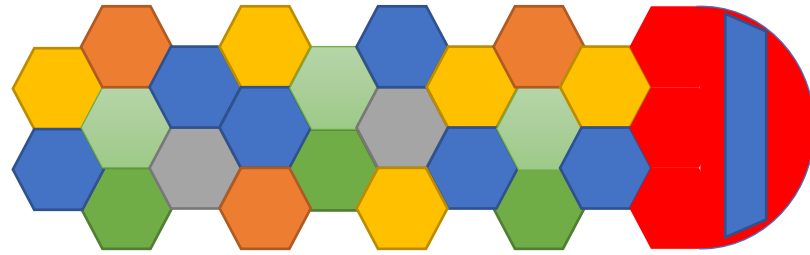


TEAM 53221 – INNOVATION PROJECT

The Hive Bus



THE PROBLEM

Traffic Congestion is a major problem in the modern world.

Productivity loss, pollution, and frustration are just a few of the severe implications that traffic congestions creates.

Public transportation could have been a solution, but unfortunately, due to **the inconvenience involved** many drivers keep choosing their private car as their main commuting mean



Being stuck in traffic Jam can be very frustrating



Using public transportation is not very convenient

TIME LOSS AND ECONOMIC DAMAGE STATS



Costs of driving average costs per driver per year		
US		\$ 10,288
UK		\$ 8,239
GER		\$ 9,341

	Time lost in congestion / parking	equal to 8h working days	Total economic damage from time lost in congestion / parking
LA	102h 85h	23d	\$ 19.2bn \$ 3.7bn
London	74h 67h	18d	\$ 12.2bn \$ 5.6bn
Munich	51h 50h	13d	\$ 5.6bn \$ 1.3bn

Area	Loss in billions	Note
USA	\$305 [22]	[23]
UK	\$52.01	[24]
NYC	\$33.7	
LA	\$19.2	[25]
Manila	\$18.615	[26]
Bangladesh	\$11.4	[27]
SF	\$10.6	
Atlanta	\$7.1	
Jakarta	\$5	[28]
Dhaka	\$4.463	[29]
GTHA	\$3.3	[30]

OUR SOLUTION – THE HIVE BUS

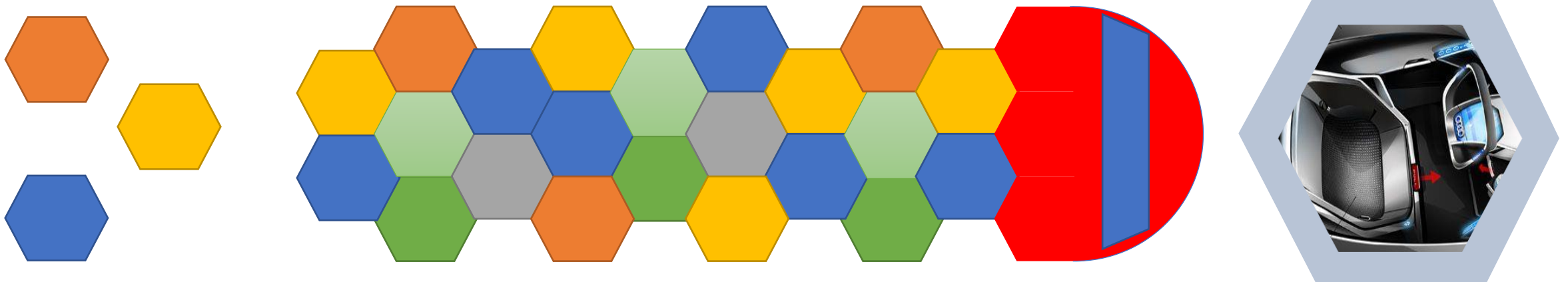
The Hive BUS is a revolutionary concept that would allow to achieve the public transportation efficiency while enjoying the private car convenience

Instead of using a big polluting car to take each commuter all the way from his home to his final destination, drivers would use a hexagon shaped tiny electrical car (**Hexa-Car**) that would be driven for short distance from the home to the township central station. There, it would magnetically snap into a hive of many other Hexa-Cars to form together a virtual bus body that would be towed by a “**Bus Puller**” and would all together be called the **Hive-Bus**

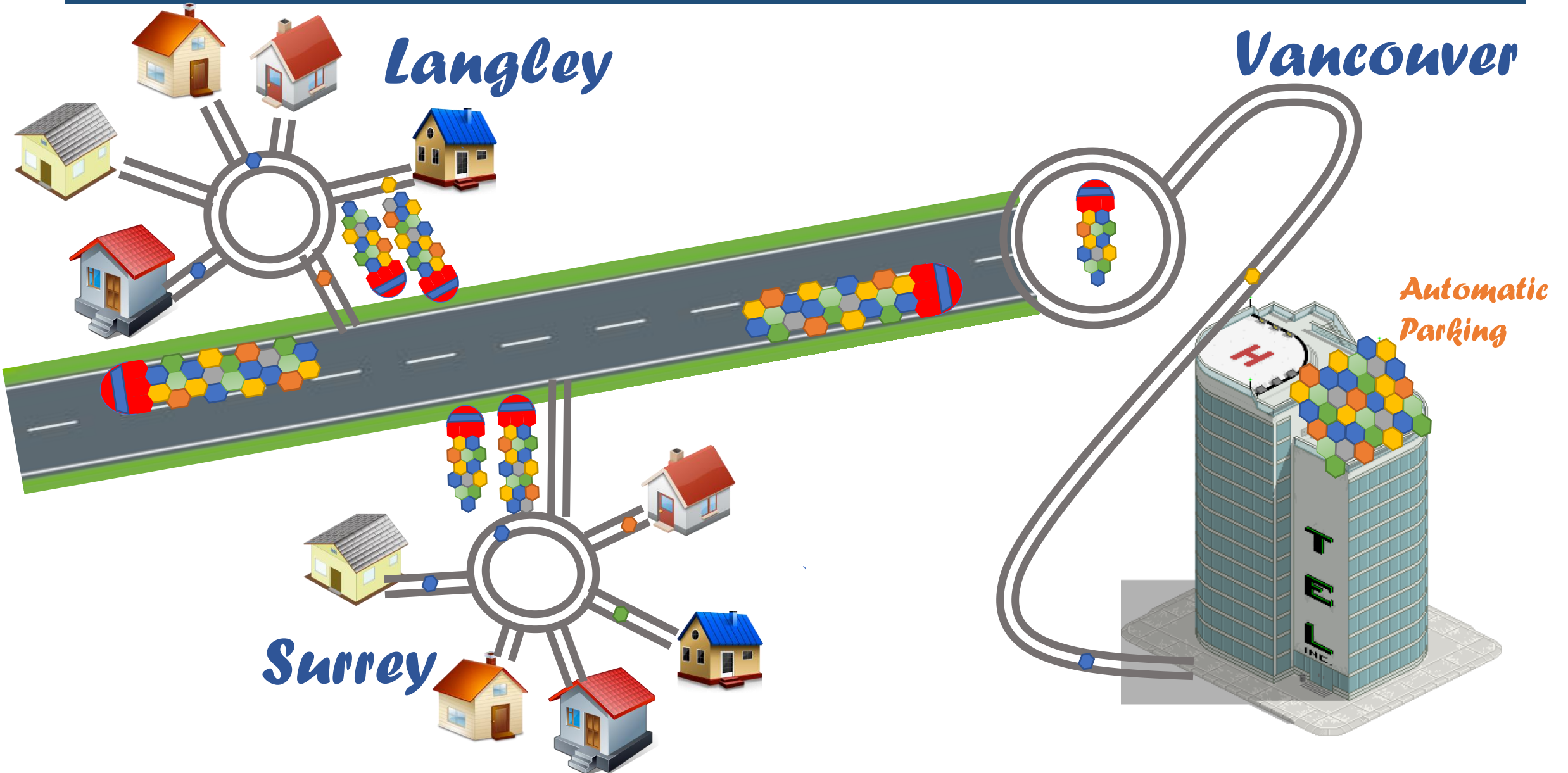
The Hive Bus, driven by the puller driver, would then make its way to the next station by making use of the public transportation restricted lanes. When getting to the station, the Hive-Bus would quickly collapse and re-form with other group of hexa-cars that are headed to the same next station.

When the Hive-Bus would get to the destination city center – the commuter with his Hexa-Car would separate from the hive and would make his way to his final destination by driving his electric convenient Hexa-Car.

Finally, he would leave his Hexa-Car in an automated parking lot in his office building and take the elevator to his desk. And here the commuter made to his destination without ever leaving his beloved convenient, dry, cozy Hexa-Car.



COMMUTE CYCLE



ADVANTAGES

Efficient

Minimal footprint of each commuter on the road would relieve the congestions and would allow many more commuters on the existing roads

Convenient

A commuter would stay in his private cozy Hexa-Car during the entire commuting cycle from leaving his home to his desk office

Clean

The Hexa-Car would be propelled by electricity which would reduce air pollution

Productive

The commuter would be free to work or to rest while being snapped into the Hive-Bus as the driving is done by the Hive-Bus driver

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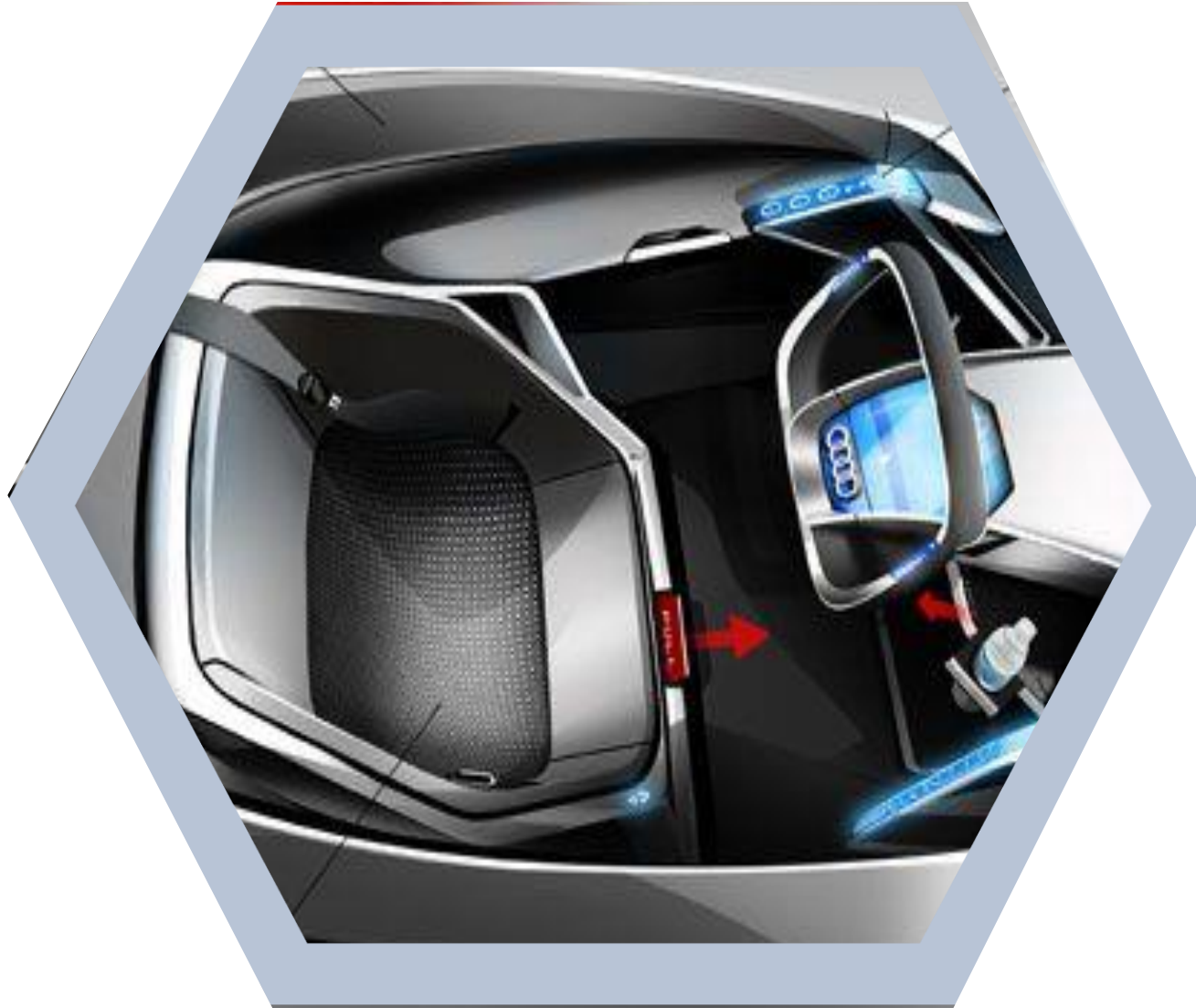
Automatic parking

The Hive-Cars would be built to be parked automatically in the most efficient way without the need to look for parking and with minimal parking footprint

Easy Navigation

The station routing and the Hive-Bus forming would be done automatically by dedicated computer software

THE HEXA-CAR



Bus Efficiency with Car Conveniency.

So, the idea is that cars in the form of hexagons, shall combine and create a bus like type of transportation. And instead of each bus moving individually much like cars, the bus will be much like the air control center, the ACC, each bus will know where the other buses are to avoid collision and traffic. And it will also be powered by electricity meaning it will also help the environment.