

WELCOME

This report, our 92nd Annual Report, communicates our operational, financial and business performance for the financial year ended 30 June 2018.

It highlights our role, who and where we are, and reports on services we provide and performance in these areas. The report also looks at issues related to our business, explores the year ahead and comments on challenges and exciting opportunities the transport sector faces into the future.

Last year our annual report achieved a Gold Award at the Western Australian Institute of Public Affairs Annual Reporting Lonnie Awards and a Gold Excellence Award from the Australasian Reporting Awards. It was also recognised as a finalist for the Public Sector Online Reports.

We have once again committed to producing an online only annual report, minimising both impact on the environment and costs associated with producing a printed version. We believe enhancing our information through up-to-date online content coupled with information on our achievements over the past 12 months, assists understanding of our activities and achievements.

Acknowledgement of Country

Main Roads Western Australia acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, water and community. We pay our respects to all members of these Aboriginal communities, their cultures and to Elders both past and present and their leaders into the future.

Reporting Frameworks

In preparing this report, we have continued to move towards greater adoption of the International Integrated Reporting Council (IIRC) Framework. In addition, we have applied the Global Reporting Initiative (GRI) Standards: Core option and operated in line with the *Financial Management Act 2006* (WA) and Treasurer's Instructions and the 2018 Western Australian Public Sector Reporting Framework.

Reporting Journey

We have further considered how to present the value created by our activities, and this year we continue our progress towards incorporating the principles outlined in the IIRC Framework. The aim of integrated reporting is to promote a more cohesive approach to corporate reporting by explaining how we create value over time. Our intention is to show the benefits to all stakeholders including employees, customers, suppliers, business partners, local communities, legislators and policymakers.

With respect to our Global Reporting Initiative (GRI) reporting, we have now moved from GRI G4 to the GRI Standards: Core option and continue to develop our disclosure to 'Comprehensive' level with the inclusion of more reporting against indicators included at this level. This is part of our continuing commitment to GRI, which provides the world's most widely used standard on sustainability reporting and disclosure.

We continue to explore our understanding and adoption of these approaches in relation to our services and performance. We believe these approaches enable better decision-making by businesses, governments, society and our community, and decisions based on information that matters. We also seek external assurance each year on key areas of focus.

Comments and Feedback

Comments or feedback on the approach that we have adopted or any element of the annual report would be most welcome.



**To the Honourable Rita Saffioti, MLA
Minister for Transport; Planning; Lands**

In accordance with Section 63 of the *Financial Management Act 2006* (WA), I hereby submit for your information and presentation to Parliament, the Annual Report of Main Roads Western Australia for the financial year ended 30 June 2018.

The Annual Report has been prepared in accordance with the provisions of the Financial Management Act and any other relevant written law.

A handwritten signature in black ink, appearing to read 'Peter Woronzow'.

Peter Woronzow
Acting Managing Director
of Main Roads

28 August 2018

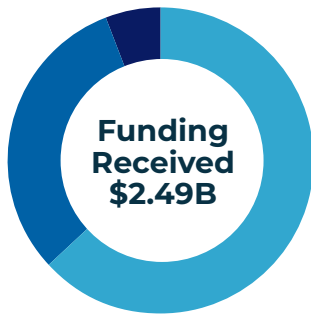
A handwritten signature in black ink, appearing to read 'Richard Sellers'.

Richard Sellers
Commissioner of Main Roads

28 August 2018

Our Finances

Our financial summary shows key elements of performance with further detailed information in Financial Statements and Notes.



Funding Sources 2017-18

- State – \$1.575 billion
- Commonwealth – \$772 million
- Other – \$145 million

Total assets

| | \$ billion |
|----------------------|-------------|
| Roads | 14.3 |
| Land under roads | 23.6 |
| Bridges | 3.9 |
| Other infrastructure | 2.0 |
| Property and plant | 0.4 |
| Amounts receivable | 2.5 |
| Other assets | 0.7 |
| Total | 47.4 |

Total expenditure by type

| | \$ million |
|---------------------------------------|----------------|
| Employee benefits and superannuation | 72.0 |
| Supplies and services | 519.0 |
| Depreciation expense and amortisation | 349.0 |
| Grants and subsidies | 271.1 |
| Other expenses | 46.1 |
| Capital expenditure | 1,065.2 |
| Total expenditure | 2,322.4 |

Our Workforce

Our workforce profile helps to illustrate who we are. We include more detailed information in the section Our People.

- **Full-time employees** – 1026
- **Gender** – Male 69%, Female 31%

Regionally Based Workforce

| Region | Headcount |
|----------------------|-----------|
| Great Southern | 30 |
| South West | 62 |
| Mid West-Gascoyne | 44 |
| Kimberley | 29 |
| Wheatbelt | 34 |
| Pilbara | 33 |
| Goldfields-Esperance | 21 |

Demographics


| Demographics | % |
|--|----|
| Female employees | 31 |
| Male employees | 69 |
| Indigenous Australian employees | 2 |
| Employees with a disability | 3 |
| Employees of culturally diverse background | 22 |


Our Performance


Around the world, governments and communities are seeking to understand whether services delivered by agencies meet expected goals and outcomes. One way to determine this is through timely, accurate and meaningful performance information. Done well, this assists in improving accountability and transparency and aids in our decision-making. We use performance measurement to gain insight into, and make judgements about, the effectiveness and efficiency of the services we are providing. Communication of our performance is part of our commitment to sustainable reporting and good governance.


The following scorecard provides a summary of how well we are performing on a wide range of issues material to our business and our customers. Whilst this provides a snapshot, more detailed information and other measures are included throughout the report.

OBJECTIVES

-  **Movement:** Improve mobility of people and the efficiency of freight

-  **Customers:** Provide a transport network centred on what our customers need and value







-  **Safety:** Provide improved safety outcomes for all users of the transport network

-  **Sustainability:** Develop a sustainable transport network that meets social, economic and environmental needs

GOVERNMENT GOAL

Future jobs and skills

Grow and diversify the economy, create jobs and support skills development

| Key Outcomes Sought | Results | Target | Actual | Status |
|--|--|--------|--------|---|
| State Development Facilitation of economic and regional development | Our target for the average return on which road and bridge construction expenditure will deliver future economic benefits to the community was exceeded and continues to improve | 2.6 | 3.3 |  |
| | Contracts completed on time came in below target but significantly improved compared to last year | 90 | 75 |  |
| | Contracts completed on budget exceeded our target showing continued strong performance | 90 | 100 |  |
| Our People To attract develop and sustain organisational capability through our people | Full-time equivalents (average) | N/A | 1026 |  |
| | We exceeded our target in respect to women in leadership positions at Level 6 and above but more work remains | 20 | 21 |  |
| | There was a high level of completion of Career Conversations coming in just under our target | 100 | 96 |  |

Achieved  More work to do  On track 

GOVERNMENT GOAL
Strong Communities
 Safe communities and supported families

| Key Outcomes Sought | Results | Target | Actual | Status |
|--|--|------------|--------|--------|
| Road Safety Provision of a safe road environment | Community satisfaction with road safety is performing well coming within our target but slightly lower than last year | 90 | 88 | ✓ |
| | Contracts completed on time came in within our target and was an improvement on last year | 90 | 89 | ✓ |
| | Contracts completed on budget exceeded our target showing continued strong performance | 90 | 92 | ✓ |
| | Black Spot location indicator exceeded our target continuing strong performance | 8.26 | 7.92 | ✓ |
| Community Access Improved community access and roadside amenity | Community satisfaction with cycleways and pedestrian facilities came within our target and has improved since last year | 90 | 89 | ✓ |
| | Percentage of the year that 100 per cent of Main Roads State Road Network was available came within our target | 95 | 87 | ✓ |
| | Contracts completed on budget exceeded our target showing continued strong performance | 90 | 100 | ✓ |
| | Contracts completed on time was below our target and a drop from last year's result | 90 | 64 | ✗ |
| Enhancing Safety, Health and Wellbeing Consistently leading safe outcomes | There were no Fatalities last year | 0 | 0 | ✓ |
| | Our Lost-time injury frequency rate was below target but increased on previous years results | 2 | 1.1 | ✓ |
| | Our Incident rate was below target | 0.6 | 0.3 | ✓ |
| | We exceeded our target of helping injured workers returning to work within 13 weeks | 90 | 100 | ✓ |
| | We exceeded our target of helping injured workers returning to work within 26 weeks | 100 | 100 | ✓ |
| Improving Customer Experience Providing a transport network centred on what our customers need and value | Community satisfaction with Main Roads came within our target and has decreased slightly since last year | 90 | 88 | ✓ |
| | The aim to continue to increase the number of calls self-serviced was not achieved this year but did improve compared to last year | Increase % | -3 | 🔄 |
| | The target for resolving enquires at first point of contact with our customer information centre was not achieved and was lower than last year | 80 | 65 | ✗ |

Achieved  More work to do  On track 

GOVERNMENT GOAL**Better Places**

A quality environment with liveable and affordable communities and vibrant regions

| Key Outcomes Sought | Results | Target | Actual | Status | | |
|---|---|-------------------------------|----------|--------|----|--|
| Road Maintenance A well-maintained road network | Community satisfaction with road maintenance came in below our target with a slight decrease from last year | 90 | 82 | | | |
| | Preventative and proactive maintenance undertaken on the network came within our target and is consistent with previous year's results | 85 | 84 | | | |
| | Average \$ cost of network maintenance per lane kilometre of road network was higher than our target due to the impact of natural disasters | 7,250 | 9,129 | | | |
| Road Efficiency and Road Management Reliable and efficient movement of people and goods | Community satisfaction with Main Roads came within our target however has decreased slightly since last year | 90 | 88 | | | |
| | Road network permitted for use by heavy vehicles | B-double -- 27.5 m % | 96 | 97 | | |
| | | Double Road Train -- 27.5 m % | 96 | 97 | | |
| | | Double Road Train -- 36.5 m % | 78 | 80 | | |
| | | Triple Road Train -- 53.5 m % | 44 | 45 | | |
| | % Network configuration | Roads | 90 | 92 | | |
| | | Bridges | Strength | 91 | 94 | |
| | | | Width | 96 | 96 | |
| | Contracts completed on time came in below target but continues to improve compared to last year | 90 | 83 | | | |
| | Contracts completed on budget exceeded our target showing continued strong performance | 90 | 100 | | | |
| Average \$ cost of network management per million vehicle kilometres travelled came in just above our target | 5,300 | 5,388 | | | | |
| Managing the Environment Protecting and enhancing the natural environmental and social values in all our activities | Percentage of state-wide clearing permit audits of compliance completed (CPS 818 and 817) continues to meet our target | 100 | 100 | | | |
| | Scope 1 and 2 Emissions (t CO ₂) are lower than expected and come in well under target | 29,597 | 25,886 | | | |
| | Community satisfaction with our sustainability practices came just below target with a slight increase from last year | 90 | 86 | | | |
| | Community satisfaction of our intent towards managing our impact on the environment came within our target | 90 | 88 | | | |

Achieved More work to do On track

Commissioner's Foreword



In 2017-18, Main Roads as part of the Transport Portfolio continued to play a key role in connecting people and places, providing linkages between land and sea, moving freight, and providing essential services to the Western Australian community.

I am especially proud of the increased collaboration and strengthened relationships between Main Roads and its portfolio partners – the Department of Transport and Public Transport Authority. The Portfolio has embraced its role in leading both the delivery of the Government's ambitious METRONET program and development of the Westport Strategy.

Project offices have been established comprising expert teams drawn primarily from our transport agencies. These teams are working in a highly collaborative manner with a range of stakeholders to ensure we deliver the best outcomes for the people of WA.

The Portfolio has overcome challenges, accomplished significant goals and demonstrated an integrated model that acts as a benchmark for other Government agencies. The degree to which we are collaborating effectively was made very clear with the execution of the Optus Stadium transport solution. The high profile and political sensitivity of the stadium, along with the huge public interest and the blockbuster early events, meant there was immense pressure to deliver.

Great experiences are as much about the journey as the destination, and it's clear this is something we've considered when developing the travel options. Whether it's a picturesque walk across the iconic Matagarup Bridge, a bike ride through the lush native gardens surrounding the Stadium, an enjoyable cruise along our beautiful Swan River to Burswood Jetty, or a relaxed trip on the train to the landmark Perth Stadium Station, there are great options for all. Not only are the transport options plentiful, they are also convenient – proof we have achieved our goals and added to the vibrancy of our great city.

The *2017-18 Connecting People and Places* document highlights examples of cross agency collaboration on some of our most significant transport projects. It provides an overview of the Portfolio's operations, achievements and the trends and influences guiding our work in the future.

Main Roads is a key part of this mix and with an annual budget of \$2.32 billion aimed at developing and maintaining a road network of over 18,500 kilometres, the organisation's position is critical to the economic and social wellbeing of the State.

Main Roads is set to be one of the first agencies to meet the Government's requirement for a set percentage of annual contracts to be awarded to registered Aboriginal businesses. Through actively recruiting youth and indigenous people, and playing a role in the continuing development of the communities in which we operate, it's clear the true measure of Main Roads' success is not weighted on construction alone, but on its willingness and ability to give back.

At the core of everything we do at Main Roads and across the wider Transport Portfolio are our customers and travellers who form our community. Together, we will keep the State moving by helping every Western Australian to get where they need to be as safely and efficiently as possible.

With approximately 60 per cent of the Government's election commitments related to transport and the importance the Government has placed on the METRONET and Westport projects, we have certainly been entrusted with great responsibility.

I have every confidence we have the people, systems and most importantly the energy and goodwill to help Government achieve its agenda. I look forward to what I'm sure will be another productive year for transport in Western Australia.

Richard Sellers

Commissioner of Main Roads

Managing Director's Review



Transport plays an essential role in the lives and livelihoods of Western Australians. It connects people, communities and businesses, helps the economy to grow and keeps people safe.

I am proud to be part of an organisation that is integral in

'Keeping WA Moving' and that delivered more than \$2.32 billion of road programs and services to the state this year.

Our Operational Performance

Our Keeping WA Moving strategy and focus areas of Customers, Movement, Sustainability and Safety emphasise what is and will be central to our business and customers in the years ahead. They continue to guide our future direction, underpinned by our values and guiding principles.

A particular source of pride for me has been the Matagarup Bridge, named for its cultural significance and connection of the Whadjuk Community to the Swan River. We have now completed the highly anticipated connection between East Perth and the Optus Stadium providing an iconic piece of public infrastructure. The decision to return the steel works to local fabricators created more than 200 local jobs and the bridge arch assembly and complex lifting process was a feat of engineering not previously undertaken on an infrastructure project in Western Australia.

The safety of the transport system and minimising any personal harm it may cause is always a significant focus for us. We are committed to forming collaborative relationships with others to ensure we make the transport system safer. Our Road Safety Management System uses a holistic approach seeking to manage the interaction between the road, travel speed, the vehicle and the road user.

Gains in road safety requires a collaborative approach to be taken and a great example of this is our adoption of a Safe System approach to conduct a review on Indian Ocean Drive.

Working closely with the Road Safety Commission and the Western Australia Police Force we examined the road safety risk, road engineering and driver behaviour of this stretch of road. The combined effort to undertake a review of this magnitude highlights the state government's commitment to road safety. We have determined a suite of actions that will make this road safer for the entire community.

We also started trialling full freeway closures for the completion of routine maintenance. This was another example of a collaborative effort with our portfolio colleagues in the Public Transport Authority bringing together nine organisations into a single initiative. This combined approach reduced the impact on commuters and also provided increased safety to our road workers as well as financial benefits that will be reinvested back into our roads.

Work continues on delivering the \$1.02 billion NorthLink WA initiative providing a much needed transport link between Morley and Muchea. We completed the southern section that now sees Tonkin Highway upgraded to a freeway-standard, providing a free-flowing link between Guildford Road and Reid Highway. When completed the NorthLink WA transport link will reduce travel times creating significant productivity benefits to the economy, industry, motorists and the local community.

Business Activities

Our business activities provide important support services focused around encouraging sustainable practices, improving the entire customer experience, investing in and developing our people and their safety, health and wellbeing.

I am very pleased we lead the way in our commitment to increasing opportunities for Aboriginal employment and engagement.

We continue to support the State and the Australian Government's policies and frameworks to maximise Indigenous employment and business opportunities through the proposals implemented by our Senior Leadership Aboriginal Employment Initiatives Taskforce. An estimated 170 opportunities for Aboriginal employment were created this year, with a significant increase anticipated as projects reach later stages of planning and construction.

Our new road maintenance network contracts have been a key factor in establishing these opportunities. A few of the major achievements include our Mid West-Gascoyne Region workforce currently has a 37 per cent Aboriginal participation rate, the Broome Cape Leveque project had 86 per cent Aboriginal employment on site, in the first month of construction and for the Wyndham Spur and Maggies Jump Up sections upgrades, more than 45 per cent of total labour hours were undertaken by Aboriginal people.

We remain committed to protecting and enhancing the natural environmental and social values in all our activities. Our NorthLink WA Southern Section project was recognised at the national Infrastructure Sustainability Awards – winning two awards and achieving the highest score for a 'design and construct project' in Australia. A clear testament to the great work we are doing in sustainability.

Providing a transport network centred on what our customers need and value is integral to our strategic direction. The Perth Area Travel Household Survey (PATHS) launched in May 2018 will see information collected from a total of approximately 7000 households over four years. The function of the survey is to collect information about how individuals travel so we can use the data to better inform land use planning and our transport infrastructure investment decision-making.

The success of any organisation is determined by the capability of its people. During the year we released TEAM (Training Engaging Accountable Managers) a management skills development program. The training is designed to empower supervisors and people managers to perform their role more effectively in key areas including resource management, conflict resolution and mental health in the workplace. It aims to equip our leaders with the skills needed to ensure their teams are productive and motivated to perform at their highest levels every day.

Our workforce planning cycle has been reinvigorated as we focus on identifying and addressing key capability risks and gaps in core areas. Particular subjects we are focusing on include succession planning, building capability and resourcing. These are a couple of high priority initiatives, resulting from previous staff engagement surveys, aiming to further strengthen a positive, collaborative and engaged workplace culture.

We have a proactive approach to safety, health and wellbeing as we continue to offer support to our people with an annual health and wellbeing program that includes flu vaccinations, skin screenings and workstation ergonomic reviews. We also encourage participation in the City to Surf fun run and the HBF Run for a Reason. Our annual Highway to Health Challenge offers a fun and interactive, friendly competition amongst staff.

This year saw a combined total of close to 42 million steps taken as well as a range of health and exercise challenges completed by participants.

Future View

Integrating technology with physical infrastructure offers a great opportunity to innovate. To ensure that Western Australia is in a position to benefit from these emerging transport technologies we will develop existing systems further, such as our industry recognised Open Data, Maps and Apps Portal, and continue to explore new and innovative opportunities including the practical use of drones and video analytics.

In the year ahead we will continue our work to reduce congestion, improve safety and create more WA jobs. This includes progressing road infrastructure such as construction of the new Bridge and duplication on Armadale Road; widening Kwinana Freeway northbound; and upgrades to Mitchell Freeway. Regional works on roads where there is a high risk of run-off road accidents include widening a section of Indian Ocean Drive; upgrades on the Great Northern Highway from Muchea to Wubin; continued construction of unsealed sections of the Broome to Cape Leveque Road; and progressing plans for the next stage of the Albany Ring Road.

Delivering a transport system that meets the needs and expectations of our communities is not something we can achieve on our own. This year we continued to work closely with our Transport Portfolio partners, Department of Transport and Public Transport Authority, so the entire integrated transport system supports, shapes and enables our thriving state.

I'd like to sincerely thank all our people who through a culture of hard work, dedication and teamwork have contributed to the positive progress we continue to make. It is their commitment, enthusiasm and professionalism that keeps us at the forefront of State Government agencies. I look forward to the next year and the exciting opportunities ahead.

A handwritten signature in black ink, appearing to read 'Peter Woronzow', written over a light blue horizontal line.

Peter Woronzow

Acting Managing Director of Main Roads

Linking Strategy, Futures, Innovation and Research

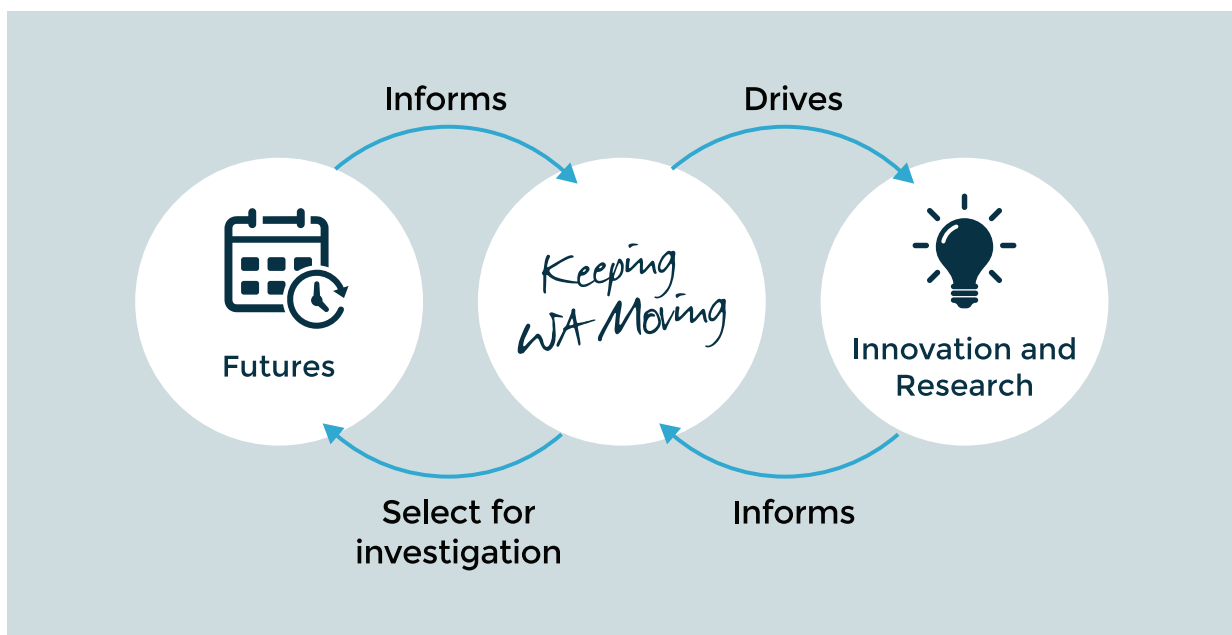
Keeping WA Moving, our strategic direction, clearly outlines our areas of focus as Customers, Movement, Sustainability and Safety. These areas underpin what we do and help us concentrate on delivering what's important as well as continuing to improve as an organisation.

We also scan the external environment to prepare ourselves for the future. Over the past decade, the future of transport has been re-imagined. **McKinsey recently reported that US\$111 billion of investments** in new mobility technologies have been disclosed since 2010.

Much of this investment has come from technology companies and start-ups, new players in the transport sector. Many newer technologies are being discussed as potential solutions to existing transport problems, technologies such as:

- Electric Vehicles
- self-driving cars
- flying cars
- delivery drones
- mobility as a service
- Hyperloop high speed transit system
- machine learning / artificial intelligence
- blockchain technology.

Given the level of investment and potential new technologies, the transport industry is expecting significant disruption in coming years and we need to adapt to take advantage of opportunities and to minimise risks. These technologies give rise to many potential futures for transport and we use this understanding to inform our strategy, innovation and research activities.



During the year, potential futures were incorporated into our update of Keeping WA Moving. The areas shown in colour on the diagram are new technologies and innovations that are changing the nature of our vision of a possible transport future.

Keeping WA Moving

To provide world class **outcomes** for the customer through a *safe, reliable and sustainable* road-based transport system

Our Areas of Focus

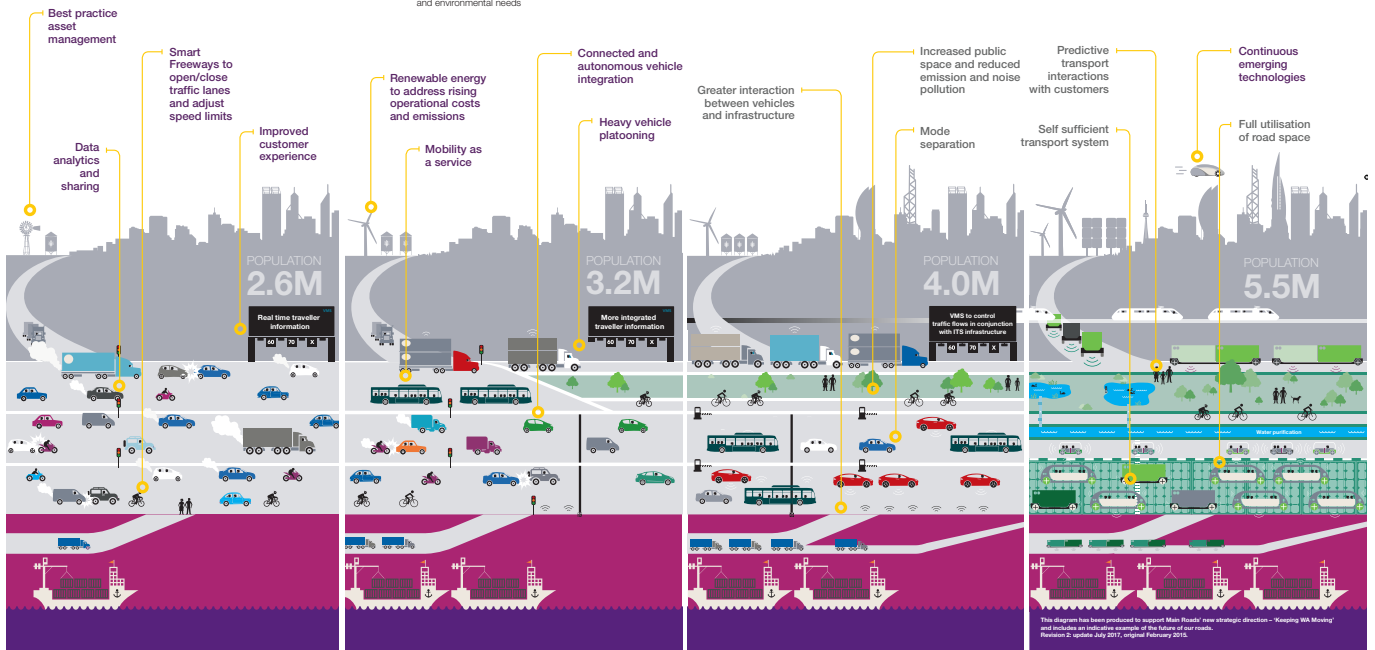
To achieve our aspiration, these four areas are about creating a focus on delivering value, which is more than just improving the status-quo.

- Customers**
Provide a transport network centred on what our customers need and value
- Movement**
Improve mobility of people and the efficiency of freight
- Sustainability**
Develop a sustainable transport network that meets social, economic and environmental needs
- Safety**
Provide improved safety outcomes for all users of the transport network

Our Guiding Principles

These are the principles that reflect our values and underpin the delivery of Keeping WA Moving. They are about how we operate as we set our future direction.

- We will strive to improve **sustainability** and **community amenity**
- We will put the **customer** and their experience at the **centre** of everything we do
- We will continue to **build and maintain** strong relationships with the Transport portfolio to achieve **better transport outcomes**
- We will be an **agile and responsive** organisation that can prosper in a rapidly changing environment
- We will develop and invest in **leaders** that will **challenge the status-quo** in a real and authentic way
- We will **recognise and cultivate innovation** to take up challenges and stay ahead



Transport in a Decade

Imagine this. It's 2028 and you are travelling to the Olympics in Los Angeles. You catch your non-stop flight from Perth to LA. Arriving at the airport, you decide to splash out on a flying car to speed up your trip to the hotel. It's a bit more expensive than other forms of transport, but you're tired after a long flight.

LA's loop system is a cheap and convenient way to get around the city and when it doesn't go exactly where you need, you book a self-driving car to meet you at a stop and continue. Travelling around a city is easy now you can handle all your bookings through one app.

After the Olympics, you fly down to Orlando to visit Disneyland, before taking the 30-minute Hyperloop trip to Miami for some beach time.

The point isn't to accurately predict the future; some of these ideas may not eventuate. However, thinking about a longer term future can help lift ourselves away from the immediate challenges to re-focus on what's important.

What Do These Potential Futures Mean for Main Roads Now?

These technologies fit, generally, into one of three areas:

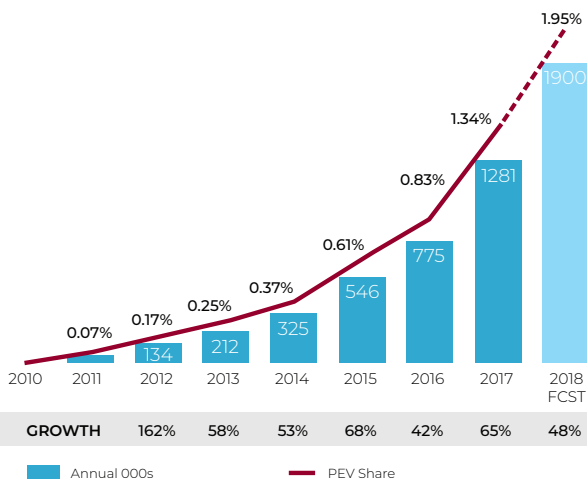
- watch
- prepare
- investigate and / or deploy.

Watch

These technologies are in early development, so we can simply watch their progress over coming years with interest. Flying cars and hyperloops are current examples of things we are ‘watching’ the development of.

Prepare

Other technologies are nearing commercialisation, so we need to initiate new areas of work to prepare for and be a catalyst for the future. For example, global sales of electric vehicles are growing exponentially, although from a small market share. Newer models generally have better range and are cheaper than their predecessors, meaning the market is expanding rapidly. Although uptake in Australia is slow, we need to start thinking about a future where electric vehicle sales are much larger.



Global Plug-in hybrid vehicle (PHEV) and Battery Electric Vehicle (BEV) sales
(source: EVvolumes.com)

To prepare for this future, we are currently participating in the Western Australian Government working group to support collaboration on electric vehicles (EV). As a result, we have initiated a research project with the University of Western Australia (UWA), in partnership with other stakeholders to take a coordinated and strategic approach to planning for charging infrastructure for EVs.

Self-driving cars also continue to develop rapidly. Both Waymo and Cruise, owned respectively by Google’s owner and General Motors, are rapidly expanding their fleet and have announced they will begin commercial services in 2018 and 2019 respectively.

To understand how these vehicles might impact the WA transport network, we have led the development of a research project in partnership with the Planning and Transport Research Centre (PATREC) and iMove CRC. This project will use a combination of scenario planning, modelling and sensitivity analysis to show how automated vehicles might impact transport in differing potential futures.

We also contribute to federal and state government initiatives by being a member or working on:

- Austroads’ Connected and Automated Vehicles Steering Committee, Industry Reference Group and research projects
- National Transport Committee Automated Vehicle Regulatory Advisory Group
- Australian Driverless Vehicle Initiative Scientific and Research Group
- Connected and Automated Vehicle Advisory Committee within Western Australia.

Investigate and / or deploy

A good example of a technology we are investigating is ‘machine learning’. It has the potential to:

- provide new data from existing assets
- simplify and reduce the cost of acquiring existing data
- provide additional insights from data

We use our innovation and research activities to investigate newer technologies. An example for machine learning includes the project with PATREC and iMove CRC to predict outcomes on the road network, based on data from previous days. Another example is a project with the UWA extracting data from video footage.

Machine learning - identifying objects

One of our Innovation and Research Program projects this year looked at detecting objects from existing cameras. This then allows us to derive a host of useful information like counting objects, classifying them and detecting their status.