

Outline (Team 2-5: Smart Public Bus System)

The smart public bus system is designed to address some of the problems we face today. These problems can be overcome by the technology available here today. The biggest problem faced now is the issue of bus timings. Since currently bus operators have no way to know the actual demand of buses other than to rely on the ground surveillance to roughly gauge the actual demand on the road. In addition, the system also strives to improve the efficiency of transport system and improve commuter convenience.



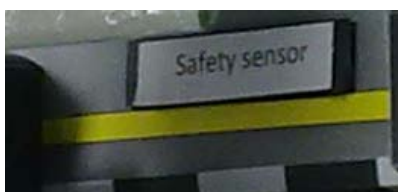
Bus Flagging and Central Command System

With the combination of the bus flagging system and the central command system, bus operators can keep track of the actual required demand along a certain bus route. In addition, commuters will also play a role in determining the bus arriving frequency by simply flagging for the bus they need.

Service No	Next Bus	Bus Stop	Bus Stop	Bus Stop	Bus Location
Location	Terminal	Computer Centre	Yusof Ishak House	University Cultural Centre	
Bus95	Dispatched	4 mins	8 mins	---	BefCompCentre [Auto]
Bus96	Delayed	Arriving	5 mins	3 mins	AftUCC [Auto] BefUCC [Auto]
Bus151	3 mins	7 mins	2 mins	6 mins	AftUCC [Auto] BefYIH [Auto]

Bus and Passenger Detection

This system supplements the abovementioned system by being the eyes on the ground. The bus detection system helps the central command track the location of buses at any point of time; whereas the passenger detection helps maintain an accurate count of passengers on each bus which in turn, will be displayed for users to see.



Commuter Safety and Convenience

With risk of impact against side mirror of buses, safety sensors have been installed to help warn any commuters whom may accidentally stray into the dangerous area.

The system also brings convenience to commuters with poor eye-sight as the flagging system does not require the user to physically look out and flag for the bus; instead it is done so electronically.

Wireless Technology

With wireless technology, accurate and timely information can be transmitted between the bus and bus-stops. Working hand in hand with the hands free flagging system, it provides convenience to commuters and also improves the efficiency of the public bus system.