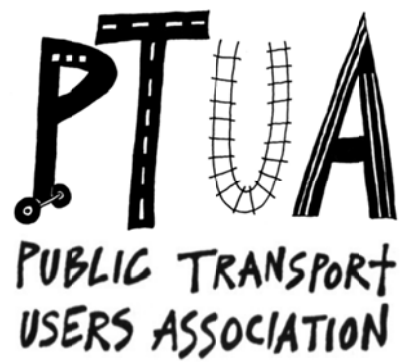


2012-13 Pre-Budget Submission

January 2012



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1 Executive Summary

1.1 Introduction

This submission outlines some reasons why the Commonwealth should extend its support for public transport and rail freight, and describes a range of investment priorities for Victoria.

1.2 Public transport is a priority

Good quality public transport is vital for liveability, productivity and sustainability – a fact that is recognised in surveys of Australians’ transport priorities.

To help prepare Australia for the challenges it faces, a regular and ongoing commitment to public transport investment by the Commonwealth is needed.

1.3 Australia’s Clean Energy Future

We accept the scientific consensus around climate change and the urgent need to cut emissions that this implies. We are however concerned that the treatment of transport under the clean energy future legislation may lead to unintended consequences.

1.3.1 Inequities in the coverage of transport

Current legislation imposes carbon pricing on some of the most efficient forms of transport, while exempting some of the least efficient. This inequity may encourage travel behaviour that increases – rather than decreases – greenhouse gas emissions. Furthermore, recent reforms to Fringe Benefits Tax legislation have not completely removed the incentive to own and use company cars in favour of more sustainable modes.

These inequities point to savings opportunities from further legislative reforms.

1.3.2 Lifecycle impact of biofuels

Biofuel production can result in higher greenhouse gas emissions than the fossil fuel it displaces, as well as force up food prices, contribute to habitat destruction and harm traditional communities. Despite this, biofuel receives favourable treatment under the clean energy future legislation.

The full lifecycle impacts of biofuel production and use should be reflected in its rating under the clean energy future legislation, and grant schemes removed with savings redirected to projects outlined in this submission.

1.3.3 Mitigating the unintended consequences

The inequitable treatment of transport should be mitigated through increased Commonwealth investment in public transport and rail freight. For example, a practical short-term measure would be upgrading Melbourne's electrified rail network to take full advantage of regenerative braking.

1.4 Fixing the transport imbalance

1.4.1 Expanding coverage of fast, frequent public transport

1.4.1.1 New and extended metropolitan railway lines

The priority investments for expanding coverage of heavy rail include:

- Extending the Epping line beyond South Morang to Mernda;
- Constructing a new railway line from Victoria Park to Doncaster East;
- A new railway line to Rowville via Monash University;
- Electrification of the existing line to Bacchus Marsh;
- Duplicating and extending the Frankston line to Baxter and beyond;
- Duplicating and extending the Cranbourne line to Clyde; and
- Alamein line reconfiguration and extension.

1.4.1.2 Completing missing links in the tram network

These modest tram extensions would greatly increase the range of journeys able to be shifted from private cars to public transport:

- Extend Route 3 to East Malvern station, and then onto Chadstone;
- Extend Route 48 from North Balwyn to Doncaster Hill;
- Extend Route 8 to Camberwell Road;
- Extend Route 57 to East Keilor;
- Complete Route 75 extension from Vermont South to Knox City;
- Extend Route 16 to Kew Junction;
- Extend Route 6 to Ashburton station;
- Extend Route 109 to Box Hill station;
- Extend Route 72 north to Doncaster Road (tram 48) and then to Ivanhoe station;
- Extend Burke Road track south to Caulfield station;
- Extend Park Street South Melbourne track to St Kilda Road;
- Extend Route 67 to Carnegie station;
- Extend Route 82 via Footscray Road to Docklands and the City;
- Extend Route 5 to Darling station;
- Extend Route 86 to South Morang; and

- Extend Route 112 to Reservoir station.

1.4.2 Cutting delays

The following investments would boost the ability of public transport to provide a time-competitive alternative to low-occupancy car journeys.

1.4.2.1 Track duplication

The following track duplications will boost reliability and capacity across the Melbourne rail network:

- Duplication of the Altona loop (Altona Junction to Laverton Junction);
- Upfield line (Northern group): Gowrie to Somerton Road;
- Hurstbridge line (Clifton Hill group): Heidelberg to St James Road and Greensborough to Eltham;
- Belgrave line (Burnley group): Ferntree Gully to Belgrave;
- Lilydale line (Burnley group): Mooroolbark to Lilydale;
- Alamein line (Burnley group): Ashburton to Alamein/East Malvern;
- Cranbourne line (Caulfield group): Pakenham line junction to Clyde;
- Melton line (Northern group and Ballarat line): Deer Park to Melton/Bacchus Marsh.

1.4.2.2 Traffic signal priority

GPS-based dynamic signal priority would improve journey times, reliability and capacity on road-based public transport in Melbourne and should be implemented across all tram and SmartBus routes.

1.4.2.3 Bus lanes and headstart lanes

Bus headstart lanes and 'B' lights would help buses to cut through congestion and should be rolled out across all SmartBus routes.

1.4.2.4 Level crossing elimination on tram and SmartBus routes

Grade separation of the following level crossings would allow higher speeds for trains and reduce delays for road-based public transport:

- Glenferrie Road, Kooyong;
- Toorak Road, Malvern;
- Glenhuntly and Neerim roads, Glenhuntly;
- Clayton Road, Clayton;
- Burke Road, Gardiner;
- Springvale Road, Springvale;
- Riversdale Road, Camberwell;
- Balcombe Road, Mentone;
- Bell Street and Munro Street, Coburg;
- Bell Street, Cramer Street and Murray Road, Preston;
- Buckley Street, Essendon;

- Camp Road, Campbellfield;
- North Road, Ormond and Centre Road, Bentleigh;
- Cherry Street, Werribee;
- Ferguson Street, North Williamstown;
- Keon Parade, Keon Park; and
- Mount Derrimut Road/Station Road, Deer Park.

1.4.3 False solutions

Expanding road network capacity encourages more traffic, however roads and transport authorities continue to pursue road building programs based on unrealistic congestion reduction assumptions. The Commonwealth can help to ensure the sustainability, liveability and productivity of our cities by rebalancing transport funding away from the traditional roads-based predict and provide approach, to an approach based on access to high quality public transport.

In particular, there should be no Commonwealth support in any form for an East-West road link as proposed by the Victorian Government.

1.5 Freight transport

An enhanced role for rail freight is vital to the productivity and sustainability of the Australian economy. The existence of incompatible rail gauges inhibits interoperability across Australia's freight infrastructure and harms productivity. Removing this inefficiency through gauge standardisation should be a key priority for the Commonwealth.

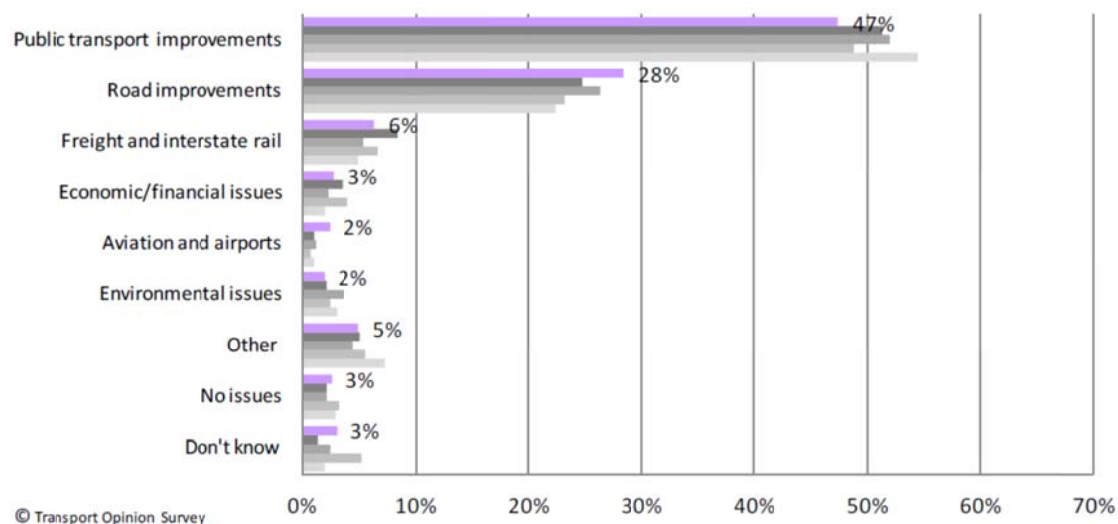
Along with increasing axle load ratings, optimising alignments and creating additional passing opportunities, we suggest the following indicative sequence for standardisation within Victoria:

1. Melbourne to Cobram, Tocumwal and Dookie via Shepparton;
2. Geelong to Mildura, Yelta, Pinnaroo, Kulwin and Robinvale, via Ballarat and Maryborough;
3. Melbourne to Piangil, Moulamein and Deniliquin via Bendigo, including Bendigo to Inglewood and Maryborough;
4. Heywood to Mount Gambier;
5. Melbourne to Ararat via Ballarat;
6. Geelong to Dennington;
7. Melbourne to Bairnsdale, Maryvale and Leongatha.

2

Many Australians recognise the importance of public transport in making Australia more liveable, productive and sustainable. This is consistently shown in surveys of Australians' views on transport priorities.

Figure 2-1: Highest priority transport issues in Australia, Dec 2010-Dec 2011



Note: Responses sum to 100%. December 2011 results are the top bar with % value, and previous four quarter results (December 2010, March 2011, June 2011 and September 2011) are the lower bars in grey. Responses were grouped into the above categories. 'Other' includes responses about transport in general, responses about both public transport and roads, issues not included in other categories, and rebuilding transport after disasters.

Source: University of Sydney Institute of Transport and Logistics Studies

Despite this, the Commonwealth Government has a long history of neglecting public transport relative to the large ongoing flow of expenditure to roads (PTUA 2009, pp.13-14; ACF 2011). The Commonwealth Government's more recent funding of public transport infrastructure is therefore warmly welcomed by the PTUA as a step in the right direction. To redress previous imbalances however, and to address emerging challenges, the Commonwealth government will need to make support for public transport investment a standard feature of federal budgets (as roads have been for decades), and not just a one-off stimulus measure.

3 Australia's Clean Energy Future

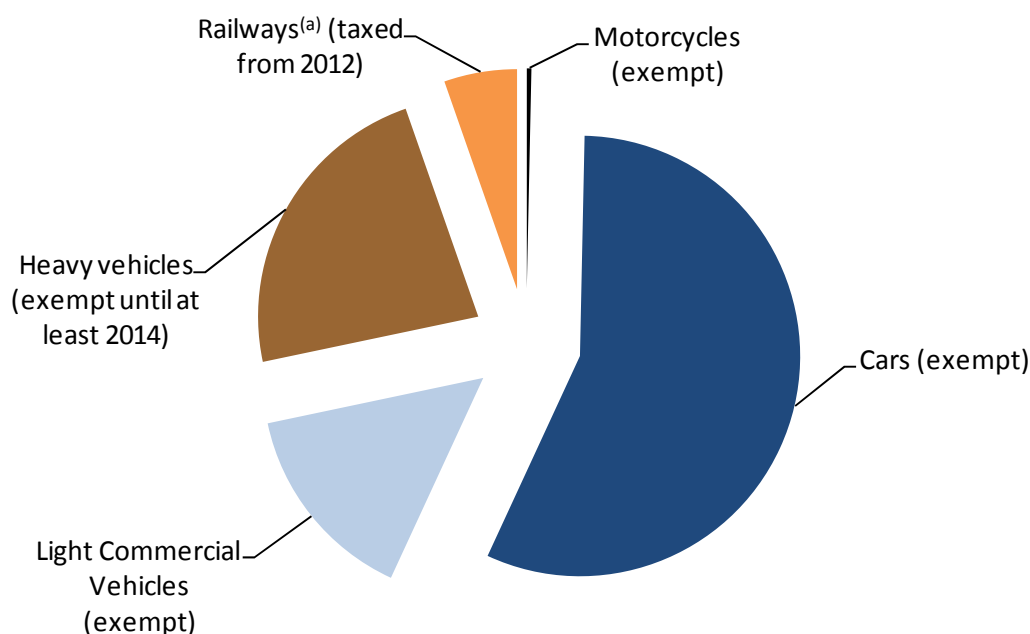
Given the widespread agreement among relevant scientists that human activities are having a negative impact on the climate (Oreskes 2004; Doran & Kendall Zimmerman 2009; Anderegg *et al* 2010), and the serious prognosis for Australia if emissions are not reduced sufficiently (Steffen 2011; Climate Action Centre 2011), we accept the need for measures to cut Australia's greenhouse gas emissions.

We do however wish to draw attention to the likelihood of unintended consequences resulting from the treatment of transport fuels under the clean energy future legislation.

3.1 Inequities in the coverage of transport

It has been noted that transport emissions are one of the strongest sources of emissions growth in Australia (DoCC&EE 2011, p.10). For the foreseeable future, major reductions in transport life-cycle emissions will not be possible without reduced reliance on private motor vehicles, even with tighter mandatory vehicle emissions standards (PTUA 2008a). We are therefore disappointed that the legislation imposes a carbon price on electricity and liquid fuel used by rail transport and - potentially from July 2014 - on liquid fuel used by buses, while exempting light motor vehicles which are responsible for the majority of transport emissions (PTUA 2008a, pp.4-5).

Figure 3-1: Land transport greenhouse gas emissions and carbon tax treatment



(a) includes direct emissions (e.g. diesel locomotives) and indirect emissions from electric railways
Source: BITRE 2009

This will shift price incentives in favour of using less efficient modes of transport and put upwards pressure on Australia's emissions. Not only is this contrary to the intent of the clean energy future legislation, it reduces the scope of activities able to be influenced by carbon pricing and places a larger share of the burden on other sectors to achieve current emissions reductions targets or targets recommended in future by the Climate Change Authority.

While we acknowledge and welcome Commonwealth funding for public transport and rail freight, this is in the context on continuing high levels of expenditure on roads by all three tiers of government, which is itself building upon decades of imbalanced transport funding in favour of roads (PTUA 2009, pp.13-14; ACF 2011) and extensive subsidies for the car industry. Furthermore, although changes to the statutory method for valuing motor vehicle fringe benefits have reduced the incentive to additional driving, the 20% statutory rate still grants a tax concession to vehicle expenses of a "private or domestic nature" and would still encourage car use over more sustainable modes. This points to additional savings opportunities from further reform of FBT rules.

Substantially greater commitment to improving sustainable transport - public transport, walking and cycling - will be required to overcome the combined effects of funding imbalances and of the inequitable treatment of transport modes under these pieces of legislation.

3.2 Lifecycle impact of biofuels

Although biofuel receives favourable treatment under the clean energy future legislation, its environmental benefits can be uncertain at best. In some cases, biofuel production can result in higher greenhouse gas emissions than the fossil fuel it displaces, as well as force up food prices, contribute to habitat destruction and harm traditional communities (PTUA 2008a, pp.18-21; Mitchell 2008; Searchinger *et al* 2009). Despite this, biofuel is granted a zero rating (i.e. exemption) under the clean energy future legislation, and its supply chain is also largely exempt from carbon pricing since, for example, fuel tax credits will not be reduced for the agriculture, forestry and fishery industries. This could encourage biofuel use even where the full life-cycle impact is worse than conventional fuel.

To address this, the rating of biofuel should more realistically reflect the life-cycle impacts of its production, including use of fossil fuels and other emissions during production. Furthermore, in light of other forms of government support for biofuels and serious concerns mentioned above, we recommend cessation of the cleaner fuels grants scheme, with savings in both cases redirected to projects outlined in this submission.

3.3 Mitigating the unintended consequences

Public polling shows that about three quarters of Australians want revenue from carbon pricing used to improve public transport, walking and cycling (AAP 2011). We believe that improved alternatives to private motor vehicle use will save households much more than the cost of carbon pricing on petrol, in addition to enabling greater transport emission reductions. We therefore call on the government to rebalance transport funding to make public transport, walking and cycling more appealing than private car

use despite the unintended impacts of the clean energy future legislation mentioned above. At a minimum, this should equate to the amount state public transport authorities will pay under a carbon tax, but would preferably be based on ambitious service improvement and modeshift objectives (beyond those already in place), and the funding allocations required to achieve them. We suggest that amendments be made to the likes of the *Nation Building Program (National Land Transport) Act 2009* to prioritise investment in public transport.

A practical short-term measure would be upgrading Melbourne's electrified rail network to take full advantage of regenerative braking. The energy savings from regenerative braking would partially offset the inequitable treatment of rail under the clean energy future legislation, while also reducing emissions from passenger transport.

4 Fixing the transport imbalance

4.1 Expanding coverage of fast, frequent public transport

About two thirds of Melbourne residents do not currently have access to the rail network which is a key determinant of road congestion levels (PTUA 2008c, pp.16-19). There is a need to boost coverage of the rail network to ensure more people have access to time-competitive public transport that can relieve pressure on known congestion hotspots (PTUA 2006, pp.21-23) and reduce emissions.

4.1.1 New and extended metropolitan railway lines

The priority investments for expanding coverage of heavy rail include:

4.1.1.1 Extending the Epping line beyond South Morang to Mernda;

This extension would serve a rapidly growing area of Whittlesea, which is one of the fastest growing municipalities in Australia. A reservation is already in place ensuring that construction could commence promptly following approval of funding.

4.1.1.2 Constructing a new railway line from Victoria Park to Doncaster East, following the alignment of the Eastern Freeway as far as Bulleen;

A heavy rail line into Manningham would finally offer a fast, high capacity public transport alternative to an area that currently has much lower public transport patronage than comparable parts of Melbourne due to the inadequacy of existing services (PTUA 2007, pp.12-14). A 1991 report to the Victorian Minister for Transport (Russell 1991) found that heavy rail to Doncaster would provide “both the best service to residents and have the best chance of offsetting the problems of road congestion” compared to a range of other road and public transport enhancements. The report also recommended that this option be pursued if favourable costing advice was obtained. Despite inflated costings, a 2001 study for the Victorian Government found that the Benefit Cost Ratio (BCR) of heavy rail to Doncaster was nearly twice that of the westwards extension of the Eastern Freeway proposed as part of the East West Link Needs Assessment (EWLNA) (PTUA 2008b, pp.16-20) and included in the Victorian Government’s 2011 submission to Infrastructure Australia.

The EWLNA reconfirmed that the majority of Eastern Freeway traffic is heading to the CBD and surrounds (EWLNA, p.131). These travel patterns would be well-served by a heavy rail line to Doncaster, while the minority of journeys to destinations beyond the vicinity of the CBD would also be served by virtue of such a rail link connecting at inner

city stations with services to other parts of Melbourne¹. A railway line along our suggested alignment would also enable connections with buses at Hoddle Street, Burke Road, Chandler Highway, High Street and Bulleen, Thompsons, Williamsons and Blackburn roads (and possibly Springvale Road), including most or all of the orbital SmartBus routes.

Although not directly relevant to passenger services, we also note that proposals have been raised to run a railway line to Dandenong via the Eastern and Eastlink freeways for freight purposes. Such proposals would obviously add to the benefits of constructing a railway line to Doncaster, and could also provide an alternative route to Gippsland if the existing route via Caulfield is unavailable due to standardisation works, grade separation or other disruption.

4.1.1.3 A new railway line to Rowville via Monash University

A heavy rail line to Rowville would improve access to the Stud Park Major Activity Centre and the Monash Science Technology Research and Innovation Precinct incorporating Monash University, the CSIRO and Australia Synchrotron. Journey times from Rowville on the current SmartBus service are about 30 minutes to Monash University and an hour and a quarter to the CBD, both of which compare poorly to driving. A heavy rail line could cut journey times from Rowville to Monash University and the CBD to around 10 minutes and 30 minutes respectively. By offering an attractive, time competitive public transport option to this area of outer eastern Melbourne, a heavy rail line would provide significant relief to the Monash freeway corridor, comfortably absorbing the equivalent of a lane full of traffic.

A 2004 study found that a railway line to Rowville would offer many benefits such as reduced travel times, reduced congestion and vehicle emissions, employment generation, more affordable mobility and reduced pressure on car parking (Russell *et al* 2004). A heavy rail line would also offer greater capacity, thereby addressing overcrowding issues experienced on existing bus services and providing greater scope for patronage growth, and improve reliability by separating services from congested road conditions.

4.1.1.4 Electrification of the existing line to Bacchus Marsh, adding a new station serving Caroline Springs;

Electrification of the line to Bacchus Marsh would enable higher capacity metropolitan rolling stock to access train paths along the corridor that are currently taken up by lower capacity regional services and thereby ease overcrowding in the west of the city right through to central Melbourne. Construction of a station at Caroline Springs would greatly improve access to the public transport network in an important growth area and ease pressure on Sydenham/Sunbury line services (and station parking) which are currently among the most crowded in Melbourne. This line could also connect with the Green Orbital SmartBus route planned by the Victorian Government, providing a link between the outer west of Melbourne and other parts of the city.

¹ "The heavy railway option opens up more opportunities for inter-regional travel growth than the light rail option. Possibly because the heavy rail design integrates better with other heavy rail services. External transit travel growth is mainly from the South and East to and from [Northern Central City Corridor]. Again this is a wider impact than the light rail option and is due to better inter-regional connectivity provided by operating DART as heavy rail and hence better connecting with other regional rail services.", *Northern Central City Corridor Study Appraisal of Transit Strategy Results*, August 2002, p.41

In order to enhance capacity and reliability on this corridor, single track sections of line beyond Deer Park West should also be duplicated in conjunction with electrification works.

A more attractive and time-competitive public transport option for outer western Melbourne enabled by electrification would relieve pressure on both the Western Ring Road and Westgate corridors, delivering significant productivity benefits for business.

4.1.1.5 Duplicating and extending the Frankston line to Baxter and beyond;

This extension provides improved mobility within the Urban Growth Boundary to the southeast of Frankston, and enables improved access to the Monash University campus at Leawarra. Electrification work should be carried out simultaneously with duplication.

4.1.1.6 Duplicating and extending the Cranbourne line to Clyde;

Combined with duplication of existing single track, a short extension of this line would better connect new communities to the public transport backbone and improve access to a number of existing and proposed educational institutions and recreational facilities in the area. A station at Cranbourne East was proposed under *Melbourne 2030* and could be easily achieved given the existing reservation for the South Gippsland railway line.

4.1.1.7 Alamein line

Stations on the Alamein line could be reconfigured to better integrate with intersecting routes (e.g. tram 75 on Toorak Road), and a short extension (with duplication from Ashburton) to meet the Glen Waverley line investigated to allow connections at East Malvern station, including with the proposed tram 3 extension. The Alamein line extension should also continue to Oakleigh if a proposed expansion of Chadstone shopping centre is to proceed.

4.1.2 Completing missing links in the tram network

These generally modest extensions to tram routes are comparable in scale to the many smaller federally-funded road projects undertaken each year. These extensions would integrate tram routes more effectively with train and bus routes - creating a network better able to serve a diverse range of journeys - and provide better access to major trip generators:

4.1.2.1 Extend Route 3 to East Malvern station, and then onto Chadstone

A modest extension that provides a more logical terminus for the no. 3 tram, linking it with the Glen Waverley train line and the Warrigal Road SmartBus (route 903). This provides an improved link to Chadstone Shopping Centre which is a Principal Activity Centre and major trip generator that is notorious for creating traffic congestion in the area. Completing this link also provides improved connectivity between the inner south and Waverley regions.

4.1.2.2 Extend Route 48 from North Balwyn to Doncaster Hill

This extension provides a more logical terminus for the no. 48 tram, linking the Principal Activity Centre at Doncaster Hill with the light rail network and inner east residential areas. This route would also connect with and feed into Eastern Freeway bus or rail services.

4.1.2.3 Extend Route 8 to Camberwell Road;

This completes tram coverage along Toorak Road, providing a more logical terminus and connection with the Alamein train line and thereby offering a connection between the inner east and inner south. The extension would serve significant trip generators such as Tooronga Village and the Coles HQ.

4.1.2.4 Extend Route 57 to East Keilor;

Provides access to the Principal Activity Centre at Highpoint from residential areas across the Maribyrnong River and connects with the Red Orbital SmartBus (route 903) at Milleara Shopping Centre.

4.1.2.5 Complete Route 75 extension from Vermont South to Knox City

Provides a direct east-west link from the major trip generator and Principal Activity Centre at Knox City and the Yellow Orbital SmartBus (route 901) to residential areas and trip generators to the west, including Deakin University, PLC, Tally Ho Business Park and through to the CBD on the tram itself or by connecting to the intersecting Alamein train line.

4.1.2.6 Extend Route 16 to Kew Junction

A simple extension along Cotham Road to the Kew Junction Major Activity Centre that would allow connections with High Street buses and route 48 trams and hence greatly facilitate non-radial journeys. This would complement the extension of route 48 to Doncaster and offer connections between the inner east and Manningham.

4.1.2.7 Extend Route 6 to Ashburton station

A modest extension that provides better coverage of High Street and offers links to both Alamein and Glen Waverley train lines.

4.1.2.8 Extend Route 109 to Box Hill station

This minor extension would provide improved integration between heavy and light rail services and the bus interchange.

4.1.2.9 Extend Route 72 north to Doncaster Road (tram 48) and then to Ivanhoe station

The initial extension would provide more a significant north-south service and allow direct connections with the no. 48 tram. A further extension to Ivanhoe railway station

would enable connections with Eastern Freeway public transport services to the CBD or Doncaster as well as provide a link between the inner east and northeast of Melbourne.

4.1.2.10 Extend Burke Road track south to Caulfield station;

Provides north-south link between the Frankston, Cranbourne/Pakenham, Glen Waverley and Belgrave/Lilydale train lines improving access to the Caulfield activity centre, racecourse and Monash University campus from the north.

4.1.2.11 Extend Park St South Melbourne track to St Kilda Road

A very simple and cheap augmentation to permit creation of a new east-west tram route linking Albert Park, South Melbourne and South Yarra in an area dominated by north-south services.

4.1.2.12 Extend Route 67 to Carnegie station

A modest extension that provides a more logical terminus for the No. 67 tram, linking it with Cranbourne/Pakenham line trains, and giving improved access to the inner south from the south east.

4.1.2.13 Extend Route 82 via Footscray Road to Docklands and the City

This connection would significantly improve access to the rapidly developing Docklands area from the CBD as well as from Footscray and Maribyrnong. The extension would also provide access to the Footscray transit city from the CBD and Docklands.

4.1.2.14 Extend Route 5 to Darling station

This short extension would provide an improved link between the inner south and the Glen Waverley line which serves the eastern suburbs and connects with SmartBus routes along Warrigal, Blackburn and Springvale roads.

4.1.2.15 Extend Route 86 to South Morang

This extension would provide improved access from outer northern Melbourne to educational institutions in Bundoora and other destinations in inner and middle northern Melbourne. Completing this link would allow connections with the South Morang/Mernda railway line and Yellow Orbital SmartBus (route 901) running through northern Melbourne.

4.1.2.16 Extend Route 112 to Reservoir station

This extension would enhance public transport services in Reservoir and better integrate existing train and tram services by providing a more logical terminus for tram 112.

4.2 Cutting delays

Even if it carries a minority of journeys, the speed of public transport can have a significant impact on general traffic flows. Where only a slow and unappealing public transport system is offered (such as across large areas of Melbourne), road users will (reluctantly) choose to endure severe congestion and add to road traffic volumes. However, where more attractive alternatives to private car use are available, potential road users will opt for them rather than endure the congestion they would otherwise be exacerbating. As a result, road travel times will tend to converge with the time taken by equivalent public transport journeys (PTUA 2008c, pp.16-19). The implications of this convergence are dire for areas with slow, infrequent or unreliable public transport.

Although a comprehensive rail network is fundamental to providing an attractive alternative to congested roads, buses and trams are vital to provide access to the heavy rail backbone, as well as serve journeys off the rail network. Measures outlined below would enhance the contribution of both rail and road-based public transport.

4.2.1 Track duplication

A lack of investment in Melbourne's rail network has left numerous single track sections of railway that limit train capacity and frequencies. Duplication will enhance capacity and reliability on the lines themselves and flow through to improved reliability and flexibility on other lines in the same group.

Werribee line (Northern group and Geelong line): The Werribee line serves some of the fastest growing areas in Melbourne, however offers poor service levels relative to other railway lines. Duplication of the Altona loop (Altona Junction to Laverton Junction) would boost capacity and reliability on the line, and indirectly benefit Geelong services by allowing greater operational flexibility.

Upfield line (Northern group): Gowrie to Somerton Road. The proposed extension of the Upfield line to Roxburgh Park increases the proportion of single track along the route and thereby constrains frequencies, flexibility and reliability. The enhanced network effect resulting from the extension should also encourage patronage growth which will require higher service levels.

Hurstbridge line (Clifton Hill group): Heidelberg to St James Road and Greensborough to Hurstbridge.

Belgrave line (Burnley group): Ferntree Gully to Belgrave. Belgrave services are often delayed by having to wait for services heading in the opposite direction along the single track section beyond Ferntree Gully. Duplication would boost capacity on the Belgrave line and have capacity and reliability benefits across the broader Burnley group.

Lilydale line (Burnley group): Mooroolbark to Lilydale. Anecdotal evidence indicates that Lilydale services are sometimes terminated at Mooroolbark due to city-bound trains using the single track section beyond Mooroolbark. Duplication would boost capacity on the Lilydale line and have capacity and reliability benefits across the broader Burnley group.

Alamein line (Burnley group): Ashburton to Alamein/East Malvern. Significant network enhancements proposed elsewhere have the potential to substantially boost patronage on this line and necessitate higher service levels which may be constrained by the single track section of line.

Cranbourne line (Caulfield group): Pakenham line junction to Clyde. This line serves one of the fastest growing areas in Australia, however the single track sections between Dandenong and Cranbourne constrain frequencies on Cranbourne line services and limit operational flexibility right across the Caulfield group of lines.

Melton line (Northern group and Ballarat line): Deer Park to Melton/Bacchus Marsh. Rapid population growth in this corridor and substantial potential to grow modeshare underline the need to cater for higher service levels without excessively compromising regional services to Ballarat and beyond. Duplication would significantly boost capacity and reliability for both metropolitan and regional services.

4.2.2 Traffic signal priority

Trams can spend as much as one third of their time waiting unnecessarily at traffic lights (Morton 2007), making services uncompetitive with private motor vehicles and thereby limiting their contribution to minimising congestion. Travel time savings of around 20 per cent have been achieved in Munich, Germany by enabling trams to activate green lights as part of a “Stop only at stops” program that has also boosted the productivity of rolling stock and delivered savings in operating costs. Similar improvements to travel times and capacity could be gained by implementing GPS-based dynamic signal priority to reduce traffic light delays for road-based public transport in Melbourne (Lund 2012). Traffic control systems should be upgraded to provide road-based public transport with dynamic signal priority.

4.2.3 Bus lanes and headstart lanes

On-road priority measures for buses could reduce travel times by around 20 per cent, thus making much more effective use of bus fleets and enticing more people out of low occupancy private motor vehicles.

Head-start lanes with ‘B’ lights are a relatively easy and low-cost option for helping buses to cut through congestion, and should be rolled out across all SmartBus routes, and included as a standard feature of all road works along bus routes.

4.2.4 Level crossing elimination on tram and SmartBus routes

While the main beneficiaries of level crossing eliminations are road users, the following grade separations should be prioritised to allow higher speeds for trains and reduce delays for road-based public transport.

Glenferrie Road, Kooyong: Facilitate increased speed and frequencies on Glen Waverley line, which would ease pressure on Monash freeway corridor, and reduce delays for the no. 16 tram.

Toorak Road, Malvern: Facilitate increased frequencies on Glen Waverley line, which would ease pressure on Monash freeway corridor, and reduce delays for the no. 8 tram once extended.

Glenhuntly and Neerim roads, Glenhuntly: Facilitate increased frequencies and higher speeds for both passenger and freight trains on the Frankston line (currently limited to 15 km/h crossing Glenhuntly Road). This would ease pressure on Nepean Highway corridor, and would also reduce delays for no. 67 tram and the 623 and 624 bus routes. Simultaneously re-locating the station to mid-way between Glenhuntly and Neerim roads would improve passenger interchange between trains and trams (on Glenhuntly Road) and buses (on Neerim Road), and improve pedestrian amenity in the suburb, which is a designated Major Activity Centre.

Clayton Road, Clayton: Facilitate increased frequencies on Cranbourne/Pakenham lines, serving growth areas in southeast Melbourne, and ease traffic flow on Clayton Road.

Burke Road, Gardiner: Facilitate increased speed and frequencies on Glen Waverley line, which would ease pressure on Monash Freeway corridor, and reduce delays for the no. 72 tram.

Springvale Road, Springvale: Facilitate increased frequencies on Cranbourne/Pakenham train lines, serving growth areas in southeast Melbourne, and ease traffic flow on Springvale Road.

Riversdale Road, Camberwell: Facilitate increased frequencies on Alamein line and reduce delays for the no. 70 tram.

Balcombe Road, Mentone: Facilitate increased frequencies on the Frankston line and reduce delays for the 903 SmartBus and 708 and 825 buses.

Bell Street and Munro Street, Coburg: Doing these adjacent crossings as a single project would allow for more gentle gradients and reduce delays for the 903 SmartBus and 512, 513 and 527 buses.

Bell Street, Cramer Street and Murray Road, Preston: Doing these adjacent crossings as a single project would allow for more gentle gradients and reduce delays for the 903 SmartBus and 513 and 527 buses.

Buckley Street, Essendon: Facilitate increased frequencies on the Craigieburn line and reduce delays for the 903 SmartBus and 475 bus.

Camp Road, Campbellfield: Combined with a new railway station, this would facilitate increased frequencies on the Upfield line and allow connections with the 902 SmartBus and 538 bus, as well as reduce delays for these buses.

North Road, Ormond and Centre Road, Bentleigh: Doing these adjacent crossings as a single project would allow for more gentle gradients, facilitate increased frequencies on the Frankston line and reduce delays for the 703 SmartBus and 625 and 630 buses.

Cherry Street, Werribee: Facilitate increased frequencies on the Werribee and Geelong lines and reduce delays for the 439, 443, 441 and 446 buses.

Ferguson Street, North Williamstown: Facilitate increased frequencies on the Williamstown line and reduce delays for the 415 and 472 buses, and the proposed 904 Blue Orbital SmartBus route.

Keon Parade, Keon Park: Facilitate increased frequencies on the South Morang line and reduce delays for the 902 SmartBus.

Mount Derrimut Road/Station Road, Deer Park: Support higher frequencies on the Melton line and reduce delays for the 400 bus and proposed extension of the 902 Green Orbital SmartBus. This crossing will also see an increase in train services as a result of the Regional Rail Link (RRL) project.

4.3 False solutions

It is now firmly established in the transport literature that expanding road network capacity encourages more traffic so that congestion ends up just as bad as before. Despite this, roads and transport authorities continue to pursue road building programs based on unrealistic congestion reduction assumptions (Victorian Auditor General 2011) while seeking Commonwealth support for road projects with costs that exceed the benefits (Lucas 2010).

The Commonwealth can help to ensure the sustainability, liveability and productivity of our cities by rebalancing transport funding away from the traditional roads-based predict and provide approach - that has delivered congestion, costly car-dependence and pollution - to an approach based on access to high quality public transport. Doing so would go a long way to funding the public transport investments outlined above.

In particular, we note that the Victorian Government included an East-West road link in its 2011 submission to Infrastructure Australia. We are firmly of the view that this project should not proceed and that it should not receive any Commonwealth support in any form. Even with a very generous assessment of the project's supposed benefits, these still fall well short of the massive cost (PTUA 2008b, pp.16-19). Pursuing this project would therefore be a scandalous misallocation of scarce resources.

5 Freight transport

The impact on freight rates of the recent disruption of the Adelaide-Darwin railway demonstrates the importance of rail freight to ensuring a competitive Australian economy (Masters 2012). Similarly, logistical complications and additional road damage and risk of road trauma are natural consequences of neglecting rail infrastructure (ABC 2012; Carey 2012).

The PTUA believes an enhanced role for rail freight is vital to the productivity and sustainability of the Australian economy. Our response to the National Land Freight Strategy discussion paper outlines recommendations for strengthening the contribution of rail to the freight sector (PTUA 2011a). In particular, rail is unlikely to fulfil its potential while different rail gauges inhibit the efficient movement of freight.

A recent Grain Logistics Taskforce report (Grain Logistics Taskforce 2011) recommended the assessment of opportunities to standardise Victoria's rail network, which follows a Victorian Freight & Logistics Council report (VFLC 2010, pp.50-60) that found benefits with a Net Present Value of \$100 million from standardisation of a number of regional lines in Victoria.

In Australia's integrated national economy, supply chains are now largely national in scope. Therefore 'intrastate' freight movements are often just a component of a longer national supply chain. As noted in our land freight strategy submission (PTUA 2011a), the existence of incompatible rail gauges inhibits interoperability across Australia's freight infrastructure and harms productivity. Removing this inefficiency through gauge standardisation should be a key priority for the Commonwealth. Consistent with the findings of the Grain Logistics Taskforce report, the opportunity should also be taken during standardisation works to increase axle load ratings. Similarly, alignments should be optimised where they currently inhibit speed, and additional passing opportunities created to expand capacity and reduce delays for both freight and regional passenger services.

Reflecting previous proposals we suggest the following indicative sequence for standardisation within Victoria:

1. Melbourne to Cobram, Tocumwal and Dookie via Shepparton;
2. Geelong to Mildura, Yelta, Pinnaroo, Kulwin and Robinvale, via Ballarat and Maryborough;
3. Melbourne to Piangil, Moulamein and Deniliquin via Bendigo, including Bendigo to Inglewood and Maryborough;
4. Heywood to Mount Gambier;
5. Melbourne to Ararat via Ballarat;
6. Geelong to Dennington;
7. Melbourne to Bairnsdale, Maryvale and Leongatha.

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