Sustainable Transport Coalition WA

Submission on
Focus on the Future - draft State Sustainability Strategy

The Sustainable Transport Coalition (STC) is a coalition of local governments and community-based organisations promoting sustainable transport in Perth and throughout Western Australia. We welcome the State Government's initiative in developing a sustainability agenda. Following are the STC's comments on the draft State Sustainability Strategy, particularly actions regarding transport.

Summary

The STC supports the preparation of a State Sustainability Strategy for WA. Transport affects sustainability in many ways, including reliance on fossil fuel, growing emissions of greenhouse gases, declining physical activity and the social and financials costs of being over - dependent of the private motor vehicle to move people and goods.

The draft strategy identifies several actions regarding transport. We see the most important actions as:

- Developing and implementing a transport energy strategy to address oil vulnerability and move to a more energy efficient, less carbon intensive transport system (relates to action 2.24)
- Acting to stop Perth's car dependent urban sprawl and better integrate transport and land use through a new strategic plan and effective implementation measures (strengthen action 4.3, 4.4)
- Integrating land use with existing and proposed urban rail lines to promote transit supportive centres (action 4.16)
- Funding extension of the TravelSmart program to foster greater use of travel alternatives (should be in strategy)
- Improving bicycle and pedestrian access and safety by investing more in the Perth Bicycle Network, supporting local transport plans that include pedestrian and cycle improvements and reviewing road engineering standards (strengthen actions 4.14. 4.15)
- Developing a parking management regime for car parking beyond the Perth central area (strengthen actions 4.18, 4.21)
- Reforming taxation and other financial measures to promote sustainable transport choices (actions 4.24, 6.7)
- Implementing an integrated transport funding process to ensure public funds and invested in sustainable transport solutions (strengthen action 4.25)
- Improving rail infrastructure so that a greater share of freight can be moved by train (actions 4.30, 4.33).

To make progress on sustainability the State Government through its strategy should develop a sustainability assessment process, require government agencies to put sustainability into practice, build partnerships between government, community and business and establish indicators and targets for sustainability.

Sustainability and transport

Sustainability should be the overarching consideration in all decision-making. Many definitions have been put forward. The definition used in the draft strategy (page 16) emphasises an integrated approach to environmental, social and economic issues. Integration is important but is not enough to address the significant challenges that face the WA community. We see environmental and resource issues as the most critical, but too often given limited attention in planning and decision-making by government and business. Trading off economic gains against environmental and social costs will not progress us towards a more sustainable way of living.

The STC's focus is on transport. Transport is fundamental to economic activity and social interaction, yet the nature and extent of transport within the state and globally poses a significant concern. Arguably transport is too cheap, allowing seemingly irrational freight flows and passenger trips. The impacts of increasing transport activity, most of it by road and fossil fuel powered, include:

- Greenhouse gas emissions that are changing the climate, with 14% of Australia's emissions and 15% of WA's emissions from transport.
- Dependence on oil, with global demand predicted to outstrip supply within the decade. This is likely to bring increased fuel costs and supply shocks, given global demand and Middle East politics.
- Air pollution, with motor vehicles the major source of photochemical smog and air toxics in the Perth airshed and a constant contributor to fine particle pollution.
- Declining physical activity, with car trips replacing many trips that involved walking or cycling.
- Social disadvantage for those without ready access to a car in a community where car travel is the primary means of transport - this affects access to employment, study and social opportunities.
- Traffic crashes, with 180 people killed and many more injured in motor vehicle related crashes on WA's roads last year, costing the community dearly.
- Clearing and fragmentation of habitat when roads are constructed and the ongoing impact of roads on biodiversity, including roadkills and dispersal of weeds.
- The financial cost of buying and owing motor vehicles - about 25% of the household earnings are spent this way, and the cost to the public purse of building and maintaining roads (in Perth this is 17% of regional earnings).[1]

Reforming transport needs to be part of moves towards a sustainable society. Key steps could include:

- Reducing dependence on the car for personal (passenger) trips through measures to discourage unnecessary car travel, to shift the burden of cost from car ownership to car use (user pays based charges or taxes), marketing travel alternatives and investing much more in enhancing those alternatives;
- Managing land use to reduce the need for travel, including redeveloping parts of urban Perth to provide a mix of housing choices and integrating employment location, housing and green transport, and locating freight generating land uses on road and rail corridors;

- Managing freight transport to increase the share of freight carried by rail, reduce the road safety and community impacts of heavy road haulage and innovating logistics and local production strategies to reduce freight movements;
- Shifting to renewable energy sources, where gas may be a transition fuel but hydrogen or biofuels may be alternative fuels in a much more energy efficient motorised transport system.

These priorities should be reflected in the State Sustainability Strategy's actions. Comments on relevant chapters of the draft strategy follow.

Sustainability and governance (Chapter 3)

Sustainability assessment:

Sustainability assessment should apply to all projects and policies, not only to major development proposals. Capacity needs to be developed across government agencies to consider sustainability when planning and assessing proposals (as proposed action 1.1 suggests). Sustainability assessment is an emerging field of practice. The development of processes and practices for sustainability assessment within government should not just be left to an industry-government working group (proposed action 1.2).

Institutional change:

The State Government has made some significant changes to the bureaucracy, but merging and renaming agencies will not ensure a whole-of-government approach to the sustainability challenge. A culture of cooperation needs to be fostered - too often institutional boundaries stifle the partnerships needed for many issues that cross portfolios and professions. The way agencies are structured and named should also make them 'user friendly' for the community. Current changes within the Planning and Infrastructure portfolio have been confusing for staff and community stakeholders, e.g. no single focus for cycling, maritime functions spread across divisions.

Government agencies:

The proposal that the state government show leadership by having its agencies contribute to sustainability throughout their activities is supported. Regarding transport this should include managing work related travel, for example:

- Developing and implementing workplace travel plans (e.g. by expanding the TravelSmart Workplace program);
- Reducing the car fleet, including more small, energy efficient vehicles in agency fleets, converting more of the fleet to LPG (though this may mean large cars, so a life cycle assessment may be useful);
- Encouraging use of email and the internet for agency transactions;
- Providing adequate end of trip facilities for cyclists at workplaces and public buildings;
- Facilitating telework by employees.

Further, agencies should consider the impacts of their policies and practices. For example the closure of TAFE campuses or high schools might mean larger catchments and less opportunity for students to walk or cycle. Where health clinics are located, policy on

government vehicle use, the way roads are design may all have unintended, adverse effects on accessibility and transport energy use.

The Commonwealth Government requires that its agencies report on how its activities impact on the environment and measures taken to promote ecologically sustainable development. State government agencies should be required to establish management systems and to include performance information in their annual reports as part of the move to triple bottom line reporting. This should feature in the final version of the strategy.

Contributing to Global Sustainability (Chapter 4)

Population, development aid and environmental technology:

Population and consumption levels are critical factors determining environmental impact, yet governments continue to avoid taking action. There needs to be more discussion in the community over population and per capita consumption. The private sector actively promotes material consumption, somehow we have to moderate this to encourage less material intensive ways of living if we are to reduce impact on the environment and share resources more equitably between the developed and developing world.

Regarding development and technology, WA may have a role to play in informing urban planning and transport. For example, Murdoch University's ISTP has a history of research into urban transport across the world. Comparative information and policy lessons could be used to help developing cities achieve sustainable transport systems rather than following car based fixes used in too many places, including Perth.

Greenhouse and climate change:

Climate change threatens WA's ecosystems, agriculture and settlements, but little is being done to reduce emissions. The WA Greenhouse Strategy, in preparation, should propose concrete actions to reduce emissions. Transport accounts for about 15% of the State's greenhouse gas emissions and so warrants attention. This should include:

- Improving travel alternatives by directing more of the transport dollar to greener modes;
- Shifting more passenger trips to walking, cycling and public transport through the TravelSmart initiative;
- Shifting more freight to rail, which will require improvements to rail infrastructure and tackling subsidies for road freight;
- Moving to less greenhouse intensive fuels - LPG and CNG as transition fuels and developing hydrogen or biofuels that offer net energy and lower carbon emissions;
- Planning land use to reduce travel demand e.g. greater employment within urban corridors through mixed use developments, containing urban sprawl.

The proposal to reduce emissions from the government vehicle fleet and electric train system is supported (action 2.18). Also see comments above on ways government agencies could reduce their motor vehicle use.

Oil vulnerability:

Cheap oil fuels passenger and freight transport in WA, allowing an extreme level of car dependence and reliance on road transport to move much freight, including agricultural inputs and produce. Many commentators have predicted the decline of cheap oil within ten to twenty years. WA is vulnerable to the increase in oil prices and possible supply shocks that would follow on from declining domestic production, peaking of global production and increased reliance on Middle East producers. We should, therefore, begin the transition to a much more energy efficient transport system that makes use of alternative fuels.[2]

The draft strategy refers to a number of actions that are underway: An emergency fuel storage plan has been prepared, but will it increase strategic fuel reserves and provide a management process for dealing with any supply shocks? What does the Strategic Energy Supply and Security Working Group do? What progress is being made in converting government fleet vehicles to LPG and when will the 25% target be met? What is involved in the DPI's sustainable transport energy for Perth program? Clearly oil decline is a serious issue for WA, and concrete actions are needed; yet the strategy just proposes a taskforce to examine the issue further.

Following the oil crisis of the 1970s the State Government developed a transport energy policy, though many actions were not sustained, or were given little priority or resources. WA needs an effective transport energy policy to guide action to reduce oil dependence and towards less energy intensive, more sustainable transport. Additional indicators that should be used are total and per capita energy used for transport.[3]

Sustainability and settlements (Chapter 6)

Most of WA's population resides in urban centres, with over 70% in metropolitan Perth. It is critical that we plan, develop and manage settlements in ways that enhance health and wellbeing across the community and significantly reduce environmental impacts. Transport is an important issue in the sustainability of settlements as the movement of people and goods affects public health, safety and quality of life. It is a significant financial cost to households, government and businesses, consumes energy and land and generates atmospheric and noise emissions.

Oil decline, international pressure to reduce greenhouse gas emissions, concern about public and environmental health and the cost of servicing sprawling suburbs offer good reasons for better managing Perth's urban growth and transport patterns. Future Perth is, as the draft strategy says (page 133), a significant planning process that should address these issues in developing a more appropriate framework for managing the region. Apparently the WA Planning Commission has decided to wind up Future Perth, if so this will be an opportunity missed and it is difficult to see how key aims put forward in this chapter could be met.

Managing urban and regional growth:

Perth has a huge urban footprint (over 559 square kilometres) that continues to grow as sprawling development continues, especially along the coast. The low density and expansive pattern of the city's development is linked to its high level of car dependence. Managing urban growth to direct housing and other activities to locations that will generate the most public good and least impact is important. The draft strategy (page 134) says that

the State Government has "significant ability to manage growth" yet it does not seem to be committed to doing so.[4]

Liveable Neighbourhoods is a positive approach to designing urban development and should become mandatory, not advisory (so this action is supported, page 135). However improving design at the micro level does not tackle regional patterns of development that are not sustainable.

Action 4.3 is supported, however Future Perth has not run its course - there has been limited community discussion, no growth options have been put forward for debate, no sustainability assessment of growth options has happened (as far as we know) and indicators for the health of the region have not been agreed. Efforts to stem sprawl and shift growth to existing urban areas or towns beyond the metropolitan area will need the support of local government and the community. Future Perth could be used to build awareness of the implications of Perth's current growth and discussion about alternatives.

The final strategy should commit to developing a growth management framework for Perth - to stop endless sprawl and better manage development. A definitive position is needed on Perth's growth, a weak stand will ensure more of the same. The Metropolitan Development Program, action 4.3, can be an important tool to manage growth but to date it has been developer driver and used merely to coordinate sprawl. An urban growth boundary should also be seriously considered, notably the Government of Victoria has instituted such a boundary under its Melbourne 2030 strategy.[5]

Better indicators are needed, for example Perth's urban footprint in hectares - which should not be increased. Population and density targets could be set for precincts within the region. The ultimate test will be things like the percentage from people working under five kilometres of home, mode split for all trips, atmospheric concentration of air pollutants and annual greenhouse gas emissions.

Revitalising declining centres and suburbs:

Directing population growth and investment to declining suburbs and towns can make better use of existing infrastructure and limit environmental impacts. This should be tied to an overall growth management strategy, see above.

Redevelopment around the Subiaco train station is an example of redevelopment. It is integrated with public transport, increases density and includes a mix of uses to revitalise the urban fabric - though affordability is a concern. The Enquiry by Design exercises have shown how redevelopment could enhance pedestrian, cycle and public transport access and local employment, shopping and leisure opportunities (more than retail outlets).

The job of managing urban centres has largely fallen to local governments, but their lack of resources and expertise to effectively manage them is a problem. Another issue is local community opposition to increased density; redevelopment that merely creates a squashed suburbia and fails to address shading, overlooking and noise concerns can justify this. A better approach to revitalising centres, that involves the community and supports local government is needed. Managing traffic and parking and enhancing travel alternatives must be important considerations.

Proposed actions 4.7 to 4.12 are supported, though the above comments should be addressed. A more useful indicator is needed, see indicators suggested above for managing growth.

Integrating land use and balanced transport:

Lack of integration between transport modes and land uses is a problem for urban sustainability. Dormitory suburbs, big box shopping centres and poor rail links to industrial areas are examples or poor integration and help explain the level of car use and road freight in Perth. The Liveable Neighbourhoods code is promoting better integration in new urban development, but this needs to be applied in redevelopment projects and supported by regional growth management.

Some four in five personal trips made in Perth are by car, most are solo trips to shops, leisure or work. Government policy favours balanced transport where we are less reliant on the car to do things, which means shifting more trips to walking, cycling and public transport. The Metropolitan Transport Strategy sets a positive policy direction, but this needs to be reflected in land use planning and transport investment decisions if the desired change is to happen.[6]

Comments on actions underway:

Department for Planning and Infrastructure - This should be a positive move, the test will be in the outcomes it delivers.

Rail extensions - The Perth-Mandurah railway will be a new strand in the regional passenger transport network. The development has been controversial, both for the route taken and the significant cost involved. Other criticisms have been that it will promote sprawl and tackles city-suburbs commuter travel rather than strengthening local economies and employment. It is important that land use be integrated with the development of the railway, including mixed use development at train stations and much improved bus services that connect with activity nodes in the south-west corridor.

Pedestrian Advisory Committee - The committee provides a forum within government to address pedestrian issues; it needs to make more headway on policy issues but has few resources.

Integrated Transport Plans - Important that this initiative continues, should be linked to the revitalisation of suburbs and growth management.

Individualised marketing - TravelSmart is a positive initiative achieving a shift away from the car through marketing travel alternatives. The draft strategy fails to mention the strategy by name, it should be included in the final version. Unfortunately, funding for this innovative program was cut by three-quarters in the 2002/03 State Budget. More resources should be put into TravelSmart so that more of metropolitan Perth is covered; the TravelSmart ten-year plan aims to reach half the population by 2010 but this target will not be met unless funding levels are restored. The program provides good value for money, with health, environmental and financial benefits to the government and the community - a better investment than increasing road space in a city where we already over provide for car travel.

Public transport fares - The freeze on concession fares is welcome; public transport is a mode of necessity for many people on low incomes. Increase the share of trips made by public transport will depend on making it more attractive to people with mode choices. If car use is relatively cheap and most costs are fixed then public transport will not be considered by many who could use it.

Comments on proposed actions:

Liveable Neighbourhoods (action 4.13): Why just 'move towards' requiring the use of this planning code? It should be mandatory to ensure that development better addresses travel alternatives and mix of land uses.

Pedestrian needs (action 4.14): This is supported, though the action is vague. Local governments should audit local streets and identify improvements needed through local transport plans or the like. There should be community involvement in this process as too often traffic engineers focus on the needs of motorists rather than safe and accessible routes for those on foot or in wheelchairs.

Perth Bike Plan (action 4.15): The Perth Bicycle Network should be better funded to provide for safe and convenient cycle access across the region. The existing path network is an asset for the city, but there are significant gaps - for example on the busy Perth-western suburbs route where the path ends at a number of points along the railway for lack of funds to complete the links. Principal routes along the freeways for the most part require cyclists to cross intersections at lights, extending journey time and posing safety risks - an audit should be undertaken to identify priorities for retrofitting with underpasses or bridges. Local governments also need to enhance cycle and pedestrian access. Bike plans and local transport strategies developed with the community, including bicycle user groups and others, should shape infrastructure and promotional work.

Vehicle trip behaviour (action 4.17): The intent of this action is not clear. Improved travel statistics are needed to inform transport and land use policy but this should cover all travel modes and purposes.

Parking (action 4.18): Rather than just researching parking demand at suburban centres the State Government should commit to developing a statutory policy, together with local government, to manage parking. Unregulated and plentiful parking is an inducement to drive. The Perth Parking Management Policy includes a levy on parking bays that funds public transport services in the central city. Similar measures should be considered in other parts of the metropolitan area, especially major shopping centres, universities, hospitals and sporting venues. Maximum rather than minimum parking provisions should be established for major shopping centres development, including expansion, and transport impact assessments required.

Mixed use development (action 4.19): Mixed use development offers a way of reducing the need to travel and trip distances by better integrating appropriate land uses at appropriate locations, for example small retail, small offices and high density residential near public transport nodes. The intent of this action is supported; the important question is how will mixed use development be increased. Mixed use and transit oriented development has

been mentioned in strategic planning policy for some time, for example in Metroplan in 1990, but these statements have had limited effect on development outcomes. The mismatch between policy and practice needs to be critically reviewed if we want better results - weak implementation and local opposition may be key factors. Mixed use development has worked where the State Government has played a strong role, e.g. the Subi Centro development.[7]

Business in the suburbs (action 4.20): Allowing small business development in suburban communities is supported, though the impact on community amenity must be considered. Allowing home based business and small businesses including 'corner shops' in existing suburbs can be a way of reducing travel and increasing local employment (though some studies suggest little travel reduction from home-based work). Local planning schemes should specify what developments are inappropriate and provide guidance to manage noise, traffic and other issues.

Flexibility in planning policy (action 4.21): Flexibility is welcome if it means less car parking. Local planning schemes should set maximum rather than minimum car parking provision requirements and should also include requirements for end-of-trip facilities for cyclists. A regional parking policy could set a framework for this change, prepared with local government and community stakeholders.

Metropolitan Transport Strategy review (action 4.22): The Metropolitan Transport Strategy, published in 1995, includes many policy objectives and measures that would enhance the sustainability of transport in the region. Particularly important is the acknowledgement of the need to moderate car use and shift a greater share of personal trips to alternative modes. The strategy is supported by a range of stakeholders, but the positive aims are not always reflected in planning or funding decisions.

The review should strengthen not weaken the modal shift objective, and go further in setting the direction for Perth's transport system. This should include:

- Extending TravelSmart marketing - recognising behavioural approaches as a critical part of achieving balanced transport
- Travel management measures for workplaces, schools and major trip generators including hospitals, tertiary education institutions and major shopping centres and recreational venues - including travel plans
- Extending the cycle route network through development of the Perth Bicycle Network and local Bikeplans
- Improving public transport including more frequent, direct and accessible bus services, competitive fare structure and an extended rail network with safe, accessible stations to capture a greater share of leisure, shopping and commute trips
- Managing development to reduce travel demand through regional growth management, urban village developments, locational guidelines to tie land use with access needs, transport impact assessment for major trip generators (including shopping centre expansions) and a regional parking policy
- Starting the transition to a more energy efficient, less oil dependent and less polluting transport system through a transport energy policy, fleet management measures, in-service vehicle maintenance measures and a cleaner, greener fuels policy.

There should be stakeholder involvement in reviewing the strategy. Regular performance reviews should be used to inform policy development and implementation - something that has not been done well with the current strategy.

Vehicle design rules (action 4.23): Improving vehicle design requirements to reduce noise and emission of air pollutants and increase energy efficiency and safety is important. This will require action by the Commonwealth Government.

Tax reform (action 4.24): Fringe Benefits Tax arrangements serve to encourage car use and discourage employers from offering travel alternatives to their staff. Taxing employer provided vehicles at 10% of their value and public transport tickets at 95% of their value sends the wrong signal. So too does the statutory formula for calculating FBT that encourages car travel by rewarding high kilometres travelled with a lower rate of tax. Employer provided cars make up 40% of peak hour traffic and skew employee travel choices, this contributes to traffic congestion, emissions and energy use. These tax arrangements are irrational but change depends on influencing the Commonwealth Government.[8]

Integrated funding framework (action 4.25): An integrated funding framework within the State Government's Planning and Infrastructure portfolio is supported, but this will need to influence the Department of Treasury and Finance and the State Budget process to work. Currently funds are directed to agencies rather than allocated to projects and there is no competitive assessment process that matches funds with the projects that will deliver sustainable solutions to transport needs in urban or regional WA.

Transport funds should be pooled, clear objectives and assessment criteria defined and an assessment process established. Currently transport investment is skewed to increasing road capacity, which in metropolitan Perth at least is arguably oversupplied and entrenches high and growing levels of car use. If greater balance in personal and freight transport modal split is what we want, and transport policy says it is, then greater balance in how funds are allocated is needed.

Research and training (action 4.26): Greater capacity for tertiary level education and training in the transport and integrated land use planning field is supported. This should encourage critical thought about transport policy and practice, including greater consideration of local history and overseas developments.

Modal split is an important indicator, so to would be total and per capital vehicle kilometres travelled. See earlier discussion about indicators also.

Managing freight and regional transport:

The Freight Network Review was an innovative process to involve community in looking at ways to manage freight transport in metropolitan Perth. It was, however, focused on Fremantle and the Roe Highway corridor and there is conflicting community opinion on what the State Government proposes in these corridors. The lessons of this experience should be used to enhance the approach used, though any planning exercise is likely to generate differing views depending on the values people hold.

We support the transport of more freight by rail rather than road, which will require improvements in rail infrastructure and intermodal facilities. Better management of road freight is also important, including management of freight routes, vehicles and the location of major trip generators.

Providing for increased freight movement will generate impacts, whether new road capacity through established communities or natural habitat, increased rail traffic bringing noise or the effects of a new harbour and associated shipping on coastal and marine environments. As well as modal shift and increased efficiency, managing freight transport should also address demand management. In Europe there is discussion about ways to achieve economic growth without growth in freight transport. Some possible strategies, that would also help address oil dependence and emissions and build local economies are more efficient use of existing freight transport capacity through better logistics, substituting near for far in the supply chain and increasing local self-sufficiency e.g. in food production. These measures should be addressed in the final State Sustainability Strategy.[9]

Comment on actions underway:

Freight Network Review: This was a more inclusive, participatory process to address freight transport has been tried in the past. The broad direction of the recommendations, i.e. more freight on rail, better management of road freight and planning of land use to reduce conflicts, is supported. Note comments above.

Comments on proposed actions:

Implement the recommendations of the Freight Network Review (action 4.27): Generally supported, but some actions are controversial and will need to be worked through with stakeholders. A strategic environmental and social impact assessment of the development of the Outer Harbour should be undertaken early in the planning process to address potential impacts on community use and the ecological integrity of Cockburn Sound.

Extend the review principles (action 4.28): This is supported, but it is important to spell out what principles and concepts are to be used. Any review should emphasise stakeholder involvement, take account of the big picture, consider all relevant options and seek sustainable solutions.

Manage conflicts between freight transport and residential areas (action 4.29): For new development the key is adequate buffer zones and management strategies that separate incompatible uses and minimise impacts. Too often planning decisions have incrementally eroded the setback between freight routes or facilities and where people live, generating conflict in time.

Expand rail freight infrastructure (action 4.30): This is supported, but how will extension of rail freight infrastructure be encouraged? The State Government could finance infrastructure improvements through sale of surplus land (though caution is needed on disposing of land that could be needed for future expansion) or user charges (though increasing rail freight costs goes against the aim of increased mode share).

Options for funding freight infrastructure need to be considered. Under the recent Freight Network Review the hypothecation of funds for freight infrastructure was investigated, with a number of recommendations put forward. Some are contentious given public concern over development of Leighton Marshalling Yards, Fremantle Eastern Bypass reservation and potentially other freight related landholings and because freight may start competing with other important uses for Metropolitan Improvement Fund monies. There was not opportunity for community stakeholders to fully consider these issues in the Freight Network Review process.[10]

Use sustainability techniques in road and rail planning (action 4.31): This is important but the techniques are evolving and need to be continuously improved. The Freight Network Review showed the usefulness of multi-criteria analysis, but also shortcomings like lack of detailed consideration of issues and problems when political boundaries are drawn when there are conflicting views.

Country passenger rail strategy (action 4.32): Rail passenger services to country areas have declined significantly from what they once were. This is due in part to increased car ownership but also to public policy that has favoured private road transport over rail services. Enhancing the role of rail could improve access for country residents without ready access to a car, extend tourism and so regional development opportunities and provide road safety benefits by offering a travel alternative.

In Victoria and New South Wales rail plays a greater part in transporting residents and tourists to and from country towns. The Government of Victoria has committed to improve country passenger services. The non-government organisation Environment Victoria has put forward a vision and recommendations for further improvements to achieve integrated public transport across country areas - many principles in it could be applied to WA. The proposed strategy should be extended to consider bus services also.[11]

Create regional transport plans (action 4.33): A number of regional transport plans were developed by the former Department of Transport and relevant development commissions. In addition, regional road safety strategies have been prepared through the Office of Road Safety. Any new regional transport plans need to add to this earlier work. This could involve greater attention to passenger transport services in major centres and between towns, managing road freight to reduce road safety and environmental impacts, improving rail and sea freight and encouraging safe pedestrian and cycle access in towns. The action refers to regional councils, we understand that only some parts of the state are covered by regional councils and in many cases they only serve to manage landfill disposal sites.

The draft strategy says "the need to develop sustainable freight movement in cities and regional areas is a global issue". We would say that freight transport is a rapidly growing component of overall transport activity that is generating greenhouse gas emissions and relies on oil - so has global dimensions. In addition, low transport costs have allowed attenuated supply chains to develop such that produce is moved across the world - but this is generating impacts on local communities and the global environment. The sustainability of increasingly global resource flows is questionable and warrants attention. Admittedly this challenges globalised trade - strongly supported by economic policy but arguably out of step with other important policy objectives.

Preserving air quality:

Perth enjoys relatively good air quality most of the time, but increasing emissions from motor vehicles and other sources is increasing the level of nitrogen oxides, so the risk of photochemical smog events, and air toxics. Monitoring by the Department of Environmental Protection found levels of benzene in Perth higher than in larger cities like Sydney. Reducing motor vehicle use and reducing emissions from vehicles are key strategies to maintain and improve air quality.[12]

Completion of the Perth Air Quality Management Plan was a positive step - providing a long-term plan to manage this critical resource. However many of the actions recommended in it involve further research and consideration of options rather than actually reducing emissions. Stronger actions include continuing TravelSmart programs and preparing integrated transport plans, but funding for TravelSmart marketing was cut in the last State Budget.[13]

Continued implementation of the Perth Air Quality Management Plan (action 4.34) is supported, but its effectiveness will depend on adequate funding for emission reduction measures and a commitment to addressing air quality beyond the government's environment portfolio.

A Statement of Planning Policy (action 4.35) could be useful in setting a framework for integrated planning and management of transport and land use, including the activities of local government. How will the objectives and principles be translated into action? As noted above, there are many positive statements in policy documents but also many examples of poor development and investment decisions. See the discussion paper on integrated land use and transport planning by Carey Curtis and her article on policy versus practice.[14]

Resolve conflicts between air quality and greenhouse issues (action 4.37): What does this refer to? There are potential conflicts regarding fuel type, but in many cases, actions concerning transport can both reduce emission of air pollutants and reduce greenhouse gas emissions.

Cost-benefit analysis of air quality decisions (action 4.40): What is an 'air quality decision'? There are a range of decisions that will affect air quality, for example land use development proposals and transport funding decisions. There are also policy decisions for the State Government regarding implementation of the Perth Air Quality Management Plan, for example improving fuel quality standards (interestingly, cost-benefit analysis has been suggested by opponents within government who want to weaken current standards). Cost-benefit analysis can be a narrowly defined exercise that excludes community stakeholders and uses convenient data. Processes that involve stakeholders and consider a range of alternative options and assessment criteria from the economic, social and environmental spectrum should be used - as was attempted with the Freight Network Review.

Sustainable energy:

Energy is a critical issue for transport and beyond given predicted peaking of oil production and carbon emissions from its use. See earlier comments regarding oil decline.

Trial innovations in transport fuels (action 4.65): Finding viable alternative fuels that can be used safely, efficiently and with minimal environmental impacts is important. Gas, hydrogen and biodiesel may have a role to play in fuelling transport. Important considerations should be the energy costs of obtaining, processing and supplying fuels and the environmental and community impacts of their production and use. The sustainability strategy background paper by Adam Hawkes notes that alternatives fuel technology is evolving rapidly and there is no clear 'winner' in the lifecycle assessment that have been undertaken.[15]

A state bioenergy policy (action 4.66) would be useful and should be complemented by a transport energy policy. Bioenergy, such as fuel cropping to produce ethanol, has been raised as an alternative to oil, particularly for transport. It has potential to provide a renewable source of energy and be an alternative source of income for rural producers, but caution is needed. The lifecycle impacts of bioenergy sources should be considered. A study by US researchers found that large-scale biofuel production cannot provide a viable alternative to current oil use and would have significant impacts on environmental quality and food production.[16]

Sustainability and community (Chapter 7)

Building social capital, giving people a real say over issues affecting their future and enhancing the quality of life that people enjoy are critical parts of the sustainability agenda. Transport can contribute to and impact on these goals in multiple ways. Some issues include the effects on traffic on neighbourhood interaction and public health, overcoming transport disadvantage by providing travel alternatives and involving local communities in transport decisions.

Housing and sustainability:

Where people live can have an important influence on their access to job opportunities, services and social support. Accessibility is variable across the state, so people who are distant from major centres and without ready access to a car may be disadvantaged. Integrating land uses to reduce the need to travel can enhance accessibility and reduce dependence on the private car. Public housing should be part of urban development and redevelopment near public transport routes, including train station precincts. The connections between housing, transport and urban form were reviewed as part of the National Housing Strategy, offering positive guidance on planning for more sustainable cities.[17]

A study of underutilised land close to public transport nodes as potential public housing sites (action 5.7) is supported. This could include private as well as public land. Future infrastructure and servicing needs should be considered before disposing of public land on transport routes.

Another idea that could be considered is location efficient mortgages. These have been promoted in the US to allow people to purchase housing in areas well served by public transport that would otherwise be unaffordable. Lower income households often locate in urban fringe areas that are poorly served by public transport and distance from job and social opportunities, whereas inner suburbs have good public transport but housing is often

expensive. A location efficient mortgage allows homebuyers to borrow more money by taking account of the lower transport costs they will have.[18]

Sustaining healthy communities:

Health is a major community concern and focus of public policy and expenditure. However State and Federal Government budgets are largely used to maintain a struggling hospital system; relatively little investment is put into health promotion and addressing the social and environmental causes of health problems in the population. There are strong ties between transport and health, in terms of problems and possible solutions.

Vehicle emissions are a major source of air pollutants that cause respiratory problems and disease in the community. The increasing share of trips made by car means fewer trips on foot and bicycle, contributing to declining levels of physical activity across the population - a significant cause of disease. Motor vehicle crashes are a major cause of death and injury. Encouraging more active transport can help reduce emissions, increase physical activity and enhance community interaction.[19]

The draft strategy lists a number of current and proposed actions to promote healthy lifestyles and incorporate consideration of health impacts into decision-making processes, this is supported. Providing adequate resources for community education and behaviour change programs is important and should be been as an investment in better public health, so a long-term solution to increasing primary care problems. Whole of government approaches are needed, the strategy will need to recommend ways to facilitate this.

Education and community awareness:

Community awareness and education is important in promoting sustainability. Sustainability is something to work towards, though often difficult to describe in definite terms and dependent on contemporary values. Dialogue about environmental, social and economic challenges facing society and the sort of future we want to create together should be encouraged by government and community organisations. Education is also important to inform behaviour and decision-making at individual and collective levels.

The strategy proposes community-based programs to reduce car trips to schools (action 7.28) and to promote travel alternatives through school based events and programs (action 7.29). These are supported. The increasing share of children who travel to school in a car and so decline of walk and bicycle trips to school is a concern - it adds to road traffic and safety concerns, reduced physical activity and opportunity for social development and may entrench modal preferences affecting future travel behaviour. The TravelSmart to School program has had a positive impact in many schools and the walking school bus initiative is an example of community building to address a community issue.

Sustainability and business (Chapter 8)

Business shapes the world today as much as government, so business must be part of efforts towards a sustainable future. Some major companies have been changing how they do work to better meet their environmental and social responsibilities, however they are a minority.

Our economic framework should encourage the use of capital in ways that enhance sustainability. Many financial measures do the opposite, for example tax laws that encourage employers to provide cars and parking rather than public transport fares, tax concessions for four-wheel drive vehicles and vehicle registration and insurance charges for heavy freight vehicles that fail to reflect the external costs they generate. The proposed study of subsidies (proposed action 6.7) should become a review that recommends reform, including changes to perverse measures like those mentioned above.[20]

There are many ways in which business can promote sustainability through transport, for example:

- Implement green travel plans for workplaces to reduce car trips and enhance access by travel alternatives;
- Consider community impacts as well as access needs in making decisions about location of operations;
- Source locally and review logistics strategy to reduce freight movement;
- Purchase energy efficient and alternative fuel vehicles in fleets;
- Include transport impacts in corporate environmental management programs.

Automobile manufacturers, oil companies, freight transport companies, urban developers, planning and engineering consultants have an especially important role in shaping transport systems and activities. The success of many of the actions proposed in Chapter 6 (sustainability and settlements) will depend on their support.

Endnotes

[1] Greenhouse statistics: Australian Greenhouse Office 2001 *National Greenhouse Inventory Factsheet: Transport*; Transport, Urban Land Use and Planning Working Group 1999 *WA Implementation Plan for the National Greenhouse Strategy in the areas of transport, urban land use and planning* Report to the WA Greenhouse Council. Perth's air quality is outlined in Department of Environmental Protection 2000 *Perth Air Quality Management Plan: State of Knowledge*. Declining physical activity and its impacts: Physical Activity Taskforce 2001 *Getting Western Australians More Active*. Traffic crash statistics from Cost of transport to the regional economy from Laird, P., Newman, P., Bachels, M., and Kenworthy, J., 2001 *Back on Track: rethinking transport policy in Australia and New Zealand* University of New South Wales Press, Sydney (table 3.11).

[2] See the proceedings of the WA Beyond Oil conference held 21 February 2003 for information on the global oil situation and possible policy responses.

[3] Government of Western Australia 1979 *Transport Energy Policy for Western Australia*.

[4] Perth's urban development covered approximately 559 square kilometres in 1995 according to the Ministry for Planning; see paper by Jan Gilchrist on population and housing in Ministry for Planning 2001 *Towards Sustainability: Metropolitan Development Options Workshop*.

[5] Government of Victoria 2002 *Melbourne 2030: planning for sustainable growth* Available at www.melbourne2030.vic.gov.au

[6] Car use statistic from Department for Planning and Infrastructure 2002 Travel in Perth: facts and myths. Perth Metropolitan Transport Strategy - published by the Department of Transport 1995.

[7]For example policy measure 6.1 in Metroplan encourages employment-generating activities and higher density residential development around public transport routes (Department of Planning and Urban Development 1990 *Metroplan: a Planning Strategy for the Perth Metropolitan Region*. The mismatch between policy and development outcomes is noted in Curtis, C. 1999 Turning Strategies into Actions: integrated land use and transport planning in Western Australia *Papers of the Australasian Transport Research Forum*, Perth, September 29 - October 1, 1999.

[8] An overview of Fringe Benefits Tax and its effects on commute trips is provided by the Australian Railway Association - factsheet on Fringe Benefits Tax 1999.

[9] The connection between economic growth, increased travel demand and environmental pollution is not inevitable (Koppen, I. 1995 Dispelling the myths of transport growth *World Transport Policy and Practice* 1 pp. 4-6). A study of freight transport in the UK found that mode shift offers a short to medium term strategy but that in the longer term substituting near for far trips is needed to address

impacts of freight movement, especially greenhouse gas emissions (Whitelegg, J. 1995 *Freight Transport, Logistics and Sustainable Development* Report for WWF UK by Eco-Logica Ltd).

[10] Freight Network Review Working Group 6 2002 *Hypothecation of Funds* Report to Minister for Planning and Infrastructure

[11] Everingham, W. and McPherson, J. 2001 *Driving the Fast Train Further: integrated public transport across all Victoria* Environment Victoria, Melbourne

[12] Department of Environmental Protection 2000 *Volatile Organic Compounds Monitoring in Perth: baseline air toxics project*; Department of Environmental Protection 2001 *Perth Air Quality Management Plan: State of Knowledge*

[13] Department of Environmental Protection 2001 *Perth Air Quality Management Plan*; Department of Environmental Protection 2002 *Implementing the Perth Air Quality Management Plan*

[14] Curtis, C. 1998 *Integrated Land Use and Transport Planning Policies: a review of selected initiatives outside Australia and their applicability to strategic land use planning in Perth, Western Australia* WA Planning Commission, Perth; Curtis, C. 1999 Turning Strategies into Actions: integrated land use and transport planning in Western Australia *Papers of the Australasian Transport Research Forum*, Perth, September 29 - October 1, 1999

[15] Hawkes, A. 2002 *Evolution towards a sustainable transport energy source* Background paper for the WA State Sustainability strategy. See also Fleay, B. 1998 *Climaxing Oil: how will transport adapt?* Paper to the Chartered Institute of Transport in Australia national symposium, Launceston, 6-7 February 1998.

[16] Study of biofuel production: Giampietro, M., Ulgiati, S., and Pimentel, D. 1997 Feasibility of large-scale biofuel production *BioScience* 47 pp. 587-600

[17] Newman, P., Kenworthy, J. and Vintila, P. 1994 Housing, transport and urban form *National Housing Strategy background paper* 15 Commonwealth Department for Health, Housing and Community Services, Canberra

[18] More information on location efficient mortgages at the Natural Resources Defense Council website: http://www.nrdc.org/cities/smartGrowth/qlem.asp

[19] A study of potential change in travel behaviour in Perth found that a significant share of car trips could be changed to walk, cycle or public transport trips (Socialdata 2000 Perth Potential Analysis). The Physical Activity Taskforce identified change in travel behaviour as a key to increased physical activity levels in the population, see Physical Activity Taskforce 2001 Getting Western Australians More Active.

[20] Examples of perverse policies and sustainable alternatives are given in Denniss, R. 2003 Implementing policies to increase the sustainability of transport in Australia - Paper to WA Beyond Oil conference, 21 February 2003.