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## Perth Metropolitan Region Pedestrian Strategy – Points to Ponder

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### Abstract

Work is currently underway on the development of a Perth Metropolitan Region Pedestrian Strategy. The objective of the strategy is to facilitate the achievement of the pedestrian/walking trip targets published in the (Perth) Metropolitan Transport Strategy (1995). The target is to (effectively) double walking trips to 12.5% of all travel trips by the year 2029.

An important component in the development of the strategy has been that of public consultation. In endeavouring to stimulate such input, individual community members, pedestrian *focus* officers (employed by Local Government) and/or pedestrian *focus* groups throughout the Perth Metropolitan Region were identified. Thereafter, public forums were arranged to identify the main issues to be addressed by the proposed strategy.

A spin-off to this consultation process has been the identification of many other organisations, both public and private, significantly involved in this community-wide issue of walking. It is now anticipated that the extent of their involvement will be embraced by the Strategy through its recognition of this significantly *multi-portfolio* issue.

As part of the Strategy development process, a Discussion Paper, focussing on the issues and the players, has been developed. This, recently published, Discussion Paper has raised questions that may be of interest to the delegates to this conference. This paper will present these points to ponder.

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## Introduction

The Perth Metropolitan Region is a region of growth, both in size and in population. This growth requires an ongoing focus on land-use and its associated activities. There is an integral relationship between these activities and travel, and providing for the movement of people and goods within this region is a core activity of Transport WA.

Perth's travel infrastructure has expanded to the neglect of the more accessible, environment friendly, healthier and sustainable travel mode alternatives of public transport, cycling and walking. Walking is a means of travel and recreation everywhere in Western Australia. Increasing walking has the potential to contribute to an increased quality of life for all Western Australians. This is particularly so in the Perth Metropolitan Region, where there is a concentration of activities within easy walking distance of each other and, quite often, people's homes.

Government shares the responsibility of enhancing and sustaining Metropolitan Perth's amenity. Within Transport WA, the most recent and substantial statements about walking as a mode of transport have been published in *The Way Ahead: Metropolitan Transport Directions for Western Australia* and, in particular, the *Metropolitan Transport Strategy* (abbr. MTS), published in 1995. The MTS establishes a target of 12.5% of trips for transport to be made by walking by the year 2029.

Until relatively recently, there has been no clear focus on walking as a mode of transport. Most of the transport interest in pedestrians and walking has arisen in the context of road safety. The resulting emphasis on the negative (safety only) aspects of walking has served to obscure the positive messages about accessibility, cost, environment, health and independence linked to walking. These positives of walking, be it for either travel or recreation, can be encouraged in many ways.

During the Strategy development process, it became increasingly apparent that Transport's wish to see an increase in walking is also shared by members of the community and others. These *others* include organisations involved in commerce, community services, environment, health, land-use planning, sport, recreation and tourism. They all encourage walking in their own way and each has contributed to the compilation of a recently published Discussion Paper. Collectively, linkages have been established through the formation of a Strategy development Reference Group. This group consists of seven members of the public, five representatives of non-government organisations, four from local and seven from state government organisations.

At this stage of the Strategy development process, the Discussion Paper has been released for public comment. Through the input of many contributors, the Discussion Paper has endeavoured to identify the major issues related to pedestrian activities in the region. It is a comprehensive presentation of background information, opportunities, ideas and suggestions. Every effort has been made to stimulate comment and to provide the appropriate and relevant springboard from which to develop the Perth Metropolitan Region Pedestrian Strategy. These aspects of the Discussion Paper are presented herein.

### The Value of Walking

Everyone walks as part of, or in preference to, any other form of transport. Walking:

- ◆ is a practical, minimum cost activity for all trips not involving large or heavy loads;
- ◆ imposes no costs on other travellers;
- ◆ imposes no community environment costs, eg air pollution or resource depletion;
- ◆ enhances community well-being, by increased social interaction; and
- ◆ provides a valuable opportunity to improve health and fitness in moving around.

### Pedestrian Related Influences and Influenced

#### Environment

Those external aspects that impinge upon one's quality of life are inherently related to the local and global health of our environment. The environment's health is a result of the combined impacts of individuals within the community. The concentration of global atmospheric carbon dioxide was at a consistent level of approximately 280 parts per million up until the nineteenth century. From the 1850's, the level began to increase. What happened to cause the change? In simplistic terms, the Industrial Revolution. And what has happened since? The rate of increase now approaches an exponential rise in reaching a current level of 360 ppm, with a major threat to environmental health being the combined effects of the exhaust gas emissions of motor vehicles. The local and global health of our environment impinges upon the quality of life of every individual. It is equally a direct result of the combined impacts of activities of every community member. If many short trips by motor vehicle (involving cold starts/engines) were undertaken on foot, significant benefits to our environment could be realised.

#### Sustainability

A growing fundamental awareness of the finite limits of our planet has led to a wider appreciation of each generation's responsibility to ensure the continued sustainability of the planet for future generations. Walking uses much less non-renewable resources than motor vehicles in production and operation. Fundamental shifts to more sustainable lifestyles are becoming more of a necessity for our global community to have a future.

#### Health

For the individual, health issues are paramount to a long and happy life. Without good health, quality of life for the individual diminishes. Our health relies on our own initiatives and the influences of our environment impacting upon us. There has been a recent and dramatic decline in physical activity undertaken by Australians. Appliances for the home are promoted for their labour saving qualities, travel is increasingly in a motorised vehicle, occupations rarely require effort and recreation and leisure activities have become increasingly sedentary. Physical *in-activity* is now the most prevalent risk factor for heart disease in Australia and is a risk factor for several other diseases. As

little as 30 minutes of moderate physical activity on, preferably, all weekdays provides a health benefit. Surveys suggest the activities most likely to be undertaken and continued throughout life are those that be incorporated into everyday habits and lifestyle. Walking for transport offers significant potential for increased physical activity

#### Social Equity

Walking complements other parts of the travel system. It links with private and public motorised transport modes to provide a multi-modal journey. Walking also has the potential to be an alternative transport mode for short to medium motorised modes. To meet the transport needs of the community, walking needs to be a viable option in the choices we make in transport. This is also an important consideration in the case of people in wheelchairs and scooters. Some of the segments of the population who are assisted by walking include those who:

- ◆ cannot or choose not to own a motor vehicle;
- ◆ do not have access to a motor vehicle for the required period; or
- ◆ cannot or choose not to use public transport

#### Education

Everyone's behaviour accumulatively impacts on the whole community. Educational establishments are a close second to the home in being the shapers of a lifetime of habits and behaviours. What children are taught and how they subsequently behave sets their pattern of living for the rest of their lives. Not only is it important being in school, getting to and from school is also important. The mode of transport adopted/encouraged will likely be the behaviour that our children will adopt when they become parents. Walking is a significant mode of transport for travel to education facilities. The encouragement of good habits in terms of walking safety, road rules and travel mode choice in school children can contribute to safe sustainable transport modes. This is more likely with the creation, existence and maintenance of safe routes to school

#### Urban Development

There are two major implications for residential development planning that relate to transport. Firstly the link between land use and dependence on the motor car, and secondly the impact of traffic on the residential environment. Closer fits between housing, employment and transport modes are required. Places of employment and commerce are seldom designed with walking in mind. Consequently Australian urban form is significantly disposed to and predominantly focussed on motor vehicle needs. Future developments of greenfield areas and redevelopment of existing sites can contribute to making walking an attractive choice of transport mode. Planners will need to integrate the needs of pedestrians into their developments to reduce motor vehicle travel, car parking and transport costs.

A pattern of urban management has been evolving leading to the better integration of planning/implementation techniques at all levels of government, within a coherent national framework. The *Australian Model Code of Residential Development* (abbr. AMCORD) has been pivotal in the process. Based on AMCORD, the WA Planning Commission recently published the *Liveable Neighbourhoods: Community Design Code* to suit WA's conditions and acknowledging that pedestrians and others need to be involved in the development of plans that will affect their lifestyle. Further possibilities are car-free areas in cities (except for people with disabilities), and strategies to encourage walking instead of driving.

#### Economic Benefits

Tourism is a major industry in Australia. Increasing demand for authentic experience as part of tourism indicates a major role for walking tourism. This can be offered in a range of formats to meet different needs and market sectors, for example, fully supported small to medium scale walking tours, to independent walking facilitated by appropriate resources, maps and routes. Walking tourism offers low impact, high quality experience. Ecotourism and cultural tourism operators are well positioned to embrace this concept. When supported by appropriate facilities, walking increases access to shops and commercial areas and reduces the need for car parking.

Today, in the face of competing community demands for land and space, particularly in cities and metropolitan regions, expansion of road infra-structure is reaching its' limitations. This has led to saturation and congestion, and at a cost. Both the community and industry benefit from a healthy workforce through reduced business transport costs. Equally importantly, motor transport has led to accidents, injuries and fatalities at some significant cost. Road safety can be improved by encouraging walking, a benign transport mode which poses minimal threat to other road users.

#### The Transport Sector

Transport policy should recognise pedestrians as an essential and desirable component of the transport mix. Transport infrastructure should cater for pedestrians as well as other road users. Ease of access to public transport modes can be significantly increased by the provision of facilities that both support and encourage multi-modal travel.

#### The Professions

Australia's existing/future professionals (architects, doctors, engineers, planners, et al) need to be made more aware of the important contribution that their daily decisions can make on encouraging pedestrian activities. The potential to do more is becoming increasingly apparent. So too is the willingness of the professions to make such contributions. How it is accomplished, is part of the challenge.

#### The Australian Road Rules (abbr. ARR)

Of some significance in these rules is the redefining of the term *pedestrian*. This definition has now been broadened to include wheeled conveyances used by people with disabilities, users of roller-boards, roller-skates and roller-blades. This is significant as many facilities used by pedestrians are additionally shared with cyclists. The term *dual-use path* has been replaced with the term *shared path*. This acknowledges the term dual-use was previously interpreted in a strictly *two-functional* sense – walking and cycling. Shared path recognises use by *all pedestrians* and cyclists and embraces far more than only two actions and/or behaviours.

It should also be remembered that the definition of a *road* also includes the pedestrian facilities within the road reserve. Consideration of *all* user actions/behaviours is thus of paramount importance. Furthermore, the mix of pedestrians/pedestrian facilities with cyclists/cycling facilities is also increasing. It is imperative that each category of user is safe and supported by appropriately designed and constructed facilities. To further complicate matters in this regard, the ARR will allow all cyclists under the age of 12 to ride on *footpaths*. For those over the age of 12, the rules leave it to individual authorities to decide whether or not they will be allowed to ride on footpaths. As the principal facility owner, Local Government is accountable in the event of user conflicts and the issue is of particular interest to its members at this moment in time.

#### Austrroads

In 1997 the Australian Transport Council endorsed its revised Strategic Plan giving primary responsibility for the implementation of its work to the Standing Committee on Transport through four sub-modal groups: Air, Sea, Rail and Road. *Austrroads* was designated the national *Road* sub-modal group. The mission of *Austrroads* is to pursue the effective management and safe use of the nation's roads as part of the Australian transport system and by the development and promotion of national practices. It also provides professional advice and supports ministerial councils and national bodies. *Austrroads* has historically worked towards uniformity of practice in respect of design, construction and user aspects of roads and bridges and with this in view, publishes guides and general procedures. The development of the *Austrroads Guide to Traffic Engineering Practice* series now consists of 15 Parts. They are a practical guide to traffic engineering for highway and transport engineers in road authorities, local government, engineering and planning consultants, and engineering students.

If we recall, Part 13 Pedestrians and Part 14 Bicycles were produced to meet the requirements of pedestrians and cyclists. Dual-use paths were also for their use. All were developed in the context of the *pre-ARR* definitions of pedestrian and cyclist. Today, the full extent of the various users of dual-use paths is fully recognised. These users will be joined, in the future, by the additional users of *shared paths*. As previously stated, these additional users are *mobile* people on wheeled vehicles. They consist of the conveyances of people with disabilities and users of roller boards, roller skates and roller blades. Their presence, motion and associated movements were *not* a consideration at the time of the development of either Part 13 Pedestrians or Part 14

Bicycles. It is imperative that facility standards and/or guidelines constantly meet the requirements of all users. As the users change or the numbers of users increase, the design standards and guidelines that are necessary to support the harmonious co-existence of all users must maintain pace. The need to provide sustainable, environment friendly and balanced (integrated) transport systems for all users is an ever increasing challenge but an essential and important requirement

Austrroads has historically prioritised motorised transport/traffic issues over those of non-motorist forms of transport. In this way, the transport developments that have taken place to date have met the needs of the *conveyance* - the motor vehicle. This is no longer to be the case as Austrroads investigates the significance of a revision that *adopts the movement of people & goods* in lieu of *vehicles* as the fundamental design and development criteria.

### **What Issues Will Need To Be Addressed?**

#### **Attitudes & Behaviours**

The historical development of road networks, their increasing congestion and saturation has led to, what some claim to be, the intimidation of pedestrian and cyclist alike. There is now a commitment to increasing the number of walking, cycling and public transport trips. The result -- more pedestrians, more cyclists, more people on footpaths, more people on bike paths, more people on shared paths, and more potential for on-path conflicts. Of course, not everyone will respond to this call, consequently, more motor vehicles. The result -- more pedestrians, more cyclists, more buses, more motor vehicles, and more potential for road user conflicts.

Despite repeated attempts to do so, there is probably nothing more difficult to change than personal behaviour, other than, perhaps, a *lifetime* of personal behaviour and particularly, it would seem, motor vehicle driver behaviour. Education has absorbed considerable time, effort and sums of money in attempting to improve road user behaviour. As long as new players come along, the need to educate them persists. To what extent investment in the provision of education resources is needed, however, is dependent upon how well it is supported. Where education fails, for whatever reason, enforcement becomes necessary. Enforcement is truly a cost. As road trauma redirects much needed finances from health treatments that *cannot* be avoided, to the treatment of casualties of motor vehicle incidents, that *can* be avoided, enforcement and education continue to be essential.

From birth, our behaviours reflect the attitudes of our trainers. Thereafter, we control our own behaviour as we self-modify our attitudes. Attitudes arise from, amongst other factors, spatial conditioning. The space engineered to the movement of people and goods is arrived at through processes encapsulated in the word *planning*. In the light of increasing global evidence, it has become apparent that transport *planning* has been in need of some considerable improvement for some time. As we move to the new primary consideration of the movement of people and goods, the deficiencies now associated with giving priority to the movement of the motor vehicle must be overcome.

### The Rules Have Changed

It should be remembered that under the design and development regime that afforded priority to the needs of the *conveyance*, not that which it *conveyed*, past expert panel opinion reflected the needs of the motor vehicle and the behaviours and practices of motor vehicle drivers. This being so, the content of each Part of the *Austroads Guide to Traffic Engineering Practice* reflected these guiding requirements. One might now have to question the appropriateness of these publications. Why is this so? Over recent years, sufficient evidence has been presented to confirm that to be really au fait with pedestrian or bicycle issues, it is equally important to have input from pedestrian and cycling experts. Pedestrian and cycling experts are knowledgeable of the needs of pedestrians and cyclists and the behaviours and practices of pedestrians and cyclists.

Whilst there *has* been increasing recognition of the need for this input, and added representation, it has been within the limitations of the dominant *motor-vehicles-have-priority* regime. In the absence of this input, such panels cannot possibly be regarded as adequately representative of the issues of *all* road users. Why is this important? It is important because those who design and construct facilities do so in compliance with standards and guidelines published by, for example, Austroads and similar organisations. Once built, those who subsequently own the facilities carry the duty-of-care and bear the responsibility for the safety of *all* users. Each player in the process expects the facility to meet the needs of *all* users, not primarily those of a select group, and to have been designed, built and maintained accordingly.

Can it now be honestly said that the *Austroads Guide to Traffic Engineering Practice* series was compiled to meet the needs of *all* users? It must now be acknowledged that the publications pre-date the current recognition that the needs of *each* defined group of users are now regarded as *equally* important. So whilst the publications might reflect biased prioritisation to the requirements of one particular user group - motor vehicles, and that was consistent with the philosophy of the day, this is no longer the case.

Is the introduction of the Australian Road Rules also of relevance to these deliberations?

Should Austroads now recognise that declaring to adopt people and goods in lieu of vehicles as its fundamental design and development criteria has significant implications? Not least of these implications being the necessity, perhaps, to now review every part of the *Austroads Guide to Traffic Engineering Practice* series? Should this *not* be done, will it really be possible to develop truly balanced or integrated transport systems reflecting the requirements of all users without fear or favour?

### Planning

Correct planning is fundamental to the efficient and effective movement of people and goods. In the planning process of the future, it is imperative that each category of user is:

- ◆ recognised as an entity;
- ◆ equally recognised; and
- ◆ recognised as having unique requirements

Each of the above dictate the basic design criterion of all facility construction proposals. Their importance cannot be overstated. No matter how good the engineering, it will never be satisfactory if the planning is unsatisfactory.

The Perth community is highly car dependent and regards car ownership as both a necessity and a sign of prosperity. Inherent in this mindset is a seemingly negative attitude towards alternative travel modes. These attitudes need to change for walking to be seen as a legitimate quality of life activity. Changed attitudes are important both as a precursor to changed behaviour by way of more walking and as a means of modifying road user behaviour.

#### Past Choices

The elevation of the surface of the footpath above that of the road has traditionally assisted in the demarcation between footpath and road. It has also fulfilled other useful (engineering) purposes in the process. Unfortunately, however, the kerb, employed as the line of demarcation, acts as a hurdle to some. How severe a hurdle is dependent upon who is doing what. Parents with prams, children on tricycles, people with shopping trolleys, the elderly, the infirm, the vision impaired and physically disabled, and no doubt others, would testify to varying degrees of difficulty.

- ◆ *In choosing to elevate the surface of the footpath above that of the road therefore, is the most influential factor in footpath discontinuity the provision of a kerb?*

It is now mandatory to cater for the needs of people with disabilities on footpaths, at bus stops, roadside kerbs, road crossings, etc. This has led to alternatives to the step-kerb. Despite such alternatives, the fundamental feature remains – the footpath surface is discontinuous and changes height relatively significantly over comparatively short distances. *Why should that be?*

Motor-powered vehicles, however, designed to run on cushioned rotating discs, supported by suspension devices, providing comfort and environmental protection for its occupants don't suffer such an obstacle. *Is that choice now warranted?*

Amongst the considered advantages of having a motor car, is its instantaneous availability and the travel time it saves. Whilst its availability is a function of ownership, savings in travel time are only achieved if car average speeds can be maximised. Contributory to this maintenance of speed is a network of roads planned with minimum interruption to motor vehicle progress.

- ◆ *Is a most influential factor in the maintenance of motor vehicle speed, the continued provision of a smooth pavement surface that suffers virtually no discontinuity?*

The difficulties of maintaining vehicle speed and minimising interruptions to a vehicle journey increase with increasing vehicle numbers. This is particularly true where other than motor vehicles have to be considered.

- ◆ *Is the most influential factor to the increase in road user fatalities, the increase in motor vehicle speed and non-compliance with vehicular speed limits?*

As individual personal wealth has grown, vehicles ownership has increased in parallel. So too, has the priority afforded to this seeming panacea of transport. In many situations, the mix of pedestrians and motor vehicles has also unavoidably increased.

- ◆ *Is a most influential factor to higher pedestrian journey times, the delay in crossing roads at grade at locations convenient to motor vehicles more so than pedestrians?*

As population and the number of vehicles continue to rise, fitting everything in becomes an increasing difficulty! Simple mathematics reminds us that if you half the radius of a circle or side of a square, then the enclosed area reduces by 75%. Is it any wonder, therefore, that congestion is a problem if we remain intent on getting motor vehicles to the centre of grid or ring-and-radial geometry networks?

- ◆ *Is a most influential factor to increased road user congestion, the non-linear reduction of available space in which to accommodate all road users?*

The problems of city-centre congestion are well known and have been the focus of considerable attention and activity. Internationally, these problems have been overcome over the last decade through the adoption of pedestrian-friendly city and residential centres. Their success has resulted from the adoption of sensible, yet fundamental criteria. These criteria may be stated as:

- ◆ pedestrian-friendly city or residential centres are *not* necessarily car-free centres;
- ◆ whilst roads still lead to a centre, they mostly no longer pass *through* the centre; and
- ◆ the adoption and integration of *all* space-user related policies.

Such policies include consideration of:

- ◆ access;
- ◆ accommodation;
- ◆ cycling;
- ◆ parking;
- ◆ people with disabilities;
- ◆ public transport;
- ◆ taxis;
- ◆ retail/service outlets; &
- ◆ Workplaces.

The inconsistency and lack of well defined and maintained pedestrian networks and facilities are obstacles to encouraging more people to walk.

- ◆ *In residential areas (a people area) is it appropriate that the determinant in the provision of footpaths is the number of motor vehicles that use the street?*
- ◆ *Is the most influential factor that discourages walking in residential areas, the failure to allocate priority to pedestrians and to provide linked footpaths on both sides of the street and at street intersections?*

Traffic management schemes focus, predominantly, on motor vehicles. Schemes and initiatives need to provide more priority to pedestrians and address the historic predisposition towards cars. In addition to comfort, routes and frequency of service, the success of any public transport system is conditional upon convenient and safe accessibility.

- ◆ *How often in alighting from a bus, is the passenger faced with crossing a busy multi-lane and vegetated median highway, in the absence of any crossing facility?*
- ◆ *Perhaps the provision of a traffic-light controlled crossing at bus stops would not only help the bus passenger in crossing the road but might also serve to provide a useful traffic calming device in, what are quite often, primarily residential areas?*

### **What the Users Say**

As part of the Strategy development process, a public forum was asked two questions, "What Discourages Walking?" and "What Would Encourage Walking?"

### **What Discourages Walking?**

#### *Urban Planning & Design:*

- ◆ **Macro Issues:**
  - Poor proximity/land use mix generating services/amenities not in walking range.
  - Land zoning that separates employment from residences.
- ◆ **Micro Issues:**
  - Lack of footpaths.
  - Frequent driveways or side streets with conflicting traffic.
  - Cul-de-sacs that interrupt flow and access.
  - Medians which are not in coordination with ramps
  - Resident pressures that result in the closure of pedestrian access ways
  - Footpaths that are turned into restaurants.
  - Gardens to the road verge with no pedestrian access on the grassed area
  - Shopping centres with no footpath access
  - The need to go through car parks to access shops and businesses

#### *Transport Planning:*

- ◆ The road network design encourages car use
- ◆ The \$2billion pa spent on roads attracts more cars and discourages walking.
- ◆ Poor public transport encourages car use
- ◆ Availability of large, free (or relatively inexpensive) carparks encourages driving
- ◆ Traffic forecasts do not include pedestrians/walking.

#### *Footpath Design:*

- ◆ Footpaths are too narrow for pedestrians to easily get passed prams, wheelchairs etc.
- ◆ Footpaths which are too close to the road pavement.
- ◆ Obstructions on footpaths such as:
  - Items that restrict access, eg vehicles, garbage bins, advertising signs
  - Overhanging tree branches.

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- ◆ Footpaths that do not connect
- ◆ Surface problems, including broken footpaths
- ◆ Lack of signage to indicate if footpaths are dual use.

### *Traffic Management:*

- ◆ Traffic light issues, including:
  - Traffic lights with no *Walk* phases.
  - Design/timing of traffic lights not taking pedestrian needs into consideration.
  - No performance indicators for pedestrians
  - Traffic lights with free flowing left-turn lanes
  - Lack of audible traffic signals for pedestrian crossings.
- ◆ Lack of pedestrian crosswalks (especially a deterrent to walking on busy roads).
- ◆ Crosswalks not placed where people want to cross.
- ◆ Limited visibility when crossing roads.
- ◆ High speed limits; no policing of speed; lack of LG control on local streets.
- ◆ The impact of the new Australian Road Rules.
- ◆ Drivers who do not give way to pedestrians.
- ◆ Pedestrians blamed for being in accidents.
- ◆ Location of stop signs/white lines should be before the footpath begins, otherwise drivers are not looking for pedestrians.

### *Safety:*

- ◆ Collisions between rollerbladers, skateboarders, cyclists and pedestrians
- ◆ Dogs that are not on a lead.
- ◆ Poor street lighting.
- ◆ Fear of being robbed/attacked; feeling isolated/alone; *stranger danger* for children.
- ◆ Poor road safety education.
- ◆ Inadequate security for mixed-mode transport (park and ride).

### *Amenity:*

- ◆ Lack of suitable facilities for people with special needs, eg people with disabilities, prams and children on bikes.
- ◆ Lack of rest places, shade, shelter and drinking fountains for pedestrians
- ◆ Lack of litterbags for dog owners.
- ◆ Untidy, dirty areas which discourage walking.
- ◆ Few signs for pedestrians to indicate the distances to facilities.
- ◆ Ample fuel stop for cars, but no places to recharge batteries (eg for *Gophers*).

*Social Issues:*

- ◆ Time constraints on walking eg lifestyles; no time to walk; it's easier to take the car.
- ◆ Two car families
- ◆ A generation of car-driven children (*Battery* children versus *free-range* children)
- ◆ The true costs of travelling by car not considered in travel decisions, eg driving to a distant shop for a bargain rather than walking to the local shop.
- ◆ Children travelling to schools outside their neighbourhood.
- ◆ Closure of local branches of businesses; dominance of large shopping centres.
- ◆ Business people perceive that everyone travels by car and oppose alternatives
- ◆ The widespread support for the car culture, eg the message "Your car is welcome"
- ◆ Social isolation – not knowing neighbours and hence not walking to their houses

*The Workplace:*

- ◆ Salary packages involving cars and parking incentives.

**What Would Encourage Walking?**

*Urban Planning & Design:*

- ◆ Macro level:
  - Planning and design that encourages sustainable developments, including factors such as proximity, land use and communities that are more compact
  - New estates, such as Ellenbrook, which focus on pedestrians.
  - Creation of a safe and accessible pedestrian environment, including meeting the needs of people with disabilities.
  - New shopping centres located close to public transport.
  - Schools located within walking/cycling distance, with footpaths and bike paths.
- ◆ Micro level:
  - Bikes that are not on footpaths Streets which are more bike-friendly.

*Transport Strategies:*

- ◆ Integrated transport strategies which promote walking and involve a wide range of stakeholders (including local government and businesses). Eg TravelSmart
- ◆ Integrated urban and transport planning and implementation, across sectors, with clear accountabilities
- ◆ The provision of an accessible public transport system.
- ◆ Funding to achieve MTS targets for pedestrians (ie funding shifts).
- ◆ Raising the profile of the pedestrian, including in road design projects
- ◆ Accountability at LG level for pedestrian Strategy, including a benchmark that is reported on publicly. Providing awards for excellence. Shifting funding priorities to those Local Governments with an integrated transport plan (ie the UK model).

*Traffic Planning & Management:*

- ◆ A *Keep Left* Campaign to improve the safe use of footpaths and shared paths.
- ◆ Signage and accessible detours for pedestrians where road works occur.

*Safety:*

- ◆ Programs like *Safe Routes to Schools* adequately funded.
- ◆ Combining Neighbourhood Watch with Pedestrian Watch to enhance safety.
- ◆ 40 kph speed limits on suburban streets.
- ◆ Enforcing dogs being kept on leads in public places.
- ◆ Closing roads near schools at school start and finish times.
- ◆ User-friendly overpasses and underpasses that improve access, visibility and safety.
- ◆ *Safety Mates Clubs* covering all kinds of safety.
- ◆ Road safety education.

*The Workplace:*

- ◆ Accessible stairwells in buildings to achieve a focus on walking.
- ◆ Change government policy to prevent employees taking a government car home.

*Marketing and Promotion:*

- ◆ Introducing disincentives for people driving to the CBD.
- ◆ Encouraging children to walk.
- ◆ Campaigns that show the benefit of giving up cars and the health benefits of walking (eg the Anti-Smoking Campaign).
- ◆ Politicians promoting walking and being seen walking.
- ◆ *Walk and Talk* campaigns, including suburb reunions.
- ◆ An awareness day each year devoted to walking.

**Future Choices**

Efforts to date to improve road user harmony would seem to reflect a primary focus on, what is termed, *traffic management* or *traffic calming*. This would also seem to be the basis of future choices, reflecting a basic *no change* choice to the status quo. One might possibly question the logic of this choice given the wealth of evidence indicating that this approach has failed to adequately cater for the:

- ◆ safety of the current number of road users;
- ◆ the magnitude of socio-economic costs related to transport issues; and
- ◆ the impact of future population growth (at unprecedented rates of increase) on both road user safety and community cost?

Fundamental to any future choices associated with adopting the movement of people and goods in lieu of vehicle models, must be an acceptance that existing parameters

must be revised, modified or discarded. There is also the possibility that it may be necessary to introduce new parameters. Only with this new mind-set will it be possible to improve the currently unacceptable situation.

#### Revised Planning Principles

Planning is an activity demanding the inclusion of a multitude of requirements. Not unlike the subject *pedestrian*, planning is equally a significant collective of inter-related issues of differing specialities. To assist planners to respond to the future movement requirements of people, be they associated with the development of new facilities or the updating of existing facilities, perhaps the following may be worth considering?

- ◆ *Always identify the site majority user and the principal transport requirement(s) of the user. eg schools, residential housing estates, shopping centres, car parks, etc. where walking would/should be the principal activity of the majority user.*
- ◆ *Always identify additional site users to the primary user and the principal activity(s) of the additional site users eg (using the preceding examples) school service vehicle access/times, housing estate service vehicle access/speed, home owner vehicle access speed/priority, shopping centre site access by pedestrian, bicycle, public transport and private motor vehicle modes of transport, shopping centre service vehicle access days/times, car park vehicular access/speed/pedestrian priority, etc*
- ◆ *At all times, prioritise all site user needs.*
- ◆ *At all times, reinforce user prioritisation with behaviour conditioning devices.*

In support of these considerations, is it now time to –

- ◆ *Adopt a car-free area philosophy where pedestrian activities predominate and for which the city/centre/area is designed?*
- ◆ *Maintain the footpath surface level at locations where pedestrians activities predominate and for which the city/centre/area is designed?*
- ◆ *Restrict motor vehicle proximity to sites or the centre of ring-and-radial or grid geometry networks, by minimising road construction within a radius dependent upon the principal activity/users of the site/centre?*
- ◆ *Where vehicular access is essential within a pre-determined radius of pedestrian activity area (eg home/shop servicing) maintain consistency of footpath level, enforce a strict speed control regime and always prioritise pedestrian activities?*
- ◆ *Maintain consistency of footpath surface level at all locations where pedestrian movements have priority over motor vehicle movements?*
- ◆ *Provide grade-separated access routes between principal pedestrian activity centres and public transport services?*
- ◆ *Always consider the driver of a motor car to be pedestrian between walking trips?*

### Conclusion

It is unfortunate that our technological progress, following the industrial revolution of the mid-1800's, has generated the global problems with which we are all familiar and of which we are constantly reminded. Nevertheless, these problems exist and the challenge now is to overcome them. At an international level, this challenge is being taken up by many of the world's governments (Australia being one), and we all have a part to play

It is equally unfortunate that despite the good intentions of all involved in the planning, design and development of travel infrastructure, it too has generated problems. Some of those problems have contributed to the international issues that must be addressed, both now and hereafter. Others have significant negative impacts on our communities, both nationally and locally, generating tremendous costs that we must all bear.

No matter how good the facilities provided are, or how much we hope they will be used sensibly and as intended, human frailties result in the need to enforce and reinforce attitudes and behaviours. This too has to be provided at some considerable cost.

Whilst regrettable, it is time to admit there exists a need for some significant changes to be made. It is also necessary to admit that these improvements will not come about based on current practices and their continued adoption. Furthermore, to adopt people and goods in lieu of vehicles as the fundamental transport infrastructure design and development criteria is revolutionary and demands equally revolutionary planning

Advocates of alternatives to the motor vehicle will indeed see this change to be of such significance. Others will choose not to regard it as such, despite all the evidence that overwhelmingly confirms and reminds us that since the industrial revolution, what we have done has not been done to our global benefit. The challenge is to put right what we can and to then ensure that the mistakes are not repeated. We are all part of the problem and, as such, we are all part of the solution - particularly planners.

The significance of the:

◆ Site ◆ Space ◆ Speed ◆ Surface

to which facility users are subjected in the context of travel cannot be over-stated. *Equality* is also a keyword in their consideration and application. It should not be forgotten that the needs of the motor vehicle will still be accommodated and be as much a part of the process as any other component.

◆ *Could the main factor of change be that of priority?*

The respective influences of these four criteria are paramount to the required outcomes of all users.

◆ *Is there any doubt that the international evidence of success is overwhelming?*

◆ *Has the time now come to consider these criteria in a manner somewhat different to that adopted in the past?*

If so, an important role of the Perth Metropolitan Region Pedestrian Strategy will be to show how.