Town and Country Planning Association of Victoria

Submission on Melbourne 2030

28 February 2003

Contents

1. Introduction

1. The Town and Country Planning Association (TCPA) is committed to the pursuit of urban planning practices that reduce environmental impact, facilitate social justice and improve the quality of urban life.

2. We welcome the development of Melbourne 2030 as the first serious attempt at strategic planning for Melbourne to tackle the many difficult issues of growth and sustainability.

3. Land, water and oil are perhaps the three most valuable resources that are currently being squandered by inappropriate urban development in Australia.

4. As one of the world's lowest density cities, Melbourne is particularly wasteful of land. Low-density urban development goes hand in hand with oil-intensive private car transport and land-hungry road networks.

5. Given that good quality agricultural land in Australia is in short supply, and is diminishing as a result of inappropriate farming practices, and that some of the best agricultural land in Victoria lies in the Pakenham and Werribee growth corridors, reduction of land-take by urban development is an important goal for Melbourne's strategic planning.

6. The very high reliance of Melbourne's residents and industry on oil-based transport is a high-risk path, which is unsustainable in the long term, as oil reserves decline and world demand for oil continues to grow. Vehicle emissions are a significant and growing source of greenhouse gases, which are contributing to global warming and potentially unstable climatic changes.

7. The heavy consumption of water by Melbourne's residents and industry is already causing environmental damage in the areas from which the water is abstracted, and is not sustainable under a scenario of population growth.

8. We regard these as being among the most important issues to be addressed by Melbourne 2030.

9. The factors we have considered in this submission are:

    *   Sustainability
    *   Land take
    *   Population
    *   Residential density
    *   Activity centres
    *   Transport modes and transport fuels

10. The fundamental questions to be answered by the strategy are:

    *   How much land will be built on,
    *   How many people will live here,
    *   How will housing and other land uses be distributed spatially,
    *   How will people travel between residences and activity locations,
    *   What combination of these variables (within social, political and economic constraints) will yield the lowest environmental and social impact.

2. Concept of Sustainability

11. We question what is meant by the sustainability of a city. A city is inherently unsustainable within the confines of its own built up area, since it relies on a large hinterland to supply its materials and energy and absorb its wastes. Ecological sustainability can only sensibly be measured across the entire country; even then foreign trade complicates it.

12. The ecological footprint is a product of not only the physical infrastructure of a city, but also the activities that occur within it. Strategic urban planning can deal with the built infrastructure of the city and with the transport activity that occurs within it, but not with the myriad processes of business and industry that also contribute to the ecological footprint. Its ability to achieve sustainability is therefore constrained.

25 February 2003

13. Many people espouse the view that the objective of ecological sustainability can best be pursued within the existing urban structure through the application of appropriate technology, particularly to reduce water, petrol and electricity consumption. Patrick Troy[i] is a well-known advocate of this view.

14. To some extent this distributed approach to urban ecological sustainability is incompatible with urban consolidation. For example, high-density apartment blocks are unsuited to solar power and hot water systems, rainwater collection and on-site sewage disposal, whereas terraced housing has been demonstrated by Michael Mobbs[ii] to be readily adaptable to such technologies.

15. It would be instructive to estimate the ecological costs and benefits of urban consolidation and compare them with the estimated ecological costs and benefits of resource-efficient technology applied to the existing urban fabric. The strategy could then propose an optimum mix of these two approaches to sustainability.

16. Environmental indicators such as the ecological footprint should be evaluated annually to determine whether the city and its hinterland are progressing towards sustainability or regressing away from it. The strategy can then be revised if necessary.

3. Land Consumption

17. We welcome the introduction of an urban growth boundary as the primary mechanism for reducing Melbourne's land-take. This principle should be extended to Victoria's major regional cities and towns within commuting distance, to avoid the displacement effect that could otherwise occur.

18. Given the intention to limit the outward growth of urban development, there is a greater need to conserve land within the urban growth boundary. How the limited supply of urban land is to be distributed amongst the competing uses becomes the major problem to be solved by the strategy plan.

19. Roads and vehicle parking are major urban land consumers, and Melbourne 2030 gives scant attention to the reduction of these land uses. A reduction in vehicle-kilometres travelled in Melbourne would reduce demand for expansion of the road system, as well as reducing oil consumption and atmospheric pollution.

20. We commend the concern for affordable housing in a development environment where the past reliance on cheap land will end.

4. Population Projections

21. Population growth is both a problem to be solved and an opportunity to restructure the city.

22. We do not question the assumption of population growth, but argue that the 1m figure is unpredictable.

23. Any approach must take account that the population projections, which have yet to be re-worked on the basis of the latest census data, may be underestimates.

24. Therefore, it cannot be assumed that incremental densification across the metropolitan area would result in densities sufficient to yield any meaningful change in travel patterns or land use relationships. There is a risk that increased population without major structural change will simply add to traffic congestion, with resultant deterioration in air quality and travel times.

5. Residential Density

25. Increased densities are central to the plan's objectives to firstly conserve land and contain the urban sprawl and secondly to reverse the present dominance of car travel. However, apart from a general indicator in Draft Clause 12 to the State Planning Policy Framework that 'average housing densities' in the new growth areas should be 'significantly higher than 10 dwellings per hectare' and a general indicator of 15 dwellings per ha. (Melbourne 2030, p. 63), there are no density targets or data on present densities. There is a need for definite figures on both present and future target densities, as well as more comparative data on other cities.

26. At present, readily available data appears to be in the form of Melbourne averages, or averages across municipalities. These are crude figures, which take no account of what proportion of the area of individual municipality is residential, and provide no useful data on the actual densities across individual parts of the municipality. For instance, for planning purposes the densities of South Melbourne or parts

of Carlton would be useful indicators of viable targets for new growth areas, taking into account areas set aside for public open space needed for denser residential development.

27. This means that the immediate debate on density issues will take place with little public information on current densities, what are realistic densities for a liveable city, and on the residential and activity densities needed for a good quality but financially viable public transport system.

28. While the focus on activity centres involves (in theory) a concentration of higher densities, the number and diversity of centres, and the heavy dependence on municipal plans and local community responses, make for an unpredictable outcome. The TCPA would recommend that a more targeted approach to increasing density should be adopted.

29. The policy of concentrating development in 'compact settlements' on the city fringe (p. 33) is supported, but the suggested average housing density of 15 dwellings per ha in the growth areas (2030 p. 63) is too conservative and misses an opportunity to use increasingly scarce land efficiently and create a density to justify investment in Principal Public Transport Network (PPTN) services. We propose that the target density should be 30 dwellings per hectare. The present proposals for the redevelopment of the Parkville site provide for densities of over 55 units per hectare.

30. There are a number of powerful reasons why the commitment to more compact development in the fringe growth areas should have target densities greater than those suggested in Melbourne 2030:

   • the central region has undergone radical redevelopment and its capacity to absorb further increases and retain the present liveability and attractiveness of the inner city area, and at the same time retain the commercial and industrial activities, may be reaching a limit.

   • there is likely to be political opposition to widespread increased densities in the middle and established outer ring suburbs, even at and around activity centres.

   • reduced land-take in the growth corridors will leave a greater reserve of undeveloped land for future expansion.

31. If the 'liveability of the established areas' in the inner and middle ring of suburbs is to be protected, it is essential that:

   • planning scenarios should contain significantly higher density targets for new growth areas. These present an opportunity to create a new well-designed mix of medium density residential developments and high-density housing in tower apartment blocks, as has been done in Toronto and many European cities. An appropriate population density target can justify good access to a PPTN.

   • strategically located higher densities be achieved in middle ring suburbs.

32. The densification strategy in the middle ring established suburbs can expect to face resident opposition. Melburnians will need to be assured that the most conservative targets involve far lower densities than are common in European and Asian cities.

33. It is suggested that a workable strategy would be to focus initially on the inner suburbs, where medium density is already common and transport infrastructure is good, and can be improved on. At the same time, Melbourne 2030 should aim to develop dense centres at the suburban fringe, where there is no history of low density.

34. However, implementation should continue to identify opportunities in suburban Activity Centres such as Knox, Southland/Cheltenham, Chadstone and Glen Waverley for small-footprint residential towers close to existing shops and planned or existing public transport.

35. The exemplary redevelopment of selected activity centres of varying size with good urban design is thought to be important if higher densities in established middle and outer suburbs are to be embraced.

6. Public Open Space

36. The TCPA welcomes the commitment under Policy 5.6 to long-term protection of open space and to improving both the quality and distribution of open space.

37. Any serious strategy to increase residential densities, which inevitably involves a reduction in private open space, should include a commitment to public open space. Any proposed densities would need to take account of the provision for open space. Melbourne 2030 contains no minimum targets or even benchmarks for new subdivisions. International benchmarks for newly developed areas are roughly

based on 40 sq m per person. The plans for the redevelopment of the Parkville site provide for only about 22 sq m per person, despite the proposed density of over 50 persons per ha.

38. Melbourne 2030 makes no reference to Rescode Standard C16 for public open space in new subdivisions. At present, Standard 16 provides for no more than a set of indicative guidelines for the provision of parks of varying sizes. The objective to develop more compact communities with higher densities in the fringe growth areas needs to be accompanied by more prescriptive standards. In the new growth areas there seems no reason why Standard C16 cannot become a requirement. In the absence of mandatory standards, developers will be induced by the growing land costs to exploit it to the maximum.

39. As the pressure for land increases up to and beyond 2030, State and local governments will be tempted to excise or alter the uses of public open space. The TCPA is not convinced that the urban open space principles under Policy 5.6 provide any additional statutory protection of urban public open space.

40. The principles have avoided any attempt to set any parameters or categorisation of what are deemed to be appropriate activities for the use of public open space. There are no principles regarding the commercial exploitation of parkland for purposes which are not ancillary to parkland (eg purposes and activities which are not directly dependent on green open space). There is nothing, for example, that rules out the use of parkland for motor racing or other totally unsuitable activities for public open space.

7. Activity Centres and Transit Cities

7.1 Analysis

41. We support the proposals for Activity Centres, including the Transit Cities program, with some qualifications. We believe the focus on the development and redevelopment of activity centres as locations for increased densities, mixed uses and public transport nodes and interchanges to be essentially correct, but its success will depend on how it is interpreted in practice.

42. Rather than treat the metropolitan area as a single entity, we believe it should be treated as five distinct regions (inner, west, north, east and south), which, except for the inner region, have a high degree of self-sufficiency in terms of employment and retail, recreational and cultural facilities. This structure should inform the planning of both public transport and the principal activity centres.

43. We would expand the definition of the CAD/CBD to include the secondary CBD extension along St Kilda Road as far as St Kilda Junction, and to Docklands, to Melbourne University and to Park Street South Melbourne.

44. Labour market segmentation, in which people tend to live clustered around specialised employment areas (particularly the CBD), could lead to greater self-containment of regions within the metropolitan area. This in turn could reduce travel demand, at least for the journey to work. Regional self-containment should be developed as a strategy, both to reduce the need for long distance travel within the metropolitan area, and for social equity reasons.

45. We fully support the proposals to increase the mix of uses in activity centres. In the major outer suburban regional centres such as Frankston, Dandenong and Ringwood, uses should include public regional cultural facilities such as theatres and galleries.

46. Melbourne 2030 has developed a hierarchy of centres. This hierarchy is of limited value as such, e.g., treating two unlike centres like Chadstone and Sunshine as a common category, where there exists more of a continuum of centres. Implementation of Melbourne 2030 should develop a priority order in terms of potential for re-design and redevelopment along the guidelines for existing street-based centres (pp 38-39.). This list would become a basis for seed funding for redevelopment.

47. Melbourne 2030 assumes that the activity centres are complementary when in fact centres are in competition with each other and with out-of-municipality centres (eg CBD and Prahran) and out-of-centre retail centres such as Altona Gate or Chadstone.

48. Melbourne 2030 needs to place more emphasis on the bottom tier of activity centres, the Neighbourhood Activity Centre (NAC). Strategies are needed to ensure the long-term economic viability of neighbourhood shopping centres to maximise opportunities for walking. This implies setting and pursuing strategies to locate retail, personal services, commercial office activity and medium to high density residential floorspace within and contiguous with existing centres, without diminishing their social amenity and heritage value.

49. The ability to walk to local shops depends on having a fine-grained mixed-use urban structure, such as that found in the inner suburbs of Melbourne, but which is missing from newer suburbs, where single-use zoning applies. The development of neighbourhood activity centres at a much finer spacing is therefore an essential part of a strategy to support and increase walking for utilitarian purposes. Many past (mid-twentieth century) attempts at providing neighbourhood shopping centres have failed, as can be seen throughout the middle suburbs.

7.2 Implementation

50. Whilst the Activity Centre Design Guidelines contain many sound proposals, the question of who will pay for retrofitting existing centres remains unanswered. Shopping centres are constructed to a minimum budget, and councils seem unwilling or unable to enforce good urban design standards on developers. There are many, possibly a majority of activity centres that break all the rules of good urban design, including some of the most recently constructed. The development on the former International Harvester site in Hampshire Road, Sunshine, is typical, with blank concrete walls facing the street, and the shops turned around to face the car park at the rear of the site. It is difficult to see how such bad cases can be rectified.

51. Funding of local government to assist the redevelopment of activity centres should give priority to those areas where substantial changes to current urban design can be effected. The redesign wishlist for existing centres (Implementation Plan 4, pp. 38-39) can be expected to require considerable public investment as well as private developer investment. Implementation will depend on the development of incentives for investors without government losing control of planning.

52. The strengthening of viable neighbourhood activity centres where they exist, and the creation of new neighbourhood centres where none exists should be a high priority. Appropriate retail growth needs to be channelled into the smaller activity centres, to maintain a viable and dense network that is amenable to walking and cycling access.

53. The current trend to concentrate and centralise the fewer key service outlets will require longer trips and more likely by car. Local government can ration parking spaces to influence travel behaviour, but has little or no power to influence the location of key services. The State Government should develop strategies to address this.

54. The continual expansion of large car-based shopping centres, driven by commercial pressures for greater market share, has eroded smaller street-based shopping centres and coarsened the network of viable activity centres. This process enforces car use by removing opportunities for walking and cycling access. Controls are needed to stop and reverse this process. Upper limits should be placed on the retail floor space of stand-alone car-based shopping centres.

55. One of the problems with the present laissez-faire approach to shopping centres is that mainstream retail activity is being syphoned off into the larger centres, leaving the neighbourhood centres with low rent premises that are taken up by businesses that have no relevance to the immediate neighbourhood, such as antique and second hand goods dealers, computer shops, etc., which serve a much wider customer base and rely on car access. The loss of banking outlets further weakens smaller centres.

56. Intervention is needed to ensure that businesses that are relevant to the local community, such as convenience grocery stores, bakers, newsagents, community banks, post office agencies, pharmacists, dry cleaners and so on, are encouraged to establish in neighbourhood activity centres, whilst specialist businesses that have larger catchments locate at higher level centres. A more restricted retail zone for neighbourhood activity centres could assist, but we also advocate positive incentives to attract the right businesses.

8. Transport

8.1 Modes of Transport, Trends and Targets

57. We welcome the ambitious target for increasing public transport patronage, although we question the validity of the "20% by 2020" target, which seems to have been chosen more as a marketing tool than as a realistic goal.

58. The "20% by 2020" target is very crude. It takes no account of the size of the transport task (in person-km travelled by each mode), or of what forms of public transport will contribute to this radical growth. Passenger-km is a more useful measure than number of trips by which to compare the transport effort performed by various modes. The basis of the claim that PT carries 9% of motorised trips is not made clear in Melbourne 2030.

59. The target of "20/20" will receive widespread support but current trends and the lack of any credible measures to actively discourage the use of cars suggest that this target will be difficult to achieve. Melbourne 2030 seems to assume that simply improving public transport will result in a reduced dependence on cars. It won't.

60. A report by the RMIT Transport Research Centre (TRC)[iii] suggests that 9% of motorised trips is an optimistic base and that any target would need to address present social and work trends, which are currently working against the growth in the use of public transport.

61. Victorian Activity and Travel Survey (VATS) data for 1994-1999 finds that:

   • 70-80% of trips are car drivers and passengers

   • Only 6% of weekday and 2% of weekend trips are by public transport

   • 16% of trips are by foot

   While there has been a short-term increase in public transport usage for work journeys, the large majority of trips on weekdays are made to non-work related destinations. The major area of travel growth has been in relation to social and recreational activities.

62. Significantly, from the point of view of M2030's plan to develop bus routes as 40% of the PPTN (check), while train travel has grown faster than the population (still small nr of trips), buses have lost patronage over the period. The TRC report concluded that: "public transport has done little more than hold its own over the six-year period".

63. More seriously, the TRC report points to a number of trends which may work against public transport, leading to greater reliance on both car and walking (Planning for Public Transport in the Future: Challenges of a Changing Metropolitan Melbourne, pp 22-24). Some of the trends, such as the sharply increasing numbers of female car drivers, and the decline in numbers of both male and female passengers, are evident in the census data on journeys to work for 1976 - 2001 (see Fig. 1 next page). Although the ABS data also shows a rise in public transport trips to work, these are clearly outweighed by the growth in those driving to work and the number of individual motor vehicles.

64. The TRC report points to the fact that inner city residents use public transport, walking and cycling significantly more than other Melburnians.

65. While the increased patronage of public transport by inner city residents is an encouraging sign, the example of Fitzroy Street, St Kilda, which is the most successful activity centre for lower than average car trips (Activity Centres Review: Technical Report 8, p. 88), provides an excellent case study in the challenges facing Melbourne 2030. This centre is served by 5 tram routes and 4 bus routes, has a parking regime which has been described as the most pro-public transport in the metropolitan Melbourne, and provides an attractive environment for walking from and to public transport links. Yet public transport captured only about 35% of visitors, whilst 30-40% used cars to get there. Trip data used by the Activity Centre Review Technical Report found that about 10% of trips to/from St Kilda were PT and over 50% were car trips. Two of the bus routes do not operate on Sundays, possibly the busiest of the weekend days for visitors.

66. There is no discussion in Melbourne 2030 of the potential of multi-modal transport which integrates bicycle trips with public transport trips which would serve to increase the length of journey and expand the capture area of the train system and possibly light rail too.

67. There is insufficient emphasis and lack of consistent strategy to cater for the increasing travel needs of aged and disabled people. In this regard, the TCPA urges the government to give major attention to the development and integration of extensive true demand-responsive passenger transport (eg. flexibus, maxi-taxi) with the existing public transport and taxi systems in Victoria's urban and rural regions.
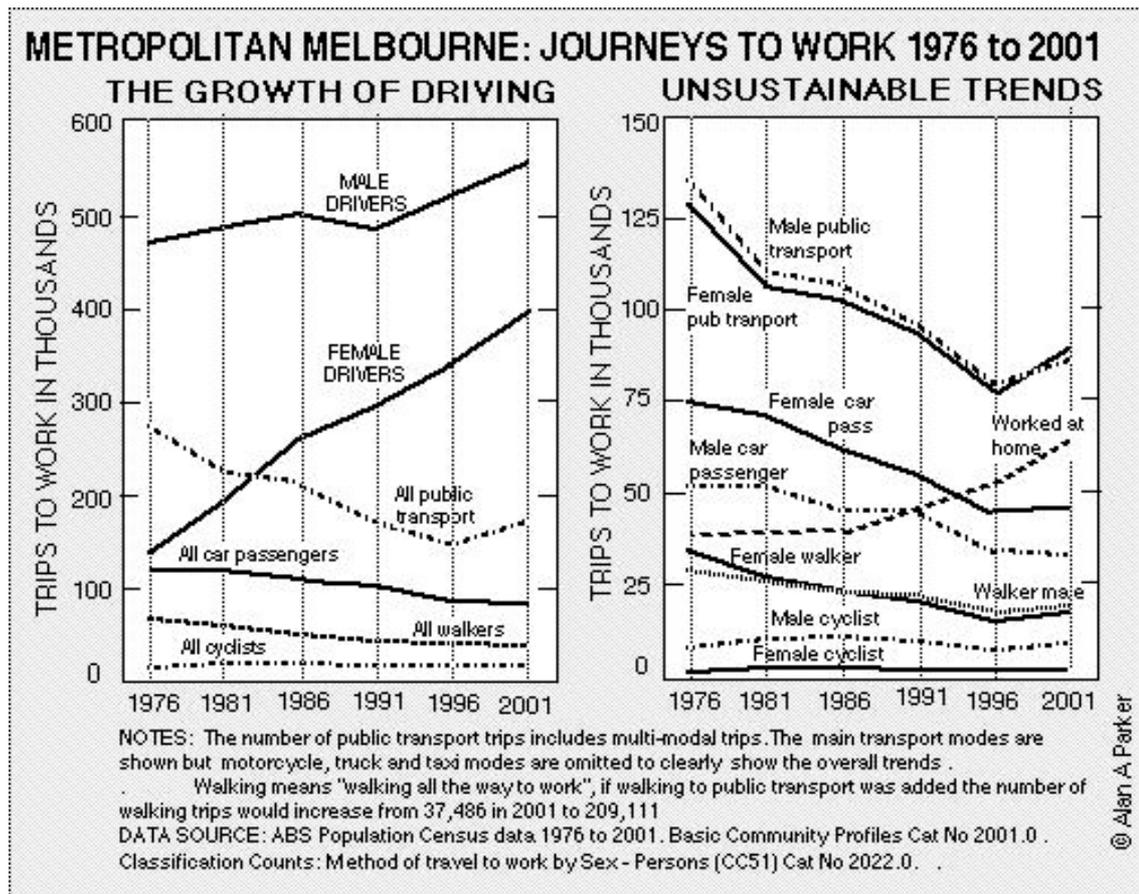
METROPOLITAN MELBOURNE: JOURNEYS TO WORK 1976 to 2001

NOTES: The number of public transport trips includes multi-modal trips. The main transport modes are shown but motorcycle, truck and taxi modes are omitted to clearly show the overall trends.
Walking means "walking all the way to work", if walking to public transport was added the number of walking trips would increase from 37,486 in 2001 to 209,111
DATA SOURCE: ABS Population Census data 1976 to 2001. Basic Community Profiles Cat No 2001.0.
Classification Counts: Method of travel to work by Sex - Persons (CC51) Cat No 2022.0.

Figure 1

8.2 Implementation Strategies for Public Transport

68. We support the expansion of public transport services on grounds of social equity as well as efficiency. Uniform minimum standards of service should be set for all serviced areas. These would include weekend services, and extended hours (16 hrs/day) of operation.

69. We would advocate as stage one that public transport investment focus on:

- CAD-centred rail services to reduce work and recreational trips by car to/from middle and outer suburbs

- More frequent tram services linking the CAD and inner-middle areas like South Yarra, Toorak and Prahran, which already have the high density necessary to support a high level of public transport service.

- PPTN rail links to the growth areas on the Melbourne's fringe on grounds of equity, and whose residents travel longer distances, have high trip rates (larger families) and lower disposable incomes. These areas will have an important bearing on the growth in car travel.

- The inner city area where there is a better opportunity for the least marginal cost to increase public transport patronage, i.e. there is a good public transport infrastructure, the higher and increasing densities of residents and activity centres, and greater tendencies to use public transport.

- Establishment of one-tiered, then two-tiered Principal Bus Routes (PBRs) that service the PACs and MACs across the metropolis. "Smart Bus" routes 703 (Blackburn Road) and 888/889 (Springvale Road) are indicative of the requisite lineal extent, regional connectivity, daytime headways, service span (16/7 or better) and grid spacing between PBRs. Single-tiered services would be, as now, hail-request stopping every 300 metres or so. Two-tiered services would have this "bottom tier" hail-request complemented by a second tier service operating semi-express ("SET") between fixed stops

25 February 2003

averaging 1 km or more apart and located at arterial intersections, public transport route interchange points and activity centres. The second tier would cater for longer distance cross-suburban travel, which is currently almost exclusively by car.

- Other local bus routes would be of hail-request type and shorter route length, servicing activity centres and interchanging with PBRs.

- Increasing the scheduled service speed and on-time reliability of PBRs, light rail and Principal Tram Routes by progressively establishing separate transitways and intersection traffic signal priority, such as those set up in USA, Brisbane and proposed between Liverpool and Parramatta in Sydney.

- Prioritised single- and two-tier PBR treatments are recommended for major trunk bus routes suffering from traffic delays, especially route 246 (Clifton Hill – Elsternwick, along Punt Road), route 700 along Warrigal Road, route 513, and Stud Road routes.

- Identify existing wide land corridors, whether service easements, future arterials, or wide arterial roads with surplus verges or medians (eg. North Road Huntingdale) that could be used as alignments for future grade-separated public transport such as PBRs in busways or light rail. Enact, via the planning scheme(s), orders to maintain and protect these spatial alignment corridors (width and height clearance) in future road widening or modifications, against proposed rebuilding and extension of building envelopes, and reviews of "surplus" land.

- Selected suburban activity centres

70. The TCPA would also recommend more research into densities needed to support desired levels of public transport.

71. In those areas of Melbourne which already have high residential densities, greater use of public transport would be achieved by increasing the quality of service of public transport, not by increasing housing densities yet more. For example, the service frequency of tram services in Toorak Road and Chapel Street, South Yarra should be increased, and stronger measures taken to keep the tracks clear of traffic, and prioritise tram and bus movements above car movements such as central right turns. Improved cross-municipality links and improved tram links between Port Phillip and Prahran.

72. The argument that such areas are already well served should not preclude the increase of service levels to match residential density. Every opportunity should be taken to increase public transport patronage for the least marginal cost, regardless of equity considerations. This is consistent with Action 2 of the ITIP to 'make more efficient use of existing infrastructure' (p. 18).

73. Melbourne 2030 should build on the evidence of growing use of public transport in the inner area and aim to fill gaps and improve services where needed.

74. There is also an opportunity to develop fast train services to outer suburban activity centres that are on planned regional fast train services (e.g. Dandenong, Werribee, Sydenham). These should be combined with maximum development at the rail terminus and at intermediate stops (e.g. Caulfield, Sunshine, Footscray). Fast and regular PPTN rails services to outer growth corridors should be accompanied by serious planning for medium and high densities using a mix of medium density housing and high density apartment blocks following the Canadian examples of Toronto and Vancouver, and European cities like Lisbon and Stockholm.

75. We recommend that extensions to the fixed rail public transport network be contingent on formal commitments to allow and foster increases in the residential density of the patronage catchments to a level that supports economic public transport operation (a minimum of 30 residences per hectare). For example, in a corridor served by a tram extension, a strip up to 400m wide on either side of the tracks should be zoned for medium density development.

76. Growth areas such as Fountain Gate and Pakenham present some wonderful opportunities to develop best practice examples in urban design that provides fringe communities with access to multi-modal public transport nodes. These could present exemplary pattern models of what is working for sustainable transport.

77. The Neighbourhood Principles will be difficult to apply to much of Melbourne's suburbs. As benchmarks for new subdivisions they are sufficiently important to justify more prescriptive standards than are currently provided for in ResCode's Clause 56. These would provide greater certainty for stakeholders, and shift the balance from market-driven development to implementation of State Government strategy.

78. Require or else provide incentives for land developers to design subdivisions that maximise accessibility and permeability by walking and cycling. In particular, ensure that shortest walking distance pathways are established to road and rail-based public transport.

79. There appears to be an over-reliance on TravelSmart as the change-agent making a large part of the travel behaviour to achieve the desired modal shift.

8.3 Road and Transport Pricing and Parking Management

80. In the absence of unacceptable road congestion, radical changes in travel behaviour, and particularly reduction in car travel to the CAD and other Principal Activity Centres (PACs) and Major Activity Centres (MACs), will require a mix of road pricing measures and restriction on supply of parking, as well as a massive injection of funds into public transport and the redevelopment of key activity centres.

81. There is no detail in Melbourne 2030 on any systematic set of incentives/disincentives that will be needed to effect changes in travel behaviour (eg road pricing mechanisms). The TCPA is impressed with the recent Netherlands program "MobiMiles" to impose "per vehicle driven kilometre" road toll-pricing on motorists and truck operators, by switching existing fixed statutory invoiced costs (eg. sales tax, insurance, registration) and externalised costs to direct or variable invoiced charges. (The change to a conservative coalition government in Netherlands has resulted in this proposed program being shelved).

82. The TCPA submits as another example of a pro-active incentive process for modal shift, with the permission of its author Peter Hill. This is an economic and marketing concept for shifting transport costs onto urban motorists generally whilst creating incentives for mass transit use, in ways that are not socially regressive. This concept, Transport Equity Pricing™ (TEP), is outlined in the attached Appendix[iv]. TEP stresses the pricing of all modes of transport, to comprehend actual modal costs, externalised costs or "virtual" costs such as time, convenience, etc., as well as respective public and external benefits. TEP seeks to employ fiscal measures of modal pricing, subsidy, incentives, and financial cross-payments between transport/income-advantaged and disadvantaged regions within metropolitan Melbourne, with the goal of minimising car-based travel.

83. In the interests of equity, any travel pricing regime for such a geographically spread city must address the varying quality of PT services and complex patterns of trips to work and for non-work purposes. Travel management is in a context where 70% of jobs are outside the inner city/CAD and the large majority of jobs are not within 40 minutes travel by public transport

84. The main objective should be one that discourages trips to the CAD by car and provides maximum incentive to use PPTN train services linking the outer and middle suburbs with the CAD and the PACs, and thus justify the capital and operating costs of the improved services.

85. Ensure that any major review of Melbourne's current public transport ticketing incorporates thorough market research of the most appropriate and desirable pricing structures. Singapore's new EZ-Link multi-modal smart card fare collection system has been found to be very simple to understand and use, and incorporates gentle small steps in fares. Melbourne's 3-zone fare structure, originally necessitated by the paper-based multi-modal Metcard of the 1970s, presents travellers with the sense of poor value-for-money when a trip extends a short distance into the next fare zone. The 3-zone structure results in distortions in modal transfer travel, eg. long driving park-and-ride trips to/from Brighton Beach station.

86. Concern that VicRoads will continue to set funding priorities in favour of freeways and arterial roads at the expense of public transport. Freeways, without any tolls, generate more motorised trips and will compete with PPTN links and undermine strategies to increase public transport patronage.

8.4 Sustainable Transport

87. Whilst the objective of increasing the proportion of motorised trips by public transport to 20% is a laudable aim, the primary objective should be to reduce the amount of motorised travel necessitated by the location of activities.

88. We believe that considerable gains in the efficiency of the transport task will come from reducing the

need to travel, and in increasing the opportunities for walking and cycling as substitutes for driving. The re-structuring of land uses to facilitate changes in travel behaviour is crucial to the success of such a strategy.

89. Multiple strategies aimed at reducing the actual trip-kilometres of personal travel are central to Melbourne 2030 alleviating Australia's burgeoning oil importation (Robinson, 2002, appended)[v], and in responding to and achieving greenhouse gas reduction targets, such as those prescribed in the current Kyoto Treaty

90. In 2001 only 1% of trips to work were by bicycle, and just under 3% were by walking (see Figure 2).

91. The TRC report found 16% of all trips by foot.

92. Lack of investment in facilities needed for multi-mode transport. Bicycle security is a major problem.

93. There is need for a funding commitment to multi-modal transport and specific target to invest secure parking facilities at selected train and light rail stations which sub-regional trip data identifies as having the greatest potential to increase cycle/public transport journeys.

94. Walking should be encouraged as the least cost method of transport (both in terms of dollars and in environmental impact) that is accessible to all but the physically disabled. Attention to the detail of physical infrastructure, lighting and safety, and the development of fine-grain mixed-use areas are priorities.

95. Viable neighbourhood activity centres, with associated high residential densities and good urban design, will encourage the use of sustainable transport. The location of neighbourhood centres on the Principal Public Transport Network connects them to the network of larger activity centres.

8.5 Transport Plans

96. Regional integrated transport plans should be developed for the five identified sub-metropolitan regions (N, S, E, W and Inner).   Metropolitan regional transport planning councils composed of local government representatives should be created to prepare regional transport plans. Such plans would complement metropolitan-wide plans for the suburban train and tram systems, and would focus on intra-regional travel.

97. The Inner West Integrated Transport Plan, which includes non-motorised transport, provides a model, with its stress on co-ordination between different modes, and its attention to the transport needs of a region. While it is noted in Melbourne 2030, the Integrated Transport Implementation Plan makes no reference to this.

98. Action 6 includes the development of subregional integrated transport strategies (ITS), which will provide a region of a number of municipalities with 'a development and management framework.' for municipalities which 'share interconnected transport facilities and needs'.

99. Transport services need coordination. The development of separate plans for each mode of transport (train, tram, bus, bicycle and car) should be abandoned in favour of integrated multi-modal transport plans. Walking should be included in transport planning.

100. Public transport needs a metropolitan public transport planning authority to plan and advocate for public transport in the same manner that VicRoads does for roads and motor vehicles. This authority would be responsible for reviewing service levels, allocating resources and overseeing the fare collection system.

8.6 Fossil Fuels and Greenhouse Gas Emissions

101. Melbourne 2030 has ignored the issue of fossil fuel consumption or cleaner energy generation needed to support growth over the next 30 years. (See policy 4.1). Multiple strategies aimed at reducing the actual trip-kilometres of personal travel are necessary to alleviate Australia's burgeoning oil importation (Robinson, 2002), and in responding to and achieving greenhouse gas reduction targets, such as those prescribed in the current Kyoto Treaty.

102. There are no substitutes for present gasoline and diesel-engine road transport vehicles (cars and trucks) predicted to be widely available in the time frame to contend with emerging threats from declining oil production in Australia and the world, or restrictions on carbon emissions. Road transport accounts for 60% of Australia' oil use. Only the battery-electric car has a reasonable chance of replacing part or most of the current car fleet. **The much-vaunted hydrogen economy, featuring hydrogen-powered cars,**

faces major and fundamental barriers in the laws of physics, as well as huge costs in its roll-out (Bossel and Eliasson, 2003 [vi])

103. Realistically, strategies to reduce energy consumption and carbon emissions per passenger-kilometre will have to focus on use of public transport, walking and cycling, and also government encouragement to switch away from existing cars to highly economical vehicles such as gasoline-electric hybrid cars and diesel cars such as the Volkswagen Lupo.

9. Strategic Risk in the Planning Environment

104. Reliance on over-simplified, predictive and deterministic models in the planning process exposes Melbourne 2030 to a large risk of failure, in the event of future changes in the global and Australian environments. This omission could in part have arisen from the intellectual traditions of town planning in the English-speaking world.

105. There is no attention to risk management involving new scenarios due to changes in the external environment. Plausible events would include:

   (a) unanticipated population increases;

   (b) oil supply or pricing crises;

   (c) unlikely availability of alternative automotive traction and energy formats to make timely substitution for oil;

   (d) hitherto unexpected and worsening predictions of greenhouse climate warning, leading to further tightening under treaty of greenhouse emissions controls;

   (e) new Commonwealth tax policies;

   (f) fiscal constraints on transport investment;

   (g) economic trade costs of increased oil importation from year 2000; and

   (h) major shifts in global political events and alignments bearing down unfavourably on the six points above.

106. None of the above 8 broad event elements of scenario have been comprehended in the draft of Melbourne 2030. These events cannot be assumed to be trivial in their impact on the Plan's projections and strategy.

10. Conclusion

107. At this stage the TCPA sees Melbourne 2030 as little more than a vision embracing planning concepts and principles, which can be expected to receive considerable support.

108. Implementation of the objectives will depend on a real commitment by State and Commonwealth government to fund the implementation.   It will require:

   • Creation of suitable planning structures and institutions,

   • Greater use of numerical data to support arguments for change,

   • Funding of more urban design and planning at local government level (including training of more planners),

   • A shift of funding from roads to public transport, for which there is no commitment in the plan,

   • Funding to maintain and extend urban infrastructure,

   • Wider community acceptance of the benefits of higher densities, and

   • Stronger regulation and more intervention in the market.

25 February 2003

Metropolitan Melbourne: Journey To Work ABS Census 2001

METHOD & MODE	MALES	FEMALES	PERSONS	% by group	% of total
ONE METHOD ONLY					
Train	5102	33580	38682	3.23	3.07
Bus	6706	8031	14737	1.23	1.17
Ferry	200	60	260	0.02	0.02
Tram	13789	16655	30444	2.54	2.42
Taxi	2456	1315	3771	0.31	0.30
Car, as driver	558818	394067	952885	79.51	75.59
Car, as passenger	33601	45491	79092	6.60	6.27
Truck	17008	429	17437	1.45	1.38
Motorbike/motor scooter	4925	482	5407	0.45	0.43
Bicycle	9821	3016	12837	1.07	1.02
Other	3944	1495	5439	0.45	0.43
Walked only; all the way	18864	18622	37486	3.13	2.97
Total 1 method	675234	523243	1198477	100.00	95.08
TWO METHODS					
Train and Bus	5092	4333	9425	16.96	0.75
Train & other (exclude bus)	16960	17725	34685	62.43	2.75
Bus & other (exclude train)	2004	2693	4697	8.45	0.37
Other two methods	4735	2015	6750	12.15	0.54
Total 2 methods	28791	26766	55557	100.00	4.41
THREE METHODS					
Train & other two methods	2933	2822	5755	88.50	0.46
Bus & other 2 methods	125	95	220	3.38	0.02
Other three methods	425	103	528	8.12	0.04
Total 3 methods	3483	3020	6503	100.00	0.52
TOTAL all 3 methods	707508	553029	1280537		

Figure 2

25 February 2003

[i] Patrick N Troy: The Perils of Urban Consolidation: The Federation Press 1996

[ii] Michael Mobbs: Sustainable House: CHOICE Books 1998

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[iv] Peter Hill: Transport Planning and Sustainability in Melbourne: summary from presentation to UITP Seminar, Melbourne, 26/10/2001

[v] Bruce Robinson: Global Oil Vulnerability and the Australian Situation. Perth, 30/6/2002

[vi] Bossel, Ulf and Eliasson, Baldur: Energy and the Hydrogen Economy: Switzerland, 8/1/2003
http://www.methanol.org/pdfFrame.cfm?pdf=HydrogenEconomyReport2003.pdf

25 February 2003