have to pay employees' salaries while

making negative profits, which is also a big pressure. Of course,royalty on the patent and Advertisements fees for our product is also a hidden expense.

In addition, Subsidies to car and truck manufacturers for making adaptation to the car hook and the cost of subsidizing and migrating residents alongside the designed routes of rail system, including costs of legal issues, subsidies to affected people could also not be negligible.

Our ways of revenue are also various. First of all, we would sell permissions to customers to use our rail system. We would allow them to install our softwares on their car as soon as they buy the permission. Also, we would take annual membership fee from them, and if they do not pay for it the software would be expired, and they would not be able to use our system any more. We could also accept other companies' requests to make advertisements along the track or even in our softwares while receiving money from them. In addition, the car hooks can be sold as our products to customers to make money. Once our system is popular enough, other car manufacturer may pay to us for permissions to make adaptations to our system.

Besides the commercial impacts, our system also generates some social impacts. Firstly, the commuters would get rid of traffic jam forever once our system is installed, because all vehicles on our rail are controlled to have same fast speed. This also decrease the risk of traffic accidents. Secondly, the students would also be benefited, since when our system attracts investments of shopping malls and restaurants alongside the route of rail, students would have more choices of entertainments. As the investment increases, more jobs would be created, which benefits the people looking for jobs. The increased traffic speed and efficiency also reduces the cost of logistics, making daily necessities more affordable to poor people. Also, the automatic control of traffic make disables' dreams of driving possible. Lastly, for all the citizens, they would enjoy better air quality, because our system is powered by electricity, which generates much less harmful gases than diesel engines on the cars.