



FIXING WA'S TRANSPORT

MORE BUSES AND RAIL, NOT ROADS

The Greens' plan to get Perth and our South West back on track

Years of underfunding and poor priorities have left Western Australia's transport system in bad shape. Our long-fought win for Perth light rail funding is under threat, and we need more buses and freight rail, not more urban freeways.

Our transport system needs an overhaul. People are spending too much time stuck in traffic and don't have enough options. Perth is one of the most car dependent cities on the planet and residents in our South West cities and towns are also suffering from infrequent services.

The Greens believe that the best, most economically efficient way to fix congestion and improve connectivity with each other is to invest in public transport and freight rail. These initiatives will ease congestion, improve productivity, provide transport choice and get trucks off residential streets.

> THE GREENS' \$842m TRANSPORT PLAN

The Greens will ensure Commonwealth infrastructure funding prioritises public transport projects over roads. We will re-direct uncontracted funds from within the \$24 billion Nation Building Fund to priority public transport and freight projects, while ensuring regional roads and road safety projects are not compromised.

The Parliamentary Budget Office has confirmed that there are adequate uncontracted funds within the Fund to commit \$842million to the following priority projects in WA:

- **Perth public transport – a better bus service \$520m**
- **Fremantle rail freight bridge duplication - \$200 million**
- **Regional city public transport - \$120 million**
- **South West Regional bus and coach services - \$2 million**

The Greens' re-allocation of Commonwealth funding is calculated over the period 2014-15 to 2018-19 and will not affect the federal budget bottom line.

> PERTH'S PUBLIC TRANSPORT

The Greens want Western Australians to have a better public transport system.

On top of the \$500 million already committed to the Perth Public Transport Package for light rail and rail to the airport, the Greens will invest federal funds of \$520 million into:

- **Express bus services and priority Bus Rapid Transit projects including the Ellenbrook Busway - \$300m**

Current bus services can take up to 20 minutes to travel just 3km. Overcrowding during peak hours and infrequent services and long waits in between define our system. Perth's commuters deserve better.

Bus Rapid Transit (BRT) is a roadway-based system that offers a high capacity bus service in dedicated right of way lanes.

In general, BRT less than \$10mⁱ per kilometre, with examples ranging from \$4m per km in US cities of Pittsburgh and Eugene, Oregon to \$24m in Brisbane and Sydney.

The Brisbane Busway carries 93,000 people per day, with 15,000 during peak hour. It increased ridership on the corridor by 65% - with more than a quarter previously driving.

Studies have identified 15 'hot spots' in Perth's metro area where "bus priority" measures, including dedicated bus way measures and signal priorities (queue jumps) which would significantly reduce travel time in buses. These comprise a series of small infrastructure projects covering about 60km of Perth's roads. These include providing rapid transit in between the major rail spines, bus priority along more routes during peak hours, and serving Perth's north eastern corridor much better.



Public transport particularly in the north eastern suburbs of Perth consists of conventional bus services, and has not kept up with the significant growth in population.

The North Eastern Corridor is a significant residential and business spine with a catchment of 250,000 people who are not being serviced by a form of mass transit. Rapid transit buses operating on dedicated Right of Way lanes could service the North Eastern quarter of Perth.

Yet Premier Barnett abandoned his election promise to deliver a train line and then a rapid bus service to Ellenbrookⁱⁱ. The rapid bus service was originally estimated to cost \$61 million.ⁱⁱⁱ

The Greens are proposing **Express Bus Services for Ellenbrook, linking into a North Eastern Bus Rapid Transit Corridor**. This would work as a feeder network from Ellenbrook along Gngangara road and connect to the proposed MAX light rail route or the Bayswater train station.

Based on Transperth figures for passenger loading at peak trip times (30 passengers per bus) emissions savings for each extra bus on the road replacing a 5km return trip to work in large cars equals 9.6 tonnes of emissions a year.

The Greens investment of \$300m over four years would build at least 30km of BRT - providing half the total funding needed for the 60km recommended as priority.

- **Improving metropolitan bus services - \$150m**

The Greens believe service enhancements should be given priority in the outer suburbs experiencing significant growth. Stakeholders have identified 11 routes that need increased frequency as a priority.

The total cost of operating Transperth bus services in 2011-12 was \$385.5 million^{iv}. A \$150m federal investment represents more than almost a 10% boost on annual funding - enough to improve services and provide additional frequency on the routes under the most pressure.

Doubling public transport frequencies, reducing travel time through more direct routes, and providing a reliable service (that is, no delays, no long waits at transfer points, and not being able to board due to crowding) are the three biggest factors that will increase public transport use. A study by the Tasmanian Department of Infrastructure found doubling frequencies increased public transport mode share by 50%^v.

In the current State Budget there was little provision for bus service enhancements in Perth. This is despite Perth's bus services experiencing unprecedented growth in patronage to the point that services in the northern suburbs are having difficulty in coping with demand.

A cooperative effort between the state and commonwealth is needed to improve services Identified as areas where improvements are needed.

- **Green fleet initiative \$70m- replacing old for new buses with hybrid and electric and creating local jobs**

The Transperth bus fleet of 1246 buses is made up of 695 diesel and 551 Compressed Natural Gas (CNG) buses.

Option 1: Phase in electric fleet of CAT buses by 2029

There are 35 CAT buses operating in Perth along 10 routes, including a hybrid diesel/electric service. The Mercedes/Volgren CAT buses have been manufactured at the Volgren plant in Malaga. Doubling the fleet and converting them to hybrid electric would cost \$19 million^{vi}.

Option 2: New for old replacement of diesel with hybrid electric buses across the PTAWA fleet

Transperth has already announced it will be incorporating new engine technology beyond 2014. The cost of hybrid-electric vehicles in Perth is around \$550,000 as compared with \$400,000 for low floor diesel, but this will quickly return the difference in price in fuel consumption savings.

The \$70m package would be used to make up the price difference of \$150,000 – to ensure all new vehicle purchases will all be diesel electric hybrids.

This would 'sponsor' over 400 new electric hybrid buses by 2029.

This initiative would be a significant boost to the Australian bus manufacturing sector as both a bus upgrade *and* buy local policy.

The bus bodies would be built at the Volgren Australia plant in Malaga, which currently employs more than 100 staff, uses more than 60 local suppliers and has local, national and international customers. The buses would be serviced at the Truck Centre WA, the Volvo bus servicing centre, which employs more than 230 people across its network.

The fund would be used over a longer period of time so that whenever a vehicle was replaced it would go from diesel to hybrid-electric. A full electric bus currently costs around \$700,000 and as the technology is improved our policy will improve the take up of electric vehicles and improvement in technology.

> BUSES AND EQUITY

Despite common perceptions, the CBD centres in Australian cities account for a very small proportion of jobs in the economy. The City of Perth accounts for 17% of jobs in the



Perth metropolitan area,^{vii} and is the biggest employer of managers, professionals, administrative, community and personal service workers; with almost half earning over \$104,000 per year.

The majority of Perth’s jobs – 83% - are in the suburbs. The City of Stirling, followed by Swan and Canning, are the highest employers by number of workers. Workers in the suburbs are a far more diverse industries and generally in lower income brackets.

Despite the suburbs being the largest employment centres, Transperth patronage to these areas is almost negligible and just a tiny fraction of low and moderate income workers use Transperth services as a proportion of total workers (Figure 1)^{viii}.

Transperth’s CBD-centric approach is letting the largest volume of workers down, and isn’t adequately serving the people who need it most.

The way Perth’s transport planners have excluded most of the metropolitan area and lower income workers from accessing public transport is inequitable, and low and moderate income households are affected disproportionately.

WA also has one of the highest levels of inequality in Australia, and public transport is essential for less well-off West Australians. According to the ABS a household in the lowest

income quintile spends 29% of its income on transport costs and 70% on housing costs – that’s 99%, leaving just one per cent of their income for other expenses^{ix}.

By failing to provide a quick and reliable multi-destination service, the State Government is deepening the gap between the rich and the poor in WA by limiting access to employment opportunities and increasing transportation costs for the less well-off West Australians.

Perth has experienced the fastest growth of all Australian cities, and the areas with the largest and fastest population growth are in outer and mostly new suburbs, far from the city and lacking in many services including job hubs and efficient public transport.

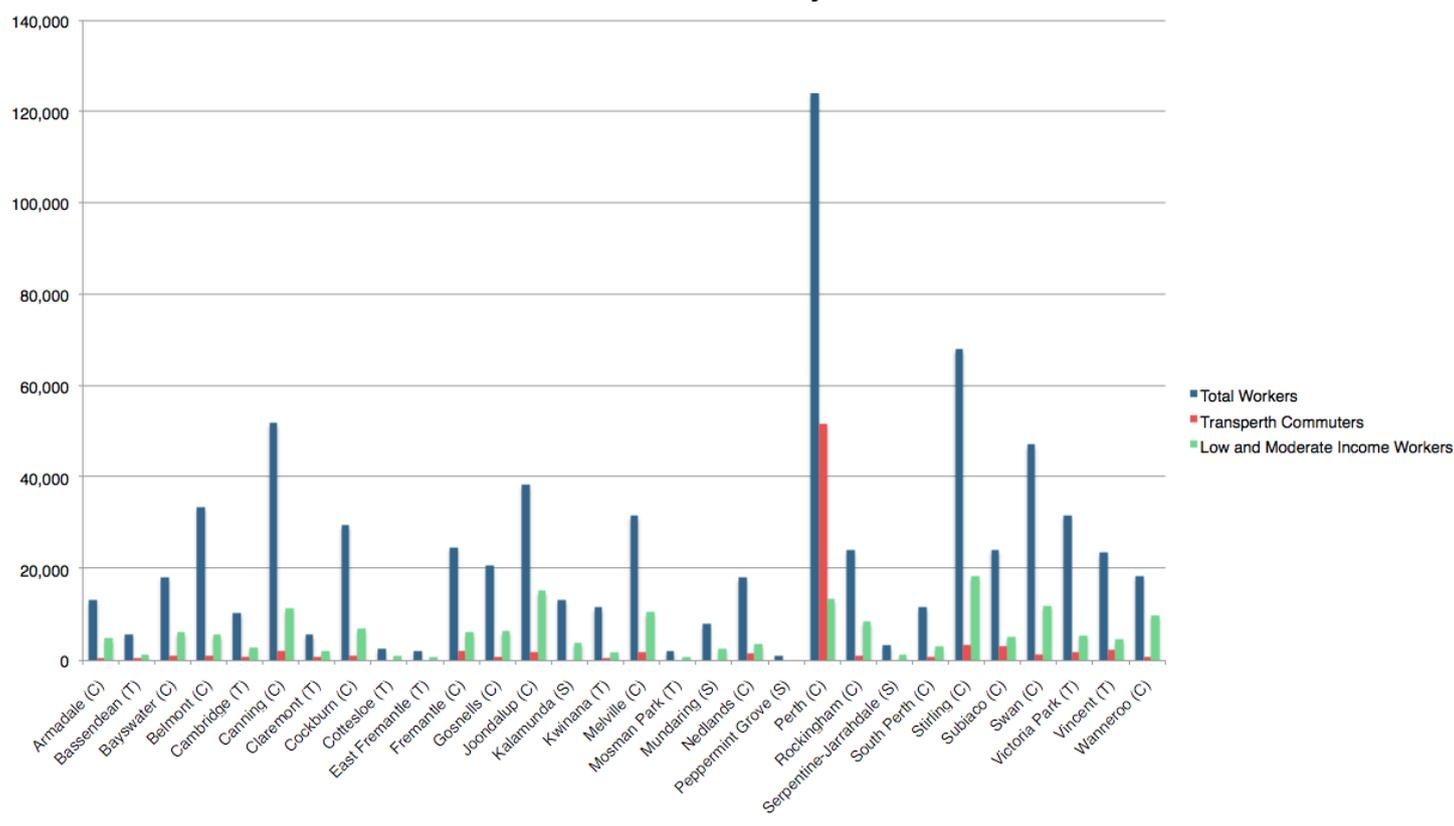
The Greens want public transport to directly connect Perth’s residential areas with the jobs to which they travel.

The Greens also want the state and federal governments to move beyond the rhetoric about congestion on our roads.

If we are serious about de-congesting our suburban road network and increasing Perth’s public transport mode share from 13% we need invest in the suburbs.

Even if 100% of CBD workers used public transport, Transperth’s commuting share would still only reach 17%.

Workers vs Transit Users by Place of Work





In London, they created the circle lines. These are like spider webs around the central city. Transport researchers argue that this is the next phase of what Perth needs. In the meantime we urgently need to increase the bus services in our suburbs taking people to major employment hubs.

The barriers to a less car-dependent, more sustainable and socially inclusive Perth can be overcome – but not if the current transport route structure isn't improved.

Within this context, any self-congratulatory statement about how Perth's transit patronage has increased in the last few years seems delusional. It's got more to do with rapid population growth than with any significant switch from private vehicles to transport. There's nothing remarkable about a system with such a low commuter share that can't even reach the people who need it the most.

The first step towards a less-car centric Perth is to stop blaming car culture and to acknowledge the fact that transport doesn't take most people to the places they need to go.

> INVESTING IN REGIONAL PUBLIC TRANSPORT

The Greens want Western Australians living in our regions to have better public transport options. The Greens would invest \$122 million into:

- **Regional City Public Transport:**

\$120 million is allocated towards regional public transport initiatives in Albany, Kalgoorlie, Bunbury and Geraldton.

- **Regional coach and bus network**

\$2 million is allocated towards providing additional bus and coach services during the day in regional towns by re-tasking their school bus service.

The funding would allow the Public Transport Authority to conduct a consultative study to look at the value and benefits of leveraging the school bus fleet and using an idle asset.

There are 703 "orange" school buses servicing schools in rural areas, used by more than 20,000 students every school day from Wyndham to Esperance. The service costs \$87 million and is provided by private contractors. The average cost per contracted kilometre is \$3.21^x.

The Bus Industry is looking at the options to improve the utilisation of the school bus fleet as part of the development of a national school bus policy, a move the Greens support.

> FREIGHT: ROAD TO RAIL

The Greens would invest \$200m to duplicate the Fremantle Rail Freight Bridge and provide a dedicated freight rail line from the Fremantle Container Terminal to Latitude 32 intermodal hub.

The Greens want to take trucks off our residential streets.

Only 14% of the freight going into Fremantle harbour is by rail^{xi}. The rest is on the back of thousands of trucks on our residential and suburban roads. At current trends the road freight task is predicted to more than double by 2030, from 600,000 container movements a year today (Figure 1) to 1.5million.

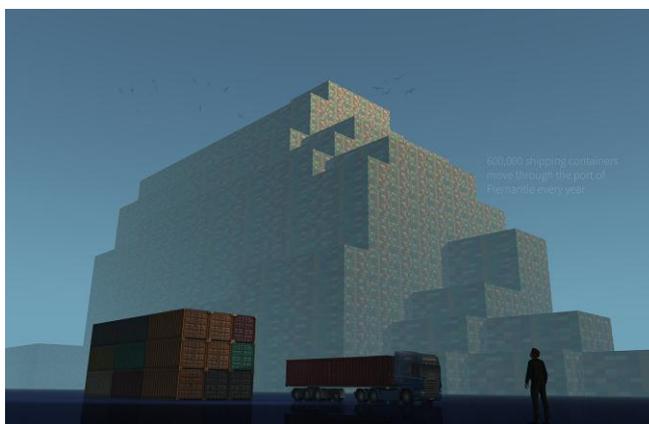


Figure 2: 600,000 containers currently flow through Fremantle port, with about 85% arriving by truck. (Image Scott Ludlam)

The Freight Network Review proposed a desirable rail share of 30% – which has been adopted by State Labor. The Greens believe is more than possible by 2029 and want the majority of our metropolitan freight task to be taken up by rail.

One of the easiest ways to achieve this is to duplicate the Fremantle rail bridge for exclusive use for freight rail, and allow double stacking. This would remove the bottleneck at the Queen Victoria St railway bridge where freight rail services have to be co-ordinated with passenger rail services.

This one action would greatly relieve road freight traffic through Perth's southern suburbs, and eliminate the excuse for the unwanted, unethical and obscenely expensive Roe 8 extension.

The state government allocated funding in this budget of \$4.3m toward planning, design and preliminary works of replacing the Fremantle bridge - if it includes a dedicated freight rail.

Indicative costing to duplicate the Fremantle Freight Rail bridge provided by a private civil engineering firm have estimated the cost to be in the vicinity of \$170 - \$220 million. The bridge should be pink and progressed urgently.



Figure 3: Aerial shot of the SA Port River Expressway Road and Rail Bridges in 2007, with two elevated 1000m bridges constructed for a total cost of \$178m

Examples of bridge duplications include:

- The \$178 million Port River Expressway Road and Rail bridge in SA (pictured, Figure 1) - a 1000m elevated rail bridge to link SA's major port and rail terminals. The commonwealth contributed \$110m
- The \$291 million Seaford Rail Bridge in SA, a 1.2km elevated rail bridge stretching over the Onkaparinga Valley including 5.7km of additional dual track rail extension. It was fully funded by the Australian Government under the Nation Building Program^{xii}.
- The \$51 million replacement bridge at the Murray River crossing at Swan Hill between NSW and Victoria^{xiii}.
- The \$39m Kapooka Bridge replacement in Wagga Wagga which included providing clearance for double-stacked containers for increased rail freight efficiency and also has 150,000 truck movements across the bridge each year (410 a day)^{xiv}.
- The \$60m Murray River bridge in Echuca, carrying 53,000 truck movements a year including over-size agricultural vehicles with no height restrictions^{xv}.

> THE OTHER PARTIES

Federal Opposition Leader Tony Abbott has said if elected he wants to be known as an infrastructure prime minister, yet he would oppose Commonwealth funding of urban rail projects. He has promised to axe the \$500m Perth Public Transport package announced in this years' federal Labor budget^{xvi}. His infrastructure vision for Western Australia amounts to two Perth road projects worth \$1.3billion (the Swan Valley Bypass and the Gateway project) that were already announced by federal Labor in the May budget^{xvii}.

The Greens gratefully acknowledge the expertise of bus industry stakeholders, the equity analysis by Luis Gutierrez, and the Parliamentary Library in developing this package.

ⁱ Bus rapid transit systems: A comparative assessment By David A Hensher & Thomas F Golob* Emeritus Researcher University of California Irvine and Biennial Visiting Fellow at ITLS Sydney April 2008

ⁱⁱ <http://www.watoday.com.au/wa-news/busted-how-ellenbrook-train-line-derailed-20090803-e6y0.html>

ⁱⁱⁱ <http://au.news.yahoo.com/thewest/a/-/wa/18693066/ellenbrook-brt-dropped-over-110m-cost/>

^{iv} <http://www.pta.wa.gov.au/portals/0/annualreports/2012/report/transperth/tranperth-buses.html>

^v Department of Infrastructure, Energy & Resources. 2010. Tasmanian Urban Passenger Transport Framework.

http://www.dier.tas.gov.au/_data/assets/pdf_file/0006/48255/PT_Framework-Final.pdf

^{vi} Based on 70 vehicles at \$550,00 each

^{vii} ABS Census 2011 figures

^{viii} ABS Table Builder, '2011 Census - Employment, Income and Unpaid Work' database, which includes 'Method of Travel to Work'.

^{ix} Housing costs in this case include mortgage/rent costs + utilities. ABS Catalogue 6523.0 - Household Income and Income at Distribution, Australia, 2009-10

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyTopic/5F4BB49C975C64C9CA256D6B00827ADB?OpenDocument>

^x <http://www.pta.wa.gov.au/Portals/0/annualreports/2009/school-bus-services/index.html>

^{xi} <http://www.fremantleports.com.au/Operations/Landside/Pages/Rail-Services.aspx>

^{xii} www.infrastructure.sa.gov.au/seaford/seaford_rail_extension/fast_facts

^{xiii}

http://www.rta.nsw.gov.au/roadprojects/projects/south_western_region/completed_projects/murray_river_bridges/robinvaleeuston/

^{xiv}

www.rta.nsw.gov.au/roadprojects/projects/maintenance/brige_for_bush/documents/bridges_for_the_bush_media_release_fact_sheet.pdf

^{xv}

http://www.rta.nsw.gov.au/roadprojects/projects/maintenance/brige_for_bush/documents/bridges_for_the_bush_media_release_fact_sheet.pdf

^{xvi} http://www.minister.infrastructure.gov.au/aa/releases/2013/may/budget-infra_07-2013.aspx

^{xvii} http://www.minister.infrastructure.gov.au/aa/releases/2013/may/budget-infra_07-2013.aspx