# **Public Transport**

Submission **David Kilsby** 

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# Prepared for:

Rural and Regional Affairs and Transport (RRAT) Standing Cmomittee inquiry into Public Transport Department of the Senate PO Box 6100 Parliament House CANBERRA ACT 2600

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## 1. SUMMARY

- 1.1 This document is a submission from me, David Kilsby, in my capacity as Director of Kilsby Australia, a small independent consulting company specialising in alternatives to cars, to the Senate Rural and Regional Affairs and Transport (RRAT) Committee and its Inquiry into Public Transport in Australia. After a brief summary, my credentials for making such an independent statement are presented, it is made and the Committee's Terms of Reference are then individually considered.
- 1.2 In summary, I believe that the present low price of oil will not last as it becomes obvious that the world has passed its peak of oil production within the next few years if it still lies ahead of us. Time is running out to prepare. I take it as a given that the nation's bus fleet, currently heavily reliant on diesel fuel, will be converted to natural gas and, eventually, electricity, because otherwise business owners will be robbed by public transport if a fuel shortage develops. (It may not: oil may simply become unaffordable in real terms.)
- 1.3 .There will not be time for the transport industry to take advantage of the many technological developments "in the pipeline". This will be a global problem but Australia, because of its size, will be particularly vulnerable, Existing alternatives (walking for the shortest trips, cycling possibly using powered bicycles for longer journeys and use of public transport for all lengths of trip) will be called on to do much more than they do today, when the private motor car reigns over all lengths of journey except the longest (1000 km and over), for which air travel tends to be preferred.
- 1.4 The lack of feasible alternatives to the car will become painfully obvious in the outer parts of our cities (Dodson & Sipe, 2008). Here conventional public transport alternatives like the bus (subject to the tyranny of the schedule) or the train (which can only serve places on the railway line, often quite distant) are not competitive. The bus is better than the train at meeting local transport needs. It is not impossible that inner-city bus routes can be converted to light rail, thereby releasing resources more suited to aiding the reduction of car dependency in outer suburbia.
- 1.5 I believe we are heading for a future where public transport must raise its game and play a bigger part in urban life.
- 1.6 This submission does not come from the ASPO Working Group on Urban Planning and Transport, which I convene, as I do not believe that some of its members share my views, especially on the value of urban rail in outer areas.

# 2. CREDENTIALS

- 2.1 For the last nine years I have been running my own consulting practice in Sydney as principal Kilsby Australia (KA). I have been working in transport and urban planning, in analysing urban travel and promoting alternatives to car use in urban areas, for my whole career.
- I graduated in 1969 as a mathematician and after early academic research experience at the University of Manchester Town & Country Planning Department, I joined UK consultants Colin Buchanan & Partners (CBP) in 1973. They were among the first to recognize the adverse impacts of car use on urban areas indeed the practice was based around the team that produced "Traffic in Towns" in 1963, the seminal "Buchanan Report" (about which I gave a presentation to the Sydney Transport Panel in early February 2008 see the entry for 3/08 in the archive of my web site www.kilsby.com.au )...
- 2.3 From 1976 to 1985 I worked extensively with nationalized bus (and ferry) operators in the UK, who accounted for about half the UK bus fleet at the time, planning every aspect of operations based on passenger data from surveys (in total, about ten million interviews in about 150 local studies), and from 1985 to 1987 I was in charge of a team of computer analysts/programmers producing a Depot-Based Management Information System ("DEMIST") for use in a deregulated environment.
- 2.4 In 1987 CBP sent me to Sydney as the inaugural manager of Sinclair Knight Buchanan, a national transport planning joint venture with local engineering firm Sinclair Knight and Partners (as it then was). In 1993 I became an Australian citizen and joined Sinclair Knight Merz (SKM), as it had by then become. I resigned from SKM in 2000 to start up KA. At SKM public transport was not a lucrative market and I broadened my vision.
- 2.5 In the last nine years I have operated my own consultancy, with the funds generated used to finance my extra-curricular activities as the Sydney Co-ordinator of ASPO (the Association for the Study of Peak Oil and Gas) and the Convenor of their Working Group on Transport and Urban Planning, and various roles within Engineers Australia (EA). I was the Chairman of the EA Sydney Division Transport Panel in 2006 and 2007, and am a Corresponding Member of the National Committee on Transport (NCTR and its Chairman in 2003 and 2004), and I have been a member of the Divisional Public Policy and Representation Committee. I am also an associate editor of the Institution's transport journal *Transport Engineering in Australia* and a member of the Australian Institute of Traffic Planning and Management AITPM and the Chartered Institute of Logistics and Transport in Australia CILTA.
- 2.6 I am no longer the Sydney Co-ordinator for ASPO Australia nor a regular member of NCTR. This document does not represent the views of either organization but rather gives my own independent opinions.

- Since 2000 and before I have worked all over Australia but NSW has provided most of my work. My skills will be evident from my CV see the 'capability' section of my web site <a href="www.kilsby.com.au">www.kilsby.com.au</a> but they include the practical development of public transport, infrastructure planning, quantitative analysis, land use and transport integration at all scales, and urban sustainability. I see my skills as being multi-layered: broadly speaking, the initial experience layer of mathematics and computing (1969-1974) was added to by transport modelling (1974-1976), public transport market research (1976-1980), bus operation (1980-1983), ferry services (1983-1985), software engineering (1985-1987) and then in Sydney integrated urban transport planning (1987-1994). social policy and energy policy (1995-1999), public transport demand modelling (2000-2003), road planning (2003-2005) and planning for sustainability (2005-now). I would suggest that this combination of experience and skill is unique.
- 2.8 The need for independent and authoritative research to inform the public debate about Public Transport has been growing for years, and a glance at any daily newspaper will show why. This Inquiry is timely. Metro development, Jan Gehl's CBD plans, the NSW power asset sale, the change of federal government, accelerating climate change, the imminence of peak oil, the effects of the economic crisis, the spatial disparity between where service consumers and service providers (eg bus drivers) can afford to live in Sydney, the TCard fiasco, the privatisation of the ferries, etc, have all featured prominently recently in Sydney
- 2.9 For more detail see my web site www.kilsby.com.au

# 3. PEAK OIL AND PUBLIC TRANSPORT

- 3.1 I have written extensively about the Oil Crisis that I expect to affect the transport sector soon see in particular the entries for 2/09, 8/08, 2/08, 9/07 and 3/06 in the archive of my web site www.kilsby.com.au.
- 3.2 I believe that the present low price of oil will not last, as the world recovers from its recession and the geological realities of oil production sink in. We cannot make more oil, and for the last few decades we have been living off what our forefathers discovered. Already (Christmas 2008) there is a disconnection between what the market is saying, via the oil price, and what the oil production data is saying. Peak Oil refers to the situation that unfolds when production from new fields fails to offset the natural decline of old fields, as it must eventually. The consensus of opinion, before the global financial crisis hit us, was that this was likely to have happened by 2012.
- 3.3 The slow-down in the world economy may have bought us a little more time, but the low oil price (complicated by many factors including speculation, hedge funds, the actions of OPEC, and national variation in putting a price on greenhouse gas emissions) and its volatility is inhibiting the development of alternatives to fossil fuels, in particular renewable sources of energy.
- 3.4 When the world emerges from recession (and I am not an economist, so I do not pretend to know how long it will take for that to happen), I expect to see a rapid rise in the price of oil (and hence petrol, which is what matters to the public). Then, people will start looking for alternatives to using their cars.
- 3.5 There will not be time for the transport system to adopt, on a large scale, any of the technological options now being investigated. Not the "green cars" to be offered by Holden and many overseas manufacturers, not the dream of a new sunrise industry of making Australian electric vehicles (which would increase the demand for electricity, and add to the pressure for the as yet undemonstrated technology of carbon capture and storage to work), not the production of ethanol from plant waste (lignocelllulose), not any other technological alternative now being pursued.
- 3.6 The transport industry will be forced to prioritise its use of oil when it becomes less plentiful and more expensive than it is today. The ramifications of passing the global peak of oil production are many and widespread, but the heavily oil-dependent transport sector must learn to change its ways, Clearly freight cannot travel by public transport, so the use of oil must give priority to getting food to people. Beyond that, the prioritisation of use is a matter for the community to discuss a discussion we have not yet had at national level in this country, and for which Australians are ill –prepared.
- 3.7 This presents a major challenge for public transport, and for the community in learning to adapt to the new world post-peak oil. By 2020 the world will be very different.

- 3.8 Sydney, as Australia's oldest and largest city and home to about a quarter of the nation, already has abundant public transport although much of its population lives in Western Sydney beyond easy reach of the rail system. 1990 data in Newman & Kenworthy (1999) showed in Table 3.9 that Sydney had a mode share for transit (the % of passenger km by transit modes) over twice that of the next biggest city, Melbourne, with Sydney having the lowest per capita road supply and the lowest per capita provision of CBD parking of any city in Australia.
- 3.9 The Transport Panel of the Sydney Division of Engineers Australia offered an assessment of Sydney's transport in 2006 see the entry for 5/06 in the archive of my web site <a href="www.kilsby.com.au">www.kilsby.com.au</a>. In particular it was felt that the different bases for charging for private and public transport use represented a barrier to progress.
- 3.10 I am not aware of any studies which seek to quantify the productivity to be expected from a train, tram, bus or ferry. Certainly the phenomenal growth experienced recently on rail in Melbourne and Brisbane (in percentage terms) has not been replicated in Sydney, which already has higher use of the trains.
- 3.11 Abundant though it is, it is not enough. In outer areas of our cities, in particular, there is no effective competition offered to the car for local movement,, as evidenced by Dodson & Sipe's maps of their VAMPIRE indices ("Vulnerability Assessment for Mortgage, Petroleum and Inflation Risks and Expenditure".). which show the result. Large parts of outer Sydney developed post-war a long way from the railway system..
- 3.12 There is one technology (PRT) which could potentially offer competition, see the entry for 1/09 in the archive of my web site <a href="www.kilsby.com.au">www.kilsby.com.au</a>, but this may be ruled out early on cost grounds before mass production has a chance to reduce those high costs.
- 3.13 Bowers et al (the entry for 9/06) argued that if we want better public transport we should think about transport in a new way, recognising the benefits of independent travel and recognise that goods and most services cannot travel in urban areas by public transport...
- 3.14 The real objective should be a reduction in car use, not an increase in public transport use. The latter can be achieved by increasing the supply so that existing public transport users make more trips, and over short distances people take public transport in preference to walking or cycling, and by tempting car passengers out of cars all of these will increase public transport use without taking a single car off the road. Car use has to be replaced by public transport use.
- 3.15 Public transport use is everywhere a minority occupation compared with use of the careven in Sydney, with its extensive rail network which is however focussed on the CBD. Some 70% of all Sydney rail trips either start or finish in the CBD. For all-day travel, 2006 trip lengths have been estimated (NSW MoT 2008) as 18.8 km for rail, 10.5 km for car drivers (less for passengers) and 7.2 km for bus. Modelling in 2003 established the length of an AM peak rail trip in Sydney in 2001 as 22.8 km (21.8 km for rail only), an AM peak car trip as 11.1 km and an AM peak bus trip as 9,7 km. Even in the most transit-friendly

scenarios this peak relativity did not change much.. indicating the huge inertia of existing use.

- 3.16 Because of the need to act quickly when the crisis comes, the transport industry will have to rely on existing alternatives to fossil fuel use and behaviour modification, for person movement. It is a mistake to think of this as a peak commuting problem in 2001 in Sydney, over half the travel in cars (53%) during the 2-hour morning peak period was estimated to be caused by people doing something other than going to work.
- 3.17 Dismissing new technology which (probably) will not be ready in time, this means greater use of public transport, walking and cycling and filling up empty car seats. Better public transport is not the answer, but it is part of the answer.
- 3.18 Planning our cities as they grow to make it easier to move around by public transport must feature. Particular attention must be given to those things that deter those who are dependent on their cars, such as stop location and amenity, ticketing, air conditioning, the age of vehicles and antiquated rules of passage, which sometimes prevent you from getting on a bus even though it has room for you and is going where you want to go.

# 4. TERMS OF REFERENCE

# **Nationwide Audit of Public Transport**

- 4.1 The Committee's Terms of Reference include: "an audit of the state of public passenger transport in Australia".
- 4.2 I will confine my comments to Sydney, ,in the expectation that the Committee will receive submissions from others in other cities closer to public transport there than I am.
- 4.3 Sydney's transport takes place in cars, trucks, vans, motorbikes, bicycles, feet (all of which tend to be looked after by the NSW Roads Ministry) and by taxi, rail, bus, ferry, light rail and monorail (the last two in limited quantities), under the regulation of the NSW Transport Ministry. There are plans to introduce another mode soon, metro rail. It seems to me that public transport use will stay at around its present low level while the charging for public transport remains usage-based when the charging for road use is access-based, with many cost elements (depreciation, insurance, even possibly maintenance) not perceived as part of the cost of a journey by car. Public transport is cheaper but slower, but because of the different charging systems it seems worse than it is.
- 4.4 Sydney covers a huge area. The use of rail for long-distance commuting to the CBD is the main reason for the high modal split to public transport, estimated at 25% of all motorised passenger-km in the 2-hour weekday AM peak of 2001 and 15% of all weekday travel in 2006 (NSW MoT, 2008). This is from just over 11.5% of the trips (2006). of which 4.5% were by train (over two-thirds of morning peak travel in 2001 required other mechanical means bus or car to access the railway.). There were more bus-only trips in 2006 than trips involving the use of a train, but this is influenced by the use made of school buses. For many car-borne people the school bus is their only experience of using public transport, and they turn away from public transport for ever once they leave school.
- 4.5 For car (2006) the corresponding figures are 79% of travel and 70% of trips, including 49% made by drivers. The balance is made up by other modes, principally walking. The entry for 11/98 in the archive of my web site <a href="www.kilsby.com.au">www.kilsby.com.au</a> shows how walking would need to be combined with drastic land use action to make an appreciable difference to transport energy use in Sydney.
- 4.6 The entry for 6/05 in the archive of my web site <a href="www.kilsby.com.au">www.kilsby.com.au</a> shows the dramatically different roles played by the car and by public transport in Sydney,, which reinforces the point made in 3.11-12 about the lack of alternatives to car use in outer areas.
- 4.7 In the bus sector in Sydney (and Newcastle) there is a distinction to be made between Government—operated buses and ferries and those operated by private businesses. Despite its name, the State Transit Authority is only the inheritor of the patronage built up in the past by the inner-city trams, when the city was a lot smaller than it is today The NSW

Ministry of Transport is the real State Transit Authority in NSW (the STA mainly serves those areas covered by the pre-war tram network, it does not operate railed systems, heavy or light, and it is by far the largest of Sydney's many bus operators and is treated the same as the rest – at least in theory).

# **Public Investment in Public Transport**

- 4.8 The Committee's Terms of Reference include: "current and historical levels of public investment in private vehicle and public passenger transport services and infrastructure".
- 4.9 I do not have access to detailed financial data, but I note that in 2007-08 the budget for roads development statewide in NSW was \$961m (RTA 2008) Contrast this with rail expenditure, where a single project in Sydney (the Epping to Chatswood Line) is believed to have costs of this order,
- 4.10 Data in the entry for 6/05 in the archive of my web site <u>www.kilsby.com.au</u> shows the slow rate of accumulation of rail in Sydney since the 19<sup>th</sup> century.
- 4.11 My conclusions are that:
  - Urban rail expenditure in Sydney is excessive at the moment. This is mainly due to the high quality of the designs. These will not be affordable once money is tight..
  - I believe that Australian cities of up to 1 million can be served by road-based transport, with 500.000 to 750,000 being the optimum size. This is followed by the need to establish urban rail as the population passes 1 million to allow the CBD to grow, followed later by the need to break down into smaller cities, linked by fast inter-city trains, as the population passes 4 million.
  - Sydney is too large to have a dominant CBD. (For an assessment of the last Metropolitan Strategy for Sydney, see the entry for 12/05 in the archive of my web site <a href="https://www.kilsby.com.au">www.kilsby.com.au</a>).
  - Australian cities have their own size distribution. Most large ones are growing, fuelled by international and national migration.
  - Melbourne will follow Sydney in this, and eventually SE Queensland and Perth too,
  - The hardest transport demand to meet will come from the outer areas of our big cities.
  - Such areas are better served by road-based transport.
  - The selection of road projects, because of the imminence of peak oil, should favour public transport. In practice this means the adoption of oil-constrained future scenarios and concentration on the benefits of projects for freight, Projects whose assessment is based on Business-As-Usual assumptions should not be supported by the Commonwealth.

# The Benefits of Public Transport

- 4.12 The Committee's Terms of Reference include: "an assessment of the benefits of public passenger transport, including integration with bicycle and pedestrian initiatives".
- 4.13 The benefits include;

#### (for the government)

- Fuel savings: more oil to go round in areas without quality public transport (mainly rural and regional Australia)
- Slowing of the trend towards community privatisation (the "windscreen view" of the world).
- A more efficient way of handling the movement of people in cities.
- Fewer health care costs to meet.
  - accident—related
  - obesity-related
  - home-delivered services to older Australians, when they can no longer drive to access these services.
- 4.14 If appropriate objectives are defined, there is the possibility of determining whether the funding applied is achieving them.

### (for the user)

- Possibility for multi-car households of disposing of one or more vehicles.
- Extra fares more than offset by savings in vehicle running costs.
- Incorporation of walking in daily trips, thereby fighting obesity
- Use of a means of mobility and social participation for those prevented by youth, old age, disability, poverty, social penalty, personal conviction or other reason from using a car
- 4.15 Public transport users (except for those fortunate enough to get lifts in cars, including taxi passengers) are by definition pedestrians for part of their journey, and so greater integration with the pedestrian network is required. Use made of the pedestrian network will increase as public transport ridership increases. Use of a bicycle greatly increases the range of an individual, but people are often deterred from using their bikes to access stations, for instance, by fast-moving traffic and by the lack of security once they get there. Integration of the bus and bike networks is in its infancy in Sydney. Money needs to be spent on improving cycling amenity if it is not to remain the domain of, mainly, 15-25 -year-old males.

#### Measures Available to the Commonwealth Government

- 4.16 The Committee's Terms of Reference include: "measures by which the Commonwealth Government could facilitate improvement in public passenger transport services and infrastructure".
- 4.17 In 2006 the RRAT Committee held an Inquiry into Australia's oil future. The relationship between energy use in transport and public transport is such that most measures to help the one (in urban areas) will also help the other. It is believed that the government, which changed at the end of 2007, has yet to formally respond to the recommendations, made in February 2007.
- 4.18 The 2007 recommendations included:;
  - (1) The Committee recommends that Geosciences Australia and ABARE reassess both the official estimates of future oil supply and the 'early peak' arguments and report to the Government on the probabilities and risks involved.
  - (2) "The Committee recommends that in considering a less oil dependent scenario the Government take into account the concerns expressed in World Energy Outlook 2006, namely –

current trends in energy consumption are neither secure nor sustainable

energy policy needs to be consistent with environmental goals, particularly the need to do more to reduce fossil fuel carbon dioxide emissions

- Two years later, the IEA warnings have become more strident (the World Energy Outlook 2008 says that "the world's energy systems are at a crossroads. Current global trends in production and consumption are patently unsustainable environmentally, economically, socially ... Tune is running out and the time to act is now") and the Rudd Government has committed to a 5-15% reduction on 2000 CO<sub>2</sub> emissions by 2020, following advice from Professor Ross Garnaut (who recommended 10-20%)...
- (5) The Committee recommends that the government commission a research group within the Department of the Treasury to identify options for addressing the financial risks faced by prospective investments in alternative fuels projects that are currently preventing such projects from proceeding...
- (7) The Committee recommends that Australian governments investigate the advantages and disadvantages of congestion charges, noting that the idea may be more politically acceptable if revenue is hypothecated to public transport improvements (as has been done in London, for example).
- (9)The Committee recommends that the corridor strategy planning take into account the goal of reducing oil dependence as noted in recommendation 2. Existing AusLink corridor strategies should be reviewed accordingly.

- (10)The Committee recommends that the government review the statutory formula in relation to fringe benefits taxation of employer-provided cars to address perverse incentives for more car use.
- 4.19 Since then, the Building Australia Fund has been established and will be used to progress infrastructure for "projects of national significance", though the global economic slowdown means that the fund is smaller than originally anticipated. Road and rail projects can compete for funding see the entry for 10/04 in the archive of my web site <a href="www.kilsby.com.au">www.kilsby.com.au</a> for an assessment of the scale of catch-up expenditure required, and the one for 9/06 for a different framework for transport than the usual road versus rail). At least the first two of the benefits of public transport, listed above, clearly apply nationally as well as at State level, and so there is a legitimate reason for the Commonwealth to intervene to support public transport,
- 4.20 The Commonwealth public service contains a nationally-oriented range of skills. The 2006 submission to the RRAT oil supply inquiry (see the entry for 5/06 in the archive of my web site <a href="www.kilsby.com.au">www.kilsby.com.au</a>) from the ASPO Working Group on Urban and Transport Planning recommended establishing an Australian Transport Fuels Office, to do for oil what the Australian Greenhouse Office has done for climate change. In a pre-budget submission to the Federal Treasurer (see the second entry for 2/08 in the archive of my web site <a href="www.kilsby.com.au">www.kilsby.com.au</a>) ASPO Australia further recommended that this be established within the Department of Prime Minister and Cabinet.

# **Options for Commonwealth Funding of Public Transport**

- 4.21 There are, in general, four options with regard to the injection of Commonwealth funds:
  - take over public transport funding entirely not recommended as great resistance can be expected from the States on constitutional grounds;
  - only intervene where State governments are unable to cope, similar to the intervention on aboriginal health grounds in the Northern Territory also not recommended, as resistance can be expected from the State(s) stigmatised as "umable to cope";
  - articulate the Commonwealth's objectives for public transport, conduct a nationwide assessment based on quantitative criteria, and fund accordingly, through the budget process this approach is recommended;
  - rely on the States, as now, with Commonwealth funding subject to the Commonwealth Grants Commission not recommended, because of State variation in regard to peak oil.
- 4.22 It is clear from Section 3 that, for Sydney at least and probably elsewhere if Sydney's problems are to be avoided, much of the remedial work lies in the outer areas and must be addressed with local means. It behoves the Commonwealth to build up a body of knowledge on local urban transport, particularly buses, in view of where the national interest lies, and not leave it to the States.

# The Impact of the Commonwealth Government's Other Policies on Public Transport

- 4.23 The Committee's Terms of Reference include: "the role of Commonwealth Government legislation, taxation, subsidies, policies and other mechanisms that either discourage or encourage public passenger transport".
- 4.24 First, the growth of our cities is fuelled (no pun intended) by Commonwealth immigration policy, at present favouring skilled migration, but as climate change takes hold, a wave of "environmental refuges" can be expected, which Australia will have tu play its part in accepting. The new arrivals will have needs for and expectations of public transport.
- 4.25 The issue of taxation is being reviewed by others. In 2006 the RRAT Committee said "The Committee recommends that the government review the statutory formula in relation to fringe benefits taxation of employer-provided cars to address perverse incentives for more car use.".
- 4.26 The FBT concession is one glaring anomaly. Another might be the diesel fuel rebate, which encourages users of heavy machinery (including transport equipment) to rely on (imported) diesel rather than converting to natural gas.
- 4.27 This led in 2004 to the substitution by an order for diesel buses for 150 gas-powered ones for the Sydney bus fleet. The new generation of diesel-powered buses from Europe produce less pollution than the equivalent natural gas vehicles, but Asian refineries cannot yet produce diesel sufficiently clean for this. The STA has nearly 200 gas-powered buses in its fleet..
- 4.28 The proportion of federal expenditure devoted to roads will be apparent by the time the current Inquiry has finished. Roads are the only ubiquitous form of transport infrastructure that there is, and long-distance rail mainly serves niche freight markets of inter-city containerised freight, and primary products, principally for bulk exports but also for domestic consumption.. The electrification of all road transport is seen as inevitable, and attention will then switch to the power generation industry for a means of fighting global warming
- 4.29 The car industry in Australia is responsible for many jobs, particularly in South Australia and Victoria. Nevertheless the support given to the industry is counter-productive. The existence of a skilled workforce accustomed to making high-tech products in quantity is a national asset that could be used, after the necessary retooling, to manufacture products to combat climate change rather than making "big Aussie sixes' for export and fleet sales. The car industry is now struggling around the world. I am aware of Holden's plans to make a 'green car' in Australia in future, although the CEO of General Motors declared in 2008 that the petrol car was dead.
- 4.30 The Commonwealth Government could use its influence with Austroads and the NTC (the National Transport Commission) to push for a more usage-based charging system for road

use (and a less usage-based one for public transport, although just "levelling the playing field" would be a major advance).

#### **World's Best Practice**

- 4.31 The Committee's Terms of Reference include: "best practice international examples of public passenger transport services and infrastructure"
- 4.32 .In my opinion there is little to be gained from the study of World's Best Practice and then copying it. Wherever it is found (for rail, possibly continental Europe; for bus, South America, for integration, Singapore or Hong Kong the list goes on),"best practice" is invariably bound up with the characteristics of the cities in which it is found their geography, history, land use, legacy of existing infrastructure, culture, and so on, and it could produce unexpected results if transplanted. Australian cities are unlike those found elsewhere, and vary amongst themselves. If public transport is treated from first principles, and lessons heeded from the things that haven't worked (like the huge cost overruns for rail projects in the US) rather than those that have, then Australian public transport planning can join the world's best.
- 4.33 Having said that, there is a clear divide between countries with an anglo-saxon background, like UK, USA, Australia, and those with a continental European tradition, with regard to their attitude to subsidy. The former group look on subsidy narrowly as something to be minimised. The latter tend to regard public transport as one of the necessities for a civilised life and are prepared to pay for it.
- 4.34 It all comes down to the objectives of supporting public transport, a point made repeatedly to inquiries in NSW (see for instance the entry for 12/03 in the archive of my web site <a href="www.kilsby.com.au">www.kilsby.com.au</a>). The imminent advent of Peak Oil is a new factor which gives greater urgency to the issue.

# 5. **RECOMMENDATIONS**

- 5.1 Revisit the peak oil debate in Parliament. Bipartisan support is desirable,
- 5.2 Sensitise the community to the imminence of peak oil.. Empower people to understand the Peak Oil concept and help them to decide the best options for us all before we face a future permanent oil shortage and/or another affordability crisis.
- 5.3 Adopt the 'easy" policies recommended by ASPO Australia in 2006:
  - *Individualised marketing:* a proven, rapid and low-cost strategy, offering individual households \the information needed to consider options of reducing automobile travel. A 13% reduction in car-km has been achieved in large programs in Australia. It can also be used for minimisation of demand for water and electricity and perhaps can be adapted to alert people to Peak Oil probabilities and risks.
  - Fuel tax escalator: Increasing fuel taxes smoothly and incrementally to UK levels (following Margaret Thatcher's 1988 example) would provide a clear signal that we must value fuel much more than we do now. "Unthinkable" measures such as this are essential given the magnitude of the near-term risks posed by Peak Oil. Fuel tax increases could provide funds for schools, hospitals, and for sustainable transport infrastructure. The impacts could, for instance, be ameliorated by abolishing fixed vehicle-ownership charges (licence and third party charges) and/or by lowering income taxes.
  - Smartcard flexible tradeable fuel allocation and pricing mechanism: providing a basic safety-net ration for modest usage, and extra fuel at an increasing taxation rate for those who want to use more than average. Unused allocations can be traded to reward those with ingenious ways of reducing fuel usage.
- Press the Government to act on the RRAT Committee recommendations with regard to peak oil, in particular recommendations (2) (by requiring the assessment of infrastructure projects to recognise that the future could be oil constrained) and (10) (review of the FBT concession for company-provided cars).
- 5.5 Consider supporting change to usage-based road pricing for road vehicles.
- 5.6 Build up capability of Commonwealth public service in regard to local transport, possibly by the establishment of a Transport Fuels Office or similar.
- 5.7 Define Commonwealth objectives for public transport. For instance, if the reason for support is oil-related the objective could be 'to save X million litres of crude per year (X to be established before the project commenced). Then the evaluation monitoring would need to find out how much of the project's patronage was generated by it and what it would have been doing without the project.

- 5.8 Consider adopting new framework for transport planning, by recognising two sectors, the independent and the commercial, with the latter being further divided into tailored services and scheduled (pre-determined) services.
- 5.9 Recommend against contributing to funding of road (or transit) infrastructure projects that do not follow recommendation 5.3 (1).

## 6. REFERENCES

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#### Kilsby D (various):

Recent relevant material written by David Kilsby and accessible via www.kilsby.com.au includes:

In "archive"

#### Peak Oil

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02/09 Peak Oil update - "Cityscape" article

02/08 Peak Oil Update - "Cityscape" article

10/06 Peak Oil (Part 3) - "Cityscape" article

08/06 Peak Oil (Part 2) - "Cityscape" article

07/06 Peak Oil - It's Coming (Fast) - "Cityscape" article

08/08 Peak oil - What Australians need to know

109/07 The impact of peak oil on public passenger transport policy

102/08 (2) Pre-budget Submission to Federal Treasury
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The 2006 RRAT Committee Inquiry into Australia's Future Oil Supply

03/06 Australia's Future Oil Supply and Alternative Transport Fuels -submission from NCTR

06/06 Australia's Future Oil Supply and Alternative Transport Fuels —submission from ASPO Working Group on Transport & Urban Planning

#### Sydney's Transport

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1/09 PRT - The Forgotten Option
05/06 Sydney's transport - a position
12/05 Review of Sydney Metropolitan Strategy Transport Plans
06/05 Reality Check for Sydney's Railways
12/03 Submission to Ministerial Inquiry into NSW Bus Services (the Unsworth Inquiry)
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#### Transport Planning, Infrastructure

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03/08 "Traffic in Towns" revisited
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09/06 Promoting Australia's Future Growth Through Efficient, Integrated Transport Infrastructure

10/04 Australia's Transport Infrastructure - Fit for Purpose?

#### Cycling and walking

11/98 On a tankful of beans: Human powered transport

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