

Transport @ 3.5 Million Perth transport plan

RAC Submission, October 2016



For the better



Introduction

Our economy and the quality of life Western Australians enjoy are inextricably linked to the planning and performance of our transport system. There has long been a need for a robust and ambitious plan to provide a clear strategic direction to shape the future of Perth's transport system. What we do now, and in the coming years, will be crucial to ensuring Perth remains a vibrant, connected and productive city with a future population of 3.5 million people.

RAC welcomes the release of the consultation draft of *Transport @ 3.5 million – Perth Transport Plan* (referred to hereafter as the Plan) and this initial opportunity to provide comment. The Plan is a useful starting point to stimulate further discussion and consideration of the future transport system requirements but further refinement is needed to ensure its vision can be realised.

About RAC

RAC represents the interests of more than 850,000 Western Australians and is the leading advocate on the mobility issues and challenges facing our State. A key role for RAC is to act as a voice for our members and as a strong public advocate on the mobility issues which affect Western Australia (WA).

RAC works collaboratively with Government and other organisations to ensure our members and the community have access to safer, easier and more sustainable mobility options.

RAC aligns its activities with the following three themes:

- > **Safe** – We want to reduce the number of road deaths and serious injuries.
- > **Accessible** – We want to reduce the cost of congestion and keep the cost of transport down.
- > **Sustainable** – We want to reduce the impact of CO₂ emissions from private cars.

We reinvest our profits for the benefit of our members, by supporting major community programs such as RAC's Rescue helicopters, as well as community projects aligned to RAC's mobility agenda.

About our submission

The Plan is considered to be ambitious in that it sets out a multitude of potential infrastructure enhancements to the road, public transport, and cycling networks, as well as some initiatives to help optimise the transport system.

The Plan demonstrates the potential scale of trips that may be generated by a population of 3.5 million people. It also provides a useful starting point to stimulate discussion amongst the community, industry and Government around the transport infrastructure, services and initiatives required to cater for this increased demand.

RAC is supportive of the broad objectives of the Plan, as part of its vision, but believes further work is required to ensure these can be realised and to provide clearer strategic direction for Perth's integrated transport system. In its current consultative form it is considered to lack clarity and commitment, and this adds to the current uncertainty around the likelihood of crucial transport projects coming to fruition.

Given the short duration of the consultation period, and the introduction of a number of projects not previously in the public sphere, our submission is focussed around several themes, or key considerations in further refining the Plan.

The key themes are:

1. Consultation
2. Underpinning policies to provide strategic direction
3. Influencing travel demand
4. An eye to the future
5. Project prioritisation, funding and implementation
6. Monitoring and review process



The absence of discussion on specific projects should not be taken as an endorsement of the proposals.

Broad comments on the road, public transport and active transport network plans include:

- > The proposed road network expansions and upgrades are extensive and appear to be based on an outdated 'predict and provide' philosophy; with some roads projects being prioritised in advance of investments in public transport which may in fact help to negate the need for them. Rather than building capacity, enhancements to the road network should be strategic and focus on addressing connectivity and road safety issues, as well as supporting the delivery of network efficiency projects and accommodating on-road public transport and cycling infrastructure where appropriate.
- > The proposed public transport network seeks to improve connectivity to activity centres which is strongly supported, as is introduction of another tier in the network in the form of Light Rail Transit (LRT) and Bus Rapid Transit (BRT). There would be benefit in more clearly defining which routes are suited to LRT, based on anticipated patronage and land use aspirations. The inner-city subway system is very conceptual at this stage and requires further consideration – it would seem to duplicate above ground services.
- > The proposed cycling network includes 'green mode bridges' to address severance issues created by the river, as well as an additional 685km of off-road commuter and recreational 'cycleways'. This is strongly supported but clarity is required around the extent of cycling infrastructure proposed for the identified on-road cycling routes and whether the cycleways will in fact be shared paths. The network planning principles are considered to be underdeveloped, in that the objectives of the network are not explicit and they do not necessarily align with the projects proposed. Principle 2 for example, which relates to separating cyclists from motor vehicles, uses bike boulevards as a concept to do so but in actual fact these are designed to encourage cyclists and vehicles to share the same space (albeit in a low speed environment). Likewise, Principle 3 emphasises a desire for separation of cyclists and pedestrians but it is unclear to what extent the 'cycleways' will in fact be dedicated for cyclists.
- > The Plan indicates that the walking network is a local government responsibility and as such this mode has not been addressed. While local governments may be responsible for implementation of local level projects, State Government should set the strategic direction in support of the aspiration to increase walking mode share.
- > As an issue affecting all road users and modes of transport, road safety is a key consideration when looking at the movement of people and goods. The importance of safety is considered to be understated in the Plan.

As an overarching comment, given its long-term outlook and strategic nature, it seems more appropriate for this document to be a Strategy, informed or supported by network plans, but with a detailed implementation plan for the short to medium term projects within the first planning horizon (by a population of 2.7 million).

Key considerations

Theme 1: Consultation

The Plan has been developed by the Transport Portfolio (the Department of Transport, Main Roads Western Australia and the Public Transport Authority), in collaboration with other Government departments, over many years but has only been released for public comment for three months.

This consultation period is not considered adequate given the complexity and long-term nature of the Plan, and its importance for the future of Perth.

It is understood that the Plan is only intended to be "the start of a broader conversation with the community, business and industry about what we aspire Perth's transport network to look like into the future". While this would be a logical step as part of the Plan's development, it necessitates the need for further consultation to be undertaken to refine details of the Plan prior to it being finalised and endorsed by Government, and this needs to be recognised.

Furthermore, it has been suggested in stakeholder and industry briefings on the draft Plan that the aspiration is for it to receive bi-partisan support. Given it has, to date, been developed with minimal input from political leaders, as well as industry and the community, it is unclear how this will be achieved.

It is strongly recommended that further consultation be undertaken on the Plan, particularly the projects proposed, and that a process to secure community buy-in (to encourage bi-partisan support, as far as this is possible) is identified. It would be beneficial if the Plan were to remain in draft form until after the WA State General Election on 11 March 2017 to ensure it is not abandoned should there be a change in Government.

Likewise, cross-portfolio commitment will also be essential to ensure the successful delivery of the Plan. This should be demonstrated through portfolio-wide signatories to the Plan as part of its endorsement by Government.

The process adopted in developing Western Australia's Road Safety Strategy, Towards Zero, provides a useful framework for developing a plan (or strategy) of this nature.

Developing ‘Towards Zero’

Extensive community and stakeholder consultation was undertaken at various stages during the strategy’s development to provide opportunities for participation and feedback on draft proposals.

A Parliamentary Reference Group was also established to ensure political leaders were involved throughout, to encourage and promote shared responsibility for implementation of the strategy, and ultimately create bi-partisan support. Acknowledgement of this shared responsibility is evidenced by the signatories to the strategy.

Government officially endorsed the strategy in March 2009, following the WA State General Election on 6 September 2008.

» Recommendation

Following the closure of the period for public comment, and analysis of the feedback received, extensive consultation should be undertaken with the community, and industry and political stakeholders in refining the Plan, prior to its endorsement by Government.

» Recommendation

Ideally, the Plan should remain in draft form until after the 2017 WA State General Election.

Theme 2: Underpinning policies to provide strategic direction

The Plan sets out a multitude of infrastructure projects for the public transport, road and cycling networks, as well as a number of initiatives that seek to optimise the system. The latter are focused around using technology to improve the efficiency of our transport networks and influencing travel choices (or managing travel demand).

Having projects identified in the Plan is essential and we commend Government for being bold in that regard, and for the extensive work undertaken in an effort to better understand the transport requirements for a city of 3.5 million people. However, such a strong focus on infrastructure projects, many of which are only conceptual or require further development and evaluation to determine their feasibility, is considered to be a limitation of the Plan. This creates uncertainty around the likelihood of the Plan’s vision ever being realised.

Supporting policies and strategies are required to underpin the projects presented in the Plan. This will help to provide the

necessary framework to guide project prioritisation and investment decisions, both at State and local government level. The network planning principles for each mode, which vary in detail, are not considered to provide sufficient strategic direction.

At present, projects for each modal network appear to be treated in isolation, with minimal considerations of the implications on, and interactions with, other modes. Policy positions and a framework will enable a more holistic approach to planning and delivering an integrated transport system, allowing projects to be coordinated and trade-offs to be made between competing demands for limited funding across the various modes.

Increased road capacity versus investment in public transport?

The extensive planning for the future road network seems to be reflective of an outdated ‘predict and provide’ approach, that is predicting the potential future traffic demand and then seeking to cater for it, rather than manage it in the first instance.

While the underlying road network plan discusses the importance of achieving operational efficiencies through Intelligent Transport Systems and Managed Freeways, as well as signal optimisation, the focus appears to be on providing increased road capacity through extensive upgrades and expansions, and implementation of All Lane Running.

A recent UK Parliament report on All Lane Running (ALR) concluded that while there are journey time and reliability improvements of ALR, the risks arising from converting the hard shoulder into a permanent traffic lane are an unacceptable price to pay for such improvements. Other forms of smart motorways, such as Active Lane Management and Dynamic Hard Shoulder Running, were considered to be safer than ALR but still improve capacity. Consultation with a peak industry body also highlighted the potential for ‘peak contraction’ (more journeys taking place over a shorter period due to the improved journey reliability), which may offset any reduction in congestion.¹

The Plan suggests that the State’s “ability to increase the capacity of existing roads, and to provide new roads, will become more limited”. Whilst this may be true, this statement is considered to send the wrong policy message – we should no longer be seeking to build our way out of congestion because it is an effective response. Increasing capacity through new or widened roads may result in short term benefits but in the longer term it will likely induce demand and thus add to our congestion challenge, particularly in inner Perth areas where the road network becomes more constrained.

¹ UK Parliament, House of Commons Transport Committee (2016). All lane running. Second Report of Session 2016-17.

Projects such as the East-West City Link, and associated river crossing from Canning Highway to Riverside Drive, for example which seek to “facilitate cross-city movement” and improve access by car, would seem to be at odds with current State and local government aspirations to encourage and facilitate an increase in travel by more active and more sustainable modes of travel. These projects would also connect into the network at locations which are already constrained.

Strategic modelling considerations

It is understood that Main Roads Regional Operations Model (ROM24) and the Transport Portfolio’s Strategic Transport Evaluation Model (STEM) were used for the road network and public transport modelling informing the Plan. While the modelling considered a modest public transport mode share target of 11 per cent by a population of 3.5 million people, it is unclear to what extent the assessment of the future road network requirements and phasing considered the potential for mode shift resulting from proposed enhancements to the public transport (and cycling) networks within each of the planning horizons. Prioritising public and active transport projects could reduce the need for some of the proposed enhancements to the road network.

The outputs of modelling should always be treated with caution and not simply used to predict demand and provide new infrastructure to cater for it.

» Recommendation

The limitations with the strategic modelling should be acknowledged and scenario or sensitivity testing considered as part of further work to understand the future requirements for the road network.

As Perth grows towards a city with a population of over 3.5 million, to safeguard the future mobility of Western Australians, it is essential that population and employment growth is focussed in areas that provide good access to a range of transport options. Based on analysis commissioned by RAC, a number of Perth’s activity centres (hubs where growth is proposed to be located) exhibit low accessibility by public transport. To support the aspirations of Perth @ 3.5 million, substantial investment will therefore be required to enhance the accessibility of these centres by a range of transport options. While the rail and on-road transit projects proposed in the Plan do seek to do this, the priority of some projects does not necessarily reflect this.

As an example, the Stirling – Murdoch Orbital rail project would connect and enhance the accessibility of four activity centres (namely Stirling, UWA-QEII, Murdoch and eventually Morley – two of which currently exhibit low levels of public transport accessibility). It is also stated in the Plan that the “Stirling – Murdoch Orbital has the potential to defer the need for a new road crossing the river”. Despite this, this project is proposed for the second and third planning horizons (with some connections delivered by a population of 3.5 million and others beyond) while the two road crossings are proposed for the second planning horizon which seems illogical.

Understanding Perth’s public transport accessibility

In October 2014, RAC commissioned the Planning and Transport Research Centre (PATREC) to undertake a comprehensive study to explore car and public transport accessibility, with a focus on Perth’s strategic, secondary and specialised activity centres.

‘Accessibility’ can be described as the degree to which (groups of) individuals can reach activities or destinations by a particular travel mode or combination of modes. The measure of accessibility is the number of people or jobs that are reachable within a specified travel time or distance.

The analyses highlighted:

- > low levels of public transport accessibility exhibited by a number of Perth’s activity centres – 13 of Perth’s 34 activity centres can be reached by less than 5 per cent of the metropolitan population within 45 minutes by public transport, but 42 per cent in that time by car;
- > some lower order secondary activity centres have better access by public transport than many strategic centres –
 - > 12 activity centres have high accessibility, with Leederville (secondary), Subiaco (secondary), Cannington (strategic), Cockburn Central (secondary) and Murdoch (specialised) being the top five;
 - > six of Perth’s 10 Strategic Metropolitan Centres have low accessibility;
- > the importance of activity centres being developed around, or within close proximity to, train stations – eight stations are accessible by more than 17 per cent of the metropolitan population within 45 minutes by public transport, which only one activity centre achieves.

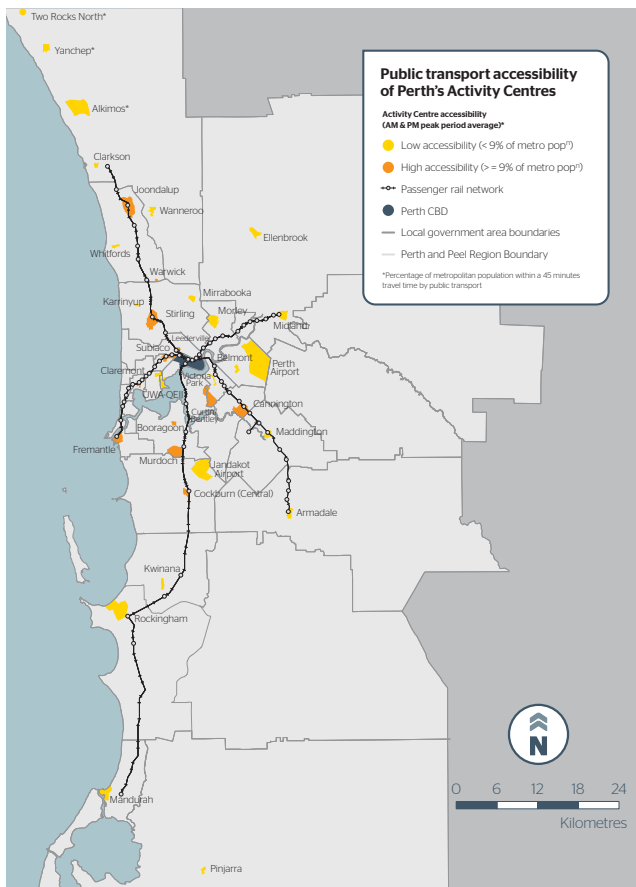


Figure 1: Accessibility of Perth's activity centres by public transport

Policy alignment, or strategic fit, must factor into the decision making process to ensure any trade-offs which have to be made are in the interest of delivering an integrated transport system. This can only be achieved through incorporation of underlying policies within the Plan, and an agreed Strategic Merit Test as part of project planning and evaluation (refer to Theme 5).

» **Recommendation**

The Plan should identify underpinning policies to set a clear strategic direction and allow the strategic merit, or alignment, of projects to be demonstrated (refer to Theme 5).

Theme 3: Influencing travel demand

Meeting the pressures placed on the transport system at peak times is challenging and this will only worsen as the city grows. Influencing when and how people use our transport system will be critical and Travel Demand Management (TDM) initiatives must be progressed as a priority.

The initiatives included in the Plan to influence travel choices are at present limited to four main TDM tools, all of which are

proposed for the second planning horizon (by a population of 3.5 million). There would be merit in more clearly defining, and prioritising, a range of initiatives that will encourage and facilitate the behaviour change that will be required to manage congestion, complementing and leveraging initiatives to improve the efficiency of our transport system.

Many TDM tools and initiatives, as well as supporting policies, could be progressed with minimal cost implications when compared to the major infrastructure projects proposed, and may help to mitigate the need for some of the road network upgrade or expansion proposals. They can also complement investment in the public transport and active transport networks.

TDM tools to reduce car travel in the city

From the mid-1990s to 2011, the City of Perth experienced a 42 per cent increase in employment and there was a corresponding 30 per cent increase in total daily trips to and from the city. During this period, car driver mode share declined from 50 per cent to 35 per cent and travel by public transport, walking and cycling almost doubled. Reductions in parking supply, increases in the parking charges and the introduction of the free Central Area Transit (CAT) services, which resulted from the introduction of the Perth Parking Policy, as well as other public transport capacity and service enhancements have been cited as the major reasons for these changes in travel patterns.²

» **Recommendation**

More clearly define, and prioritise, a range of tools and initiatives which seek to influence travel demand, helping to make better use of our transport system. These should align with underpinning policies setting the strategic direction (refer to Theme 2).

Theme 4: An eye to the future

The Plan discusses a number of social and technological trends that are, or will, influence the nature of travel and the future of mobility and acknowledges the need to “continuously identify and monitor influential trends and their causes”. While “predicting the future is not an exact science”, and it is difficult to accurately predict the path of such trends, we should be planning now for the future we want to achieve.

While it is positive these trends are acknowledged in the Plan, we must move beyond identifying and monitoring trends, which is too reactionary. Government should adopt a proactive approach and seek to be at the forefront, leading discussion and exploring the potential implications, barriers and enablers of such trends. This will be essential to ensure regulation and

² Richardson and Elaurant. (2014) The Importance of Parking policy for sustainable transport and land use city planning. AITPM 2014 National Conference.

policy keep pace with rapid advances in technology, and that funding opportunities are identified and secured, to position WA to embrace and maximise the benefits or adapt to mitigate potential negative implications. Government has a leading role in shaping how these trends impact transport and mobility.

In regards to driverless vehicles, the Plan acknowledges they are on the rise but that the timing and impacts are uncertain. It also identifies some transition challenges with the emergence of these vehicles but the road to responding to these remains unclear.

While there are still many unknowns about what a future with driverless vehicles will look like, these vehicles will no doubt have considerable implications for our transport system and city, and will change the way we travel.

Driverless vehicles have the potential to deliver significant benefits in terms of road safety and enhanced mobility but equally there is the possibility that the number of vehicle trips made could potentially increase due to their convenience and ability to make trips without occupants.



Consideration needs to be given to developing a roadmap, not only to facilitate the safe transition of driverless vehicles onto our roads but also the role they will play as part of an integrated transport system. Government is already leading in this regard with its support of the Intellibus™ trial in South Perth and the recent announcement of the truck platooning trial. It will also require consideration of policies to disincentivise a focus on private, and encourage shared demand-responsive, driverless vehicles, as well as the future infrastructure requirements – will we need the eight lane freeways and expressways being proposed in the Plan?



The Plan makes mention of other emerging mobility options such as car sharing, ride sharing, ride-sourcing, car-pooling and bike-sharing which are being enabled through technology. As part of an integrated transport system they offer real potential to support an increasing desire for reduced car ownership and usage. Again though, what Government will do to facilitate these new ways of travel is unclear.

The potential of car sharing

Over recent years, RAC has been exploring the role of car sharing in helping to offset mobility and cost of living pressures, and its potential to work in Perth.

Car sharing, which provides short term access to motor vehicles for personal and business use, offers users the benefits of a car without the costs and responsibilities of ownership and operation. Research has shown that one car share vehicle can remove nine to thirteen private cars from the road.³

An RAC survey of 800 respondents highlighted that the concept of car sharing is appealing to many people residing in inner Perth areas. Almost half found it appealing, and one in four said they would actually use a car sharing service if one was available in their area, despite the concept being new to most.

Car sharing will not work everywhere. Demographic, socio economic and transport factors all play a role in its viability. Areas in Perth with greater potential for car sharing to work have been identified as pockets within the Cities of Belmont, Fremantle, Nedlands, Perth, South Perth, Stirling, Subiaco and Vincent and the Towns of Cambridge and Victoria Park.

Readying Perth to facilitate car sharing as a new mobility option, and unlocking its full benefits, will require action from the public and private sector. Strategic leadership, direction and policy will be required from State Government to help create the conditions to support car sharing.

» Recommendation

The Plan should consider Government's role in better understanding the implications of, and taking a proactive approach in responding to, identified trends to ensure transport and mobility benefits can be realised.

³ Martin, E., Shaheen, S. & Lidicker, J. (2010). Impact of car sharing on household vehicle holdings.

Theme 5: Project prioritisation, funding and implementation

The infrastructure projects, and initiatives to optimise the system, outlined in the Plan are phased over the three broad planning horizons: by a population of 2.7 million (which is assumed to be around 2031 – a little over 14 years from now), by 3.5 million (assumed to be 2050) and beyond 3.5 million.

Under 'Timing' it is stated that "the plan is a guide for the future network – how and when different elements are delivered will be determined over the next three decades". With the current budget constraints and recanting of projects which were once viewed as a priority for Perth, such as MAX light rail, there is a clear need for a detailed implementation plan of prioritised projects for the first planning horizon. Given our city could be well on its way to a population of 2.7 million people within a decade, and with the long lead time for infrastructure projects, what we do now will be crucial for our future.

» Recommendation

A more detailed implementation plan is required for projects and initiatives to be delivered within the first planning horizon of a population of 2.7 million people. This should include identified priorities, indicative timeframes and lead agency(s) to guide implementation.

To ensure that essential transport infrastructure, services and initiatives are prioritised for funding, all projects in the Plan should be subject to a Strategic Merit Test as part of the project planning and evaluation process. The purpose would be to determine alignment with, and contribution towards, strategic and policy objectives (Theme 2), as well as to identify barriers to implementation. This may result in some of the identified projects being discounted prior to detailed economic appraisals. For major projects that are subject to economic appraisal, robust business cases justifying investment should be made publicly available.

Clear governance arrangements need to be established for project planning and evaluation to inform the annual Budget process. There is considered to be value in aligning the transport portfolio's investment planning to ensure funding is allocated across all modes of transport equitably, in line with the policy framework. Furthermore, establishment of a more formal parliamentary oversight committee would ensure the different government agencies with transport responsibilities are meeting those responsibilities effectively.

» Recommendation

A Strategic Merit Test should be applied to all projects, and economic appraisal as appropriate, to help inform the decision-making and prioritisation process.

» Recommendation

The process and governance structure around project prioritisation and funding should be outlined in the Plan.

With the exception of reference to the State continuing to partner with private industry and exploring innovative funding opportunities, such as value capture, funding is not discussed in the Plan. As a minimum, existing and potential funding opportunities should be identified for further investigation. It is important that the Plan clearly identifies the projects which could attract Federal Government funding and that these opportunities are taken up wherever possible through business case submissions to Infrastructure Australia. Likewise, those projects that may lend themselves to value capture or other innovative funding or financing approaches should be identified.

As of October 2016, the 'priority projects' and 'priority initiatives' included in Infrastructure Australia's Infrastructure Priority List for WA are very limited compared to those for the other States. Perth Freight Link and the Forrestfield – Airport Link are the only two infrastructure projects identified. There are also five additional initiatives, or potential infrastructure solutions for which a business case has not yet been completed, these are:

- > Perth CBD – north corridor capacity.
- > Perth major east – west and southern corridor capacity upgrades.
- > Perth Airport third runway.
- > Perth container terminal capacity enhancement.
- > Improve road access to remove communities (outside of Plan area).

This reflects the lack of clarity on WA's transport infrastructure priorities and reinforces the need for a pipeline of priority projects for Federal funding.

» Recommendation

The Plan should identify a range of existing and potential funding sources, and highlight projects which could lend themselves to more innovative funding and financing approaches, to ensure opportunities are explored and taken up wherever appropriate.

Theme 6: Monitoring and review process

As acknowledged in the Plan, there will be a need to review the Plan to ensure it keeps pace with rapidly changing land use, economic, social and technological trends influencing the nature of travel so it continues to meet the needs of Perth's growing population. Similarly, the Plan needs to be monitored to ensure that implementation is on-track and occurring in an effective and timely manner.

Currently, the Plan contains limited detail around the process for monitoring, and feedback of outcomes into the proposed five-year review cycle. This needs to be an integral element of the Plan.

The rationale for the planning horizons being based on population, rather than arbitrary years when the population may or may not have reached a level to justify specific projects, is understood. However, with the Census occurring in five year intervals, and the population estimates for years in-between being based on projections, there is a risk that projects may not have been delivered in time for when they are required. Likewise, with growth rates varying across the metropolitan area, some projects may be required in advance of these planning horizons. This will need careful consideration as part of the monitoring and review process and will be aided by the detailed implementation plan for the first planning horizon.

The Plan outlines key outcomes, or targets, relating to the public transport, active transport and car driver mode shares. While the inclusion of targets is strongly supported, those set for cycling and public transport (4 per cent and 11 per cent mode share for all-day trips) are considered to be modest. More ambitious targets should be considered to demonstrate Governments commitment to encourage and facilitate an increase in travel by more active and more sustainable modes.

Furthermore, the Plan should contain a series of Key Performance Indicators (KPIs), with identified data sources, to aid monitoring. This should include appropriate measures of accessibility, congestion / network performance (e.g. delay, journey time reliability, vehicle kilometres travelled per capita) and safety.

As for project planning and evaluation, appropriate governance arrangements also need to be established to ensure the robustness and transparency of the monitoring and review process. This could include the establishment of an Implementation Reference Group, as well as a commitment to share the outcomes of the monitoring and review process with the community.

» Recommendation

The Plan should include a monitoring and review regime (with appropriate measures of performance and a commitment to reporting) to ensure outcomes feed back into project planning and evaluation, as well as future budget decisions.

Moving forward

We thank the State Government for this initial opportunity to comment on the Plan, which will be critical in providing clear strategic direction to ensure Perth's future transport system supports a vibrant, connected and productive city of 3.5 million people.

We look forward to further consultation in refining the Plan, and on the project priorities.





A submission by the RAC.

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For the better