

Model Name: Multitype Freeflow Movement

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Purpose Of This Project:

A traffic jam is a phenomenon that occurs when the flow of vehicles on a road becomes slow or comes to a complete stop due to an excessive number of vehicles or other reasons such as construction or accidents. This can lead to increased travel times and frustration for drivers, as well as increased air pollution and fuel consumption.

Road accidents are a major cause of death and injury worldwide. They are caused by a variety of factors, including driver behavior, road design, and vehicle defects. Common causes of accidents include distracted driving, speeding, and driving under the influence of drugs or alcohol. Poor road design and inadequate traffic control can also contribute to accidents.

Both traffic jams and road accidents are major problems for the public and the government. They cause loss of lives, injury, damage to property, loss of productivity, and increase the cost of healthcare. They also harm the environment and the overall quality of life.

Governments and private organizations are constantly looking for ways to reduce traffic congestion and improve road safety to mitigate these problems.

To avoid these major events we've prepared this model. Which will allow bringing accidental rates to almost zero. This a multipurpose project for roads and footpaths. The footpath is being transferred as an expressway which will be located on a flyover at the top of the road.

And for the road, It has normally 4 lanes by 2x2 layout but due to emergencies, it allows us to make it 1:3 or 4:0 if needed. It also allows 2 lanes combined with single lanes for emergency service for ambulance or fire service.

This model is designed for crowds and there is a very huge chance of getting into an accident. To avoid this problem this is an ideal model. This will also reduce traffic jams with modern traffic control systems and road control systems. No cars will be able to break rules if they want to. All traffic and another system will be controlled from a control tower at the center of this model.



Details of the elevated expressway:

This section is exclusively designed for humans to bring themselves and their goods to carry automatically from point to point. No one is allowed to enter or exit in expressway from anywhere. They must reach a specific point to get on board. There are two parts to this section. One is automated and one is manual. By automated section, they just have to board on the elevated path. And for the manual part, people can also walk. The automated belt will take people and goods to the bus stoppage or the fixed point where people can get to a

residential area. This will stop the problem of crossing roads unnecessarily to get to any place or get on the bus. This will also reduce the time to reach stoppage. On the still passage, you'll be able to walk or can take a rest at fixed benches at some fixed points.

Details of the road intersection:

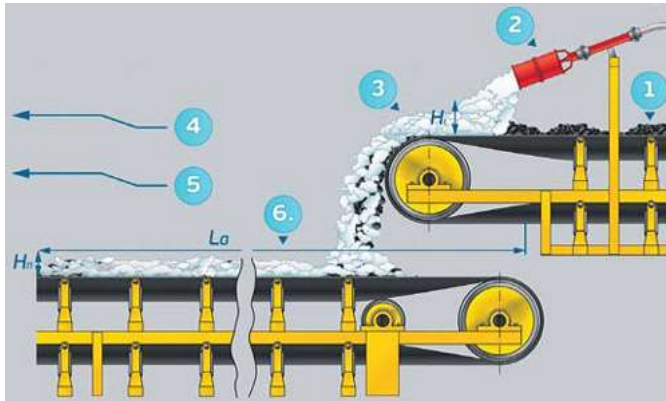


The road section has two different parts. First the intersection and second the divider. For the intersection part, cars will have to go in the right way to change course and bus stoppage is in a fixed place, and also no road crossing. So, they won't have to stop the cars too many times, just at the stoppage or in any emergency. And for the divider part is designed with hydraulic bollards to divide the lanes. Mainly it has normally 4 lanes by 2x2 layout but due to emergencies, it allows to make it 1:3 or 4:0 if needed. It also allows 2 lanes combined with single lanes for emergency service for ambulance or fire service. And there will be a light and sound signal before changing lanes layout including a physical barrier before the emergency lane gets aligned.



The road also has noise-proof glass on both sides of the road to reduce noise. This will reduce the noise so that the sound doesn't make problems for residential area's people.

Details of the dust cleaner conveyor belt:



This part is basically designed to transfer dust from any place to a fixed place in the city to carry out or recycle properly. The manholes will be replaced by this. We just have to throw the dust into the fixed pot in the belt and it will automatically carry it to the fixed place.

All those things will be placed in the same place and all will be controlled automatically but there will be a control

tower at the center to control manually if needed. This will fix a lot of problems at once in a crowded place where is a chance to have traffic or road accidental problems. This can be used for a small place like 0.5km to 1km in area.

Estimated cost for this concept:

Proposed Area: 1KM Square

Proposed Highway Length: 2KM

Proposed Highway Budget: 200Cr. BDT

Hydraulic Bollards Road Divider Required For 2KM: 3000 Unit

Hydraulic Bollards Road Budget Required For 2KM: 100Cr BDT

Proposed Flyover With Steady Riding Passenger Escalator Length: 1.5KM

Proposed Flyover Budget: 350Cr. BDT

Proposed Dust Cleaner Length: 1.5KM

Proposed Dust Cleaner Budget: 50 Cr. BDT

Expected Total Budget: 700Cr. BDT