Urban Cooling: From Congestion Tax to Metro Transit Levy!

Tim Colebatch is right ["Warming: it's time to come clean", *Age*, 18/01], it is indeed time to cool our lifestyle. News from *Nature* ["Methane emissions from terrestrial plants ..."12/01] however, indicates that the "green deserts" [trees] we're now planting as "greenhouse offsets" may not be the substitute for changing our energy-use patterns because trees generate methane and methane is 40 times more "powerful" as a greenhouse gas than carbon dioxide. Remarkably, the cover story in the current issue [Fall, 2005] of Yale University's *Environment Yale*, "As a Remedy to Global Warming, Do Forests Matter?", written without knowledge of the *Nature* article, suggests that plantations will struggle to substitute for planetary deforestation let alone compensate for fossil fuel use and that for complex ecological reasons it would be better to stop forest removal rather than plant ecologically simple tree crops.

Transport and the energy needed to make it and its infrastructure, account for a significant proportion of all the energy we use, responsible for at least a third of Australia's greenhouse gas contributions and many other toxic consequences.

In attempting to change the way we transport ourselves, particularly the more discretionary parts of our travel demand such as urban DODO [Driver Only Driver Owned car] commuting, we need to address the perverse incentives that sustain such behaviour in the light of the many "contraindications" that threaten human as well as environmental health. Owning our vehicles is part of the problem. Having paid all that money, fuel prices are a relatively small and well-spread out disincentive to using our vehicles compared with the incentive constituted by purchase price. Providing social (e.g. economic!) structural incentives to use metropolitan public transit, rather than simple exhortation in the face of numerous disincentives (such as tickets), would be a means to reverse the perversions in our current urban transit systems.

Rather than the negative congestion tax let's consider transferring road-congestion to rail-congestion by introducing a metropolitan transit levy (MTL). It would replace some of the taxes that currently support public transport *and replace tickets* that employ many in a zero sum game that probably doesn't even pay for itself let alone for public transport. Once we were used to it, a levy could return our cities to us with enhanced community, environment & health. Federally collected annually (c.f. the Medicare levy), from employed urban Australians, it would be a natural end point to 150 years of awkward and alienating fare schemes. In Melbourne it could be in place in time to rescue the problems associated with the next half billion dollar fling about to "smarten" Melbourne's public transport fare collection.

A MTL would mean:

- public transport free at point of access.
- public transport free to rural visitors and tourists (just like water). Along with rural fast rail, it would provide an incentive to use rural public transport to commute to the cities.
- a built-in incentive for urban residents to use public transport we'd all remember that we'd paid for
- an improvement in the status of travel on "The Met". It would no longer be seen as the "poor cousin" of the DODOs. It would simply be *the* way to commute in our cities.
- removal of stresses associated with commuting. Not least, a dramatic decline in the deaths and injuries from crashes and the plethora of diseases directly attributable to auto-commuting. In Melbourne alone, that accounts for some 600 deaths annually.
- avoiding favouring those wealthy enough to afford congestion taxes and avoiding the resentment such favours generate.
- the usual Medicare-like support for people for whom the levy would be an excessive burden.
- removal of barriers to the poor to use public transport.

• a general "disarming" of the public transport system with transit assistants replacing police, the return of the space & vacant buildings around railway platforms to commerce and the community, and a welcoming and attractive system, partly arising from the greater density of users!

Therefore:

- an improvement in the community spiritedness of our already friendly city.
- removal of the threat to monitor citizens' movements by tracking us through the coming "smart" cards.
- enhanced participation rates which would provide political constituency for dramatically improving
 the current carrying capacities of our metropolitan transit. Relieving rail-congestion is so much
 cheaper and healthier than relieving road-congestion especially in the long run. Consider for example
 the invariably neglected costs of making good planetary damage caused by greenhouse effects, let
 alone the many other negative effects of urban DODO commuting!
- a more open and equitable system in which payment for the system was overt rather than covert as
 with the current system of payment which comes from consolidated revenues that all of us pay into.
 The annual MTL bill could indicate what proportion of the total cost of metro-transit the levy
 actually covered.

One of the most valuable implications would be the support that an MTL would give to Melbourne's best kept secret: the bicycle-rail collaboration. Thirty years ago Alan Parker pointed out that the fastest, cheapest, healthiest and most sustainable way to get around much of the Melbourne Metro Area was (and today still is) a combination of bicycle and rail. I have proven this now over nearly 40 years. From my flat in Clifton Hill I make it to my office in Clayton in just 50 minutes, as fast as by car. With a yearly ticket - that doesn't even need validation (because it doesn't work!!) - and a bicycle, one can really make transport a breeze. Melbourne becomes translucent. No peak hour jams, no parking problems, no need for fuel and maintenance, no depreciation on the car (I rent if ever I need one), no speeding fines (!?) and, most of all, two to three times faster than the DODO because there's no time wasted earning the money to pay for it or to park and service it!.

And oh yes, for those of you who don't believe that ticketing costs more than the revenue it raises, consider not just the costs of raising and selling tickets and maintaining the system in the face of complex machine failure and vindictive vandalism, but the direct costs of policing the system against fare avoidance and evasion and the costs in time and stress to the public of struggling to interact with it and with its failures. Consider the indirect costs of alienation of the public by the ticketing process itself and by that punitive policing system. Finally, consider the loss of revenue inherent in all the urban land that languishes, underutilized behind the barriers that keep the ticketless out of the system (+ the small but continuing loss of revenue to the space occupied by the machines on trams and buses) ... and consider the *social costs* of the "dark-spaces-of-terror" that unstaffed and isolated stations represent to many people who would use them at night. Incidentally, have you ever tried to use the *red button*? It's not easy to get to when you're being molested and if you *do* make it, will someone be there? No-one was when I tried and, when others have tried they were trivialized for their reasons for trying!

Frank Fisher

A/Prof., & Director, The Understandascope, Monash Science Centre.

Phones: 9905 4618 [Tues-Thurs]; 5354 5522 [Fri-Mon].

[The Understandascope (courtesy Michael Leunig), is a new Monash R&D unit based on my termination package. It is about to enrol two Ph.D. students one of whom will investigate aspects of the MTL while the other will look at overcoming violence on The Met. We are looking for sponsorship – care to assist??]