Ministry Category : Ministry of Environment and Forests
Problem Statement : Digital Solutions for Smart Transport restructuring to reduce air pollution in any city
Team Name : Spirit Busters

Problem Code: #MEF20
College Code : 1/2313443514

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Our Solution/Idea

The Digital solution for Smart Transport can never be single point. It has to be an integrated solutions over multiple points.

- A web portal for the city that will give information about routes, public transport details (Example – Which routes have city buses and what timing the buses arrive, The intermediate stations etc.) and their fixed fare card. It would have an integrated app to choose shortest way and update traffic status as well as inform other shortcuts of reaching destination.
- A single fixed digital rate card for area wise location in all public transport be it buses, auto and Cabs. Increasing dependency on public transport will restrict the number of vehicles used in city which will lead in reduction of pollution rate. Also monthly passes for working people and students.

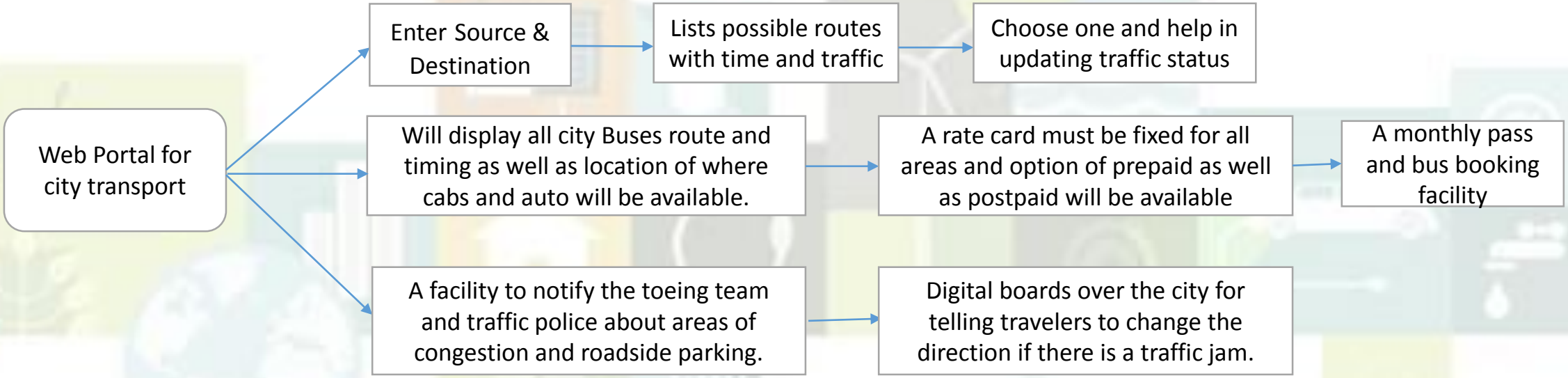
Our Solution/Idea details (Continued)

- All the areas prone to roadside parking will be under surveillance camera and the person in control room will inform the toeing team through a software if a vehicle is parked in no parking zone it can be toed and taken away.
- Drone cameras will monitor congestion and people registered with portal will get information about congested areas. Also an alternative solution is installing digital boards all over the city.
- Restructuring a city transport is impossible without reconstruction so it is important to work on these two areas – Firstly, create an intersection with greater diameter so that traffic signals use can be reduced as people do not turn off their vehicles on signals and it contributes in pollution. Secondly construct central lanes for buses and auto.

Technology Stack

- Front- End : Html, Css, JavaScript & ASP. Net framework
- Back- End : SQL Server
- Windows Operating System
- Google Maps API for mapping and routing.

Our Use Case



a) Intersection/ Roundabout – Alternative for traffic Signals

b) Central lanes for Buses

Our Dependency / Show Stopper

- Most cities also have private buses and autos that may not agree for single fare card system. A common scheme can be proposed that will be profitable for both sectors. Dependency on public transport will reduce rate of air pollution.
- Smart Solutions need smart citizens to make the solutions work. So the mentality that such solutions are not at all feasible in India is an obstruction.
- Surveillance Camera and Drone need manual monitoring but can help solving long problem of roadside parking and congestion control in the city that will decrease rate of pollution.

We are providing a solution that is hitting 3 birds with one stone. Our solution makes the traffic smooth and reduces pollution. City is getting reconstructed for saving congestion. Third we'll need manual monitoring of no-parking zone which can also help in giving employment.