

ALTERNATIVE ENERGY DEBATE:

GET RID OF THE PRIVATE CAR!!

The article below makes an excellent debating topic for years 10-12. It is particularly pertinent to DS: Alternative Energy, Unit 2 Physics. An oral version can be podcasted/downloaded from ABC Radio National/Ockham's Razor - July 17 2005 - Martin Mahy. (<http://www.abc.net.au/rn/science/ockham/index/orChrono2005.htm>)

Time for the Car God to Vanish Forever?

Has the time come to topple one of the gargantuan gods of the twentieth century – the private car? Every city in the world is choking with fumes, gridlocked with frustrated drivers and constantly burying accident victims. As third world cities gain wealth their car ownership is growing rapidly and their roads and streets are beginning to choke like London, Los Angeles and Tokyo have for decades.



Every day thousands of people sit in traffic jams and we citizens are all sucking in polluted air. Is there a better way to get all these people to where they're going? My suggestion is this:

Replace private cars with a fleet of computer-linked mini-buses, all running on hydrogen fuel. Such buses are already on the way in Perth and in Iceland (which has geothermal energy to generate Hydrogen). This car-less system has people simply dial in their destination postcode and PIN on a home or mobile phone. Their current position is registered automatically and their trip is

electronically withdrawn from their bank (EFTPOS). The central computer then directs the nearest mini-bus travelling in their direction to pick them up. Their name or group name is displayed on an electronic sign so they know it's their bus coming. There is a swarm of vehicles travelling East-West and back and another travelling North-South. It only takes seconds for a mini-bus (12 seater) to arrive. They swipe their card, to verify the trip, as they enter the bus, and inform the driver of their exact destination. The bus has two luggage compartments at the rear for those with shopping bags, cases etc.

What would be the benefits? There would be **no traffic jams**, because vehicles would be a tenth as many. **Pollution would vanish** because they emit only water vapour (this will only be completely true if the hydrogen is made using wind farms and not fossil fuels). **The road toll would vanish** because of low traffic volumes and trained drivers on zero alcohol. Currently we have drivers with all levels of skills and with all measures of emotional and mental stability, hurtling around in lethal juggernauts of steel. Mostly it is one tonne or more of high technology (7,500 parts) which has devoured enormous energy in manufacture, carrying one person only. Extremely inefficient on a finite planet! Without all these dangerous, wasteful cars, one lane could be freed up on all main roads, freeways and highways for bicycles. **Thousands more people would ride bikes** for fitness if the air was clear and they were safe from cars.

Garages would no longer be necessary, saving enormous space and cost in housing. **Side streets and main roads would be clear of parked cars**, encouraging walkers and cyclists. The enormous car parks around universities and shopping centres could be **turned into real parks** for the benefit of the planet and of communities. Ambulances and fire-trucks would get to emergencies much quicker. Trucks would still run, but would all be converted to hydrogen as well. The system could work in country towns and regional cities as well as capital cities. The only people still needing cars would be rural dwellers and tradesmen with equipment. The electric train and tram systems would remain because they are so efficient at getting CBD workers to work. Trams would be much safer and quicker without private cars to impede them.

Naturally, many will resist parting with their beloved cars. But the government must pay them a fair price for their car and recycle it into a mini-bus. A huge new industry will be created, with thousands of jobs in bus manufacture, computer systems, solar and wind farms to produce hydrogen.. Environmentally-friendly jobs. Why not go for it?

It is worth imagining how people could adapt to this system.

- Family wants to go on a Sunday picnic to the Dandenongs. Minibus picks them all up plus baskets, blanket etc. and drops them safely at the destination. When ready to come home they ring for another bus.
- Group of young people want to “hire a limo” to go to a formal. Such vehicles are now part of the taxi fleet and are on hydrogen. Trip proceeds as normal.
- Group of teenagers want to “hoon around” in someone’s car, get drunk and crash some parties. I’m sorry –this is no longer possible – much to society’s benefit.
- Criminals want to steal a car to do a robbery. I’m sorry but this is no longer possible. They would have to steal a minibus – which are all computer-linked and locatable at all times.

- A couple want to drive to a country town for a weekend, with personal luggage. They take a mini-bus, with their luggage in the luggage locker, to a car hire place at the edge of the city. No unauthorised cars are allowed within city limits.
- Car enthusiasts want to drive their engineering wonder-machines. These are stored in city edge “marinas” and they are allowed to enjoy them, (under the speed limit), on country roads.
- Recent tragedies like the underage kids fatal driving accident and the motorcyclist killed in the police pursuit of a motorist would become a thing of the past.

The main problem facing a plan like this is to convince a citizen, who is very fond of his/her car, to do without it. The plan would have to be introduced gradually.

First replace all buses and taxis with the new computerised mini-bus system. No-one has lost their car yet, but a lot more people will leave their car home and use the new quick, pollution-free system.

Then ban cars on main roads and freeways on weekdays, after preparing the mini-bus system for the extra load. People can still drive their cars around on weekends. The pain is not yet absolute. Many people will now find they can easily do without their cars altogether. Thousands will ride bikes to work for free in the safe bike lanes. The value of used cars will plummet and the government will have to buy them at fair prices to recycle (a privatised business could do this).

Finally, when only the diehards have hung onto their cars and everyone has seen the benefits of doing without cars (lives saved, no gridlock driving, no haze over the city), then will come for the time for a complete ban within the city limits. Urban humanity has reached the age of enlightenment. No citizens need risk their lives and other's lives jockeying lethal machines through heavy traffic. Cities are safe, easy to get around in and the air is so clear you can see forever!

c. Martin Mahy
2005