URBAN TRANSPORT POLICY

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INTRODUCTION

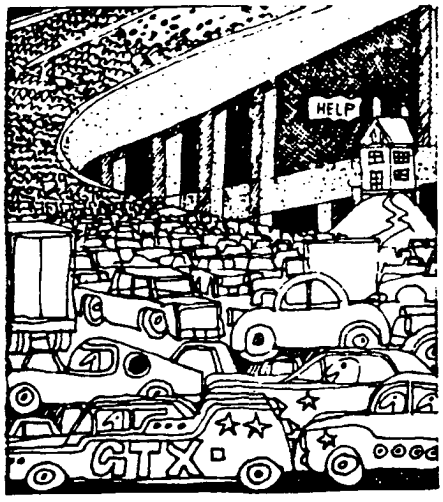
This paper examines present characteristics of urban transport in Melbourne, and attempts to draw out the political, economic and social influences that have contributed to their existing character. The paper examines these influences as they are inhibiting change from the contemporary pattern of transport choices in Melbourne. In particular, it documents the demise of public transport and the growth of private transport, and tries to explain why this occurred. It briefly examines transport and land-use policy options that may produce superior efficiency and equity effects to the status quo, and concludes by considering the political, economic and social barriers that stand in the way of achieving these superior policies. The thrust is not on the details of the Melbourne case per se, but on the contributory influences that have moulded urban transport characteristics and policy in the Australian capitalist context. In varying degrees, these influences affect all large Australian cities; Melbourne is used to illustrate the principles and influences involved.

THE CHANGE FROM PUBLIC TO PRIVATE TRANSPORT - PATRONAGE AND SUBSIDIES

At the end of the Second World War, Melbourne's electric trains carried some 190 million passengers annually, with government trams and buses carrying a further 355 million. By 1985, rail patronage had fallen to 86 million and trams/buses to 140 million, despite a greater than doubling of Melbourne's population (Tables 1 & 2). Accompanying this patronage decline, especially since the mid-1960s, has been a marked reduction in public transport cost recovery, from nearly total cost recovery to under 30% today.

On the other hand, the growth of car travel in Melbourne, as in all parts of Australia, has been spectacular. Travel by car in Melbourne has increased some fifteen fold since 1945, so that car travel now accounts for over 90% of vehicular travel (Table 2). The proportion of car travel is even greater in the other state capitals, with the exception of Sydney, and in the non-metropolitan areas of Australia. This unprecedented growth in car travel has meant that, on a per capita basis, overall vehicular travel has more than doubled over the last four decades (Table 2), which contrasts with the small increases recorded from the turn of the century to 1945 (MMBW, 1979).

Yet only a small part of the increase in personal mobility can be ascribed to city growth (Moriarty and Beed, 1985): per capita travel is higher in Perth and Adelaide than in Melbourne or Sydney. Nor can this increased



mobility be seen simply as part of our rising "standard of living". Economists point out that travel is only a derived demand; it is a means to an end, which is access. Access might not have improved significantly for the average resident in recent decades - trip frequencies to school, work, shops, friends etc. are probably no higher today than in the past. But vehicular trip frequency has increased, since many of these trips that were once conveniently made on foot (or by cycling) are now longer, and made by car. Between 85-90% of Melbourne households own at least one car, while over 45% have two or more cars. Carless households are chiefly confined to the young, elderly, poor and women, and more in the inner suburbs than the outer suburbs. It is not hard to see why the car has solid political support among the majority of voters for both major parties.

All forms of vehicular travel are subsidised. Until the mid-1960s, the public transport subsidy was small, but the operating deficit alone for Melbourne's public transport is now over $300 m./yr.

TABLE 1: Millions of passengers carried by three public transport modes, Melbourne, 1945-1985

Mode	1945	1955	1965	1975	1980	1985
Tram/government bus	355	259	178	134	119	140*
Suburban rail	190*	163	145	113	85*	86*

(* = estimated)

Source: MTA, Vic Rail, MMTB Annual Reports.

TABLE 2: Population and transport characteristics, Melbourne, 1945-1985

	1945	1955	1965	1975	1985
Melbourne population (million)	1.3	1.6	2.2	2.7	2.9
Public transport (million pass-km)	3,500	3,500	3,300	2,600	2,300
Private transport (million pass-km)	1,500	3,000	6,500	17,000	22,000
Public transport's share (%)	70	54	34	13	9
Annual vehicular pass-km/person	3,850	4,050	4,450	7,250	8,350

Source: As above, ABS Censuses; Moriarty & Beed, 1985.

For private travel, a subsidy element occurs chiefly because local government road costs are paid from general taxes (rates) rather than from road-user payments, and the same is true for police traffic-related costs. In recent years, the Victorian State Insurance Office has run heavy deficits on compulsory third-party insurance, so that Victorian private car transport was subsidised to the value of several hundred million dollars. On these figures alone, private car travel in Melbourne has a subsidy level matching that of the city's public transport, but as travel by car is now about ten times as large as for public transport, the subsidy per unit of travel is much lower. This has not always been the case; private travel subsidies, whether calculated on an absolute or unit basis, were almost certainly higher than those for public transport for the first two post-war decades. The huge increase in road travel enabled it to become more "efficient", as the high costs of the vast road network were spread over the increasing number of motorists. Conversely, the large decline in public transport patronage caused revenue in real terms to fall. As service frequency levels have remained relatively constant since the war, costs could not be reduced, and have actually risen in real terms.

There are other costs of urban transport to be considered: the external costs arising from air and noise pollution, community disruption and too rapid depletion of Australia's scarce oil resources. It is difficult to point to official acknowledgement that car travel receives subsidies in these areas. Of course, pro-car groups can hardly afford to acknowledge the unpaid external costs of the car in urban areas, for to do so would undermine the rationale for car travel's predominance. Per unit of travel, these external costs are far higher for private than for public transport (Beed, Andrews, Lacey and Moriarty, 1983), because of public transport's higher efficiency in energy and land use, and its much lower accident levels and air pollution emissions. Government officials may verbally acknowledge these differential costs, but they are never factored into planning decisions. If they were, we would not have the same transport systems as we now have.

WHY DID THE CAR SUPPLANT PUBLIC TRANSPORT?

One possible explanation of private travel's rising popularity is that it is, in some sense, cheaper than public transport. Indeed, motorists have never been presented with a bill for the full costs of private vehicular travel. There has also been a large implicit subsidy to car-orientated outer suburban development in the form of subsidised provision of utilities and social services, which are more expensive to provide there than in the fully built-up suburbs (Beed, 1981, 35-37). All these subsidies, taken together, support the "car is cheaper" argument, as the private cost to motorists is lower than it would have been if motorists were faced with the full costs of car travel. Even with these implicit subsidies, the private costs of car travel were and still are much higher than those for public transport. Not only are private costs higher on a passenger-km basis, the shift to car-oriented living has led to a great increase in per capita vehicular travel (Table 2). The overall result of both these effects has been a rising proportion of household disposable income spent on transport.

Some economic factors favoured the car. For a start, rapid growth in

real incomes enabled more households to afford the higher travel costs car ownership entailed. The structure of motoring costs favoured exclusive reliance on car travel once the decision to purchase a car had been made, as the relatively low operating costs (compared to the fixed costs) meant that the perceived costs of a given trip compared much more favourably with public transport. The declining real price for petrol since about 1950 - when the price was still higher than it is today (Metras, 1985) - gave further encouragement to car ownership.

Although the spatially dispersed form of the large Australian city (discussed later) helps explain why its residents need and favour private over public transport, this was less the case for the 1950s when urban form was more suited to public transport. In the 1950s, public transport was far more convenient for innter city residents than for those living in the outer fringe, but the converse was true for car travel, and outer suburban infrastructure costs were heavily subsidised. The result was that private transport established itself much more readily in the outer suburbs, and car ownership rates remain far higher in the outer suburbs than the inner. In effect, the outer suburbs were first adapted to car travel and road freight. Progressively working inwards, the rest of the city was and still is being modified for private motor travel. To some extent, rising car ownership in the inner and middle suburbs can be seen more as a defensive reaction to declining service quality on public transport and the increasing location of destinations away from public transport routes, than as a celebration of the car.

In addition, there is little doubt that the idea of private motor travel was a powerful attraction in itself, with lack of household resources being the main constraint to car ownership. There was nothing new in private ownership: Australians were already used to purchasing many consumer durables using hire purchase terms. Moreover, the trend to a dispersed spatial urban form was enormously functional to the capitalist economy, and this urban form was dependent on private car and truck use (Beed, 1984). However, the extensive spatial urban forms of Australia's big cities were not started by the car. Even in nineteenth century Australia, the large Australian cities were much less dense than their European counterparts. But, from the mid-twentieth century, with the take-off in urban car and truck use, urban spatial form exploded. The rapid increase in urban spatial dispersion encouraged by car and truck meant more and longer vehicular trips, increasingly feasible only by car and truck; that is, private transport creates its own demand.

The vast increase in post-war mobility has been associated with greatly increased sales of cars, spare parts, tyres, motor fuels and insurance. It has also stimulated the development of large tracts of land on the city's fringe, and throughout the city, construction of car oriented shopping centres. As part of the process, public social space was inexorably transmuted into private space, traded through the capitalist market (Feenberg, 1980). Some feminists would also claim that the move from public to private transport and space, and the related shift to suburbia, has worked to male advantage. No similar forces encouraged the expansion of the state-owned fixed-rail public transport system, let alone non-motorised travel. While we do not doubt that ordinary Australians, at least in the post-war era, have internalised the values of continued economic growth, it is still relevant to point out that consumers'

preferences were shaped by the requirements of the growth economy. In all this, car-oriented living in the United States was the exemplar. Not only the public, but decision-makers as well, saw in the American present the image of Australia's future. "We have seen the future and it works", as the Webbs said in a different context.

Finally, the position of the government in the quiet struggle between private and public transport was hardly neutral. The government has zealously concerned itself with publishing public transport deficits but has neglected to do the same for private travel - in part because of the difficulty of quantifying them. Then again, there is the relative lack of official concern until recently with air and noise pollution, most of which is produced in large cities by motor traffic; in the continuing lack of concern with social disruption produced by road projects; and in a relative lack of official severity in dealing with culprits of road traffic accidents and of compensation for the victims. Indeed, a remarkably casual attitude historically has been taken towards careless, dangerous and drunk-driving that resulted in serious injury or death. The low penalties and the relative lack of offical action towards the high injury and death rates from road travel must have helped private travel establish itself. Today, a tougher line can be afforded, but even so, driving licence tests cannot be too exclusive; if too many were refused licences in an effort to reduce road accidents, the spread of car travel would be severely curtailed. Of course, wealthy urban citizens could always buy their way out from some of these external diseconomies. Henry Ford himself paid to have a nearby road relocated; freeways rarely intruded on the residences of the rich and powerful, while at the micro level, they could always buy larger blocks and build high fences to shield themselves from traffic noise and intrusion.

PROBLEMS INHERENT IN PRIVATE TRANSPORT DOMINANCE

It is sometimes argued that it would be pointless (and expensive) to change our transport system back to a fixed-rail one, regardless of how well it served us until the 1960s. But this is not our view. We see public transport as possessing several key advantages over private travel, especially in urban areas, and further feel that these advantages will be of even greater importance for the future. Per unit of travel, public transport (especially fixed-rail transport) is safer, less polluting and more energy efficient than car travel (Beed, Andrews, Lacey and Moriarty, 1983). In Melbourne especially, this energy efficiency (joules/pass-km.)

is highlighted by the use of electric-powered suburban trams and trains, rather than petroleum-based fuels. Electric-powered public transport is the only solution to the high air pollution levels in the heavily trafficked and congested inner suburbs. It is also more equitable as it does not require ownership or availability of a private vehicle, or a driver's licence. Fares can be, and are, kept low for disadvantaged groups.

Public transport also requires and encourages non-motorised travel to gain access to public transport. Walking and cycling are equitable transport modes and incidentally, are non-polluting, energy efficient, land-use efficient, and given their slow speeds, inherently safe. Ideally, non-motorised travel should be regarded as primary, with vehicular travel as a back-up (albeit a very important one, in the large Australian city!). It is only in this way that the steady intrusion of car traffic into every area of the city can be halted, for increased intrusion is the inevitable side-effect of increased car access. We acknowledge that vehicular access to all destinations by public transport will never compete with that presently afforded by cars. But vehicular intrusion would be far lower, and overall access could be maintained at a high level by better provision for, and encouragement of, non-motorised travel that the reduction of vehicular intrusion would allow. While a car-oriented transport system seems to both require and promote a dispersed, low-density urban pattern, public transport, especially fixed-rail, fares best in a city with a strongly developed centre and relatively high density urban development. This is needed to provide the high levels of patronage for fixed-rail routes. Even with the existing city structure, public transport is capable of playing a more important part in the large Australian city's transport task than it presently does (Moriarty, 1981). Even with present urban form, shifting some trips from private to public transport could lead to the immediate benefits of decreasing pollution, especially in the inner suburbs, as travel by car to the inner areas was replaced by increased patronage on the mainly radially-oriented fixed-rail, electric public transport. It would also lead to decreasing private travel costs, especialy for outer suburban households, the majority of them two-car households. Use of public transport, especially for work trips, still heavily biased in the radial direction, would reduce the average household's need for a second car.

The main change needed is a new land-use policy which would reverse present trends towards continuing low-density outer suburban development. These land-use changes would help to encourage and increase the use of both public transport and non-motorised travel, while at the same time greatly reducing the need for car travel - and overall vehicular travel (Beed and Moriarty, 1986).

One general land-use change that would help achieve the aim of reduced vehicular travel is to increase both population and activity levels in the inner suburbs. Outside the inner suburbs, development would need to be more selective, but two principles need to be kept in mind:

i. with due regard for the second principle below, increase the level of development and population density in suburbs that are closer to the centre of the city, as in Melbourne per capita vehicular travel appears to increase in a linear manner with distance from the city centre (Moriarty and Beed, 1987).

ii. as far as possible, concentrate new development and services around district, local and neighbourhood centres which can be more easily reached by public transport - preferably being on existing fixed rail routes - and by walking and cycling. These ideas have been developed in detail for the Melbourne context by the Conservation of Urban Energy (CUE) Group, (CUE, 1982). However, significant travel savings may not be possible in this model without major changes in life style.

The policies discussed above would take time to implement - in fact several decades for their full effect to be realised. Other policies are needed which would have a more immediate impact: these should include both measures for encouraging increased use of public transport such as traffic priority for public transport vehicles as well as direct measures to discourage car travel such as parking restraints. While the community subsidy would be ended for car travel, it would continue for public transport. The justification for public transport's continuing subsidy is that it helps offset the much higher external cost subsidy that private transport receives.

Overall, the changes advocated may not even entail an increase in total government transport expediture. If anything, a decrease should occur as the costs for public transport improvements may be more than offset by increased fare revenue and removal of subsidy from car travel. Indeed, the proposed land-use changes in effect put the costs of urban sprawl back on to the private sector, and have only a small public cost component.

HOW COULD THESE CHANGES BE ACHIEVED?

Abstracting from the transport/land-use constraints imposed by the Australian capitalist system, transition to the advocated transport/land-use system discussed in the previous section might be achieved in theory in at least the following ways:

i. installing or maintaining a State Labor Government in power;

ii. waiting for the inevitable rises in both oil prices and imported oil volumes, leading to large import bills for oil and forcing the Federal Government to take action, coupled with pressures from below caused by rising motoring costs at the household level;

iii. pressures from inner suburban residents anxious to improve the amenity of their suburbs.

Each of these approaches is examined below.

Salvation Through Labor?

When in opposition, the Victorian Labor Party opposed the building or extension of urban freeways and the closure of public transport services. The then shadow Minister of Transport, Steve Crabb, when discussing the proposal to link the South Eastern and Mulgrave freeways, stated in 1978 that "The Gardiner's Creek Freeway would cause more problems than it would solve", and pointed out that up to 400 houses and shops, and much public open space, would be destroyed.

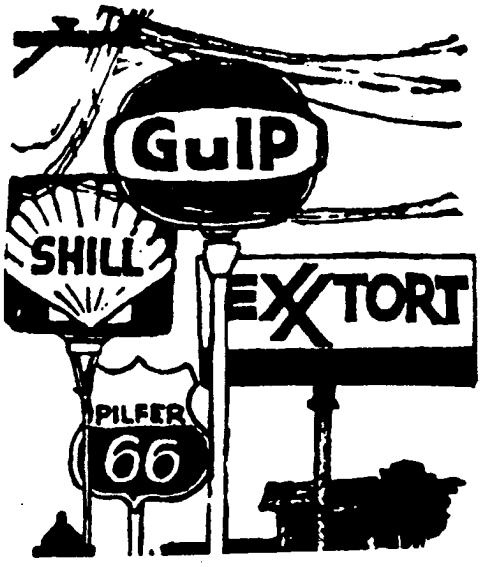
But Crabb's passage in 1982 from Shadow Minister to Minister produced a dramatic about face on the Freeway link in 1982, while in 1983 an attempt was made to close nearly all the country rail freight centres, which proposal was defeated by union action. In 1987, with Roper as Transport Minister, the Labor government is advocating scrapping much of the rail network in Victoria, along with up to half the State Transport Authority workforce. It is now clear that despite the rhetoric, the Victorian Labor government is little more committed to public transport than the previous government.

There is thus an ambivalence in ALP urban transport policy. It pulls one way when the ALP is in opposition and another way when the ALP is in government when the ALP is either unable or unwilling to disrupt the capitalist status quo to the extent official ALP policy requires. This is reflected currently in Melbourne where the State Labor Government's Ministry of Transport has just produced a major arterial road planning exercise. As we have argued elsewhere (Moriarty and Beed, 1986), this planning exercise reflects the contradiction in its lack of internal consistency.

Indeed some observers, including the authors, feel that the chances for public transport, and for a more human oriented city, are worse under a Labor government. This is <u>not</u> to say that the policies or personnel of the Labor government are worse than the Liberals. But we suggest that the struggle for a better transport/urban planning system is harder under the present Victorian Labor government. Probably the most important factor is the loss of recognised spokespersons and activists by the public transport/anti-freeway movement, many of whom have been subsumed into the State government bureaucracy. When the Eastern Freeway was being built, several State ALP politicians were at the barricades. The media tend to prefer legitimate opposition of this parliamentary kind. Now, of course, these same politicians support the Labor government's decision to build the freeway link. A related point is that when Labor is in opposition there exists a unity of interest between the ALP rank and file, unions, ALP politicians and local transport and environmental community groups. With the election of Labor to power, this unity is lost, as the political wing finds that its land use/transport policies developed in opposition do not "fit the spatial requirements of Australian capitalism" (Beed, 1984). The unions' leadership and ALP members and supporters are reluctant to oppose the "party" which, when Labor is in power, increasingly means the parliamentary wing alone. Transport activists thus find that with Labor in power they have the whole weight of parliamentary political opinion opposed to them, rather than just half of it. They find it harder to recruit supporters and harder to command media attention. At the same time, the public transport unions have limited power to improve public transport. Unlike industries whose employers have an intrinsic interest in growth, there is no guarantee that a Labor government will wish to defend public transport or plan for its growth.

<u>Salvation Through Necessity</u>?

Australian indigenous oil production is expected to peak this year or the next, and given the poor outlook for major new discoveries, net self-sufficiency is expected to decline from its present record level of over 85%, to as low as 30-40% by the mid-1990s (DRE, 1986a; Esso, 1984). By the mid-1990s, if recent production trends continue, major producer/



consumer nations such as the U.K. and the U.S.A. will also be experiencing marked declines in production and will therefore need to import greater volumes of oil, assuming consumption stays at roughly its present level. At the same time, many oil exporting countries both in and out of OPEC will either be experiencing production declines, or declines in oil available for export. Much larger volumes of oil than at present will need to be imported world-wide, largely from a small group of Middle-Eastern countries that hold the major (and increasing) share of the world's proven recoverable reserves (OECD, 1982; Moriarty, 1984). These states will once again be in a position to command high prices for their oil, especially as production costs of non-Middle Eastern oil increases (Saunders, 1984). If prices remain at their present low level, exploration for oil will decrease, and some oil production from high cost wells would even be lost forever (Morse, 1986). Again, greatly increased dependence on Middle-East oil could be expected to occur by the middle of the next decade.

How will this affect Australia? To maintain present oil consumption rates, we will by the mid-1990s need to import several times the present volume of oil imports, probably at price levels several times their present level. The effect on our already serious balance of payments problems would be severe. In order to lower imports and to raise revenue - which will fall as indigenous production declines - the Federal Government could impose larger taxes on petroleum products. Moreover, governments could go even further, by promoting the shift of motor vehicle operating costs from standing to operating charges. Thus, State governments could transfer such standing charges as vehicle registration, drivers' licences, stamp duty and third party insurance to a fuel tax, while the Commonwealth Government could transfer new vehicle sales tax. It is estimated that all such shifts in standing charges would increase fuel prices by 34% (based on 1984 prices) and lead to a reduction in demand for fuel of 10% (DRE,1986b). Even if oil prices remain fairly low for the remainder of this century, our dependence on Middle-Eastern oil imports is likely to increase, since both domestic exploration for oil, and the bringing into production of marginal fields, will be curtailed. To limit dependence on supplies which could be interrupted, the Federal Government may still wish to reduce import volumes by discouraging consumption. Synthetic fuels (oil from coal, natural gas, biomass etc.), while they can in the long term reduce our dependence on imported oil, appear far too expensive since their costs are typically $60-80/bbl or higher (DRE, 1986c).

The private motorist could offset the resulting increased fuel costs by

switching to more fuel-efficient cars. While large increases in fuel efficiency are possible, actual gains have been modest. Since 1984, the fuel efficiency of new cars has decreased because of a swing back to larger cars (DRE 1986b). Even with the efficiency increases of the early 1980s, total per capita petrol consumption in Melbourne (and Australia) remained constant, largely because of the continued shift to the outer suburbs in the major cities. Car pooling runs counter to the ethos of suburbanisation and private car ownership as exemplified by steady declines in car occupancy rates for work trips. Overall, it is reductions in car travel, coupled with an increase in public transport use, which offer the most effective response to rising fuel costs, and these could occur by the mid-1990s. The pressures for improved public transport, and land-use changes to reduce the need for car travel, would probably come mainly from outer suburban residents, whose per capita motoring expenses are already more than twice those of inner suburban residents. Improvements in public transport to enable the strongly car-oriented outer suburban residents to function with only one car per household (the majority have two or more) would then seem politically feasible.

In summary, the almost certain decline in Australian oil self-sufficiency coupled with probable (but by no means inevitable) steep price increases in unit costs of imported oil, could encourage both Federal and State governments by the mid-1990s to implement measures to reduce road-vehicle usage. Increasing household costs for motoring (car purchase costs have recently shown steep increases) especially in outer suburban areas, would reinforce this trend (as would any decline in real income for less-than-average income households, most of them car-owning).

Salvation through inner suburban residents?

In the 1970s inner suburban residents were mobilised in large numbers to fight the construction of freeways in Melbourne (Wilkinson, 1984; Rundell, 1985). The continued "gentrification" of the inner suburbs has meant that increasingly these suburbs are being populated by people who treat environmental issues (distinct from the traditional working class concerns of these suburbs) as important. For example, one survey found that 10% of the demonstrators at a large anti-nuclear rally in Melbourne came from the inner Municipality of Fitzroy, which has only 0.7% of Melbourne's population (Moriarty, 1982). Even in the early 1985 state elections, when the incumbent Labor government still had some residual credibility as a pro-public transport party, the Public Transport Party, formed to make urban transport an issue in the election, polled 7.5% of the votes in the

central Melbourne electorate, compared with 3.5% in the Minister of Transport's outer suburban seat.

On the other hand, there is a problem with relying on resident action in the inner suburbs because the high degree of residential mobility in these suburbs inhibits political mobilisation. Moreover, while the potential is clearly there, it will not be as easy to mobilise support as it was in the 1970s, for two related reasons. Firstly, passive support for the Labor government blunts opposition. The second reason relates to the style of Labor transport planning. Gone are the large-scale, highly visible projects like the Eastern Freeway, which provided a focal point for popular opposition. Instead a host of smaller scale projects, which cumulatively will prove just as hostile to our hopes for a human-oriented city, are being implemented or planned. Being smaller, they attract less popular concern, while their number fragments and diffuses the opposition resources.

So the outcome in the struggle for a better city is not pre-ordained. The Victorian Labor government will be of little use. Moreover, probable large future increases in our fuel import bill and in the private costs of motoring cannot guarantee a massive shift to public transport and sympathetic land-use changes in the near-term. But at present, declining world prices for oil have removed concern for our oil future from popular consciousness. Over the next five years and possible longer, the main hope may lie in political action by residents, especially from the inner suburbs, to protect their suburbs from further deterioration caused by car intrusion and pollution, as shown by the recent (March 1987) strong action by the residents of South and Port Melbourne against downgrading public transport services in their area.

CONCLUSIONS

The main findings of this study can be summarised as follows:

i. car travel has increased about fifteen-fold over the last 40 years; even allowing for the decline in public transport travel and the doubling in population, this rise has meant a doubling in per capita vehicular travel;

ii. although the public financial subsidy to private travel is now much less than for public transport per unit of travel, the opposite was the case until about the mid-1960s. For the entire post-war period, the unit external cost subsidy for car travel has been much higher than that for public transport;

iii. even for the first two post-war decades, the subsidy to car travel cannot explain the shift to private transport, as the private costs of car travel were still much higher (on a unit bases) than that for public transport. The structure of motoring costs (with perceived travel costs being much lower than actual costs), the declining price of petrol, rising real incomes and the apparently successful example of the United States all helped car travel, as did its early superior convenience for outer suburban travel. The major explanation, however, must be sought in car travel's perfect "fit" to a profit and growth-oriented economy.

iv. even in a city as extensively modified for car travel as Melbourne, the promotion of public transport would provide many advantages. A series of short-term measures to encourage public transport and discourage excess car travel exists, including public subsidy removal from private transport. Moreover, the long term solution must involve land use changes sympathetic to public transport.

v. reliance on a Labor government to implement the necessary changes is misplaced, while future large increases in the oil import bill and petrol prices are either too far in the future, or too uncertain in extent and impact, to rely upon. Political action by inner suburban residents most affected by excess car travel offers the best, but by no means assured, hope for change in the next decade.

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