

## **Inquiry into the investment of Commonwealth and State funds in public passenger transport infrastructure and service**

### **Senate Submission by Marion Byass**

#### **The future of City Transportation**

I would like a city in Australia to trial a sophisticated monorail public/private transport system. In its grandest form the monorail system would replace most cars and all existing forms of public transport. Single monorail cabins designed for a varying number of passengers (one passenger, two passengers, family & group size) would traverse the city crisscrossing over the existing road network. It would cover all primary, secondary and many if not all tertiary roads. A person could get from A to B in one single journey just like a car but without having to find parking. It could be built on the existing nature-strips and be high above ground running ideally off an alternative energy source. Trucks, tourist buses, recreational driving (lets face it some people love driving cars for the pleasure of it!), bicycles and pedestrians would be the other main forms of transport left on the existing roads. People visiting from outlying country regions could still use their cars.

The idea is formed on the principal that people will not give up cars for public transport for the following reasons;

- It is not convenient for short journeys around suburbs
- It is not convenient for longer journeys across suburbs
- Public transport is only really good for getting people to the CBD or other large central hubs.
- Many people find sharing closed public space with other unknown members of the community unpleasant or dangerous
- People want transport that is fluid and works within the immediacy of their decision to travel. (Go to the car or monorail cabin sitting out the front of the house and jump in and drive. Not walk 5km to a train station and wait 30min only to then have to walk another 2km to arrive at destination.)

The only reason people have flocked to public transport in recent years is because of road congestion, petrol prices and climate change. It has nothing to do with improvements in the public transport system.

#### **How it would work**

The system would work by booking a cabin from a mobile phone, home computer, or a monorail stop outside the home. A cabin would arrive outside the home or restaurant within 10 minutes and a text message would notify you of its arrival, so you don't have to

wait outside. You then jump in the cabin and plug in your destination. You don't drive the monorail, the computer does.

A distribution modeling system has information on where congested routes exist and models the most efficient route to take. Each cabin has a GPS and its location is known by the system so journeys are based on current live data. You can book a journey in advance and return journeys would be taken into account. Booking would be encouraged through slightly cheaper fares. I'd imagine you would pay on a monthly basis for the total journeys taken by direct debit or some such billing system.

It would be built in a way that avoids crashing with other monorails completely.

Cabins would be distributed across the city according to a sophisticated computer modeling system that analyses how and when people move about the city. So when a football match is on extra cabins are distributed in advance to bookings throughout the suburbs most likely to attend the match. On weekends human movement is vastly different to weekdays, nighttime is different to daytime and school pick up times and work peak hours would all be taken into account by the distribution modeling system.

The flow of cabins would follow the pattern much like cars do. There would be minor links and major links. I don't know if a stop at the end of each suburban street would suffice or if people would want a stop at each house. It would come down to the cost of building such a transport network.

### **Private or publicly owned?**

Given the expense of building and maintaining a system like this and that the objective is to replace many individually owned motorcars I see that a combination of privately owned cabins and public cabins could be an option. The cost of maintaining and expanding the current road network would decrease. Considerably less people would need privately owned cars.

### **Potential problems**

A city relying on only one main form of transport for the bulk of its population makes the system vulnerable. If the system fails the entire city comes to a standstill.

- Computer failure
- Terrorism
- Breakdowns
- Energy security (blackouts on hot days!)
- Vandalism
- Safety getting in and out of the cabins at night

### **How to implement the system**

A trial city would need to be chosen. Start with the new outer suburbs that have no or very little existing public transport. Aim to get those people to and from existing train stations and major bus routes and also all the minor journeys around the immediate region. School drop offs, shopping, visiting friends etc. Start with just covering all the primary and secondary roads to begin with. Make it cost the same as current public transport initially.

**Monorail or something else?**

Any transport technology that can run off as little energy as possible and preferably renewable energy. Make sure it is developed on a system that doesn't require driving so that people who should be currently catered for by public transport such as the aged, disabled, children etc can use it. It would need to be designed so that computer illiterate people could use the system also.