

# Draft Public Transportation Plan in 2031

## Submission by the Committee for Perth

This submission has been prepared by the Committee for Perth in response to the draft Public Transportation Plan for Perth 2031.

The Committee for Perth, established in 2006, is an influential member-based organisation driven by Perth's business and community leaders. We promote and enable change that improves the cultural diversity, economic prosperity, sustainability and world-class amenity of Perth.

The Committee for Perth has a very strong interest in the future of public transportation in Perth because cities are shaped by their transportation systems, and we believe that the cities that are most successful in improving the sustainability of their transportation networks are those that do so as part of a wider programme of creating a more vibrant, liveable and sustainable city.

We have a particular interest in light rail because we believe that light rail is the missing mode and fits well between heavy rail and bus in an integrated public transport network. We also believe that light rail will transform Perth's transportation and urban development future more than any other transportation or land use strategy or project currently proposed for the metropolitan region.

This paper forms our submission on the draft Public Transport Strategy 2031. As previously advised, the Committee for Perth has commissioned specific research on funding light rail through value capture models and the findings of this research will be completed next month and forwarded to the Department and to the Minister for Transport in November.

The Committee for Perth is also the convenor of the Knowledge Arc Light Rail Steering Committee which was formed to facilitate strategic and co-operative dialogue between the critical organisations, local authorities and stakeholders potentially involved in delivering light rail to Perth. The purpose of the Committee is outlined below.

### Knowledge Arc Light Rail Steering Committee Statement of Purpose

The Committee for Perth is the convenor of the Knowledge Arc Light Rail Steering Committee which was formed to enable the critical organisations and stakeholders who would be involved in connecting Curtin University and the University of Western Australia through Victoria Park, the City and West Perth.

Having met for more than 12 months, members of the Steering Committee include the Committee for Perth, the City of Perth, the City of Nedlands, the City of South Perth, the City of Subiaco, the

Town of Victoria Park, Curtin University, the University of Western Australia and QE2 Medical Centre Trust. Meetings of the Steering Committee have also been open and attended by representatives of the Department of Planning and the Department of Transport.

The Knowledge Arc Light Rail Steering Committee is:

- Committed to light rail as an integral component of the future land use and transportation development of Perth.
- Dedicated to ensuring that the light rail routes and infrastructure identified for Perth provide the greatest possible advantage for the metropolitan region from both a land use and transportation perspective.
- Committed to identifying the most appropriate funding mechanisms for light rail development in Perth.
- Committed to ensuring the engagement of key stakeholders and property owners/community members who will be affected by light rail.
- Committed to the creation of light rail hubs at strategic locations along the route that will contribute to the vibrancy of the community and sustainability of businesses.

## 1.0 Introduction

In planning for the first new light rail in Perth in nearly a century, the draft Public Transport Plan 2031 provides the State Government with a key tool to reshape the future of metropolitan Perth.

This is an exciting opportunity for our future. Perth has the potential to be a city that has a 21<sup>st</sup> century approach to transit with decreased car dependence and fully integrated transportation and urban development that increases accessibility and reduces the need for car travel.

However, achieving this will not be easy and it is therefore crucial that the State Government acts proactively and collaboratively now, to ensure that future public transportation and particularly light rail is well designed, funded, executed and contracted in a way that will serve Perth as a growing metropolitan region well for the coming decades.

The Committee for Perth congratulates the State Government for moving in the direction of many other cities in the UK, Europe, Asia and the USA by taking an integrated transport approach where road, heavy rail, light rail and bus all have a role to play.

Given that our road network, bus and heavy rail systems are well established, the Committee for Perth is committed to advocating for the implementation of light rail in a way that will change the face of Perth by creating pockets of urbanity in what is a largely suburban car-dependent region.

We are aware that the government and private enterprise in the State have substantial expertise in public transportation planning however we believe that there are many cities that we can learn from both domestically and internationally through experts who have first-hand experience in implementing light rail, optimising its patronage within the public transportation network, and delivering integrated land use and transportation outcomes.

To assist in achieving this, the Committee for Perth has invested in research into international light rail examples through an international study tour to the United Kingdom and the USA. Committee for Perth CEO Marion Fulker visited five cities in the UK – London, Nottingham, Sheffield, Blackpool and Manchester, hosted by the All Party Parliamentary Light Rail Group. Marion also visited Portland, hosted by First Stop Portland, part of the Portland State University; and visited Melbourne to meet with the Managing Director of Yarra Trams. During her visits, Marion met with local and regional government representatives, elected and executive, as well as developers, operators, retailers and engineers.

The findings of the study tour along with the expertise and experience of the members of our Reshaping Working Group and the Knowledge Arc Light Rail Steering Committee has informed this submission. We believe that the experiences of these cities both establishes a case for light rail to be a major component of the future of transportation in Perth, and identifies some important implementation issues that Perth needs to be aware of in planning for, implementing and funding light rail with the current implementation of light rail in Edinburgh cited consistently as a worst case example.

## 2.0 This Submission

This submission is primarily focussed on strengthening the case for light rail in Perth as opposed to other forms of transit because we do not believe it has been clearly established in the current draft Public Transportation Plan.

The submission identifies international light rail best practice examples that Perth can learn from in planning for and designing a light rail system for the city that maximises transportation and land use benefit; it identifies potential goals for the planning of light rail routes; and focuses on funding mechanisms for light rail, something that is not outlined in detail in the draft Public Transportation Plan.

The submission highlights the importance of drawing on the wealth of experience that is available world-wide in planning, funding and developing new light rail systems and of learning from international success stories which clearly demonstrate that while there can be implementation challenges, light rail, trams or streetcars provide very considerable positive benefits to cities.

The Committee for Perth believes that the most critical lesson we can learn from international experience is that success comes from an integrated transportation and land use approach and the benefit that light rail has in stimulating development and redevelopment, something which is addressed repeatedly in this submission.

It is also our view that the unique ability of light rail systems to stimulate development makes the planning and development of light rail as much about planning the future urban form of the city than it is about planning for its transportation needs.

This submission also considers some of the detail of the Public Transportation Plan and provides comment and suggestions on how the draft Plan could be made more robust, clearer and accessible. It also identifies some concerns with the Plan including the use of conservative population forecasts and modelling data and the lack of a fully integrated modelling approach.

*'Urban development and public transport are two sides of the same coin. What is your urban development strategy and then I can tell you what the transport solution is.'*

- Michel Masson, Managing Director of Keolis Australia, operators of Yarra Trams

### 3.0 The Need for an Integrated Transport and Land Use Approach

Given that the vision of the draft Public Transportation Plan is *'to facilitate the development of public transport as the preferred choice of travel to strategic centres'*, it is evident that the ultimate goal of the draft Public Transport Plan to make Perth a less car dependent city by increasing public transportation trips and reducing car trips to strategic centres and we are in full support of the direction.

Achieving this will require the development of a fully integrated transport and land use planning system, because decisions about road infrastructure affect public transport planning. Similarly planning for roads and for public transport is influenced by the form of urban development and how land is used.

It is therefore essential that planning for Perth's public transport future is integrated with planning for our road transport and urban future.

International best practice indicates that effective planning for public transport, and particularly for light rail, requires a fully integrated and co-operative approach involving all of the agencies and stakeholders involved in transport and land use planning and development.

We believe that the delivery of an integrated transport and land use system should therefore be the core objective of the Public Transport Plan and that the Plan should detail the governance and decision making framework to show how the Department of Transport is working with, or intends to work with, other agencies including the Main Roads Department, the Western Australian Planning Commission (WAPC), local authorities and key stakeholders to deliver its vision.

### 4.0 Making the Case for Light Rail

The draft Public Transportation Plan identifies a strong vision for the future of public transport in Perth and some of the very important roles that public transportation serves in the metropolitan region, with which we strongly concur. These include moving people, managing congestion, creating development opportunities, connecting centres and providing environmental and social benefits.

However the draft Plan lacks consideration of the capacity of different modes of transportation to achieve these goals and therefore does not clearly demonstrate the comparable, documented benefits of heavy rail, light rail and bus (for rapid transit vs local and feeder services).

This is important because while the draft Plan proposes light rail as a preferred mode for Perth's future, it does not build a strong case for light rail over other forms of rapid transit.

The draft Plan suggests that bus and light rail are equally capable of achieving the benefits stated above, whereas current research and international examples indicate that the capacities of the different modes in achieving these goals is substantially different.

The benefits of light rail are very well documented – it gets people out of cars by creating new public transport users who would not have used bus and perhaps might have used heavy rail – and have been strongly reinforced through international and national observations. Light rail is not just a vehicle for moving people, although it is very effective at this, it is a transportation mode that

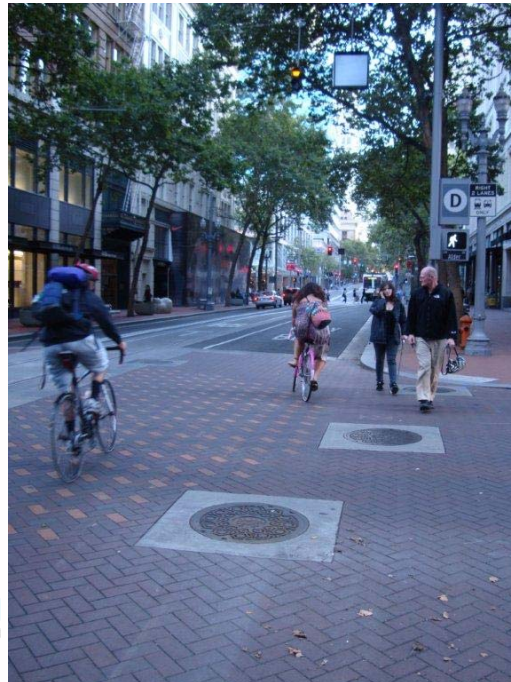
transforms the physical form of the city, it changes travel behaviour and strongly influences perceptions of the city.

The benefits of light rail are emphasised in that a large number of cities have recently developed substantial light rail systems or are planning expansions to existing systems. The light rail revolution is in full swing. New light rail has been developed in the Middle East, throughout Europe, in the UK, in the Republic of Ireland and cities in the United States, in South America, Asia, India and Australia.

### Sheffield Network Map



### Multi-modal Transport on Portland's Streets



Perth would be joining the revolution not leading it and therefore is in an advantageous position to learn from the successes and failures of others.

We have outlined some of the benefits below, which we believe should be clearly articulated in the final Public Transport Plan.

#### 4.1 The Benefits of Light Rail – A Summary

Benefit	Comment
Flexible and efficient	Light rail has the ability to combine the benefits of on-street accessibility and flexibility provided by buses with the higher speed and service reliability of light rail.
Drives new development/urban regeneration	There is a very substantial body of international research which clearly demonstrates that light rail, in comparison to other modes, has capacity to drive new development and urban regeneration along its route.  <b>Portland</b> is a primary example of a city that has used light rail and streetcar to shape the city and promote investment at the city's core – which is considered

Benefit	Comment
	<p>critical to the region’s economic stability. According to a report produced by the Office of Transportation and Portland Streetcar Inc in 2008, since 1997 when the Portland streetcar alignment was identified property along its length have experienced very significant changes including:</p> <ul style="list-style-type: none"> <li>• \$3.5 billion investment within two blocks of the streetcar alignment.</li> <li>• 10,212 new housing units and 5.4 million square feet of office, institutional, retail and hotel construction within two blocks of the alignment.</li> <li>• 55% of all CBD development since 1997 has occurred within 1 block of the streetcar and properties located closest to the streetcar line more closely approach the zoned density potential than those situated further away.</li> <li>• Developers are building new residential buildings with significantly lower parking ratios than anywhere else in the region.</li> </ul> <p>This success was due to an orchestrated approach taken by Portland to use the streetcar system to connect two major redevelopment areas: Seven acres of abandoned rail yards and a contaminated brownfield site and to use the system as an incentive for the development of high quality mixed use development within the central city.</p> <p><b>Bordeaux</b> is also an exemplary example of a city that has been restructured around its tram network. The network’s success has been through the ability of the government to mobilise capital and technicians as well as leading urban planners, architects and landscape architects in planning the system, its infrastructure and its routes.</p> <p>The result has been a public transport system that is reported to have profoundly changed the face of the city and been a highly effective urban restructuring tool. Light rail development has been attributed with reconciling the city with its river, making the centre of the city attractive to investors, and serving the peripheral municipalities in an equal manner, specifically those areas that were struggling to attract investment.</p> <div data-bbox="448 1386 745 1778" data-label="Image"> </div> <p>Similar positive results have been achieved in Manchester where light rail was instrumental in stimulating the redevelopment of Manchester’s Quays, one of the first and largest urban regeneration programs in the United Kingdom. The success of the Salford Quays (pictured left) has been largely attributed to the development of a Metrolink light rail route to Manchester City Centre.</p>
Facilitates economic development	Investment in light rail has been shown to deliver substantial benefit to local economies. Investment in light rail networks stimulates investment along its route and has been demonstrated to reduce vacancy rates and increase the

Benefit	Comment
	<p>profitability of businesses located along its route. For example, according to the American Public Transit Association:</p> <ul style="list-style-type: none"> <li>• Every \$100 million USD invested in public transit supports approximately 4,000 jobs.</li> <li>• \$3.3 billion USD in new property development and redevelopment completed, underway or planned near Dallas Area Rapid Transit light rail stations since 1999.</li> <li>• St. Louis has seen substantial transit-oriented development, redevelopment and real estate investments near its Metro Link light rail system opened, generating over \$1 billion to Metro’s service area.</li> <li>• Within five years after the construction of Portland’s light rail line, over 7 million square feet of new development valued at over \$900 million occurred adjacent to light rail.</li> <li>• Businesses located near the Dallas Area Rapid Transit light rail starter line experienced a nearly 33% jump in retail sales in one year, compared to just 3% elsewhere in the city.</li> </ul>
Increases property values along its route	<p>International experience indicates that light rail drives up property values along its route, particularly residential property values, and that this provides the potential for some of this value to be captured as a funding tool.</p> <p>The American Public Transit Association estimates that property values around transit stations attract a premium of approximately 20 to 25%.</p> <p>This is similar to the value premium currently experienced in Perth for land centred on and immediately around stations which, as cited in the Committee for Perth Case Study ‘Perth’s Rail Transformation’, according to the Australian Property Institute, approximately 15-35%.  <a href="http://www.committeeforperth.com.au/projects/research/18-reserach">http://www.committeeforperth.com.au/projects/research/18-reserach</a></p> <p>According to research by R B Diaz (<a href="http://www.rtd-fastracks.com/media/uploads/gl/diaz.pdf">http://www.rtd-fastracks.com/media/uploads/gl/diaz.pdf</a>) there are a large number of studies that examine the relationship between light rail and rail development and residential and commercial property values which provide varying conclusions, but which almost unanimously find a that there are positive impacts of proximity to rail transit on property values where a system provides improved access and reduced commute times to places of employment.</p> <p>This effect is generally limited to properties within pedestrian accessibility of transit stations and is affected by the market penetration of transit within the area. That is, those areas that attract the highest rail patronage also experience the greatest increase in property values.</p> <p>Rail transit also makes sites located near transit more attractive as sites for potential development and suitable for a higher level or density of development, which in turn increases value.</p>



Benefit	Comment
People prefer light rail	<p>Light rail is perceived in other markets as being a high quality ‘up market’ form of public transportation. Surveys undertaken in Sheffield in the United Kingdom have shown that, while seeing bus as somewhat down market, public perceptions of light rail were similar to those of heavy rail. It is perceived as convenient, comfortable, safe and secure and providing a high degree of accessibility. It was also considered to be more reliable and faster than bus, as well as quiet and pollution-free on street.</p> <p>This research has been supported by studies in the United States which indicate that the public perceive light rail considerably more positively than bus transit (<a href="http://www.worldtransitresearch.info/research/3787/">http://www.worldtransitresearch.info/research/3787/</a>)</p> <p>Media and commentators in the USA have gone so far as describing light rail as transit with ‘sex appeal’ and have partially attributed this allure to its ability to attract private investment and high ridership. (<a href="http://www.mayorsinnovation.org/pdf/USATodayStreetCars.pdf">http://www.mayorsinnovation.org/pdf/USATodayStreetCars.pdf</a>)</p> <p>The findings of recent research by the Committee for Perth (<i>Perth’s Rail Transformation</i>) also reiterates that Perth’s population has a strong preference for rail transit over bus, something which has been demonstrated in the electrification of the suburban rail system and the development of the northern and southern suburbs rail routes. We believe that when implemented, light rail will attract significantly increased transport ridership in Perth just as it has in other cities.</p>
Creates new transit users	<p>Light rail has greater capacity than bus and as outlined above, is perceived more positively, both of which are effective in attracting new transit users.</p> <p>This is reflected in the mode shift achieved by light rail in comparison to bus. According to a report released by the Great Britain Parliament House of Commons Transport Committee, in Great Britain, peak hour transfer from car to tram is approximately 20% where new light rail has been developed, in comparison to 4 to 6.5% where bus corridors have been improved. (<a href="http://www.publications.parliament.uk/pa/cm200405/cmselect/cmtran/378/378i.pdf">http://www.publications.parliament.uk/pa/cm200405/cmselect/cmtran/378/378i.pdf</a>)</p> <p>Similar findings have been reported in Europe. For example the implementation of light rail in Karlsruhe (Germany) demonstrated that motorists prefer light rail to buses, with 40% of car owners willing to use light rail compared to 5% who were willing to switch to buses.</p> <p>Light rail is also documented to have a significant ‘network effect’ – i.e. as more people use the service, demand for it grows and people jump on the bandwagon and perceive it as having increased value.</p> <p>Light rail also attracts significant attention in media and in its high ‘on street’ visibility and that this contributes to the memory and perceptions of transit systems.</p>

Benefit	Comment
	Perth's history has demonstrated that the population prefer rail, and we therefore firmly believe that ridership of a high quality efficient light rail system in Perth would also achieve high levels of patronage.
Social equity	<p>Light rail has been demonstrated to increase social equity by providing a fast, comfortable, reliable and economical transportation service – thereby reducing the need for vehicle ownership in residential areas along its route.</p> <p>Research by the Centre for Neighbourhood Technology in the United States has demonstrated that people who take mass transit spend considerably less money on transport than people who rely on their own vehicles and that spending on transit has an added advantage in that the money remains local.</p> <p>This could have big advantages in Perth, particularly in providing light rail to the university zones which house large numbers of students who require economical transportation options and to areas of economic stress. It also has big advantages for non-drivers, such as the young, mobility impaired and elderly, an issue which requires increasing attention as our population ages.</p>
Environmentally friendly	As outlined above, light rail is more environmentally friendly than road alternatives and is effective in decreasing noise and vehicle emissions.
Light rail is more effective at moving people than bus	International examples demonstrate that rail is more effective at moving people than bus. According to a report produced by the Great Britain Parliament House of Commons Transport Committee light rail has potential to carry flows of up to 20,000 per hour (around four times more than conventional bus and twice that of the largest tram-like bus alternative).
Improving Perth's liveability, sustainability and national and international reputation	Light rail has a positive impact on the liveability and sustainability of cities, and there is evidence that investment in light rail has a positive impact on a city's international reputation. Of the cities listed as the liveable Economist Intelligence Unit's top 10 'most liveable' all but two – Perth and Auckland – have a light rail system in operation.

We are well aware that light rail has its critics, particularly among the bus lobby and that issues such as cost, maintenance and disruption during construction are likely to be raised by some in Perth as reasons to focus on rapid bus transit rather than light rail. However it is evident from the vast number of international examples of successful light rail development around the world that bus is not as effective as light rail either as a people mover or as a catalyst for urban regeneration and economic development.

Some bus advocates claim that tram-like bus systems are capable of similar benefits to like rail. However, as pointed out by the Great Britain House of Common Transport Committee – *'the more tram-like the bus system, the more tram-like the costs'*. Similarly, our research is yet to identify a city that has facilitated transformational change in transportation ridership or land use through rapid bus transit.

We therefore refute the draft Plan's premise that rapid bus is as effective as light rail in achieving transportation and land use objectives and request that this assumption is either justified or removed as it is not accurate.

It is noted that the Committee for Perth also acknowledges the important role that buses will play in Perth's future public transport system, however we believe they are best used for feeder and local services, rather than as rapid-transit vehicles.

## 5.0 Goals for Light Rail Planning

The information outlined in Sections 1 to 4 above demonstrate some of the very substantial benefits of light rail however they also highlight the complexities of planning for light rail, and particularly planning for light rail as part of an integrated transport system which will maximise transportation and urban benefits and capitalise on potential property value increases (which is essential if the system is to be partially funded by capturing the value of property value gains).

We therefore believe that the role of the final Public Transportation Plan in guiding the detailed planning and delivery of light rail would be strengthened by identifying high level **goals** for rapid transit/light rail delivery in Perth.

Our research and discussions with international experts has identified a number of specific factors which we believe should be included as specific goals for light rail route planning. These include:

### 1. Connecting strategic, trip generating centres

Planning light rail with a prime objective of connecting areas that have been identified as strategic centres in *Directions 2031* and centres that act as major employment, development or infill development locations. According to UK Transportation Knowledgebase KonSULT, a light rail system *'is more likely to be successful if it connects two large centres which generate or attract trips, preferably over the whole day, to ensure a continuous high level of patronage. This happened in Calgary, Baltimore, Los Angeles, Portland, St Louis and San Diego'*.

### 2. Maximising System Speed and Pedestrian Accessibility

In order to maximise patronage and positive impacts on property values, the pedestrian accessibility of stations from development nodes to transit stations should be maximised, as should the speed of the system through route alignment and separate and priority right of way. We believe that it is important that the Department of Transportation works closely with the WAPC, local authorities and the Main Roads Department to achieve these goals.

### 3. Shaping TOD along its route

Light rail systems need to be planned to enable and shape Transit Oriented Development (TOD) along its route. According to prominent Transport Planner and Place Maker, G B Arrington, *'To realize the benefits of TOD it is not enough for development to be adjacent to light rail. The development must be shaped by transit.'*

As outlined above, Portland and Bordeaux are cities that have used light rail investment to reshape their urban areas and they have achieved this by carefully planning light rail routes to ensure that the potential for TOD is maximised and by working in partnership with government agencies, local authorities, private enterprise and land owners to enable TOD delivery. Internationally, transportation authorities have worked with other agencies to develop incentives for investment in

development adjacent transit stations including financial incentives, decreased regulation, density concessions or development through public-private partnerships to support developers in delivering high quality TOD outcomes.

We believe that there will be a strong role for the future Metropolitan Redevelopment Authority (MRA) to play in delivering TOD in Perth and that the Department of Transport should work closely with the WAPC, local authorities and key stakeholders throughout the light rail planning and delivery process, as well as with the existing redevelopment authorities prior to the formal establishment of the MRA. Improvement Schemes under the Planning and Development Act 2005 have obvious potential to be used as mechanisms to enable high quality transit focussed development along light rail routes and the role of these should be considered as part of the light rail planning process.

#### 4. Increasing Social Equity



There is potential to maximise social equity through light rail and international examples indicate that light rail can be explicitly planned to increase accessibility of areas which suffer from economic stress and can be used as a catalyst for affordable housing development, such as in Manchester in the UK (pictured left).

#### 5. Improving the liveability of areas along light rail routes

It is evident that public transportation and higher density development does not always, or automatically deliver more 'liveable' communities. To achieve this, planning for light rail needs to also consider and identify parallel mechanisms to ensure the delivery of high quality public open spaces; high quality urban design outcomes; public art and affordable housing projects. Consideration should also be given to the capacity for light rail infrastructure to be of an appropriate design and scale to fit within and potentially enhance the neighbourhoods through which it travels.

It is evident that, to achieve all of these goals, light rail routes must be carefully planned in a fully integrated manner.

### 6.0 A Development Oriented Transit Approach



However it is evident that achieving the goals outlined in Section 5 of this submission will require a fundamental shift in the approach taken to planning for transport – an approach which places development stimulus as the top priority in planning for transportation modes and route.

In Portland, this approach has been termed 'Development Oriented Transit' and has resulted in extremely high quality urban regeneration outcomes (pictured above). We believe that it is critical that Perth, like Portland, takes this approach, because realising the

total benefits of light rail hinges on creating development stimulus – as does potential funding.

However, as previously outlined, achieving this will require the Department of Transport to work in collaboration and partnership with other State Government agencies and with local authorities and key stakeholders in determining and enabling the most appropriate transit route and in ensuring the seamless integration of light rail, road based transport and land use development.

In this regard we don't believe that the State Government should rely solely on the implementation of high level planning policies or on high level linkages between strategic land use and transportation plans to ensure the delivery of high quality, integrated land use and transportation outcomes. While these policies are important it is evident that they are not always effectively implemented and that achieving high quality urban outcomes will require active involvement in the planning and development of key sites along public transportation routes.

## 7.0 Prioritisation of Investment

Given the goals and issues outlined above, we believe that initial light rail investment in Perth should focus on the routes with the greatest capacity for development stimulus and which connect the highest trip generating activities.

In particular, we are concerned that the northern route, which we understand is currently being given priority by the State Government, does not meet the above criteria. We believe that, based on international experience the highest land use and financial benefit would come from focussing on areas with very significant development and infill potential.

In addition we believe that further consideration should be given to proposed development or redevelopment nodes that have not currently been identified for a light linkage in the plan – specifically Canning Bridge which, given its recent identification as a major infill and redevelopment node, as well as its proximity to Curtin Town, between which there is major movement, should be included in the plan for light rail before 2031.

## 8.0 Light Rail Funding

Our detailed submission on funding will follow in November and in the meantime we make the following comments.

The Committee for Perth believes that the biggest current weakness of the draft Public Transportation Plan is the lack of funding identified for its delivery and particularly for the delivery of 'transformational' projects. This has opened the draft Public Transportation Plan, and proposals for light rail to unnecessary levels of scepticism and criticism.

The Committee is well aware that the cost of light rail systems is typically in the hundreds of millions. Funding is required for track infrastructure, land acquisition, rolling stock and stock customisation, platforms, ticketing systems, staffing, integration with other modes, depots, spares, personal recruitment, training and management, legal fees, compensation, etc.

International examples also demonstrate that funding light rail systems can only be achieved through a multi-pronged approach involving a combination different mechanisms including local and State Government funding; Central Government non-repayable capital grants and repayable loans;

percentage levies on payroll tax; increases in property tax; private sector funding mechanisms such as developer contributions; institutional and organisational capital contributions; and private public partnerships.

Given the magnitude of the costs involved, we believe that it is essential that the final Public Transport Plan provides more detail on funding as discussions with cities in other jurisdictions shows that about 10-20% of the upfront capital cost has been funded by the private sector.

It is our view that the Plan should include:

- A commitment that the State Government will be a significant funder/funding partner of any transformational projects including light rail. We believe that this is essential to provide confidence that the State Government is committed to achieving the vision stated in the Plan.
- A summary of the types of funding mechanisms that the State Government is committed to investigating, an overview of each of these mechanisms and the process that will be used to identify the most appropriate funding mechanisms for delivery of light rail in Perth.

As previously outlined, the Committee for Perth has commissioned research on value capture models which is currently being completed and will provide considerably more detail on the applicability of this model in the Perth context. The outcomes of this research will be forwarded to the Department of Transport and to the Minister in November.

However, based on our research and discussions with domestic and international experts to date, there is potential for light rail funding through:

- **Value capture models.** Pending the outcomes of more detailed research, we are currently of the view that the most equitable application of a value capture or transfer model would be through a tax applied to all properties within a defined proximity of light rail routes or stations, similar to the approach currently being taken to fund the Gold Coast Light Rail.
- **Public Private Partnerships.** Public private partnerships are a key mechanism for light rail infrastructure funding and have been implemented in almost all overseas examples that we are aware of. Advice from national and international light rail developers and operators suggests that without private sector investment in infrastructure through a form of public-private partnership, it will be extremely difficult to get a light rail system off the ground.
- **Institutional, organisational and developer contributions.** There may be potential for the government to obtain additional contributions from institutions, organisations or development companies that will directly benefit from light rail development.
- **Infrastructure Australia Funding.**

In addition the Committee for Perth:

- Would support increased allocation of funding within the State's transport portfolio to increase the funding share for public transport reflecting its increase importance and strategic importance for the city however we would also support the allocation of funds

from other portfolios in recognition of the strategic importance of public transportation to ensure that the State has a healthy capital city.

- Agrees with the use of cash-in-lieu parking levies and the City of Perth car parking levy.
- Agrees with establishing an independent mechanism for pricing.

However the Committee believes that a congestion charge would be difficult to implement equitably in Perth and would therefore require very thorough investigation.

## 9.0 Co-operation and Collaboration

Experience nationally and internationally shows that the planning and delivery of light rail is not easy and success hinges on co-operation and collaboration between sectors including State Government departments, local authorities, institutions, organisations and developers along the route. This success is not achieved through consultation but through active participation and collaboration along with an effective governance structure.

We also believe that Perth's success in planning and delivering light rail could be substantially enhanced through by co-operating with and learning from established light rail developers and operators domestically overseas.

Our experience with the international light rail sector to date has identified a strong willingness to assist other cities to achieve light rail success. We believe that our State Government should draw on this and learn from the vast national and international expertise in light rail development rather than take a 'closed door' approach.

The Committee for Perth has identified an opportunity to potentially fund a visit by a cohort of international experts to Perth to assist in the detailed planning for and implementation of light rail and associated urban development and we would like to work with government on a program for Q1/2012.

## 10.0 Community Involvement

The success of the light rail development process hinges on real and effective community involvement. The development of light rail is a long and difficult process and the community must be on board early.

International examples have all demonstrated that the up-front support of community members is particularly critical: because of the high level of investment involved; because of the need for the community to pay the additional taxes and levies to enable funding; because the community faces major changes to their urban environment; and because they face significant disruptions during the development process.

By providing ample opportunities for meaningful community involvement throughout the process the community can gain a sense of ownership of the project and are more willing to tolerate these changes and inconveniences.

According to the Portland Office of Transportation "*Without public support, projects of this magnitude can get bogged down to the degree that public investment cannot move in tandem with the development*".

There is a history in Perth of projects being ‘derailed’ through community objections when they are presented to the community as a fait accompli. We believe that this should be a project where the local community and stakeholders are provided with real opportunities for involvement and are kept informed throughout the project.

## 11.0 Ensuring that Modelling is Robust and Clearly Explained

The Committee for Perth has concerns that the modelling used in the plan is based on assumptions and data that are not disclosed, is too conservative and that is not properly integrated with land use and land use goals for the region.

It is our view that modelling should be open and accountable, integrated with land use and should consider a range of scenarios in order to identify the best possible transportation approach for Perth’s future. We believe that if the modelling is conservative and is not fully integrated with land use goals, it will result in outcomes that are conservative and achieve poor land use integration.

In particular the Committee for Perth has serious concerns about the use of *Directions 2031* population figures in the draft Public Transportation Plan modelling. The Plan currently bases its forecast travel activity on Perth having a population of 2.2 million residents by 2031. This is an increase of just over 500,000 people over the next 2 decades, and we do not believe that this ‘low growth’ scenario is realistic. This level of growth would be below the lowest ABS projection which predicts that Perth will grow to at least 2.4 - 2.9 million people over this period.

Basing future public transport demand modelling on these projections is not adequate. The Plan needs to take into consideration high growth scenarios for Perth and resulting public transport demand and identify actions and strategies to meet this demand.

Perth has a history of underestimating its growth and associated demand for public transport and as a result our new public transport systems have reached capacity early on and much sooner than anticipated. The Plan should be future proof and to achieve this, the Plan must ensure that the future public transportation system has capacity to meet demand resulting from medium and high growth scenarios for the city and aim to maintain and increase growth in public transport patronage.

We note that the Committee for Perth has had recent advice that the modelling is currently being revised based on updated population forecasts and we hope that this data will be more consistent with recognised growth projections provided by the Australian Bureau of Statistics (ABS).

In addition to population forecast data, we have some concerns regarding the lack of detail provided in regards to the assumptions behind demand modelling and we request that the final Plan provides additional detail to ensure that it is open and accountable.

For example, the draft Plan predicts that 2.2 million people will make 120% more trips by public transport than they do today (an estimated 760,000 per day). No clear explanation is provided as to the assumptions behind these predictions and we do not understand why, given there has been a 67% increase in public transport patronage over the last decade and, and given that this Plan has a vision for public transport to be the mode of choice for travel to strategic centres, the draft Plan forecasts *lower* growth in patronage over the next 2 decades? Should the Plan not be aiming to *increase* growth in patronage to meet its vision?



We also have concerns that the draft Plan does not clearly articulate, through the text or modelling, the relationship between transportation and future urban development in the city, particularly with regards to meeting the *Directions 2031* infill targets and development aspirations.

The draft Plan states that *Directions 2031* provided updated demographic and socio-economic data and information regarding the major centres of activity but it does not clearly identify how this has been applied or integrated into the modelling; whether the modelling has taken into account the potential for infill and urban regeneration outside activity centres; or if it has considered the impacts of transit as a stimulus for development. For example:

- Has the modelling taken into account the preferred land use outcomes based on *Directions 2031* goals, activity centre and other strategic development and *infill development* areas in identifying future transport demand?
- Has the modelling comprehensively considered changes in development patterns and travel behaviour that would occur in *response* to investment new transit development (particularly light rail) and corresponding transit oriented development and how this could in turn influence travel activity (with increased transit use as well as walking and cycling etc)?
- Why were conservative values used for variables such as travel cost, availability of parking and transportation investment – wouldn't the plan be more robust if it considered and modelled a range of scenarios and used this to determine the best overall strategy for the region? Our concern is that by using conservative values, we will end up with a conservative outcome, which is not in keeping with the plan's vision.

We would therefore like the Plan to provide a more comprehensive explanation of the modelling undertaken to forecast travel activity, the values that have been used and why, and the level of integration between land use and transportation in the modelling.

We understand and appreciate that integrated transportation and land use modelling is complex however we believe that it is important that all possible steps are taken to ensure that we get Perth's land use and transportation future right.

## 12.0 Making Sure and Clearly Demonstrating that the System Meets Demand

The draft Plan does not clearly explain exactly how the proposed system will meet future demand. We believe that the Plan should provide a table or figure which clearly identifies required capacity to 2031 and to 2050 and how the proposed systems (Stage 1 and Stage 2) will meet this capacity.

It is noted that the draft Plan currently estimates (through demand modelling) that by 2031 a population of 2.2 million people will make 120% more trips by public transport than they do today (an estimated 760,000 per day). At 2050 and a population of approximately 3.5 million, the Draft Plan estimates that Perth's public transport system is likely to need to accommodate 1.5 to 2.0 million trips per day.

This is significant growth despite the very conservative values used in the modelling and this Plan, however it is still difficult to ascertain how the system identified in the Plan will meet this demand.

We believe that the Public Transportation Plan should clearly demonstrate that it can meet this demand and how it could meet any additional demand if, as has happened in the past, actual population growth and growth in public transport usage is significantly higher than forecast.

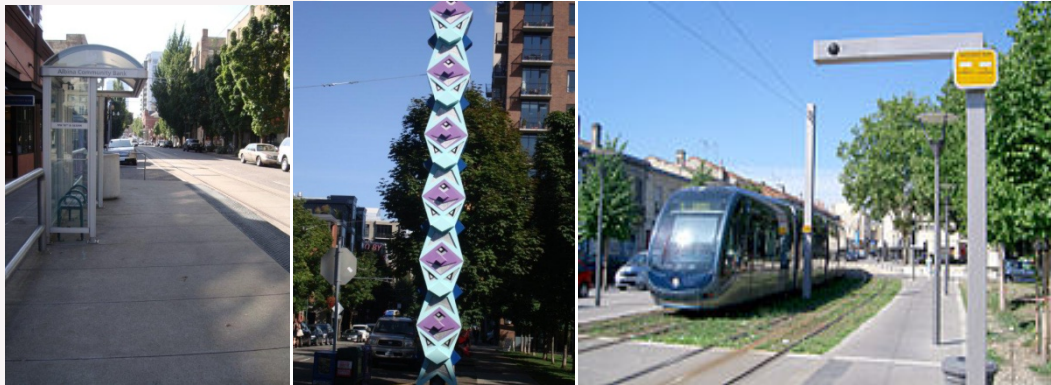
### 13.0 Type of Light Rail/Rapid Bus Systems?

The draft Plan provides very little detail on either the type of light rail or, alternatively the type of rapid bus transit that is proposed. This makes it difficult to provide specific feedback or assess whether the system identified will be able to meet the needs of the city as its population approaches 3.5 million people and we understand that these decisions are most likely still in their infancy they will strongly impact on the capacity, design and cost of the infrastructure and therefore its overall effectiveness.

We are aware through our research that the design of light rail infrastructure is a complex and multi-faceted task, with a wide range of systems available which will have differing economic, efficiency, social and environmental costs and benefits.

However some innovative solutions have been developed internationally to enable light rail infrastructure to integrate into the urban fabric with minimal disruptions or impacts on existing functions or on visual amenity. We offer to assist in obtaining information on international best practice and input from international experts in regards to the best solutions for Perth.

Some notable examples of innovative infrastructure responses include Bordeaux's Tramway which uses a ground level power supply (below right) to avoid issues associated with overhead power lines and Portland's use of public art to minimise the visual impact of infrastructure (below centre).



### 14.0 Reduced investment in transit planned?

The Committee for Perth is disappointed that while this Plan speaks of bold visions, on analysis it actually plans for reduced investment in fleet expansion and capital expenditure over the next 2 decades.

Over the last 7 years the Plan states that \$79 million per annum has been invested in fleet expansion. It proposes that \$1.2 billion is invested over the coming 21 years – an investment of approximately \$57 million per annum.

Similarly capital expenditure on public transport has averaged \$270 million per annum over the last 7 years and planned investment is \$2.9 billion over the next 21 years or \$140 million per annum (only about half of current investment).

In the 21 years from 1986 to 2007 the state government invested an estimated \$2.5 billion (2010 values) on the electrification of the Fremantle, Midland and Armadale rail lines and development of the northern transit line and southern suburbs railway. A rail system that struggles to meet the current demand for about 155,000 passenger boardings per weekday.

Given this, it is difficult to imagine how a total planned investment in the public transit infrastructure of \$2.9 billion (of which about \$2.3 billion will be investment in rail and light rail) can be considered sufficient given the need to accommodate a 120% increase in total trips or an additional 400,000 trips per day, particularly given the proposed reduction in investment in fleet expansion.

It is our view that if the State Government is committed to providing a positive future of Perth's public transport system the allocation of adequate funding is the only way to ensure this happens and that given the predicted population growth and forecast economic development that will occur over this period, reducing government investment in public transportation is not an option.

## 15.0 Policy

Our key concern in regard to the Policy Issues outlined in the draft Plan is the clear caveat that light rail will only occur if partially funded through value capture. Although we support the investigation of a value capture approach, making transformational projects conditional is, in our view, unreasonable.

We believe that the government should provide an unconditional commitment to an integrated public transport network which includes light rail and work in a positive and committed manner to develop and implement appropriate funding mechanisms to achieve it.

In regard to conditions relating to support from local authorities we believe that it is extremely important to have their support along with other stakeholders. However keeping the vision and holding the political nerve during what are difficult projects to deliver, need to be state led. So important is light rail to the future of cities across the UK that the All Party Parliamentary Light Rail Group has been formed. It 'is an independent forum for MPs and peers from all political parties and Industry to come together and raise awareness of matters concerning Light Rail & Tramways best practice and sustainable development.'

The condition identified that minimum density outcomes need to be secured is very important however, again we do not believe that it needs to be a condition of the development of transformational projects – it should be a goal of transformational projects and the State Government should then work actively to make sure that this is achieved.

## 16.0 Conclusion

Thank you for the opportunity to provide feedback on the draft Public Transportation Plan. The Committee for Perth is committed to a light rail future for Perth and to assisting the State Government in achieving this goal.

In this context, we hope that you find our comments constructive and we would welcome any opportunity to discuss any of the information in this document and to share the findings of our CEO's recent international light rail regeneration study tour with the Department in detail.



**Marion Fulker**  
CEO