Governments around the globe are investing in integrated multi-modal public transport systems to solve the challenges facing cities and regional centres. However, long term investment into public transport by governments can be limited by demands on competing priorities such as health, education and roads.

Passenger rail services provide the backbone of public transport systems around the world. Continued investment into and expansion of public transport is crucial to the success and productivity of the nation. Whether individuals travel by public transport or not, they still benefit from its existence and use. Investment in and use of public transport ensures less vehicles and therefore congestion on roads, decreased transport-related emissions, fewer road accident costs and healthier and more active lifestyles.

Cities drive the economy and wealth of the nation. Collectively, Sydney, Melbourne, Perth, Brisbane and Adelaide central business districts (CBDs) produce 12.3 per cent of Australia’s total economic output by employing 10.6 per cent of the population. With only 0.6 per cent of the population living in CBDs, public transport links in to, out of and within city centres are vital to maintain and improve productivity.

Similar to other countries, Australian cities faces the following challenges:

- **a growing and urbanised population**: Australia is one of the most urbanised countries in the world. 35 per cent of Australia’s population resides in Melbourne and Sydney and Australia’s larger capital cities are growing at triple the rate of regional areas.

- **expanding and geographically spreading cities**: 74 per cent of Australia’s population is expected to live in a capital city by 2061.

- **congested roads**: By 2020, road congestion is forecast to cost Australia $20.4 billion annually through lost productivity as a result of time wasted in traffic.

- **increasing greenhouse gas emissions**: On a per capita basis, Australia is the highest carbon emitter in the OECD and one of the highest in the world.

Public transport is a critical part of the solution to each of these challenges.

Cities may be the powerhouses of the nation but our regions are also vital contributors to our economic and social viability. The Australasian Bureau of Statistics (ABS) forecasts the population outside of cities to grow by 26 percent between 2007 and 2026. Regional Australia also contributes substantially to our economy; being the “major source of Australia’s export earnings” and attracting almost $16 billion in tourism expenditure.

In 2012, 71 per cent of Australians travelled to work or study by private vehicle (a 1 percent decrease from 2009) and only 16 percent travelled by public transport. During the same period, 2012, Australia’s rail networks moved more than 850 million passengers. That is 16.4 million passengers per week or 2.3 million people each day of the year. In New Zealand, more than 22 million passengers were moved by rail in Auckland and Wellington during 2012/13.

Our cities and regions will only continue to prosper with continued improvements to our public transport systems.
THE PASSENGER TRANSPORT GROUP

The PTG represents all passenger rail operators in Australia and New Zealand.

Over the past decade, due to significant investment in new lines, upgrading and electrification of existing lines and procurement of new rolling stock, passenger rail patronage has boomed in Australian and New Zealand cities, particularly on the revitalised rail system of Auckland, the rapidly expanded Perth rail system, Melbourne's extensive heavy and light rail network and Victoria's upgraded regional rail system. As noted previously, PTG members collectively carry more than 880 million passenger journeys each year on urban heavy and light rail systems.

Passenger rail networks are vital for the smooth functioning of the Australian and New Zealand economies. Without them, the city centres that power the economies of both nations would be gridlocked by congestion, reducing productivity.

For Australian and New Zealand passenger rail networks to function effectively in the service of the city and its people in the 21st Century, significant new levels of funding are required for much needed investment that maintains and upgrades existing systems and provides new capacity to better manage future patronage growth. This applies equally to regional networks which provide vital transport links between capital cities and regional centres.

The Passenger Transport Group has developed this plan to guide the future of the Australian and New Zealand passenger rail sector. This plan will work over a two-to-three year time horizon to assist the passenger rail sector to manage its most pressing issues.

THE VISION

The Passenger Transport Group's (PTG) vision is to be executed through the PTG Strategic Plan by:

“Aligning the interests of passenger rail operators through pro-active advocacy that:

- Builds a visible, long term pipeline of infrastructure improvements including new passenger rail systems, new lines, stations, rollingstock and amenities;
- Ensures continued investment in passenger rail projects by all levels of government;
- Enhances safety through a co-regulatory model; and,
- Establishes operational best practice in order to minimise costs and maximise customer experience.”
THE ROLE OF THE ARA

As the peak body for rail in Australasia, the ARA has an important role to play in promoting the case for the passenger rail sector to all levels of government throughout Australia and New Zealand.

Between 2016 and 2018, the PTG will work with the ARA to advocate and promote passenger rail to all levels of government by:

- Establishing and maintaining strong relationships with Ministers, politicians and senior decision-makers at a Federal level and in each jurisdiction;
- Highlighting the benefits passenger rail can generate including reducing congestion, reducing environmental impacts and improving safety;
- Developing promotional opportunities for the passenger rail sector through events and other activities; and
- Lobbying for greater funding of passenger rail through all levels of increased government and private sector investment as well as new and alternate sources for project funding and finance.

THE ROLE OF GOVERNMENTS

To ensure the future of our cities and regions, all levels of Government have a vital role to play in:

- **Funding:** Federal and State Governments must agree to co-fund transport infrastructure and take investment and support for infrastructure projects out of election cycles. Better coordination of funding across governments and businesses, including tendering out the provision of infrastructure will attract greater private sector innovation. Innovative funding should also be embraced by all levels of Governments.

- **Planning:** Cities should be viewed as a network to ensure interoperability between transport and urban planning. Planning must be holistic, provide certainty and include transport connections in the planning and construction phase, not post-construction. City blue-prints should be established and agreed to by all political parties to take infrastructure investment out of political cycles.

- **Regulatory reform:** Reduced rules and regulatory burdens on industry will heighten transport efficiency. Passenger rail operators recommend moving to co-regulation which will enhance rail’s safety performance. Government reform can also position public transport as a preferred solution over the car.

- **Coordination:** Ensuring state and commonwealth departments work collaboratively with Infrastructure Australia and transport operators will see continued network efficiency and improvements.
WHY PASSENGER RAIL?

Whether individuals travel by rail or not, they still benefit from its existence through the broader benefits it provides. Passenger rail systems provide the following benefits:

- **Safety**: Rail is the safest form of land transport and is up to nine times safer than road transport.

- **Capacity**: Passenger rail moves people ‘en masse’. The average passenger train takes 525 cars off the road while light rail can move between 4,000 and 20,000 people per hour. The same space dedicated to an arterial road lane could move only 800 cars (or less than 1,000 people) per hour, while buses move between 2,000 and 8,000 people per hour. The capacity of passenger rail provides reduced road congestion, reduced transport-related greenhouse gas emissions and safer roads as a result of less vehicles on the road.

- **Accessibility for all**: Rail aims to be accessible to individuals with all abilities. Legacy heavy rail networks are investing significantly to ensure their systems are fully accessible to all. Modern, low-floor light rail vehicles and level-access stops ensure that light rail is available to people of all abilities, including the elderly, people with disabilities, tourists with luggage and people with prams.

- **Certainty**: The fixed routes of rail lines provide certainty for residential, retail and commercial property investment. This leads to considerable intensification of property development and uplift in property values around light rail lines and train stations.

- **Urban renewal and property value uplift**: Light rail is highly valued for its ability to regenerate urban areas and generate increased property values. As a result, local governments usually align light rail projects with complementary urban planning policies and precinct planning to maximise urban revitalisation along light rail corridors and around light rail stations. With the right planning and investment, heavy rail train stations can also lead to significant urban renewal and development, particularly when Transit-Oriented Developments are introduced.

- **Health improvements**: Public transport is a driver behind more active lifestyles leading to healthier individuals and communities and as a result, helping to mitigate some of the health impacts of sedentary lifestyles. For example, Melburnians travelling by public transport are five times more active than those who drive, averaging 41 minutes walking each day compared to 8 minutes a day for drivers.xi The Queensland Government reports that public transport assists increased activity levels of socioeconomically disadvantaged groups who are half as likely as more advantaged individuals to participate in sport or physical activity.xii

- **Environmentally efficient**: The use of fossil fuels for transport creates one fifth of the world’s greenhouse gas emissions.xiv Aside from improving local air quality along the route, electrically-powered light rail vehicles can be one of the most sustainable forms of land transport. Depending on the energy source, light rail is commonly cited as capable of being close to emissions neutral and is therefore recognised as a sustainable transport solution.

- **Increased sense of place**: Making public spaces for community interaction around heavy and light rail stations assists in generating retail, commercial and residential investment, contributing to increased density and activity, property value uplift, creating a greater sense of safe ‘places’ and encouraging public interaction.
PLATFORMS

To achieve its aims, the PTG has developed six key platforms for the passenger rail sector. These are:

1. Safety
2. Technology
3. Funding and Investment
4. Asset Management
5. Information Sharing
6. Accessibility and Integration

Platform 1: Safety

Safety is the number one priority for passenger rail operators. The rail industry provides the safest form of land transportation in Australia and New Zealand, with passenger rail in both countries boasting enviable safety records.

Rail safety is a shared responsibility between many stakeholders. The industry wants to become the champion of rail safety and build on a collaborative and proactive relationship with the Office of the National Rail Safety Regulator (ONRSR) to develop mutually agreed safety strategies and associated work plans.

In 2015, the industry established its own Safety Vision 2015-2020. This vision is:

*Working as one industry in an effective co-regulatory framework, Australian rail will strive to be a world leader in passenger and freight rail safety.*

Passenger operators believe rail safety will be improved through the pursuit of a co-regulatory model. Achieving co-regulation requires the ARA and operators working in close collaboration with the Rail Industry Safety and Standards Board (RISSB) and Regulators, including:

- In Australia, the Office of the National Rail Safety Regulator (ONRSR) and the National Transport Commission (NTC)
- In New Zealand, the New Zealand Transport Agency (NZTA)

The co-regulatory regime would include:

1. Agreeing on risk issues and industry priorities
2. Sharing data and information on incidents and investigations
3. Working to enhance the safety culture within the rail industry and ONRSR
4. Exploring ways to create regulatory efficiencies and subsequently reducing costs, and allowing greater resources by industry and ONRSR to be dedicated to identifying and driving safety improvements.
Actions

The rail safety regulatory issues that will be progressed by the ARA and its members include:

1.1 Modifying the ONRSR cost recovery methodology applied to accreditation fees levied on rail operators to include a government component, major projects component and, over time, a performance element that recognises good performance. This will better reflect the performance of operators, the regulatory burden of major projects and the level of government support for ONRSR.

1.2 Ensuring ONRSR becomes a truly national regulator and maximising the benefits that flow from establishing a single national rail safety regulator including working with ONRSR to review the efficiency of its operations.

1.3 Working with NTC and the ONRSR to adjust the Australian Rail Safety National Law (RSNL) to reflect a single regulator operating with a single law and ensure that consequential changes to the RSNL reduce the regulatory burden on the rail industry, including:
   - Clarifying the definition of ‘rail safety work’ and ‘rail safety worker’
   - Reviewing drug and alcohol regulations
   - Reviewing fatigue management regulations
   - Through the ARA’s SPAD Working Group, harmonising the categorisation and reporting of SPADs as part of an industry-wide program of SPAD reduction.

1.4 Lobbying for the removal of road conflict points. Level crossings delay road users and provide a potential collision location. The removal or upgrade of level crossings improves road and pedestrian traffic flows and reduces the safety risk to rail and road users, pedestrians, and cyclists.

1.5 Developing a pathway for ARA-developed SPAD management guidelines to be incorporated into RISSB-owned SPAD management documents.

1.6 Facilitating the development of Australasian national light rail standards, including nationally consistent wayfinding signage to safely direct pedestrians moving across light rail intersections and corridors.

1.7 Through the SPAD Working Group and with the ONRSR, establish a distinction between a light rail SPAD and a heavy rail SPAD and appropriate reporting for each.

It is also important that there are collaborative arrangements with TrackSAFE and Australasian Centre for Rail Innovation (ACRI) as well as ensuring outcomes from the issues outlined above are an input to RISSB standards and guidelines.
Platform 2: Technology

Technology is a vital component of the day-to-day operations of the passenger rail sector. Technological innovation and improvements in all business areas are critical to ensuring continued improvement of passenger rail services. Improvements in train control and communication allow operators to run trains closer together safely. This will increase capacity and efficiency by allowing passenger rail operators to move a greater number of customers whilst reducing demand for hard infrastructure such as tracks, lowering infrastructure investment costs for Government and Industry.

Ticketing systems have evolved from basic paper-based arrangements to electronic smart ticketing systems that improve the customer experience and provide significant customer insights for operators. There is opportunity for continued improvements in this space to further improve the customer experience and accessibility of passenger rail services.

Passenger rail operators utilise radio spectrum for their telecommunication networks. Track maintenance, train control, responses to emergencies, signalling systems, automotive train protection, security, on-train customer help points, train speed control, shunting and train control are just some of the activities that rely on radio spectrum to operator passenger rail networks. Just as the productivity and efficiency of the wider Australian society is benefiting from wireless broadband services, so will the Rail Industry as it transitions from a history of track-side wired systems to smart-train broadband-based radio systems.

Actions

Technology related issues that will be progressed by the PTG include:

2.1 Working with the Australian Communications and Media Authority (ACMA) to ensure the Australian passenger rail sector operates safely and efficiently in metropolitan and regional environments through guaranteed access to the radio frequency spectrum. Specifically this includes:
   - Promoting and co-ordinating rail entity access to the rail industry only (RIO) 400 MHz band
   - Seeking an embargo on the 450.05 MHz channel for national application in on-rail corridors for train-to-train and train-to-infrastructure radio communication
   - Canvassing the option of consistent radio communication technology being used across the rail industry
   - Actively participating in the implementation of the Australian Government’s spectrum review with a focus on links to current and proposed spectrum licensing
   - Actively participating in the ACMA review of long term spectrum licensing in the 400 MHz band

2.2 Investigating new smart ticketing technology options:
   - With a long-term view to developing an Australia / New Zealand public transport ticketing standard
   - Holding an industry forum to canvass new ticketing technologies and standards

2.3 Investigate new technology to assist light rail in the on-road environment

2.4 Working with the ACRI and TrackSAFE to investigate level crossing control options that apply innovative technology
Platform 3: Funding and Investment

A vital element to continued improvement in passenger rail services is funding and financing to expand and improve existing systems and invest in new systems or networks. Due to global fiscal constraints, governments at all levels are increasingly exploring and introducing innovative ways to sustainably fund and finance vital infrastructure projects. As an important adjunct to its advocacy and government relations role, the ARA will work with the PTG to lobby all levels of government for on-going investment into urban and regional passenger rail systems. Public transport operators and authorities in Australia rely on funding assistance from governments to subsidise operations. Very few public transport systems worldwide generate sufficient revenue to be self-funding. Fares typically do not cover the cost of the service provided and as a result, fare box revenue commonly contributes but does not cover operating costs.

Long term investment into public transport requires a fresh look to ensure all priorities in transport, infrastructure, health and education can be funded. Australian governments must innovate and embrace some of the many funding tools successfully used around the world. Alternative revenue raising tools such as value capture, transit-oriented developments, congestion charging, payroll, sales and fuel taxes and Superannuation funds have been providing dedicated funding sources for transport operations and expansions around the globe for years, some since the early 1900’s.

Actions

The PTG will work in parallel with other sectors to assist the ARA in:

3.1 Lobbying for sustained investment by all levels of government and securing Federal Government commitment to support State Governments in co-funding public transport.

3.2 Guiding the development of an advocacy strategy based on the Passenger Rail Infrastructure Priority List that aims to increase/provide funding for:
   - New high capacity rollingstock and refurbishment of existing rollingstock
   - New passenger rail lines and extensions and improvements to existing lines
   - Greater separation of freight, urban and intercity passenger networks
   - Improving stations and other amenities
   - The introduction of new technologies
   - Renewal and transformation of existing infrastructure
   - Upgraded control systems.

3.3 Lobbying for increased long-term funding for passenger rail through:
   - Attracting increased levels of public and private sector investment
   - Developing new project funding financing sources (such as value capture and road pricing)

3.4 Lobbying for the provision for employers to offer salary packaged public transport passes to encourage commuters onto public transport and reduce taxation system bias.

3.5 The harmonisation of standards. Currently jurisdictions order rollingstock with unique specifications, driving costs up and creating interoperability issues. Better coordination between States is required.

3.6 Facilitating a national approach to rollingstock procurement to provide financial savings through economies of scale.
Platform 4: Asset Management

The rail industry manages a multi-billion dollar asset base built up over 160 years of continuous rail operations in Australia and New Zealand. The management of these assets is vital to ensure a safe and reliable service is provided to customers.

At a very general level, passenger rail assets include track, rollingstock and train stations. But each of these key assets consist of a vast number of components that must be safely monitored and maintained to ensure optimal performance and service delivery for customers.

Passenger rail operators strategically manage and maintain new and existing infrastructure to optimise and extend the use of their assets while ensuring the required assets are available and reliable with minimal failures that disrupt or delay services.

Asset management programs are continually refined and improved to provide a greater return of assets in terms of life and reliability. Proactive and reactive maintenance programs are implemented by passenger rail operators to maintain and improve the life of their assets, drawing on best practice methods, new technologies and programs.

Actions

For the passenger rail sector, management of the considerable base of assets will be improved and costs to operators reduced through:

4.1 Reducing the regulatory burden and financial costs of approvals for different types of assets and equipment by developing, publishing and updating a library of successful ‘type approvals’

4.2 Investigating the development of an Australasian set of asset management standards for light rail to better differentiate light rail from heavy rail and reduce light rail capital and operating costs

4.3 Developing a range of targeted projects that improve asset management and utilisation through the ARA’s Asset Management Working Group (AMWG), including:

- Benchmarking processes, procedures and costs of passenger rail asset management
- Implementing a rail industry-wide set of inventory and asset management standards for passenger operators using the global (GS1) standards
- Conducting an infrastructure maturity survey to better understand the condition of the passenger rail sector’s asset base
Platform 5: Information Sharing

The ARA facilitates information sharing between its members.

PTG membership brings the Executives of Australian and New Zealand urban and regional passenger rail operators together three-times a year to identify key areas of interest where industry can collaborate for improved operational and productivity outcomes, share information and promote passenger rail.

The similarities between passenger rail systems allows passenger rail operators to share operational information regarding initiatives, lessons learned, innovations and solutions to common problems.

At the request of the PTG, subject-matter specific industry groups are established to create consultative forums that address shared challenges or system issues. These dedicated groups then work towards a common goal and ideally develop or identify industry solutions that will benefit all passenger rail operations.

Actions

Improved information sharing between PTG members will be implemented during the life cycle of the strategy through:

5.1 Regular updates from members at PTG meetings as a standing agenda item

5.2 PTG-sponsored technical working groups (e.g. Signals Passed at Danger and Asset Management Working Groups) collaborating toward defined and focused outcomes that benefit the passenger rail sector

5.3 Greater involvement and integration of light rail operators (Transdev, DPTI SA, KDR) into PTG activities and working groups

5.4 A range of annual information sharing forums (potentially aligned with AusRAIL), focused on:
   - Customer Service
   - Revenue Protection
   - Transport Safety and Security

5.5 Collaborating with key industry stakeholders, such as RISSB and TrackSAFE to share information on industry priorities and initiatives being progressed by other bodies. The ARA will feed any relevant information on these projects and activities back to ARA members through the PTG.
Platform 6: Accessibility & Integration

Passenger rail provides extensive access opportunities for people with all levels of ability. Integration of all modes of transport so that a seamless transport journey is available helps position public transport as a viable alternative to the car. When car travel is not a viable option, the integration of public transport systems is even more important.

Transport modes must work collaboratively to maximise the service offered to customers. There is a need to ensure that the passenger rail sector is effectively integrated with other modes of public transport (buses, ferries), paratransit (taxis, car sharing) and active transport (walking, cycling). Only in this way will passenger rail and other complementary modes of transport provide a seamless, complete mobility package that will drive mode shift from cars to public transport over the longer term.

Passenger rail operators have made a commitment to continuously improvement the accessibility of passenger rail systems. This includes improvements to infrastructure and rolling stock and the customer experience as a whole for those with a disability or limited mobility.

Over the past two decades, significant investment has seen accessibility improvements at rail premises and to rolling stock. PTG members have consulted with the disability sector individually and collectively regarding accessibility plans and investment decisions to ensure that all accessibility improvements are developed in collaboration with people with disability and their representative organisations. Considerable investment is still required to ensure legislated targets for accessibility are met by passenger operators. As complete accessibility cannot be provided immediately, ARA members have concentrated their efforts on upgrading facilities where the greatest number of customers benefit from the investment. Prioritisation for access upgrades is based on a number of factors, including station patronage, local demographics, access to educational and health services, parking, bus services, shopping, tourism and how stations form a network or provide interchange opportunities.

Disability Transport Standards were introduced in 2002. Some aspects of the standards are impractical and impose significant regulatory and financial burdens on the passenger rail sector, making compliance a greater challenge for operators.

Actions

In regards to accessibility and integration, the PTG will:

6.1 Work through the ARA to guide the Federal Government’s modernisation of the Transport Standards and provide critical input into the periodic review of the Premises Standards. This will ensure the passenger rail industry has a pragmatic and practical way forward to improving public transport accessibility.

6.2 Work through the ARA to manage the recent temporary exemptions from the Transport and Premises Standards.

6.3 Collaborate with other transport modes to provide multi-modal integrated transport systems accessible by all.
References

i PwC Geospatial Economic Model (GEM). All values are real FY13. Locations are based in ABS SA2 classifications

ii PwC Geospatial Economic Model (GEM). All values are real FY13. Locations are based in ABS SA2 classifications


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