

HOW THE WEST WAS WON: BICYCLES IN THE DOMAIN OF THE CAR

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abstract: Velo Australis, the 9th Velo City International Bicycle Conference will be held in Perth, Western Australia in October 1996. For the first time, those in the southern and eastern hemispheres can directly participate in a global forum focussing on the region's issues.

The Perth Bikeplan (1985), one of the Australian genre of comprehensive bikeplans acknowledged as among the best in the world, has been updated as an integral part of a Metropolitan Transport Strategy. This paper reviews experience with cycling programs in the Perth Metropolitan Region of Western Australia, and assesses the bicycle contribution to providing accessibility and greenhouse gas emission reduction.

1. INTRODUCTION

Perth, Western Australia (WA), is a highly car-dependent city, with the highest rate of car ownership and use outside North America. Why, then, was Perth chosen to host the 9th International Velo City Conference¹, only the second to be held outside Europe², in 1996?

In part, the reason is that Perth has been demonstrably successful in promoting increased use of the bicycle over the past 20 years. Successive WA governments and their local government counterparts have consistently supported cycling encouragement programs, including the establishment and continued endorsement of Bikewest, the bicycle planning and management unit of the Department of Transport.

Equally important, however, is the location of Perth, which is highly accessible from Asia and most of Africa. This closeness provides an exceptional opportunity for Velo City to address the important issues facing countries in these regions with substantial input from and attendance by the people directly involved in finding solutions.

This paper reviews experience with cycling programs in the Perth Metropolitan Region³ of Western Australia and assesses the potential contribution of bicycles to providing accessibility whilst contributing to the achievement of greenhouse gas emission reduction targets and to ecologically sustainable development. It also outlines some of the key issues which have to be addressed by those who seek to encourage cycling in any country.

¹ The first Velo City conference was held by the European Cyclists' Federation in 1980, in Bremen, with the objective of bringing together cyclists, planners, engineers, the cycle trade, academics and politicians to talk and hear about the latest developments in cycle and transport planning.

² The first was Velo Mondiale, held in Montreal, Canada, in 1992.

³ The Perth Metropolitan Region has a population of 1.2 million, and is growing at a rate of 2-2.5% a year. Perth has around three quarters of Western Australia's population, and the proportion is increasing. No other centre in WA exceeds 35 000 people. The nearest cities of more than 1 million people are Adelaide (South Australia) and Surabaya (Indonesia), both several thousand kilometres away.

2. BIKEPLANNING IN PERTH

A State Bicycle Committee, comprising representatives of State and Local Government and cyclist groups, was established in WA in 1978, under the auspices of the Department of Local Government. The Committee published a program for improving conditions for cyclists (SBC, 1980).

In 1984, a team was established to develop a comprehensive bikeplan for Perth. The Perth Bikeplan (Perth Bikeplan Study Team, 1985) made 75 recommendations in:

- Education, awareness and behaviour.
- Enforcement and road traffic law.
- Encouragement.
- Engineering and planning, including establishment of the requirements for a network of regional bicycle facilities.
- Administration, management and funding.

The most significant recommendation for continuing development and implementation of cyclist programs was for the establishment of a 'bicycle planning and management group'. Bikewest was established in 1987, and was transferred from the Department of Local Government to the Department of Transport in September 1990, in recognition of the need for better integration of bicycle policy and planning with transport policy and planning.

Bikewest is a 'multiplier agency, using limited resources to encourage others to implement their own programs in ways beneficial to cyclists. It is a model other Australian States are now seeking to emulate. It has 12 permanent staff, as well as having access to the other resources of the Department of Transport.

Another key element of the Perth Bikeplan was the emphasis on education, awareness and behavioural programs, not only for cyclists, not only for road users, but for all those concerned with the planning, design and operation of our transport systems. More recently, this concern has been translated into the broader areas of transport policy and land use planning, recognising that *the future is formed, not so much by the grand edicts of planners or politicians, as by the multitude of small, medium and large decisions, made by people as individuals and as members of organisations* (Transport Strategy Committee, 1992).

Bicycle policy and planning in Perth is multi-dimensional, in the conventional 4-Es sense (Engineering, Encouragement, Education and Enforcement), but also in the involvement of a wide range of interests. Bikewest was able to publish a set of agreed policies for government agency co-ordination (Bikewest 1988), which included the Departments of Local Government, Police, Transport, Main Roads, Planning, Education, and Sport and Recreation, the public transport authority (Transperth), and Local Governments.

3. CYCLING IN PERTH

At the time of the Perth Bikeplan, two data sets were available to indicate the importance of cycling in Perth. These were:

- the 1976 Perth Metropolitan Travel Surveys (DGT, 1982).
- a 1982 survey of bicycle usage and safety (ABS, 1983).

Some key points to emerge from these surveys were:

- in 1976, 3.2% of trips were made by bicycle (DGT, 1982).
- in 1982, over 30% of Perth's cyclists were aged 20 or over, with a further 13% aged between 15 and 19 years (Perth Bikeplan, 1985).

- cycling participation rates were highest (over 70%) among children aged 5 to 14 years (Perth Bikeplan, 1985).
- over 75% of all cycling (85 per cent of adult cycling) was for transport purposes (ie to get from one place to another) (Perth Bikeplan, 1985).

Between 1976 and 1986, trips by bicycle increased from 3.1 per cent to 5.2 per cent of all trips in Perth (Socialdata, 1987a). The number of bicycle trips increased from 85 000 per day to 180 000 per day, or by 8 per cent annually. The proportion of bicycle trips in 1991 was estimated to be around 6 per cent.

Around 80% of bicycle trips were for transport, in 1989 (Figure 1).

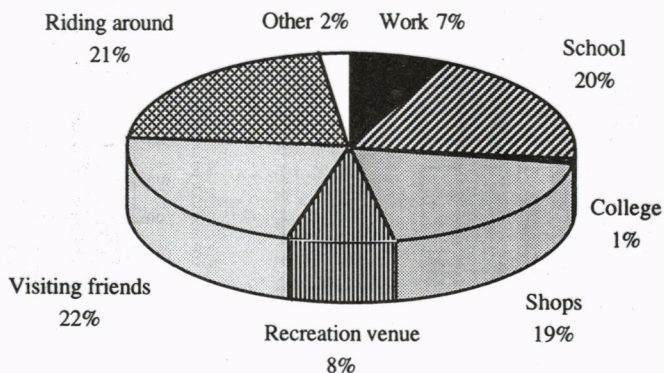


Fig 1. Bicycle Trips by Purpose: 1989 (Western Australia)

Source: ABS (1990)

The four surveys can be used together to identify trends in the number of 'regular' cyclists (Figure 2), defined as one who rides a bicycle at least once a week.

- The number of regular cyclists, in Western Australia, increased by around 8.5 per cent per year from 1976 to 1989.
- The proportion of the population which cycles regularly increased from 13 per cent, in 1976, to 27 per cent, in 1989 – a growth rate of 5.8 per cent annually.

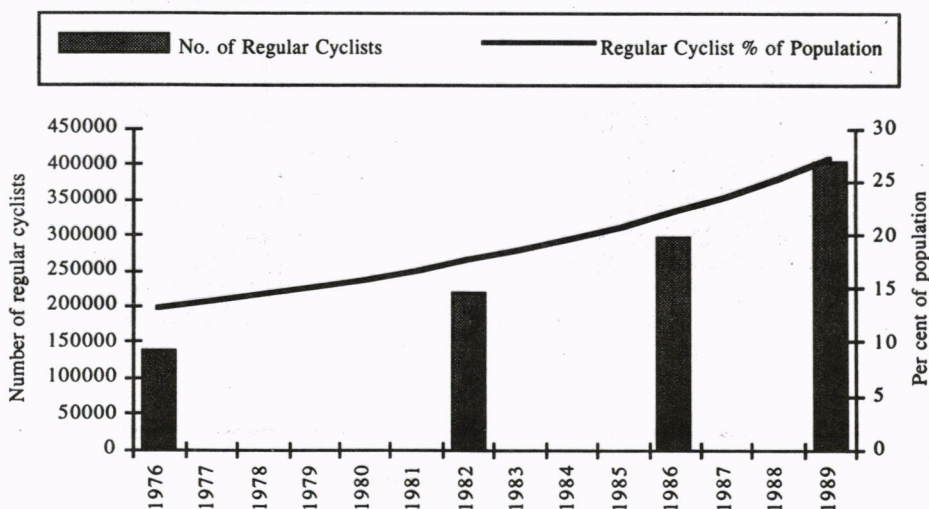


Fig 2. Regular Cyclists in Perth

These figures, however, are an amalgam of a number of trends, which can be identified from further analysis of the 1982 and 1989 surveys (Figure 3). It is clear that the majority of the increase in cycling activity (Fig 3a) derived from the increase in the numbers of cyclists rather than in the frequency of usage. Whilst the activity rates per cyclist fell for all purposes except work (Fig 3c), a small increase in school cycling frequency is apparent on an age-specific basis (Fig 3d).

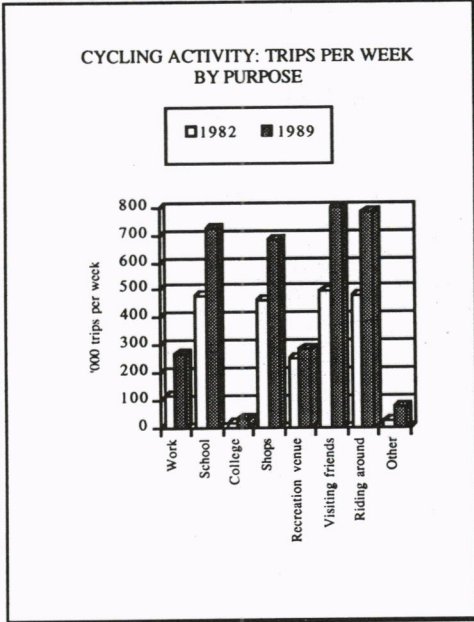


Fig 3a

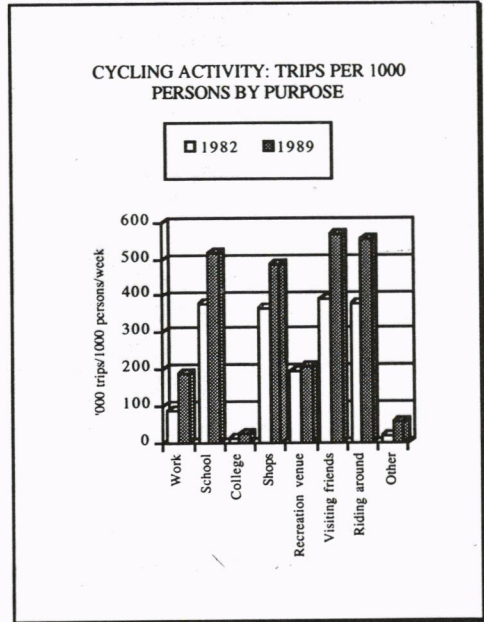


Fig 3b

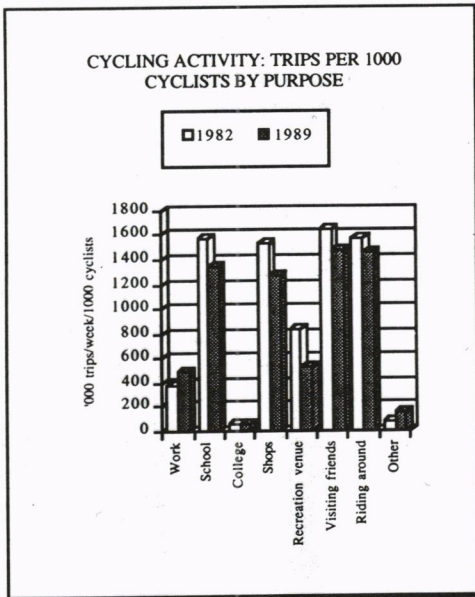


Fig 3c

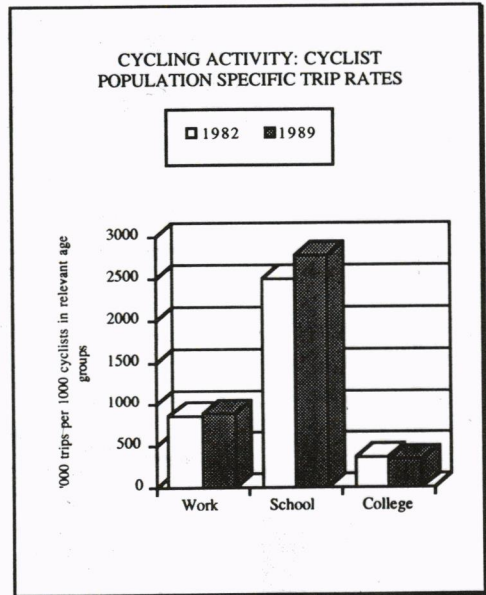


Fig 3d

Fig 3. Changes in Cycling Activity: Western Australia

Since 1989, there is some evidence of a sustained decline in cycling to school, which might be an unwanted by-product of campaigns to encourage school children to wear helmets. By making parents more aware of the dangers of cycling, the campaigns might have made parents less likely to allow their children to cycle to school.

4. CYCLING IN CONTEXT

4.1 Cycling, Walking and Accessibility

We too easily plan for mobility instead of accessibility.⁴ It is, of course, very much easier to visualise and monitor the movement of vehicles than it is the movement of people (and goods). It is also true that, in the short term, when activity patterns are already established, mobility is the key to accessibility. In the longer term, however, we can alter activity patterns and the way in which we undertake activities in ways which are likely to be more effective than simply attempting to provide for continually increasing amounts of travel.

Most cycle trips are relatively short, averaging 2.5 kilometres. The average walk trip is even shorter, less than 1 kilometre. The average car trip is 9.6 kilometres. We should not assume that cycling and walking have only limited roles in providing accessibility, since around 30 per cent of car trips are shorter than the average of bicycle trip.

Moreover, a significant proportion of the population does not have independent access to a car, but many of these should expect to be independently mobile. Even in Perth:

- 26% of the population is too young to have a drivers licence;
- 19% of the population, whilst old enough to drive, do not have a drivers licence;
- others have a licence to drive but do not have access to a car.

The 'access disadvantaged' are disproportionately to be found among the young (100% of those younger than 17), the aged (43% of those over 60 do not have a drivers licence) and women (25% of women over 17 and 60% of those aged 60 and over). Where extreme age (youth or old age) or disability do not preclude it, accessibility through walking and cycling plays a major role for these groups. The relatively high proportion of women without a drivers licence and their relatively low cycling participation rate (Figure 4) suggests a potentially-significant marketing focus for cycling.

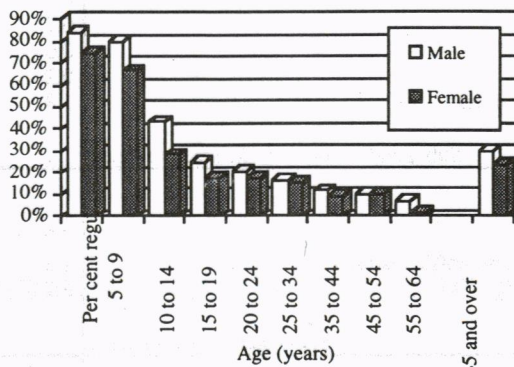


Fig 4. Cycling Participation Rates (Western Australia, 1989)

⁴ *Accessibility* is the ease of getting to an activity (work, recreation, education, shopping, medical services, etc). *Mobility* is the ease of movement. The nearby corner shop (if we have one) is much more accessible than a more distant regional shopping centre, even if there are no impediments to travel (ie mobility is high).

4.2 Cycling, Walking and Environment

Non-motorised modes of transport (cycling and walking) are the only truly sustainable means of transport, with current technology, since they do not use fossil fuels and do not produce gaseous emissions from combustion which are pollutants at either a local (eg nitrous oxides, which are a major cause of photochemical smog) or global level (eg carbon dioxide, the most common greenhouse gas).

With the fitting of catalytic converters, made possible by the requirement for all new cars to run on unleaded fuel, local atmospheric pollution is a less pressing problem. Even so, Perth is starting to show a photochemical smog problem, to which motor vehicles are major contributors, especially from short trips (ie when the catalytic converter is not fully effective), for which the bicycle is most competitive.

As motor vehicle travel continues to increase faster than population, greenhouse gas emissions are starting to loom larger as a global problem which requires local action for its solution. This has been reflected in the emphasis given to greenhouse gas emissions in the work on ecologically sustainable development (ESD) strategies in Australia (ESD, 1992).

The Transport Working Group for the ESD process identified increased cycling amongst a range of measures to reduce the greenhouse gas emissions from transport, in the context of ecologically sustainable development (ESD, 1991). The estimated impact of increased cycling was small in the context of the whole range of measures (Table I) and the whole range fell short, except in the most extreme scenario, of achieving the level of reduction implied by the Toronto Target of 20% reduction from 1998 levels by 2005.

For Australia, with its continued population growth, a 20% reduction would require a 40% reduction from the 'do-nothing' 2005 levels; in Western Australia, a 50% reduction would be needed.

Table I. Potential Contributions to Greenhouse Gas Emission Reductions , Australia (by 2005): Per cent of 1988 levels.

Measure	Scenario 1	Scenario 2
Vehicle-Related Technologies		
Passenger car & LCV fuel economy	4.5	6.4
Trucks	0.7	2.4
Rail	0.7	0.7
Air transport	0.0	1.0
Sea transport	0.2	0.2
Alternative energy sources	1.8	3.1
Sub-Total: Vehicle-related technologies	7.9	13.8
Urban systems		
Urban consolidation	6.9	7.8
Increased transit use and traffic restraint	1.2	7.5
Cycling and Walking	0.2	1.8
Sub-Total: Urban systems	8.3	29.6
TOTAL	16.2	43.4

Source: ESD (1991)

The ESD Transport Working Group identified total potential reductions of 16-43% in greenhouse gas emissions from urban transport, made up of vehicle-related technologies (7.9% to 13.8%) and urban systems (8.3% to 29.6%) (ESD, 1991).

The higher level of potential savings (Scenario 2), in the 'urban systems' case in particular, was based on scenarios which are unlikely to be achievable in their entirety (eg all new development in inner suburbs or equivalent in urban villages).

4.3 Synergies in Transport

It is misleading, however, to consider only the direct impact of measures to encourage walking and cycling. Many of them will have other impacts, by making people more aware of the energy and environmental costs of transport decisions, and measures not directly aimed at improving the convenience of non-motorised transport will, nevertheless, do so.

The draft Metropolitan Transport Strategy for Perth contains a package of targets, which individually are reasonable but will not be easy to achieve.

- | |
|---|
| <p>a) <i>Increase public transport trips to 12.5% of all trips.</i> The current level is 6.4%.</p> <p>b) <i>Increase average car occupancy rates to 1.25 persons per car.</i> This requires a 20% increase in the number of passengers per car from the estimated 1991 level of 0.21 overall (and lower in peak periods).</p> <p>c) <i>Reduce average car travel per person trip from 8.4km to 7.2km</i>, through increasing car occupancy and reducing car trip lengths.</p> <p>d) <i>Increase bicycle usage to 11.5% of all trips.</i> In 1991, bicycles were estimated to account for 5.7% of trips, but had doubled in a decade.⁵</p> <p>e) <i>Increase walk trips to 12.5% of all trips.</i> In 1991, walk trips were 10% of all trips. Walking is also a component of many other trips.</p> <p>f) <i>An additional 4% of trips to be substituted by teleaccess.</i> The current importance of teleaccess is not known, but telephone calls and facsimiles are used by millions of people each day, often as a substitute for the physical movement of people or paper.</p> |
|---|

Source: Draft Metropolitan Transport Strategy for Perth (Transport, 1995b)

A key feature of meaningful targets is that they should extend the bounds of the feasible. Targets which do no more than reflect what is already known to be achievable serve no useful purpose. At the same time, however, targets must not be so extreme as to be unrealistic, for such targets contain the seeds of their own downfall.

Targets must also be consistent with a coherent overall view of the future, preferably one which can be readily understood and identified with. The Transport Strategy Committee on Future Perth adopted a statement of vision, consistent with the philosophy underlying Metroplan (DPUD, 1990), the long-term planning strategy for the Perth Metropolitan Region, but which goes beyond transport or land use planning in its concept.

*Perth will be a place of vitality and well-being.
There will be sharing of spaces for living, work and leisure activities,
close enough to be reached easily and safely
by all members of the community.
This kind of city will be shaped by people who care about Perth
and who are prepared to work together
to make it a good place in which to live.*
[Underlining denotes the key elements of the vision.]

Source: Transport Strategy Committee on Future Perth, (1992)⁶

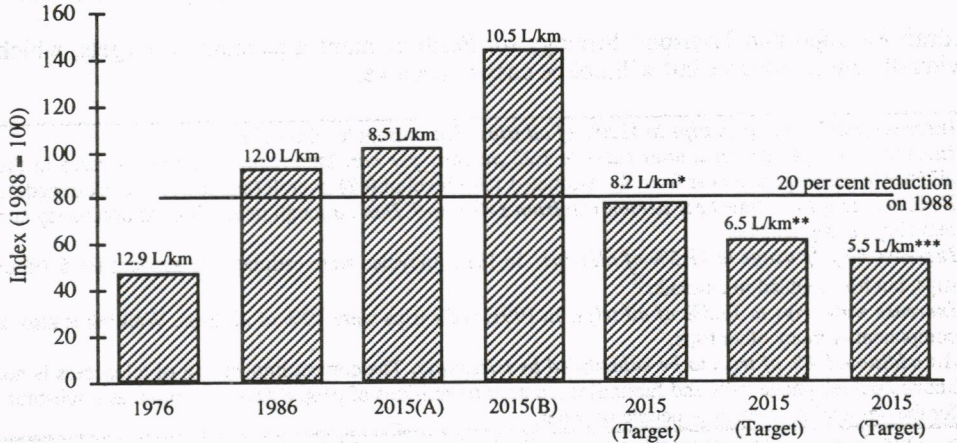
⁵ The 1992 Ausbike conference held in Melbourne resolved to set a considerably more ambitious target of 20 per cent of trips in urban areas to be made by bicycle in the year 2000.

⁶ This vision was developed by an informal group of transport and land use planning professionals in Perth, and was adopted by the Transport Strategy Committee on Future Perth.

The strategies to achieve the targets are a mix of transport, land use and behavioural ones, recognising the need for continued investment in transport, greater efficiency in the use of existing transport systems and a more considered approach to individual decisions.

4.4 Greenhouse Targets and Perth

Earlier, similar, targets established for Perth would, if all were achieved, bring about a 20% reduction in greenhouse gas emissions from transport by 2015 (Figure 5), rather than 2005, the Toronto Accord target (Transport Strategy Committee, 1992).

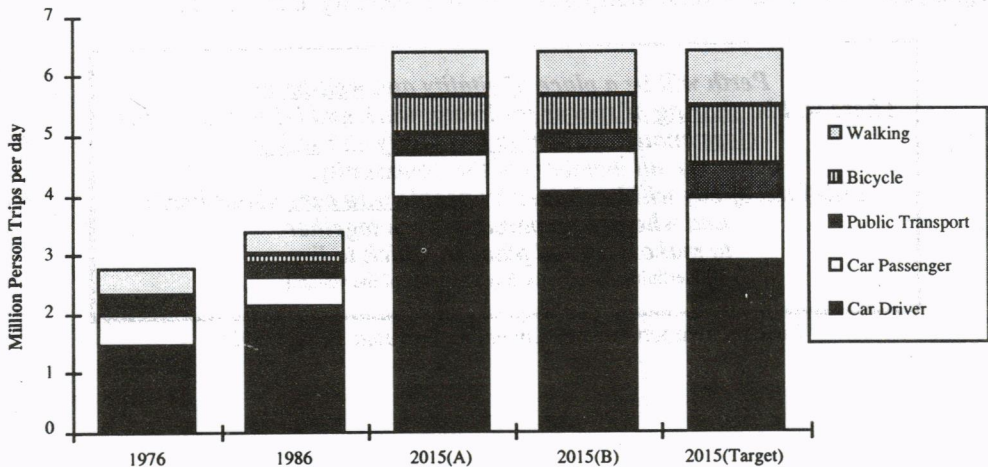


* Federal Chamber of Automotive Industries 'Achievable' ** Ecologically Sustainable Development 'Achievable'
 *** Ecologically Sustainable Development 'Strong Incentives'

2015A is low real income growth, high petrol price, high car running cost;
 2015B is high real income growth, low petrol price, low car running cost (RRR, 1991)

Fig 5. Greenhouse Gas Emissions from Transport: Perth

While only 7 per cent of all person travel, under this earlier scenario, would be by non-motorised modes, 30 per cent of all trips would be – and it is trips, rather than travel, which enable access to activities (see Figure 6).



2015A is low real income growth, high petrol price, high car running cost;
 2015B is high real income growth, low petrol price, low car running cost (RRR, 1991)

Fig 6. Trips by Mode, 1976 - 2015

5. THE NEXT THIRTY YEARS

5.1 The Role of the Bicycle

Non-polluting transport, accessible to most of the population, is achievable – for short to medium distance trips, at least. Unfortunately, the dispersed nature of activities, outside the central area of Perth, is a major factor inhibiting travel by bicycle or on foot as travel distances are frequently too long for these to be feasible. Even where individual trips are short enough to be made on foot or by bicycle, linking of trips to access more than one activity is likely to take the total travel beyond the feasible distance. And yet, where activities are in close proximity, people are willing to walk or ride – 60% of trips made wholly within the central area of Perth are pedestrian or bicycle trips.

Besides reinforcing low densities of development, high levels of car use can make traffic conditions unsatisfactory for both cycling and walking. It is all too easy to assume that the absence of pedestrians or cyclists in an area reflects a lack of demand, when it could also be a result of adverse conditions.

Whilst there are many things which might prevent the use of a bicycle for travel (apart from not owning a bicycle), such as the need for a car for related trips or to carry luggage, cycling was a feasible alternative for 23 per cent of car or public transport trips. It is perceptions, more than reality which reduces the number of trips for which cycling is seen as a realistic alternative (Socialdata, 1987b).

On current trends, 8% of trips could be made by bicycle by 2020, an increase from 235 000 per day to 538 000. The Metropolitan Transport Strategy target for 2020 represents 774 000 trips per day.

To put this target in perspective:

- If *all* current trips for which the bicycle was a feasible option or for which perception of route was the major deterrent (ie potentially remediable by engineering means) were made by bicycle, this would represent around 15 per cent of all trips (Socialdata, 1987b).
- If *everyone* had access to a bicycle for every trip and there were no perceived route problems, up to 21 per cent of trips could be made by bicycle (Socialdata, 1987b).
- If the growth in the proportion of the population which cycles regularly and the slightly lower growth in cycling activity continued at the 1982-89 rate, cycle trips would be around 16 per cent of all trips by 2006 (see Figure 7). In practice, it will become increasingly difficult to get additional people to take up cycling.

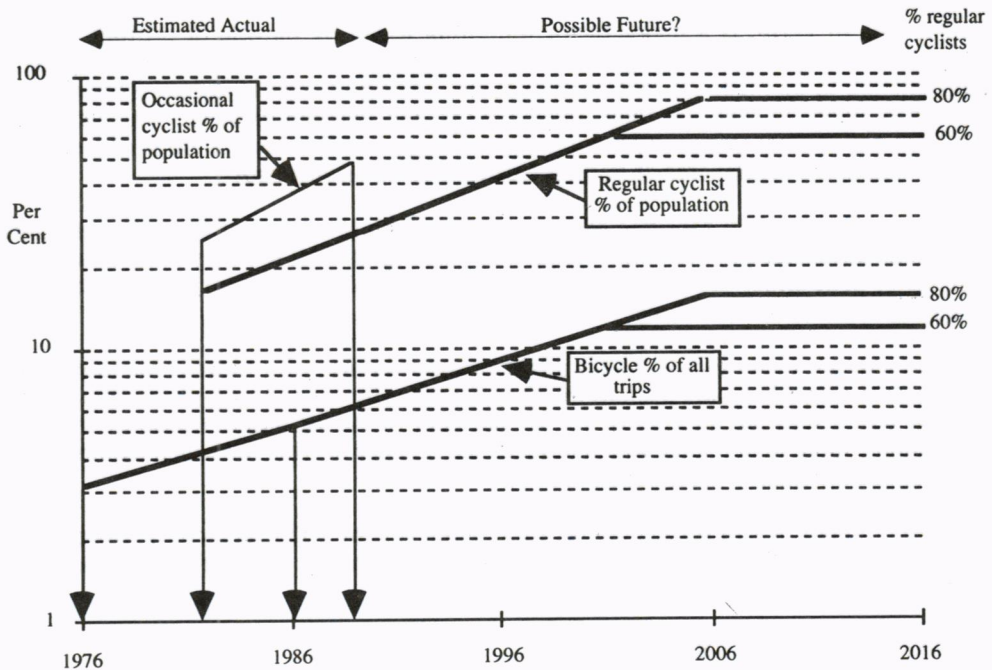
These are not forecasts, but attempts to estimate the upper bounds of cycling activity, within the constraints of existing urban form and travel choice behaviour. Given these upper bounds, it is clearly necessary to go beyond measures which are directly within the remit of bicycle planning groups, in order to achieve what are seen as desirable targets.

5.2 Planning for Cyclists

For 11.5 per cent of trips to be by bicycle, cycling will have to become even more an adult activity and a transport activity, and the planning and design of cycle facilities will be of even greater importance. Facilities for cyclists must:

- form continuous routes suitable for regional as well as local travel;
- form networks rather than being isolated facilities serving a single purpose, such as travel to the local school;
- be suitable for cycling at typical adult speeds;
- be integrated with road and other transport and traffic planning, including bicycles as an access mode to public transport – in 1981, some 41% of people in Perth lived

within comfortable cycling distance of a railway station (Campbell & Adams, 1989). This proportion has increased substantially with the opening of a fourth suburban rail line in 1993. In conjunction with rail electrification, safe bicycle parking has been provided at many stations with improved cyclist access from the surrounding areas.



(A regular cyclist is defined as someone who rides a bicycle at least once per week)

Fig 7. Cycling Potential in Perth

Whilst a substantial amount has been invested in local and regional bicycle facilities over the past decade, a major step forward was taken when the present WA Government announced its commitment, in 1993, to design a network of cycleways for the Perth metropolitan area and to develop a construction schedule that will see the project completed by the end of our second term in office (WA Coalition, 1993).

Although a comprehensive network of easily-identified regional cycling facilities, providing ease of access, limited interruptions to travel and continuity, was identified in the Perth Bikeplan (1985), development of facilities has been spasmodic. Bikewest has been reviewing existing and planned regional cycling facilities to establish a program for construction and development of a regional cycling network to complement local on-road and off-road facilities, a specific transport policy commitment of the current WA State Government, made during the election campaign. Particular attention has been paid to the possible use of suburban rail reserves (GHD, 1993) and cycle access to the Perth Central Area (Land Planning Associates, 1993).

For the first time, planning has identified opportunities to establish high levels of cycle accessibility both to and within the Perth Central Area (Transport, 1995c), largely in conjunction with the removal of a large amount of through traffic as a result of the impending construction of an inner city bypass, which will be largely in tunnel.

In addition, a Task Force established by the Minister for Transport has noted that many local area traffic management devices, particularly speed humps, represent significant hazards for cyclist, among others. It has recommended the removal of existing speed

humps by 2005 and the instigation of more comprehensive traffic calming strategies. The Task Force also recommended that clearly-marked cycle lanes be installed on all primary and district distributor roads by 2010 (Scott, 1995).

Facilities for movement must be complemented by end of trip facilities – taken for granted in the case of car travel. The Perth Bikeplan (1985) encouraged provision of appropriate bicycle parking facilities and recommended there be a requirement for provision of bicycle end-of-trip facilities (parking and, for commuter cyclists, changerooms, showers and lockers) where car parking is required as a condition of commercial development and in the Perth CBD.

A new draft central city parking policy, developed by the State Government and the City of Perth, has taken up this recommendation and includes a requirement to provide 50 cycle parking bays per hectare of site area (one quarter of the maximum car parking allowance) as a condition of all new commercial developments in the central area of Perth.

5.3 Achieving It: Reorganising the Mental Garage

The key to achieving many of the changes mooted in this paper can be summed up in the expression *reorganising the mental garage*. There are at least two mental garages which need to be re-organised to put non-motorised modes ahead of motorised transport, and public motorised transport ahead of private motorised transport:

- that of the transport user;
- that of the transport and land use planner

In the case of the transport and land use planners, reorganisation of the mental garage requires a similar inversion of mode priorities. It would certainly help if local area and subdivision planning were based, firstly, on walking and cycling access (Transport Strategy Committee, 1992), to provide genuine accessibility to local facilities as the first priority. Local streets become places for people as well as for vehicles.

RE-ORGANISING THE MENTAL GARAGE: WEANING TRAVELLERS FROM INTERNAL COMBUSTION ENGINES

- Most people in Australia are able to walk a reasonable distance - certainly further than they do now.
- Most households in Australia have at least one bicycle, many of them more than one, but it is likely to be kept at the back of the garage and access to it might well require the car to be moved.
- Many city people have access to public transport, but it often does not provide convenient travel to their destination.
- So, we all regard the car as our first choice, especially if we can drive ourselves and don't have to rely on someone else.
- *But* what would happen if we re-organised the 'mental garage' and organised our travel choices on the following basis?
 - Can I walk to where I want to go?
 - Can I cycle to where I want to go?
 - If not, can I use public transport to get there?
 - If none of these is possible, do I really need to go to that place, or is there an alternative destination which would make one of these feasible?
 - If not, can I travel in a car with someone else (either as driver or passenger)?
 - If not, can I go at some other time, when this would be possible?
 - If I must travel by car, is it tuned and running properly?
 - In the longer term, do I really need this large a car?

These questions are at the heart of travel demand management. Their ordering, here, parallels that suggested by Westerman (1991) for planning.

In existing developed areas, let us encourage traffic calming and other transport/traffic actions which are consistent with the interests of pedestrians and cyclists. A significant proportion of traffic management devices, which are put in place with the admirable objective of reducing or slowing motor vehicle traffic in residential streets, rely on road narrowing or vertical or horizontal displacement (humps or 'chicanes'). These can easily create squeeze points for cyclists or pose hazards to safe cycling, when other techniques might achieve the same objective without creating cyclist hazards.

Bikewest has recognised this as one of the major issues it needs to address, but we must be very aware that changing attitudes does not necessarily change behaviour. The most effective way to achieve behaviour change is to influence experience as new experiences provide the 'excuse' to change (FORS, 1989).

6. WHERE TO NOW FOR PERTH?

6.1 Key Outstanding Issues in Perth

The overall approach of the Perth Bikeplan continues to be appropriate, but there are some key areas to be addressed, to take account of, and build on, experience since 1985.

- a) *Maintaining the integrity and continuity of cycle routes*, especially those which use the existing street system. In the specific area of *local area traffic management*, we need to develop and implement traffic management devices which are more cyclist-friendly.
- b) *Urban design to facilitate local trips by bicycle, without the need for special facilities*. In minimising the adverse impact of private cars on residential lifestyles, we have created a form of residential planning which makes it almost imperative to have a car.
- c) *Providing for the regional role of cycling*, through taking advantage of opportunities which already exist.
 - Alignments of suburban rail and controlled access highways/freeways, including facilities in the reserves, where appropriate;
 - Important Regional Roads;
 - Extending Bikeplan routes into newer areas.
- d) *Signing and 'on the road' information for cyclists*. Apart from signs identifying the start and finish of dual use paths, there are few signs to aid cyclists in Perth. Bikewest has recently undertaken a study of signage and signing protocols for cycling, which is being implemented.
- e) *Overcoming the invisibility of cyclists*, in the literal sense (on the road at night) and in terms of their recognition in transport and related planning.
 - Bicycle lighting
 - Transport and traffic data
 - Accident data
- f) *The apparent decline in cycling to school*. Since 1989, there has been an apparent decline (based on observations at selected schools) of 45% in high school and 28% in primary school participation rates. This decline coincides with the emphasis on helmet wearing and could be an unintended by-product of increasing awareness of safety issues in cycling.
- g) *Cyclist and Motorist Education*. It has proved difficult to achieve a high rate of penetration with existing cyclist education programs.

6.2 Mainstreaming and Other Strategies

The Perth Bikeplan was an 'affirmative action' plan, in a time when it was necessary to regain ground which had been progressively lost since the coming of the private motor car. The comprehensive Bikeplanning approach, pioneered in Geelong, Victoria, had set a broad agenda, but still a major part of the debate was about 'Apartheid or Multiculturalism' in providing for cyclists on the road (Ker, 1984).

A major problem with affirmative action programs is they can easily be seen as working against the people one is trying to influence. A stage is reached where this should be replaced by strategies to work with those people, harnessing their expertise and energies.

The new Metropolitan Bicycle Strategy (Transport, 1995a) is a 'coming of age' and is an integral part of an overall Metropolitan Transport Strategy (Transport, 1995b) developed jointly with Main Roads WA and the WA Ministry for Planning. Whilst it still cannot be said that the cyclist is treated equitably compared with the car driver in all cases, it is time to move on. Just as affirmative action in areas such as employment has been replaced by 'equal opportunities' and 'anti-discrimination' legislation, so bicycles must re-enter the mainstream of transport, traffic and urban planning, if further advances are to be made. It is a happy coincidence that they do so at a time when the form and functioning of our cities is under close scrutiny, for increased bicycle use will enhance the quality of life for their citizens and the directions being established by urban planners will facilitate widespread use of the bicycle.

The Metropolitan Transport Strategy, of which this Bicycle Strategy is a part, is an integrated and comprehensive approach to the future of transport and access in Perth. It requires transport to be integrated with land use planning and development, and it also requires integrated traffic strategies. No longer can the bicycle be seen, a priori, as something apart from other traffic; where separation from motor vehicles is imposed, it should be as a result of assessment of the needs of all road users, not a gut reaction to the vulnerability of cyclists.

Bicycle activities in WA have tended to have an emphasis on:

- education and encouragement, including maps rather than planning.
- engineering, rather than planning.
- separation rather than integration. Not only in terms of separate cycleways vs on-road treatments, but also lack of integrated objectives for traffic calming.
- local rather than regional planning.
- reactive rather than pro-active strategies in engineering/planning.

The updated Bicycle Strategy represents a re-orientation of the 'segregation/integration' debate from the roadway into the transport and urban planning arena, replacing 'apartheid' with 'multiculturalism' (Ker, 1984).

7. THE RELEVANCE FOR ASIAN COUNTRIES

It would be presumptuous to provide prescriptions for enhancing cycling in Asian cities on the basis of experience in an American/European style city with significant differences of geography, urban form, lifestyle, culture and climate. Some lessons learnt in Perth might, however, provide some useful support for initiatives to encourage cycling in Asian cities.

- Most important is the value of establishing an effective 'champion' for cycling. Bikewest was deliberately established as a 'multiplier agency': an organisation which uses its own limited resources to encourage others to do better for cyclists in their own

programs. Bikewest has frequently been called a *lobby group within Government*. Other Australian States are now seeking to emulate this model.

- The effectiveness of this champion will be greatly enhanced if it is contributing to the achievement of a wider imperative for government or the community. The global imperative of reducing greenhouse gas emissions is probably stronger in developed countries, where per capita fossil fuel use is already high, but Bikewest's greatest success has come through an emphasis, promoted by the whole WA Department of Transport, of *maintaining or enhancing accessibility with less need for motorised mobility*. The traveller then spends less on transport, the cyclist and pedestrian have better environments and local communities suffer less adverse traffic impact.
- In the past, transport planning has been the exclusive preserve of the 'experts' - those who know sufficient about the subject to be able to remove themselves, in principle at least, from the concerns of individual, particularly mode-specific, organisations or professions. The 'expert' approach also does nothing to create a sense of ownership of the strategy or sharing of values in the community, without which any planning will become an exercise in futility.

The current vogue for separating responsibility for the planning of transport systems and services from their construction, operation and maintenance provides an important opportunity to introduce new concepts, particularly those with a longer term focus such as social and environmental sustainability. But how often do those involved in planning transport in your city get out on a bicycle themselves, especially as part of a shared and structured experience?

- From an encouragement perspective, it is clearly easier to get people to take up cycling as an occasional activity than it is to persuade people to cycle more often and for a wider range of trips. Those who seek to encourage cycling as a transport activity need to seek allies, for example in the land and building development industries, for what is built today will be here for the next 50 to 100 years at least.
- Changes in attitudes alone are often not effective in achieving change in transport (Office of Road Safety, 1989), because people tend to select information that supports their attitudes and avoid contrary information. Nevertheless, a stimulation of existing attitudes may give support for a desired behaviour change (OECD, 1994).

8. CONCLUSION

Encouragement of and planning for increased use of bicycles in our major cities has been a feature of government policies in Western Australia over the past 15 years. During that time, there has been rapid growth in cycling activity.

Whatever the causal relationship between these features of the 1980s, the full potential of bicycle transport will not be achieved unless there are some significant changes in individual and organisational behaviours. These changes are also of importance to global environmental concerns and the related thrust of ecologically sustainable development.

Cycling must be integrated with the rest of transport and with land use planning, at local and regional levels. If it is not, bicycle planning and management groups will continue to have to react to the actions of others, making sure that they do not impact adversely on cyclists, rather than being able to be forward looking.

Many of the transport and land use strategies which would benefit cyclists and cycling would also enhance the convenience of walking as a means of gaining access to facilities,

goods and services. However, pedestrians do not have a 'Pedwest' to look after their interests!

In the long term, it would be desirable for organisations like Bikewest to do themselves out of a job – when other agencies have truly internalised the needs of cyclists into their own programs. In the meantime, continued affirmative action will be needed to ensure that planners and transport users are not blinded by shiny new hi-tech toys, when an older technology has so much to offer.

For anyone who wishes to see some of these things for themselves and, at the same time, to contribute to and benefit from the most important cycle event outside Europe and North America, Velo Australis 96 will be the opportunity to hear from some of the most eminent and experienced people in the field of bicycle activism and planning.

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