mainroads WESTERN AUSTRALIA

We're working for Western Australia.

Annual Report 2020 Sustainability Supplement – Additional Disclosures

Contents

About the Sustainability Supplement

This supplement provides additional supporting disclosures for our 2020 Annual Report. It is intended that it clarifies sustainability within our context, provides further explanatory information on our most important issues and tracks these issues and topics back to the Global Reporting Initiative indicators and table available on the Main Roads website.

Introduction & Context

Defining Sustainability

Sustainability within our context is defined as a commitment to 'creating lasting benefits through an integrated consideration of social, environmental and economic aspects in all that we do'. Another way of stating this is that we meet the needs of today without compromising the needs of future generations. Our interpretation of sustainability is based on the definitions within the State Sustainability Strategy 2003. For further information refer to our website.

Challenges & Trends

Road Safety has major social implications and we continue to endeavour to find ways reduce the burden on our communities. We are also increasingly aware that this also includes security. There is an increasing trend for vehicles to be used as a tool of terror during events and in crowded locations. The guidance we provide for traffic management for events that utilise our road space has been revised to improve security as a result of incidents that have occurred around the world, including in Australia.

Our works and operations impact communities that live and work within close proximity. Acquisition of property, noise, vibration, and business continuity are examples of issues that need to be carefully managed, require stakeholder engagement and impact our role as good neighbours. This is an ongoing issue and we continue to evolve our approach to undertaking our works so that any negative impacts are minimised and we can also leverage any opportunities for stimulating local economies.

Impacts from the COVID-19 crisis represents one of the biggest challenges to the global and domestic economy that any of us have ever experienced. Main Roads has had a unique role to play in supporting the Western Australian economy and its people through this period and into the future recovery phase. We have been asked to increase our delivery capability as part of an overall strategy to stimulate the creation and maintenance of jobs within the economy.

The development of a circular economy in Western Australia through the Waste Strategy 2030 is changing the flow of materials through our economy and industry. Increasing the use of recycled input materials for road construction is also key to reducing our overall environmental burden. We have experienced a lower than expected uptake of the use of recycled materials within our industry and we are continuing to work our industry to normalise the use of these materials.

Concern for public health and our workforce from construction related activities continues to be a concern to us, as it is to the broader community. Public health may be impacted through exposure to contaminants, hazardous materials or poor air quality. The media continues to document times when the broader construction industry breaches public trust in the health security of the materials selected for use. We implement processes to ensure that the materials streams that are utilised for all aspects road construction are not imposing undue risk of exposure to contaminates, or substances that increase health risk. Responses includes our materials specifications, audits and other contract conditions.

We acknowledge the traditional custodians of Western Australia's lands and aim to protect Aboriginal cultural values wherever possible. We recognise that there is an unacceptable level of disadvantage in living standards, life expectancy, education, health and employment experienced by Aboriginal peoples. We are committed to making a change in our industry and progressing reconciliation and we are increasing being ask to take the lead in our regional areas and contribute to increasing the level of aboriginal employment as a result of our contracts.

Climate change in Western Australia continues to impact network resilience. Much uncertainty remains as to what will be the extent of the impacts of climate changes on the road network. The difficultly in predicting what the impacts will be makes it difficult to determine the most appropriate response. For example, in South Western Australia we are expected to experience a number of general climate change risks which include decreasing winter rainfall, overall increased temperature, more hot spells, more extreme rainfall events and sea level rise. We have taken conservative steps to adapt new infrastructure to increases in sea level.

The expectation to contribute to climate change mitigation continues to take shape. Generally there is an expectation to contribute in this space. There has been a continued focus in reducing emissions from transport from key lobbyists in the climate space. Internationally, transport agencies are being delegated broader responsibility to improve air quality within urban areas including the reduction of greenhouse gas emissions from the use of transport networks. For us the expectation is how we can provide services that assist the economy to transition to lower emissions transport such as low and zero emissions vehicles.

Zero emission vehicles such as electric vehicles present many benefits for Western Australian Transport. They allow transport to reduce its climate change impacts but also potentially improve amenity through lower noise, can be designed safer with lower centre of gravity vehicles, reduce air pollution and health impacts in urban areas and improve fuel security and transport affordability. However, large portions of our funding is linked to fuel excise which electric vehicles currently do not pay.

Highlights

This year we have achieved a number of significant milestones in Sustainability across our projects and the state road network. The below case studies outline our achievements and how they have benefited the community, the environment, and the economy.

Graham Farmer Freeway Tunnel Lighting Upgrade
We are currently in the middle of undertaking a program of works to replace all the fluorescent tubes in the Graham Farmer Freeway tunnel. Throughout 2020, the tunnel has undergone a number of closures to replace all the fluorescent lighting with LED lights. This work follows on from the previous upgrade of the lane use management system to LED lighting.

The tunnel currently has a combination of fluorescent tubes and high pressure sodium (HPS) lamp fittings. These include 3094 fluorescent fittings and 483 HPS lamps, which were installed when the tunnel opened in 2000. Through this program of works, each 58watt fluorescent light fitting will be replaced with a 17.5watt LED light fitting. LED lights have a life expectancy that is two to four times longer than fluorescent lights. This enhances both the economic and environmental sustainability of the lighting. Economically, the lights require changing less frequently making them more cost efficient. Environmentally, the lighting change reduces our

annual Greenhouse Gas (GHG) emissions across the network by two percent, as we reduce our carbon dioxide emissions by 648 tonnes a year.

The next steps in rolling out LED lighting in the entire tunnel is to design and test an LED light alternative as a direct replacement for the HPS lamps. This is underway, and expected to be complete in the near future. Following this, a program to build and then replace the HPS lamps will be rolled out, ensuring the Graham Farmer Freeway tunnel is completely lit by LED lighting. This expected to significantly further reduce GHG emissions produced through our operations.

Silver IS Planning Rating for Bunbury Outer Ring Road

The Bunbury Outer Ring Road (BORR) is a 27 kilometre section of highway that will connect Forrest Highway to Bussell Highway in Western Australia's south west region. The project will reduce travel times between the north and south of Greater Bunbury by 15 minutes, as commuters travelling between Forrest Highway and Bussell Highway avoid 13 sets of traffic lights and one rail level crossing. Infrastructure projects like this have the ability to influence economic, environmental, social and governance outcomes and values from a local to national scale.

As with all Main Roads projects over $100 million, the BORR project was registered and assessed by the Infrastructure Council of Australia (ISCA) using the Infrastructure Sustainability (IS) V2.0 Planning tool. The Project team were awarded with a Silver IS rating, which is a milestone for Main Roads given BORR was the first project to be assessed, verified, and achieve a planning rating under the new version 2.0 of the framework. Notable outcomes from this phase were achieved through quality sustainability governance and integration, and the incorporation of sustainability considerations into the project delivery scope.

With construction on track to commence in 2021, the Bunbury Outer Ring Road will continue assessment using version 2.0 of the IS Tool to deliver sustainability initiatives identified and investigated throughout Project Development. The initiatives are linked to the Project's Sustainability Focus Areas, which include workforce and Aboriginal participation; energy, resource efficiency and waste; and minimising environmental impacts.

Crushed Recycled Concrete Pilot Trial

Over 31,000 tonnes of CRC, produced from construction and demolition waste, was placed on the Kwinana Freeway northbound widening and Murdoch Drive Connection projects last year during the Roads to Reuse Pilot Project. The project was very successful, with all material fully complying with the agreed specifications, as well as our own requirements for engineering properties. The construction contractors provided positive feedback on the workability of the material and the excellent well-bound surface finish. Since completion of the pilot, we placed a further 3,000 tonnes on other road projects. We will also work with metropolitan local governments to increase usage of CRC on their road networks and are committed to lifting usage to over 200,000 tonnes.

Watch our video on the pilot trial to find out more.

Sustainability Context

Following is context information on our most material topics for Sustainability and explains why we consider them our most material topics. For our material topic visualisation and process please refer to our Annual Report.

Road Safety (Customer Health and Safety)

There is a safety risk associated with the use of the road network. In 2020, Western Australia had 6.2 road deaths per 100,000 population per year; over 33% above the national average. We believe no one should die or be seriously injured on the State's road network, and we will manage the network to decrease the likelihood of road trauma to all road users.

As the state road agency in Western Australia we are custodians of the approach to road safety in road infrastructure. We are expected to systematically address the high risk areas across the road network. In Western Australia, through the Road Safety Commission, we have adopted a Safe System philosophy to our road Safety Strategy 'The Road Towards Zero'. The Safe System acknowledges that human error on the road network is inevitable, and that when it does occur the system makes allowance for these errors to minimise the risk of serious injury or death.

The Safe System approach is based on four key cornerstones:

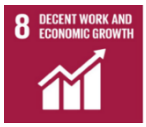
- Safer vehicles
- Safer speeds
- Safer drivers
- Safer roads and roadsides

For Main Roads we are applying the Safe System approach to our roads, roadsides and the speeds limits across the road network to make road environments more forgiving of human error. This approach flows through most aspects of what we do including project prioritisation, road design and design standards and road safety auditing.

The adoption of ROSMA will help us meet our state and national targets for road trauma reduction. It is built in line with ISO 39001 for Road Traffic Safety and drives best practice in the application of Safe System principles to projects and activities. ROSMA was launched in June 2016 and hundreds of employees have completed ROSMA operator training. Main Roads is committed to implementing the state strategy – Road Safety Strategy Towards Zero 2008-2020 through the establishment of road safety as one of its cornerstones in our corporate plan. Our commitment to road safety is defined in the Main Roads Road Safety policy.

Furthermore, the way our communities currently use and access the road network has adverse impacts on human health. It is recognised that globally, every year more people die from vehicle emissions than from road accidents. Improving transport mode choice has implications for improved health and more active life styles, as currently 60 percent of Australian adults are getting less than the recommended 30 minutes of moderate intensity physical activity every day. Providing facilities for active transport can be one way of addressing the issue.

Congestion and Freight Productivity (In-direct Economic Performance)



One of our core objectives is to reduce the negative impacts to our community and economy from congestion of the road network and provide better access for our freight customers to improve that sectors productivity. We do this through prioritising which projects are delivered to manage congestion, managing road traffic policies and practices, such as traffic signal timing, that facilitate safe and efficient movement of traffic on the road network and managing all planned and unplanned events on the network to optimise traffic flow and minimise disruptions. Road related expenditure makes up approximately 8% of total State Government spending. The right infrastructure investments with high cost benefit ratios can unlock greater economic benefits throughout our value chain for the State.

Main Roads considers indirect economic impacts from investment and non-investment during the project selection phase. We use a needs identification framework using Customer Levels of Service, which includes consideration of safety, travel experience, accessibility, amenity and reliability to highlight deficiencies on the network. This method ensures we aren't just looking at asset deficiencies – but focuses on the values of the outcome that the asset delivers. This framework also ensures our rural and remote communities are considered in the identification of needs and project selection. We also consider access to community infrastructure (schools, hospitals, stadiums, etc) through collaboration with the relevant government agency (Health department, Education Department, Sport and Recreation).

Main Roads adopts the Treasury Prioritisation Methodology to prioritise potential projects (for an investment decision) and for projects (for a funding decision). Business case guidelines detail the minimum requirements from investments from both a State and Commonwealth perspective. We include in-direct economic benefits that are outside the scope of the usual benefit cost assessment described above by including wider economic benefits in submissions.

Main Roads has adopted a post project evaluation framework to measure project success – this ensures we are achieving the intended KPI's and outcomes from project investment. This Benefit Realisation Framework is endorsed by ATAP and is a key feature of ISCA's V2.0 Rating Tool.

Good Public Policy

As a Statutory Authority we must ensure clear and transparent relationships between the elected government to prevent any undue influence in the administration of the public function and to ensure the swift and efficient implementation of government policies and strategies.

The Public Sector Commission provides direction and guidance to Main Roads on what constitutes good governance in the Public Sector. A number of mechanisms are in place to inform agencies of direction and disseminate information. This includes Commissioners Instructions and Public Sector Commissioners Circulars.

Biodiversity & Compliance with Environmental Legislation

We acknowledge that our actions have the potential to cause negative environmental impacts to Western Australia's unique environment. Our State is widely recognised as having unique and special flora and fauna species which can be impacted by our operations. Our road network also transects sensitive and protected environmental areas. Details of these areas and threatened species is available on our website. The table below conveys the number of threatened species with habitats located in the Main Roads road reserve.

IUCN Classification	Flora	Fauna	Total
Critically Endangered	32	5	37
Endangered	26	20	46
Vulnerable	26	19	45
Near Threatened	590	35	625
Total	674	79	753

Our network transects other significant conservation areas such as:

- Environmentally Sensitive Areas
- Vegetation of Low Representation
- Threatened Ecological Communities
- Bush Forever Sites
- Black Cockatoo Species
- Ramsar Wetlands and DBCA Managed Lands
- Significant Fauna Species Habitat

We use the precautionary principle in our approach to environment and heritage, and aim to avoid and minimise impacts wherever possible. The precautionary principle is built into our internal processes and Western Australian environmental legislation.

We manage our operations using a systematic approach in which all our activities are screened for potential environmental impacts. Environmental impacts can include positive or negative changes to the values of our environment. Values impacted may include: physical features (land, water and air); biological (flora and fauna); cultural and heritage related Aboriginal and European values; and socio-economic and human-health values.

If potential impacts are negligible then the activity is implemented using standard management measures. If potential impacts are identified, the activities require further impact assessment. We operate on a hierarchy of avoid, minimise, reduce and offset our environmental impacts. We achieve this through changes in scope and design, and the development and implementation of an Environmental Management Plan (EMP) and an Offset Proposal.

Where the environmental impacts are likely to be significant we refer our projects to be assessed by the relevant regulators such as the Commonwealth Department of the Environment and Energy (DotEE), the Western Australian Environmental Protection Authority (EPA), or the Western Australian Department of Water and Environmental Regulation (DWER). The regulator will decide whether or not to assess the project. Where the regulator does not assess the project, it is

implemented in accordance with the relevant EMP. Where the regulator assesses the project, it is subject to a comprehensive Environmental Impact Assessment and may be open to extensive public and community consultation. We do not implement those projects assessed by the regulators until they meet relevant approval conditions.

We work closely with the Western Australian Department of Biodiversity, Conservation and Attractions (DBCA) to identify suitable environmental offsets and obtain approval. Offsets approved by DotEE can be identified in the project's approval conditions which are available on the DotEE website. Offsets that are approved by the EPA or DWER are advertised on the Government of Western Australia Environmental Offsets Register which is available on DWER's website.

Regional Presence & Development (Market Presence)

We are one of the most geographically dispersed road agencies in the world, responsible for more than 18,600 kilometres of road spread over 2.5 million square kilometres. We operate from eight regional locations throughout the state.

Our rural operations can have significant impacts on regional towns' communities and their economies. In many instances, our regional presence presents the opportunity to positively impact indigenous communities as a higher proportion of our regional population is indigenous compared to in the metropolitan area. Increasingly our project funding conditions include stringent indigenous employment targets and requirements.

The regional towns in which are operations are located have comparatively low populations and therefore smaller economies. Our business activities can contribute to the economic activity of any of our regions but the impacts are more significant in our regional locations. Fly in, Fly out operations across all industries continues to be a key trend impacting regional towns and makes our continued commitment to regionally based services all the more important.

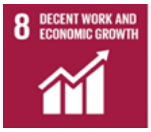
Procurement Practices

We rely on our supply chain to deliver tasks critical to our overall success. In 2020, we engaged with over 4,900 suppliers and made in the order of $1.753 billion in payments. Our indirect supply chain is again more extensive with our construction projects engaging with multiple sub-contractors and suppliers. We are aware that our terms of payment can impact the cash flow and solvency of various businesses and seek to minimise those impacts. We also leverage our relationship with our suppliers to deliver priority government policy which includes training, indigenous engagement and supporting local business.

The State Supply Commission Policy on sustainable procurement requires us to demonstrate that we have considered sustainability in our procurement of goods and services. We have gone beyond the requirements of this policy to reflect this in not only our processes for procuring goods and services but also in procuring works. We apply the Western Australian Government's Buy Local Policy where we consider and give preference to local providers in our purchases as the benefits to industry development and employment are recognised. Buy Local Policy clauses are also included in all our tender documents and tender assessments. In addition

we promote social procurement initiatives such as: direct purchasing from Aboriginal Businesses; using WA Disability Enterprises to provide works, goods and services; and giving recognition to our contractors who employ Aboriginal people and businesses. In 2018 we introduced contractual requirements for Contractors to employ Aboriginal People and subcontract to Aboriginal Businesses. This includes mandating minimum employment and subcontracting percentages that must be met in the delivery of works.

Workforce Safety & Health



A predominant amount of our workforce is directly engaged in road construction activities. Our contract workforce work environment interfaces with the road environment, moving traffic and heavy machinery. The construction industry itself is characterised by activities that are considered high risk from a safety perspective. According to Safe Work Australia the construction industry is consistently among the top industries with the highest number of serious incidents, and it has the fifth highest incident rate of all industries.

We aim to influence safe practice throughout our business including on our projects and for road maintenance where we have a principal-contractor relationship. We require our contractors to provide safety related information including the reporting of serious incidents and reporting to our external bodies such as WorkSafe or EnergySafe if required.

Each project provides a Monthly Safety Indicator report that includes information that is collated to form our corporate dashboard:

- Number of Lost Time Injuries
- Number of serious incidents
- Serious incidents that were reported in 24 hours
- Contractor hours
- Number of hazards closed out within 30 days.

The safety of Main Roads staff both working directly and indirectly on our road projects, is managed within the scope of our Safety Health and Wellbeing management system that is being maintained in accordance with AS 4801:2001 Occupational Health and Safety Management System and in compliance with the Occupational Safety and Health Act 1984.

Main Roads WA maintains road safety statistics related to people that are under the direct and indirect control of Main Roads, through the Workers' Compensation and Injury Management Regulations 1982. Any statistics and details for fatal and serious injuries will be picked up through the Police reporting mechanism and be processed by our Road Safety Branch.

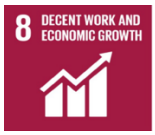
Our strategy for reducing fatal and serious injury crashes on the state road network is focused on the areas that Main Roads can directly influence, which are:

- Ensuring that projects implemented on the state road network are assessed, selected, developed and delivered with the aim of reducing death and serious injury
- Developing and delivering effective road safety treatment programs
- Operate and implement policies that manage the risk of being killed or seriously injured on our roads or while working directly or indirectly for Main Roads

Local Communities

We understand major infrastructure projects can create significant change and disruption, with issues such as land acquisition, environmental impacts and construction traffic affecting our reputation and performance as a "good neighbour". Furthermore, the type, form and design of the infrastructure that is delivered can have significant impacts on the urban fabric and liveability of local communities or precincts. Whilst it is not always possible to achieve universal satisfaction we work closely with our stakeholders and the community, to reach mutually-beneficial outcomes wherever possible, based on the established principles of openness, transparency and proactivity.

A major impact of delivering State significant infrastructure is we sometimes need land which is already utilised for other purposes such as residential property. Land is acquired by negotiation or formal taking action under the powers contained in the Land Administration Act 1997. Land required is previously identified within the Metropolitan Region Scheme or a Planning Control Area.



The process of acquiring land can have significant community and social impacts which need to be managed. Main Roads will initiate land purchases by voluntary negotiations when funding is available. In some cases, where construction is imminent, acquisition may take place by formally taking action. Property owners are entitled to compensation and have the power to object to the Minister of Transport. Generally, land is acquired two years prior to construction.

Value for Money

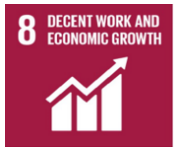
We must make effective use of the government funding we receive to deliver our services to the community. We rely on a number of performance indicators to recognise the value created by our activities on the economy. In 2019/2020, Main Roads received $2.34 billion in funding and invested $2.46 billion in managing the state road network. The road network and construction industry has many flow on effects for our economy. Improvements in road network efficiency can also lead to increases in the competitiveness of industries that rely on transport.

Due to the impacts of COVID-19, transport infrastructure was allocated more than $8 billion of funding allocated to transport projects over the next four years. The aim of this was to support the COVID-19 economic recovery, and led to Main Roads fast-tracking the tendering process for 11 major road projects in both regional and metropolitan areas in WA. Projects included the Bunbury Outer Ring Road, Mitchell Freeway Extension and Fremantle Traffic Bridge.

By increasing the connectivity and extensiveness of the state network, it is important to note that there may be negative in-direct economic impacts in optimising road-based transport that are related to equity. In 2019 in Western Australia, middle-high income households spent 11.5 percent of their income on transport each fortnight, compared with 12.5 percent for low-income households. WA's average fuel spend is $63 per week which is higher than all other states, except NT.

Refer to the Our Performance section of the Annual Report for a full overview.

Indigenous Heritage and Native Title



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Our Reconciliation Action Plan 2017-19 is driven by our Diversity Working Group and focuses on:

- Building even stronger relationships with Aboriginal people and communities
- Creating greater understanding for ourselves and our partners of Aboriginal heritage; and cultures providing opportunities for Aboriginal people through our activities and our industry.

We are currently at the end stages of developing an updated Reconciliation Action Plan.

Job Creation

The size of our workforce is 1140 people, who are spread throughout our metropolitan and regional offices. Of this figure, 31 percent are female and 69 percent are male. Indigenous Australian's make up two percent of our workforce.

We have also made a commitment for a sustainable future workforce and have revitalised our employer brand and increased awareness of our development employee pathways. This included hiring 12 Graduate Engineers and Engineering Associates for our 2020 Development Employee Program. Further increasing female and Aboriginal participation in these programs will be an area of future focus. This year, 22 percent of Graduates and Cadets were female while 78 percent were male.

During the COVID-19 pandemic, which has created unprecedented economic ramifications, we have been asked to increase our delivery capability as part of an overall strategy to stimulate the creation and maintenance of jobs in the economy. Our investments are considered to have a multiplier of 2.3 for job creation, meaning every direct job created by our investments creates a further 2.3 in the economy. With a number of our infrastructure projects being fast tracked for delivery and construction, this number is expected to further increase within the next financial year.

Other aspects for significance for sustainability context.

Energy & Emissions

The development, operation and use of a road network consumes energy and generates emissions in numerous forms. The predominant impacts from energy consumption and emissions fall outside of our direct control from the use of the road network itself. Road transport makes up 18.8 percent of Australia's total GHG emissions and has been the highest growing source of emissions since 1990 (BITRE 2015). Transport is the third largest sector of emissions in Australia, behind electricity and stationary energy (electricity generation). We

estimate that the road network generates carbon emissions of a rate of 295.6 t CO_2 per million vehicle kilometres travelled (MKVT). Emissions from the use of the road network also adversely impacts urban air quality.

Water

Water is a precious resource and our State continues to experience the effects of a drying climate. Water scarcity impacts some regional areas due to the arid environment and salinity of groundwater. On occasions our construction projects may require temporary but significant quantities of water for construction purposes. A license is required for the withdrawal of groundwater and there may be limitations as to how much water can be extracted at any one time.

Materials use

Road construction requires the use of large volumes of both naturally occurring and processed materials. Naturally occurring materials are extracted from locations in a close proximity to projects sites and may involve vegetation disturbance. The processed materials, such as bitumen, concrete and steel will also have environmental impacts associated with their manufacture.

Sustainability Impacts through our Supply Chain

Our Sustainability Impacts across our Supply Chain Activities

Main Roads is custodian of the State road network in Western Australia. We invest in, operate and maintain the road network for the good of all Western Australians and the road user. Aspects of the services we deliver we delegate responsibility for delivery to other organisations. Activities such as construction and maintenance of infrastructure assets are outsourced to civil contractors.

The graphic below describes at a high level the activities that Main Roads undertakes to deliver its services to the community and how this translates into Main Roads material issues for Sustainability. It also describes at which point Main Roads has the capacity to influence or manage the issue and at what stage the impact of the issue takes place.

Main Roads Sustainability Policy

Our Sustainability Policy is underpinned by six key aspects. The key aspects were determined through previous consultation that had occurred at portfolio level between ourselves, Public Transport Authority (PTA), Department of Transport (DoT) and various industry stakeholders. The key aspects are guided by a policy objective and we continue to develop actions and metrics to underpin these objectives. The six key aspects are:

- Sustainable Transport
- Climate Change
- Environmental Footprint

- Behaviour
- Governance & Performance
- Funding & Financing

Main Roads Sustainability Policy Aspects

1. Sustainable Transport

The transport system is an integral part of the everyday lives of all Western Australians. In a State that is as large and diverse as ours, it is a critical component that makes it all work. Beyond connecting people and places, effectively designed road infrastructure and road reserves make a significant contribution to the urban form and function, liveability, amenity and heritage of our cities, towns and settlements. The travel experience enjoyed by road users and visitors depends in part on the:

- creation of community amenity through urban design features and condition of road reserves;
- the ease of mobility across all modes of transport; and
- the ability to choose how to access transport.

What We're Doing
Some of our key policy commitments in this area include:

Congestion

With Perth's population expected to reach 3.5 million people by 2050, congestion on our roads will continue to be a reality faced by everyone in the city. This population growth is prompting us to establish the Traffic Congestion Management Program. The aim of the program is to ensure congestion does not impact liveability, ensuring Perth remains a sustainable place to live no matter how fast the population and road infrastructure is growing.

Busting congestion is a key focus of a number of our projects as well. In August 2020, we opened Perth's first Smart Freeway. Travel times during peak hour have been reduced by approximately ten minutes, as the emergency lane on the Kwinana Freeway northbound from Canning Bridge was converted into a full time traffic lane. This reduced the need for vehicles entering the freeway from Canning Bridge to merge into peak hour traffic.

We are also currently transforming Tonkin Highway to deliver a high standard, north-south transport link from Muchea to Mundijong. Part of this upgrade is the Tonkin Gap Project, which will remove the congestion that currently forms at the bottleneck where Tonkin Highway reduces from three lanes down to two in Bayswater and Redcliffe. This is set to reduce travel times, improve safety, and increase access for road users, pedestrians, and cyclists in the area.

Facilitating Public Transport Infrastructure

In light of the Premier fast tracking $2.3 billion worth of projects, the Office of Major Transport Infrastructure Delivery was created to deliver all transport projects valued over $100 million. This includes the Public Transport Authority and their teams working on METRONET projects including the Thornlie-Cockburn Link, Yanchep Rail Extension, Morley Ellenbrook Line, Bayswater Station and the Byford Extension. A number of these METRONET works fall under the construction of Main Roads projects, for example, the Tonkin Gap Alliance will be delivering the

Tonkin Gap project and associated work for the METRONET Morley-Ellenbrook Line.

In addition to this, we have adopted a partnership approach with PTA to ensure the smooth delivery of infrastructure (e.g. dedicated bus lanes) on local and state roads. This has seen a significant expansion of the bus lane network. In most instances, the dedicated lanes are also shared with other road users such as cyclists and taxi's, further adding to the benefit of reduced single passenger vehicle trips. This partnership has seen the delivery of a number of new bus lanes across the network, which has improved Perth's public transport system and encouraged more motorists to make the mode switch from vehicular travel to more sustainable types of transport.

Cycling and Pedestrians

We aim to achieve a safe, accessible and efficient road network as part of an integrated transport system for all road users. This includes pedestrians, people with disabilities and cyclists. Some of the specific initiatives that relate to sustainability that are targeted at improving pedestrian and cycling network access include:

- Developing a number of off-road facilities for cyclists and pedestrians to reduce conflict with traffic and provide safe travel. An example of this is the Fremantle Principal Shared Path from Victoria Street to North Fremantle
- Conducting a trial of reduced speed limits
- 30 km/h bike boulevards
- 40 km/h residential areas

Visit our Pedestrian and Cyclists page for more information, including our Disability Access and Inclusion Plan.

Urban Design

Urban design applied to roads involves thinking beyond the provision of solely functional infrastructure, to consider the surrounding context and to include design objectives for people and places of the road management process.

All state road authorities include urban design considerations in the planning and design of road infrastructure. Road design solutions that are sensitive to the surrounding context (natural and built, social and visual) contribute to building better cities and communities, enhance local environment and add community value.

Main Roads places great importance on the urban and landscape design aspects of infrastructure works. For major works we will request the development of a Urban and Landscape Design Framework to inform the infrastructure project and urban design outcomes. The Design Principles of State Planning Policy 7.0 *Design of the Built Environment* are a key consideration for our approach to urban design. We will refer projects for independent review under Design WA which significantly impacts precincts of significance from an urban design perspective.

Aboriginal Heritage

We acknowledge the traditional custodians of Western Australia's lands and aim to protect Aboriginal cultural values wherever possible. We have developed an Aboriginal heritage process that ensures compliance with Western Australia's Aboriginal Heritage Act 1972. We work closely

with other state government agencies including the Department of Planning, Lands and Heritage (DPLH) and the Department of Premier and Cabinet, as well as Aboriginal people, to ensure our Aboriginal heritage processes are robust.

We aim to avoid, minimise, and reduce our negative impacts to Aboriginal heritage sites wherever practicable. All our activities are screened for potential impacts in compliance with the DPLH Due Diligence Guidelines using our internal Aboriginal Heritage Risk Assessment process. Where this process identifies a potential risk of impact to an Aboriginal heritage site, further investigations are undertaken.

We value the input and contribution of Traditional Owners and seek, their advice and opinions regarding potential impacts via site surveys and other consultation processes. In our endeavour to protect Aboriginal cultural values we also liaise with other stakeholders including Prescribed Body Corporates, Native Title Representative Bodies and Aboriginal Corporations and we directly engage with relevant community groups and Traditional Owner informants.

Where it is not possible to avoid impacts to an Aboriginal heritage site, we will seek consent and works will not progress without approval from either the Registrar of Aboriginal Sites or Minister for Aboriginal Affairs.

Read more about of Aboriginal Heritage and Native Title commitment.

Electric Vehicles and Charging Infrastructure

Electric Vehicles fit in well with our broad notion of promoting more sustainable travel as they reduce carbon, tail-pipe emissions and reliance on transport fuels, are energy efficient and produce low noise. They will be a significant contributor for achieving emissions reductions from transport from use of the road network.

In our continued support for electric vehicles, plug-in and hybrid electric vehicles, we will endeavour to promote and encourage their use within our industry (hybrid plant) and community in general while we investigate opportunities to provide charging infrastructure. We are currently piloting an EV quota within our major project construction fleets. If successful, we will seek to implement a quota more broadly.

2. Climate Change

Adaptation and Mitigation

We have been working towards developing new infrastructure and assets that are adapted to facing the challenges presented by current climate change forecasts. We are also working to minimise the effect of climate change on our current assets, while looking for opportunities to offer benefits for the community of Western Australia.

Initiatives that are planned or underway include:

- Climate change risk assessments undertaken in project planning;
- Reviewing incident management procedures;
- Continuing review of current standards against impacts of climate change;
- Exploring options to offer benefits that counter climate change impacts;

- Adding climate change considerations to existing planning, development and delivery process reviews;
- Collaborating with stakeholders agencies to address shared climate change risks; and
- Educating specific employees and contractors on the impacts of climate change and ways to adapt the assets over time ahead of climate change.

Climate change considerations are being integrated into our design standards and our major roads are being incrementally adapted as upgrades or infrastructure investments occur. As part of our alignment with the Infrastructure Sustainability Council of Australia (ISCA), we address the risks of climate change in the planning, design, and construction phase of our major projects. We also address and implement methods to best adapt our assets to these risks. Visit our Climate Change page to learn how we are adapting and mitigating against climate change and associated risks.

3. Environmental Footprint

What We're Doing

Land Use

We recognise that the operations of the state road network, if not undertaken with care and responsibility, has the potential to cause negative environmental impacts to Western Australia's unique environment. The biodiversity of our state is widely recognised as unique and special. To ensure our sustainable approach to land use we do the following:

Environmental Management

We manage our operations using a systematic approach in which all of our activities are screened for potential environmental impacts. Environmental impacts are the consequences of implementing an action and can include the positive or negative changes to the:

- physical (eg. land, water and air);
- biological (eg. flora and fauna);
- cultural (eg. Aboriginal and European heritage and culture);
- socio-economic; and
- human-health values, of our environment.

We also operate on a hierarchy of avoid, minimise, reduce and offset our environmental impacts. This means that when an Environmental Impacts Assessment identifies that an action is likely to have a negative environmental impact we seek to firstly avoid, minimise, reduce and then offset our environmental impacts. This is achieved primarily through changes in scope and design, and the development and implementation of an Environmental Management Plan and an Offset Proposal. Read more about our Environmental Policy and Environmental Management System.

For further disclosures on Environment and Heritage Management refer to our Annual Report.

Revegetation and Landscaping

Revegetation and landscaping is standard practice on our projects to counteract the impacts of vegetation clearing and/or soil disturbance and to help retain and enhance the environmental values of roadsides. We have a proud history of undertaking revegetation, over many years, with awards for innovative revegetation along roadsides dating back to the 1980's. All of our major projects must develop and implement a Revegetation and Landscaping plan adhering to specifications. Read more about these specifications in our online Technical Library.

For statistics on Clearing, Revegetation and Offsetting refer to our Annual Report.

Energy and Emissions

Our Administration Facilities and Network Asset Operations are under our direct control. Our Asset Maintenance and Asset Upgrades/Construction are delivered under contract arrangements where the responsibility of energy consumption and emission sources are delegated to the contractor. For Road Network Use we have minor influence on energy use and emissions but recognise we have a role to play and opportunities to influence better outcomes overall.

At Main Roads, our Network Operations team are constantly looking for ways to alleviate traffic congestion across the network. The team completes this through a collaborative and agile data system named the Network Performance Reporting System (NetPReS), which reports the network performance of major roads in metropolitan Perth. This system collates speed and volume information from multiple data sources across the 4,300 links that currently represent the metropolitan network. This data is recorded every 15 minutes and dates back to 1 January 2013.

Using the Australian Transport Assessment and Planning Guidelines 2016 published by the Transport and Infrastructure Council, NetPReS data has been used to estimate emissions trends on significant state and local roads. We use this information to monitor the impacts of operational emissions produced from the road network.

Emissions from Direct Operations Activities

We have a carbon reduction target of five percent of 2010 carbon emissions by 2020 with a stretch target reduction of 15 percent through improving energy efficiency. The target is largely focused on upgrading current electrical assets to be energy efficient.

Effort will also go into reducing the expansion of certain asset types, such as traffic signals which tend to be utilised as a general congestion management option. We have adopted a policy that alternative treatments such as roundabouts or modified intersections to provide acceleration lanes will be preferred over traffic signalisation, as they provide significant road safety benefits and in most cases, assist with reducing congestion.

Our total emissions across our facilities during 2019-20 was 25,262 tCO2, which led to us achieving our target to produce less than 25,870 tCO2.

A major action under our Carbon Reduction Plan has recently progressed with our continued support for electric vehicles, plug-in and hybrid electric vehicles (EV). We continue to promote and encourage their use within our industry and community while we investigate opportunities to provide charging infrastructure. We are currently piloting an EV quota within our major project construction fleets. If successful, we will seek to implement a quota more broadly. Electric vehicles produce zero direct carbon emissions, and with the further technological advancement of renewable energy, EVs are a more sustainable method of transport than petrol engine cars.

Project and Maintenance Activities

We're looking to expand our focus for emissions reductions to manage the emissions generated on our projects and maintenance activities. We encourage our project partners to reduce emissions from their activities through energy efficiency, the use of renewable or alternate energy sources and use of materials with lower embodied energy.

In collaboration with interstate and overseas road authorities we have helped develop a common whole-of-life methodology for assessing the greenhouse footprint of road projects, the Carbon Gauge Greenhouse Gas Calculator Tool. It is anticipated that the introduction of the Infrastructure Sustainability framework for our major projects will see a greenhouse gas emissions reporting regime implemented.

Pollution

In Australia, air pollution is assessed by measuring six main air pollutants: carbon monoxide, nitrogen dioxide, photochemical oxidants (as ozone), sulphur dioxide, lead and particles. Urban air pollution is a known carcinogen and has a range of human impacts. Globally air pollution contributes to more deaths than road accidents. Of all the pollutants assessed, PM2.5 (tiny particles of matter, one-fortieth the width of a hair) is considered to present the greatest potential impact to our health. No level of air pollution is completely safe for humans.

Particulate matter in the air can come directly from natural sources such as bushfires and dust storms. It can also come from human activities. Particle pollution is evident as the brown haze sometimes seen in the cooler months of the year. Motor vehicles produce it by flicking up dust, from tyres and disc brakes. Motor vehicles are a significant contributor to emissions, contributing 14 percent of PM2.5, and 62 percent of nitrogen oxides. Diesel vehicles contribute most to air pollution.

We adhere to legislated requirements in regards to managing air quality from its activities. Refer to our Environment page for further information on how we manage our environmental impacts.

As part of a commitment to develop a data driven approach to addressing congestion, based around agreed performance metrics and targets, a cloud based data factory was developed to collate and report road network performance data across major roads in metropolitan Perth.

The data system collates speed and volume information from multiple data sources across the 4,300 links, which currently represent the Perth major road network. Data is recorded on each link for every 15-minute interval dating back to January 2013. This data system has been named the Network Performance Reporting System or 'NetPReS'. Using the Australian Transport Assessment and Planning Guidelines 2016 published by the Transport and Infrastructure Council, NetPReS data has been used to estimate emissions trends on state roads and significant local roads in the Perth metropolitan area.

Main Roads takes action to directly manage the traffic flow of vehicles, which has consequences for the overall environmental impacts from the use of the road network that includes carbon emissions and air quality. The following tables reflect the impact that the roads we directly manage are having on energy use and emissions, which give an indication of the impact to air quality.

Annual Emissions due to Operations Estimates for Perth Metropolitan State Road Network and Significant Local Roads			
	2018	2019	2020
MVKT	10,607	10,477	9,644
Fuel Consumed (kl)	1,411,000	1,399,000	1,285,000
Emissions by Type (tonnes per year)			
CO2	3,267,000	3,239,000	2,975,000
CH4	427	423	389
N2O	99	98	90
NOX	1,712	1,697	1,559
CO	12,294	12,190	11,196
NMVOC	4,266	4,230	3,885
SOX	224	222	204
PM10	40	39	36

Annual Emissions due to Congestion Estimates for Perth Metropolitan State Road Network and Significant Local Roads			
	2018	2019	2020
Fuel Consumed (kl)	57,000	53,000	50,000
Emissions by Type (tonnes per year)			
CO2	132,000	123,000	116,000
CH4	17	16	15
N2O	4	4	4
NOX	69	64	61
CO	497	462	436
NMVOC	172	160	151
SOX	9	8	8
PM10	2	1	1

Discharges to Water

Our operations results in very little discharge of water. In WA, the discharge of water is regulated through the Environmental Protection Act 1986 and the Rights in Water and Irrigation Act (1914) and in the event we were required to discharge water, it would obtain the appropriate approvals prior to discharge.

Water Run-off

Where there are direct linkages between storm-water and sensitive receivers, pollutant traps have been installed to prevent adverse impacts to the wetlands. Locations include:

- Lake Gwelup from Karrinyup Road;
- Swan River from Reid Highway; and Great Northern Highway;
- Swan River from ~20 outfalls along Kwinana Freeway;

- Canning River from Leach Highway;
- Booragoon Lake from Leach Highway; and
- Quenda Wetland from South Street.

The treatments include interception of gross pollutants/rubbish, sediment, nutrients, heavy metals and hydrocarbons. Apart from Kwinana Freeway outfalls, the above outfalls also have the capacity to trap hydrocarbon spillages up to 19000L.

There are several sites where a pollutant trap system is being designed to prevent potentially significant impacts, though these areas have not been confirmed as being "significantly affected". Locations include Bull Creek from Leach Highway (one outfall near Bull Creek Drive) and Canning River from Canning Highway (one outfall west of Canning Bridge).

The Southern Lake at the Narrows Interchange is an artificial sump that collects storm-water from Mitchell Freeway and Mounts Bay Road, contains nutrient-rich sludge, heavy metals and hydrocarbons, and is directly connected to the Swan River. However, this sludge is being removed, and there is a weir structure that retains water and hence pollutants within the Lake.

For other road runoff, local sumps, compensating basins, infiltration basins and swales have been specially constructed to process storm-water, separating it from sensitive water receivers.

Resources & Waste

Water

We encourage practices that reduce our impact on water sources including improving water efficiency and overall water use, utilising recycled water and avoiding the use of potable water. For our buildings and accommodations we require water efficient WELS rated plumbing fixtures and any landscaping is to be water wise. We actively manage our water use to minimise any impacts from water leaks should they occur.

Within construction projects and for operations, we prioritise the use of non-potable water over scheme water to ease the burden of water scarcity within the communities we work in. When we are required to utilise ground water reserves we adhere to our licensing obligations to access this water. WA has a rigorous environmental impact assessment process which assesses the impact of water withdrawal/usage on a water source. The withdrawal of water that is likely to result in a significant impact on a water source would not be considered to be environmentally acceptable under the Environmental Protection Act 1986 and would not receive a license to abstract water under the Rights in Water and Irrigation Act (1914).

Information regarding water abstraction and the licences required can be obtained from Department of Water and Environmental Regulation (DWER).

Road Building Materials

Natural materials are crucial in road building, so we encourage our project partners to recycle and reuse materials and use recycled and 'environmentally labelled' materials in road construction and other activities.

When obtaining road building materials we endeavour to avoid clearing natural vegetation, particularly high value vegetation. On-site materials unsuitable for use in road construction is used, as appropriate, for rehabilitating areas where road building materials have been obtained

from.

The briefing note on our recycling practice provides guidance on current accepted recycling practice. Specifications for the use of recycled road building materials can be found on the Standards and Technical website. Those materials include the use of 100 percent glass cullet in earthworks which was adopted in 2015-16.

We are trying to enhance our positive effect on the circular economy by using and researching the use of waste construction and demolition waste.

The Waste Authority has developed the Waste Avoidance and Resource Recovery Strategy 2030 to "avoid waste generation, recover more value and resources from waste, and protect the environment by managing waste responsibly."[1] The targets to achieve by 2030 in this Strategy are:

- "Achieve a 20 percent reduction in waste generation per capita;
- Increase material recovery to 75 percent; and
- Ensure no more than 15 percent of waste generated in Perth and Peel regions is landfilled"[2]

We are also currently completing a number of trial programs and initiatives in order to support the Waste Authority's Roads to Reuse program. Through supporting this program, we used over 25,000 tonnes of Crushed Recycled Concrete (CRC) – a majority of which came from the demolition of Subiaco Oval – under the FDA pavement in the recent Kwinana Freeway widening project between Russell Road and South Street. We have developed a specification following this successful trial to include CRC in future Main Roads projects.

We are also looking to create new methods of utilising crumbed rubber through the Western Australian Road Research and Innovation Program (WARRIP). Similar to use in sprayed bituminous seals, CRM bitumen in asphalt produces more durable roads that resist oxidation, cracking and ravelling. It also plays a key role in further reducing the large volumes of tyres sent to landfill each year.

During 2019/20, Main Roads used approximately 1,900 tonnes of crumbed scrap rubber across the state-controlled road network. This equates to the equivalent of 380,000 passenger car tyres. This has met Main Roads intent to double usage of crumbed rubber from 600 tonnes to 1,200 tonnes by 2021 as outlined in the Western Australia Waste Strategy 2030.

The NorthLink WA northern section used nearly 56,000 tonnes of crushed recycled glass throughout the project's construction. Further research is being undertaken into enhancing the economic sustainability of crushed recycled glass as a reusable construction material, as the costs associated washing contaminants off the glass are high.

[1]&[2] Waste Authority (Government of Western Australia)
https://www.wasteauthority.wa.gov.au/images/resources/files/Strategic_Direction_Waste_Avoidance_and_Resource_Recovery_Strategy_2030.pdf

Imported Road Construction Materials

Indicator	2018 (000)	2019 (000)	2020 (000)
Sand (t)	5,722.9	2,678	175.7
Gravel (t)	1236.7	2,037.9	2408.5
Crushed rock (t)	684.5	825.7	895.0
Limestone (t)	814.4	520.9	148.3
Aggregate (t)	172.6	45.2	70.6
Asphalt (t)	403.9	422.7	250.7
Bitumen	1284.4	40.8	2563.8
Bitumen cutter	223	36.6	653.4
Emulsion	789.2	27.0	1775
Concrete and steel (t)	152.2	56.0	44.1
Concrete	-	32.0	34.3
Cement stabilised backfill	-	12.0	33.2
Mulch	-	12.0	2.4
Other (steel, paint, glass, primer, topsoil) (t)	67.5	19.0	13.1

Imported Recycled Construction Materials

Indicator	2018 (000)	2019 (000)	2020 (000)
Sand (t)	0	99.6	13.9
Road base (t)	33.9	66.3	57.2
Asphalt / profiling (t)	2.1	14.4	13.4
Crushed glass (t)	17.1	7.4	56.0
Rehabilitation purposes (t) – unsuitable material	7	88.5	4.3
Other (crumbed rubber, limestone, plastic, concrete, steel, topsoil, mulch) (t)	0.6	0.8	13.6
Imported construction materials with an eco label (t)	6	1.5	1.5

Waste Materials to Landfill (Waste)

Indicator	2018 (000)	2019 (000)	2020 (000)
Kerbing / concrete (t)	0.02	2.4	3.1
Existing seal (t)	3.0	2.5	1.2
Unsuitable material (t)	39	77	27.0
Site office / general waste	0.04	2.2	0.6
Contaminated material	-	1.2	77.6
Other (roadside litter / waste, plastics) (t)	0.1	0.02	1.9

Materials Recycled

Indicator	2018 (000)	2019 (000)	2020 (000)
Sand (t)	73.7	162.2	118.3
Road base (t)	3.6	46.8	5.2
Asphalt / profiling (t)	24.8	17.0	2.2
Steel (t)	0.6	0.24	0.8
Concrete (t)	0.3	12.6	12.7
Office waste, general, roadside litter (t)	1.6	0.7	7.71
Timber	0.2	0.9	0.6
Rock	-	89.4	0.3
Other (green waste, plastic, topsoil, hydrocarbons) (t)	0.0	0.5	3.6

Data is based on calendar year

Traffic Signals, Signs & Pavement Markings

Reducing sign clutter and reducing pavement marking like median infill contributes to using less resources. We continuously review existing standards and practices to reduce the amount of unnecessary signs and pavement marking across the network where it is safe to do so.

Additionally, a process to identify potential sites for traffic signal removal and installation of alternate shared space treatments is currently under development. This will have flow on benefits for reducing our direct energy consumption and greenhouse gas emissions.

Roadside Waste

Roadside waste is a strategic sustainability issue for us and continues to burden our regions requiring ever-increasing attention to control. For many years illegal dumping of waste items, which are potentially recyclable such as tyres and building waste, has affected our road reserves. Illegal dumping is an offence under the Litter Act 1979, and plagues roadside rest areas and reserves across the state network. Litter and waste items in these areas can cause damage to drainage and waterway infrastructure, and eventually cause environmental degradation in wetlands and swamps. We encourage our community and industry to become involved in developing initiatives and solutions to target this issue.

We are collaborating with key stakeholders, interested parties and community groups to implement a consistent litter management approach for the state whilst taking into account individual regional requirements. A State Wide Litter Plan has been developed, targeting five key aspects across Western Australia:

- Roadside litter collection;
- Rest Area Management;
- Illegal dumping;
- Unsecured Loads; and
- Abandoned vehicles.

The primary objectives of this strategic initiative is to educate road users to take their litter with them wherever feasible or practical and reduce the occurrence of litter and illegal dumping through greater public awareness of the issue, increased community buy-in and participation in

litter reduction programs and behaviours.

Renewable Energy

We support the use of renewable energy where it is practical to install within our electrical assets regardless of the fact that it may not be a first order priority for emissions reduction. So far, assets that we've used renewable energy for include bus shelters, remote road lighting, emergency telephones and school crossing warning signs. We have also installed systems on our offices and staff housing. We will trial the use of renewable energy systems on our site offices. These assets and site offices have solar PV cells installed, and some assets are producing up to 10kwh of electricity per day. In 2019-20, our installed renewable energy systems produced 3,202,232 mega joules of electricity (889,509 kwh).

Within the Infrastructure Sustainability Council of Australia IS Rating Tool, which Main Roads are aligned with, there are credits to achieve relating to renewable energy. Our major projects are consistently assessing different options and initiatives to implement renewables throughout the design, development and operational phases. Below are some examples of renewable energy used in the construction and operational phases of some of our recent projects:

- Smart Freeways Kwinana Northbound used solar lighting during the construction of the now operational emergency stopping bays
- NorthLink WA Southern Section trialled a solar powered variable message sign using wireless communication technology. This was a pilot trial to determine the reliability of the solar powered technology and understand operational and maintenance costs.

Noise and Vibration

Management of road traffic noise is an important issue as traffic growth continues. Noise is produced and influenced by the road network in a number of ways including from vehicles, infrastructure and road design, construction and maintenance activities.

Our major projects must develop a Noise and Vibration Management Plan during construction. These plans are made publically available on our website. Each plan outlines how construction noise will be managed during the duration of the project, including outlining existing sensitive receptors to noise and vibration, and how impacts on the local community will be mitigated. We also have a 'Requirements for Road Traffic Noise Assessments' document publically available that aids acoustic consultants and developers to ensure project traffic and construction noise complies with *State Planning Policy 5.4*.

4. Behaviour

What We're Doing

We have been building a culture that supports sustainability since we first rolled out our sustainability policy in 2006. We are continually working to build on our skills and knowledge aligned to our key aspects for sustainability. Some of the key activities that keep our people aware of sustainability challenges include:

- Training of key staff in Infrastructure Sustainability.

- Sustainability awareness program using corporate communications.
- Our participation on external research and industry bodies such the World Roads Association, Infrastructure Sustainability Council of Australia or Austroads working groups for topics such as Stakeholder Engagement, Maintenance, Workforce, Urban Design, Environment, Resilience and Climate Change.
- Innovation and Research Program – We have licenced a fully functional innovation management platform from a leading vendor to enable us to better seek solutions to known problems and to give employees a place to post their ideas and suggestions for improvement.
- Direct support of sustainability at industry level through membership of the Infrastructure Sustainability Council of Australia and hosting the Western Infrastructure Sustainability Conference.

For details on how we embed sustainability within its procurement practices to encourage industry participation please refer to our Governance and Performance section.

Strategic Research

We undertake significant activity to develop and enhance our collective knowledge of economic, environmental and social topics. Additionally, we formally partner in a number of significant research groups/projects:

Austroads – Main Roads, along with the Commonwealth Government and the New Zealand, Australian State and Territory road agencies collectively own Austroads, which is the peak organisation of Australasian road transport and traffic agencies. Austroads undertakes leading-edge road and transport research which underpins input to policy development and results in published guidance on the design, construction and management of the road network and its associated infrastructure. Austroads provides a collective approach that delivers value for money, encourages shared knowledge and drives consistency for road users.

ARRB - provides research, consulting, products and information services to the road and transport industry. ARRB applies research outputs to develop equipment that collects road and traffic information, and software that assists with decision-making across road networks. ARRB is the leading provider of road research and best practice workshops in Australia. Main Roads, along with the Commonwealth Government and the New Zealand, Australian State and Territory road agencies collectively own ARRB. ARRB and its members recognise the critical role that they play in supporting one another to improve productivity, safety, sustainability and amenity outcomes for the community

WA Road Research and Innovation Program - is an agreement between ourselves and ARRB which includes the establishment of a Western Australia Road Research and Innovation Program (WARRIP) in pavements, asset management, structures and bituminous surfacing, investment in the technology and systems necessary to gain a better knowledge of the condition and capacity in our current and proposed assets, a close association of ARRB's Pavements, Materials and Geotechnical resources with our Materials Engineering branch, increased collaboration with similar research centres in other states, including Austroads and the Queensland Department of Transport and Main Roads' National Asset Centre of Excellence (NACOE).

PATREC - We are a partner to the Planning and Transport Research Centre. The Centre (referred to as PATREC) is a collaborative program that was established in 2002 for the purposes of

conducting collaborative research and teaching in the area of integrated land use and transport policy and planning. PaTREC is a collaboration between The University of Western Australia, Curtin University and Edith Cowan University and is also supported by Transport and the Western Australian Planning Commission.

Sustainable Built Environment National Research Centre (SBEnrc) - is a key research broker between industry, government and research organisations for the built environment industry. Main Roads is a Core Member of the SBEnrc and benefits from this arrangement as Main Roads membership complements other member road agencies in NSW RMS and QTMR and complements the work of Austroads and Roads Australia, providing public leadership to encourage the private sector to be a part of industry development. Membership also entitles Main Roads to a nominee on the Governing Board.

Sustainable Procurement & Industry Sustainability

We apply a number of policies to assist us develop a culture for sustainability through our supply chain and improve overall outcomes for sustainability.

The State Supply Commission Policy on sustainable procurement requires us to demonstrate that we have considered sustainability in our procurement of goods and services. However, we have gone beyond the requirements of this policy to reflect this not only in our processes for procuring goods and services but also in procuring works. In addition, we apply the Buy Local Policy where we consider and give preference to local providers in our purchases as the benefits to industry development and employment are recognised. Buy Local Policy clauses are also included in all our tender documents and tender assessments.

We support the recent changes to the State Supply Commission's Open and Effective Competition Policy which allows for exemptions to the minimum competitive tender requirements where there are opportunities to purchase from Australian Disability Enterprises and Registered Aboriginal Businesses. We have incorporated these policy changes into our business processes and are encouraging our people and our Contractors to support these organisations. These organisations are listed on the Aboriginal Business Directory and on the Australian Disability Enterprises websites.

Industry Sustainability Plans have been incorporated into major projects to manage impacts and leverage opportunities for sustainability or social responsibility within project supply chains. Sustainability aspects within supply chain include environmental risk, local economies or businesses, workforce development, equal opportunity and Indigenous participation. It is intended that these plans will draw attention to the impact projects can have within their supply chain and build culture within the industry.

WA Industry Participation Strategy

The Western Australian Industry Participation Strategy (WAIPS) was developed to support objectives outlined in the WA Jobs Act 2017. The aim of the WAIPS was to ensure local businesses have a fair opportunity to be win State Government supply contracts. All State Government agencies and departments must adhere to the WAIPS to achieve the WA Jobs Act objectives. These objectives are outlined below:

- Supporting the growth of the WA economy through supporting supply opportunities for local industry
- Providing suppliers of goods and services with knowledge of local industry capabilities

- Training local industry to adapt to new workplace innovations, materials, and technologies
- Create awareness around increasing job opportunities, training, and apprenticeships
- Promoting increased opportunities for local industry to develop import replacement capacity by giving local industry, in particular small or medium enterprises, a full, fair and reasonable opportunity to compete against foreign suppliers of goods or services (Government of Western Australia. 2017)[3].

5. Governance & Performance

What We're Doing

Infrastructure Sustainability Council of Australia Membership

We are a member of the Infrastructure Sustainability Council of Australia (ISCA) which has developed the Infrastructure Sustainability (IS) rating scheme. The IS Rating Tool is Australia's only comprehensive rating system for evaluating sustainability across design, construction and operation of infrastructure. At Main Roads, we have an on-going commitment to ensure all of our projects achieve at least a Bronze Rating according to the IS V2.0 Planning and Technical Rating. All projects that have a greater value than $100 million are formally registered for assessment by ISCA using the IS Rating Tool. For those projects that have a value between $20 million and $100 million use the IS Rating Tool to undergo a self-assessment, rather than formal verification.

Supporting schemes such as the IS Rating Tool directly links to our current Sustainability Policy. We supported the Tool development by participating in pilot trials of various versions of the IS Rating Tool and by providing resources for the Working and Advisory Groups that ISCA facilitates as part of their program of tool development and improvement.

Infrastructure Sustainability Rating Status

We use the Infrastructure Sustainability (IS) Rating Scheme to evaluate sustainability within our highest value major projects. We have mandated that all projects greater than $100 million will be formally registered to undergo an IS rating. The table below indicates the status of our registered ratings across the project phases of planning, development, design and construction.

Program	Project	IS Version	Current Rating Phase	Target Rating	Tracking Status
Great Northern Highway Muchea to Wubin Stage 2 Upgrade	Overall Program	1.2	A Built	Commended	Verified Excellent Design
	Muchea North	1.2	As Built	Commended	Verified Excellent Design
	New Norcia Bypass	1.2	As Built	Commended	Verified Excellent Design

[3] WA Industry Link (Government of Western Australia). 2017. Sourced from http://industrylink.wa.gov.au/about/western-australian-industry-participation-strategy.

	Walebing	1.2	As Built	Commended	Scoped Out for As Built
	Miling Bypass	1.2	As Built	Commended	Verified Excellent Design
	Miling Straight	1.2	As Built	Commended	Verified Excellent Design
	Pithara	1.2	As Built	Commended	Verified Excellent Design
	Wubin	1.2	As Built	Commended	Scoped Out for As Built
NorthLink WA	NorthLink WA Central Section	1.2	Complete	Excellent	Verified Excellent As Built
	NorthLink WA Northern Section	1.2	Design	Excellent	Excellent
Metropolitan Roads Improvement Alliance	Armadale Road	1.2	As Built	Excellent	Verified Excellent Design
	Murdoch Activity Centre	1.2	As Built	Excellent	Verified Excellent Design
	Wanneroo Road Duplication	1.2	As Built	Excellent	Verified Excellent Design
Armadale Road	Armadale Road Northlake Road Bridge	2	Design	Silver	Silver
Bunbury Outer Ring Road	Bunbury Outer Ring Road	2	Planning	Bronze	Verified Silver Rating
Mitchell Freeway	Mitchell Freeway Extension – Hester Romeo	2	Planning	Bronze	Bronze
Tonkin Highway	Tonkin Gap and Associated Works	2	Planning	Bronze	Bronze
Tonkin Highway	Tonkin Highway Extension	2	Planning	Bronze	Bronze
Swan River Crossings	Swan River Crossings	2	Planning	Bronze	Bronze
Albany Ring Road	Albany Ring Road	2	Planning	Bronze	Bronze
Tonkin Highway	Tonkin Grade Separations	2	Planning	Bronze	Bronze
Great Eastern Highway	GEH Bypass (Roe / Abernathy)	2	Planning	Bronze	Bronze
Karratha-Tom Price	Karratha-Tom Price (Stage 4)	2	Planning	Bronze	Bronze
East Link	East Link	2	Planning	Bronze	Bronze

The following table provides information on projects valued between $20 and $100 million and subject to internal self-assessment using the IS rating tool and current status.

Project	Current Phase	Target	Tracking Status
Swan River Pedestrian Bridge	As Built	Commended	Excellent
New Lord Street	Design	Commended	Commended
Nicholson Road Bridge Over Rail	Design	Commended	Commended
Old Mandurah Traffic Bridge	Complete	Commended	Commended
Great Northern Highway – Wyndam Spur/Maggies Jump up	Design	Commended	Excellent
SMART Freeways	Design	TBD	Not Started

Global Reporting Initiative Reporting

Our commitment to best practice reporting is evidenced through our Annual Report which is compiled in accordance with the principles of the Global Reporting Initiative (GRI). We adhere to the GRI principles of stakeholder inclusiveness, materiality, completeness and context and as an ongoing commitment to ensure the validity of these topics to our business and stakeholders we conduct a biannual desktop materiality review which is reported to our Corporate Executive. The review draws from our corporate commitments, our key business and environmental risks, our corporate stakeholder engagement processes and media and ministerial topics.

The results of our Materiality review for 2020 are demonstrated in our Annual Report. The chart is a visualisation of what our stakeholders are interested in and what our greatest impacts to sustainability.

6. Funding & Financing

In order to achieve stable economic stability, Main Roads faces the challenge of ensuring adequate funding is provided to construct and maintain a safe and reliable road network for current and future road users. In 2019/2020, Main Roads received $2.34 billion in funding and invested $2.46 billion in managing the state road network. This included a number of fast-tracked projects to not only boost jobs during the COVID-19 pandemic, but to also increase the safety and efficiency of the road network.

What We're Doing

Main Roads have developed a Funding and Finance Policy that outlines the intent, principles, and responsibilities for the expansion of funding for activities. This includes the identification, evaluation and implementation of alternative revenue, funding, and financing opportunities. The policy distinguishes between these three factors to promote an understanding of the various principles and demonstrate linkages to asset management, investment planning and project programming. Part of the new policy included holding a number of Financial Acumen workshops designed to improve the level of commercial acuity and awareness throughout the organisation.

We currently manage a Concessional Loading Road Maintenance Contribution Policy to ensure

efficient freight access is balanced with equitable charging regime for the additional damage to the road network.

In 2020/2021 we will be participating in National Heavy Vehicle reforms in conjunction with DoT. The aim of this is to turn the provision of heavy vehicle road infrastructure into an economic service where feasible. This will see a market established that links the needs of heavy vehicle users with the level of service they receive, the charges they pay, and the subsequent investment of proceeds back into road services.

Indirect Economic Impacts

Main Roads considers indirect economic impacts from investment and non-investment during the project development phase (assess and select phase). A needs identification framework is used to address factors including safety, travel experience, accessibility and amenity to highlight network deficiencies. This method ensures that we recognise that an asset in itself does create value, but the greatest value is the outcome that the asset delivers. This framework also ensures rural and remote communities are consistently considered, especially in terms of accessibility and amenity.

Main Roads identifies crucial needs including access to important facilities including schools, hospitals, and stadiums in urban areas by working with the relevant infrastructure owner's (including the Department of Education and Department of Health) to ensure the road network is providing appropriate access and linkages. For example, we have built access roads from the Kwinana Freeway to Fiona Stanley Hospital, and access ramps and bridges to the new Perth Stadium. We manage safe access around schools using a combination of traffic calming devices, and speed management plans using ITS.

Main Roads adopted the Treasury Prioritisation Methodology to prioritise potential projects for an investment decision, and for project funding decisions. This methodology considers the importance, benefits and maturity of each initiative, and ensures indirect economic impacts are considered.
Main Roads has a Business Case Guidelines document, which details the minimum requirements and preferred template for a Business Case. Both the State and Commonwealth templates have a section on alignment to State priorities, government goals and Main Roads outcomes. The Infrastructure Australia template has a section regarding alignment to government goals and key strategies. Long and short listed options (undertaken for each project) are rated according to how they contribute to government goals and strategies.

Indirect economic benefits (those outside the scope of the Benefit Cost Assessment) are now being measured through Wider Economic Benefits. These are an attempt to monetise the benefits a project delivers to the wider economy through enabling infrastructure. For example, building a road from a remote location to a National Highway or to a remote Port helps to increase profitability to uneconomic mining developments. This creates job opportunities for residents – including Indigenous people – in remote communities.

Main Roads has adopted a Post-Project Evaluation Framework that measures the success of a project, and ensures it has achieved the intended KPI outcomes from project investment. This Benefit Realisation Framework is endorsed by ATAP and is a key feature of ISCA's version 2.0 Rating Tool.

GRI Content Index

Main Roads Western Australia Annual Report - GRI Content Index

GRI Standard	Disclosure	Page number(s) and/or URL(s)	OMISSION Part Omitted	OMISSION Explanation	OMISSION Reason
GRI 101: Foundation 2016					
General Disclosures					
GRI 102: General Disclosures 2016	**Organizational profile**				
	102-1 Name of the organization	Main Roads Western Australia	This disclosure cannot be omitted		
	102-2 Activities, brands, products, and services	About Us: Our Role	This disclosure cannot be omitted		
	102-3 Location of headquarters	About Us: Our Minister Legislation, Role and Operations	This disclosure cannot be omitted		
		Contact Us			
	102-4 Location of operations	About Us: Our Minister Legislation, Role and Operations	This disclosure cannot be omitted		
		Our Regions			
		Projects			
		Travel Map			

	102-5 Ownership and legal form	About Us, Enabling Legislation	This disclosure cannot be omitted		
	102-6 Markets served	About Us, Extent of Operations			
		Our Regions			
		Improving Customer Experience			
	102-7 Scale of the organization	About Us, Extent of Operations	This disclosure cannot be omitted		
		Our People			
		Our Regions			
		Projects			
		Travel Map			
		Our Finances			
		Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			
		Road Facts Summary Sheet			
	102-8 Information on employees and other workers	Our People	Omissions include not reporting by employment contract, no discussion of significant activities undertaken by others and no explanation of		

			how the data is compiled.		
		About Us, Extent of Operations	This disclosure cannot be omitted		
	102-9 Supply chain	About Us, Extent of Operations	This disclosure cannot be omitted		
		About Us, Value Chain			
		Prequalification			
		Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			
	102-10 Significant changes to the organization and its supply chain	Achieving Government Goals: Changes since last report	This disclosure cannot be omitted		
	102-11 Precautionary Principle or approach	Managing the Environment: Environmental Management of Road Projects	This disclosure cannot be omitted		

	102-12 External initiatives	Our Governance Model: Our Commitment	This disclosure cannot be omitted		
		Governing Bodies: Risk Management			
		Additional Governance Disclosures: Delegation of Authority, Integrated Management System	Managing the Environment: Environmental Management System; Road Management: Road Safety.		
		Managing the Environment: Environmental Management of the Road Network, Sustainability Assessment in Projects and Operations	This disclosure cannot be omitted		
		Enhancing Safety, Health and Wellbeing: Proactive Safety, Health and Wellbeing			
	102-13 Membership of associations	Sustainability: Behaviour	This disclosure cannot be omitted		

		ARRB Group; Austroads Ltd Board; CEEID CEO Group; National Engineers Registration Board; PATREC Board; ROADS foundation board; World Road Association (PIARC) Council; UWA Engineering Foundation Advisory Board; Transport Certification Australia Ltd Board; Roadside Conservation Committee; Infrastructure Sustainability Council of Australia; Australian Asphalt Pavement Association; Engineers Australia; IPWEA; Sustainable Built Environment National Research Centre			
	Strategy				
	102-14 Statement from senior decision-maker	Managing Directors Review	This disclosure cannot be omitted		
	102-15 Key impacts, risks, and opportunities	Our Sustainable Approach and Defining Materiality			
		Linking Strategy, Futures, Innovation and Research			
		Governing Bodies: Risk Management			
	Ethics and integrity				

	102-16 Values, principles, standards, and norms of behaviour	Code of Conduct	This disclosure cannot be omitted		
		Linking Strategy, Futures, Innovation and Research			
		Additional Governance Disclosures			
	102-17 Mechanisms for advice and concerns about ethics	Additional Governance Disclosures	This disclosure cannot be omitted		
		Code of Conduct			
		Complaints and Feedback			
	Governance				
	102-18 Governance structure	Our Governance Model	This disclosure cannot be omitted		
		Governing Bodies			
		Our Structure			
		Corporate Information			
	102-19 Delegating authority	Governing Bodies	This disclosure cannot be omitted		
		Additional Governance Disclosures: Delegation of Authority			
	102-20 Executive-level responsibility for economic, environmental, and social topics	Governing Bodies	This disclosure cannot be omitted		
		Our Leaders			
	102-21 Consulting stakeholders on economic, environmental, and social topics	Improving Customer Experience	This disclosure cannot be omitted		

		Governing Bodies	Processes for consultation between highest governance body and stakeholders.		
		Our Commitments to You			
	102-22 Composition of the highest governance body and its committees	Our Leaders	Some data exclusions including tenure, other significant positions, inclusion in under-represented social groups.		
		Governing Bodies			
	102-23 Chair of the highest governance body	Our Leaders	This disclosure cannot be omitted		
		Governing Bodies			
		Our Governance Model			
	102-25 Conflicts of interest	Our Governance Model			
		Conflicts of Interest			
	102-26 Role of highest governance body in setting purpose, values, and strategy	Our Governance Model	This disclosure cannot be omitted		
		Governing Bodies			
		About Us, Value Chain			

	102-27 Collective knowledge of highest governance body	Governing Bodies	This disclosure cannot be omitted		
		Our Sustainable Approach and Defining Materiality			
	102-31 Review of economic, environmental, and social topics	Our Sustainable Approach and Defining Materiality	This disclosure cannot be omitted		
		Governing Bodies: Risk Management			
	102-32 Highest governance body's role in sustainability reporting	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Overview			
	Stakeholder engagement				
	102-40 List of stakeholder groups	Improving Customer Experience	This disclosure cannot be omitted		
		Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			
	102-41 Collective bargaining agreements	99.98%	This disclosure cannot be omitted		
	102-42 Identifying and selecting stakeholders	Improving Customer Experience	This disclosure cannot be omitted		
		Our Minister, Legislation, Role and Operations: Our Role			

	102-43 Approach to stakeholder engagement	Improving Customer Experience	This disclosure cannot be omitted		
		Our Governance Model			
		Our People: Developing our People, Employee Relations and Recruitment			
		Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			
	102-44 Key topics and concerns raised	Improving Customer Experience	This disclosure cannot be omitted		
	Reporting practice				
	102-45 Entities included in the consolidated financial statements	Financial Statements and Notes	This disclosure cannot be omitted		
	102-46 Defining report content and topic Boundaries	Our Sustainable Approach and Defining Materiality	This disclosure cannot be omitted		
		Overview: Reporting Frameworks			
	102-47 List of material topics	Our Sustainable Approach and Defining Materiality	This disclosure cannot be omitted		
	102-48 Restatements of information	No restatements	This disclosure cannot be omitted		
	102-49 Changes in reporting	No significant changes	This disclosure cannot be omitted		

	102-50 Reporting period	Overview	This disclosure cannot be omitted		
	102-51 Date of most recent report	Overview	This disclosure cannot be omitted		
	102-52 Reporting cycle	Overview	This disclosure cannot be omitted		
	102-53 Contact point for questions regarding the report	Overview: Comments and Feedback	This disclosure cannot be omitted		
	102-54 Claims of reporting in accordance with the GRI Standards	Overview: Reporting Journey	This disclosure cannot be omitted		
	102-55 GRI content index	GRI Content Index and Supplementary Information	This disclosure cannot be omitted		
	102-56 External assurance	Statement of Certification	This disclosure cannot be omitted		
		Auditor General's Opinion			
		Financial Statements and Notes			
		Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission		
			Part Omitted	Reason	Explanation
Material Topics					
GRI 200 Economic Standard Series					
Economic Performance					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
	103-2 The management approach and its components	Our Governance Model			
		Governing Bodies			
		Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			
	103-3 Evaluation of the management approach	Achieving Government Goals: Changes since last report			
		Performance Measures			
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Our Finances	No omission identified		
		Financial Statements and Notes			
	201-2 Financial implications and other risks and opportunities due to climate change	Managing the Environment: Climate Change Adaptation	No omission identified		

		Sustainability: Climate Change			
	201-3 Defined benefit plan obligations and other retirement plans	Financial Statements and Notes	No omission identified		
	201-4 Financial assistance received from government	Financial Statements and Notes	No omission identified		
		Our Finances			
		Our Performance			
		Performance Measures: Summary of Key Performance Indicators and Outcomes			
Market Presence					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Our Regions			
	103-2 The management approach and its components	Our People	No omission identified		
		Employment			
		Aboriginal Participation			
		WA Industry Participation Strategy			
	103-3 Evaluation of the management approach	Our People	No omission identified		
		WA Industry Participation Strategy			

GRI 202: Market Presence 2016	202-2 Proportion of senior management hired from the local community	To be eligible for permanent appointment to the Western Australia public sector it is essential that applicants are an Australian citizen or have permanent resident status in Australia.	Information unavailable	Information unavailable	
Indirect Economic Impacts					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
	103-2 The management approach and its components	Road Management	No omission identified		
		Road Efficiency			
		Traffic Congestion Management Program, Sustainability: Sustainable Transport			
		Heavy Vehicles			
	103-3 Evaluation of the management approach	Performance Measures: Summary of Key Performance Indicators and Outcomes	No omission identified		
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Achieving Government Goals: Changes since last report	No omission identified		
		Our Performance,			

		Sustainability: Funding and Financing			
		Road Facts Summary Sheet			
		What we manage			
Procurement Practices					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Contracting to Main Roads			
	103-2 The management approach and its components	Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			
		Contracting to Main Roads			
	103-3 Evaluation of the management approach	Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors	No omission identified		
		About Us: Our Minister Legislation, Role and Operations			

Anti-corruption					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
	103-2 The management approach and its components	Additional Governance Disclosures			
	103-3 Evaluation of the management approach	Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Additional Governance Disclosures	No omission identified		
		Main Roads is continuing to assess all business units to identify and rate fraud and corruption risks			
	205-2 Communication and training about anti-corruption policies and procedures	Additional Governance Disclosures	No omission identified		
		All metropolitan and regional offices have received presentations on anticorruption policies and procedure			
	205-3 Confirmed incidents of corruption and actions taken	No incidents of corruption	No omission identified		
GRI 300 Environmental Standards Series					
Materials					

GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Managing the Environment: Materials for Road Building			
		Environmental Footprint, Sustainability: Environmental Footprint			
	103-2 The management approach and its components	Managing the Environment: Materials for Road Building			
		Environmental Footprint Sustainability: Environmental Footprint			
	103-3 Evaluation of the management approach	Managing the Environment: Sustainability Assessment in Projects and Operations			
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Managing the Environment: Materials for Road Building, Aspects for Sustainability Context: Materials Use	No omission identified		
	301-2 Recycled input materials used	4.09%	No omission identified		

	301-3 Reclaimed products and their packaging materials	Not Applicable	All of disclosure	Not applicable	Main Roads does not produce a product or service with packaging that meets the criteria for this disclosure
Energy					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Managing the Environment: Emissions and Energy, Sustainability Context: Energy and Emissions			
		Environmental Footprint, Sustainability: Environmental Footprint			
		Sustainable Transport, Sustainability: Sustainable Transport			
	103-2 The management approach and its components	Managing the Environment: Emissions and Energy Sustainability Context: Energy and Emissions			
		Environmental Footprint, Sustainability: Environmental Footprint			
		Sustainable Transport, Sustainability: Sustainable Transport			
		Road Efficiency			

		Community Access			
	103-3 Evaluation of the management approach	Managing the Environment: Sustainability Assessment in Projects and Operations, Sustainability: Governance and Performance			
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Managing the Environment: Emissions and Energy, Sustainability Context: Energy and Emissions	No omission identified		
		Main Roads adheres to the National Greenhouse and Energy Reporting Scheme and utilises the National Carbon Accounting Guidelines to calculate the energy intensity of the various energy sources Main Roads utilises.			
		National Greenhouse and Energy Reporting			
		National Greenhouse Accounts Factors			
	302-2 Energy consumption outside of the organization	Managing the Environment: Emissions and Energy, Sustainability Context: Energy and Emissions	No omission identified		

		Main Roads adheres to the National Greenhouse and Energy Reporting Scheme and utilises the National Carbon Accounting Guidelines to calculate the energy intensity of the various energy sources Main Roads as reported by its supply chain.			
		National Greenhouse and Energy Reporting			
		National Greenhouse Accounts Factors			
	302-3 Energy intensity	Managing the Environment: Emissions and Energy Sustainability Context: Energy and Emissions	No omission identified		
	302-4 Reduction of energy consumption	Managing the Environment: Emissions and Energy Sustainability Context: Energy and Emissions	No omission identified		
		Not achieved			
	302-5 Reductions in energy requirements of products and services	Managing the Environment: Emissions and Energy Sustainability Context: Energy and Emissions	No omission identified		
		Not achieved			
Water					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	About Us, Value Chain	This disclosure cannot be omitted		
		Environmental Footprint, Sustainability: Environmental Footprint			

	103-2 The management approach and its components	Environmental Footprint, Sustainability: Environmental Footprint			
	103-3 Evaluation of the management approach	Environmental Footprint, Sustainability: Environmental Footprint			
GRI 303: Water 2016	303-1 Water withdrawal by source	Buildings – 38,568kl Construction scheme – 385,696 kl Construction Groundwater – 773,872 kl Surface water – 85,328 kl	No omission identified		
	303-3 Water recycled and reused	5,168 kl	No omission identified		
Biodiversity					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Managing the Environment: Our Unique Environment, Sustainability: Environmental Footprint			
		Environment and Heritage			

	103-2 The management approach and its components	Managing the Environment: Environmental Management of Road Projects, Environmental Management of the Road Network, Environmental Management of Buildings and Depots, Screening all Projects for Impacts			
		Environmental Management at Main Roads, Sustainability: Environmental Footprint			
	103-3 Evaluation of the management approach	Managing the Environment: Key Performance Indicators, Committed to Continual Improvement, Sustainability Assessment in Projects and Operations			
		Construction Project Reports			
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Managing the Environment: Our Unique Environment, Sustainability: Environmental Footprint	No omission identified		
		Projects Website			
		Project Sustainability Reports			
		Our Environment, Sustainability: Environmental Footprint			
	304-2 Significant impacts of activities, products, and services on biodiversity	Managing the Environment: Our Unique Environment	No omission identified		
		Projects Website			
		Project Sustainability Reports			

	304-3 Habitats protected or restored	Managing the Environment: Revegetation and Offsets, Sustainability: Environmental Footprint	No omission identified		
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	Managing the Environment: Our Unique Environment, Sustainability: Environmental Footprint			
		Our Environment, Sustainability: Environmental Footprint			
Emissions					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Managing the Environment: Emissions and Energy, Sustainability: Environmental Footprint			
		Sustainability Context: Energy and Emissions			
	103-2 The management approach and its components	Sustainability: Environmental Footprint Carbon Reduction Plan			
	103-3 Evaluation of the management approach	Managing the Environment: Emissions and Energy, Carbon Reduction Plan, Sustainability Assessment in Projects and Operations			
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Managing the Environment: Emissions and Energy, Sustainability: Environmental Footprint	No omission identified		

		Main Roads adheres to the National Greenhouse and Energy Reporting Scheme and utilises the National Carbon Accounting Guidelines to calculate scope 1 carbon emissions			
	305-2 Energy indirect (Scope 2) GHG emissions	Managing the Environment: Emissions and Energy, Sustainability: Environmental Footprint	No omission identified		
		Main Roads adheres to the National Greenhouse and Energy Reporting Scheme and utilises the National Carbon Accounting Guidelines to calculate scope 2 carbon emissions			
	305-3 Other indirect (Scope 3) GHG emissions	Managing the Environment: Emissions and Energy, Sustainability: Environmental Footprint	No omission identified		
		Main Roads adheres to the National Greenhouse and Energy Reporting Scheme and utilises the National Carbon Accounting Guidelines to calculate scope 3 carbon emissions			
	305-4 GHG emissions intensity	Managing the Environment: Emissions and Energy, Sustainability: Environmental Footprint	No omission identified		
	305-5 Reduction of GHG emissions	Managing the Environment: Emissions and Energy, Sustainability: Environmental Footprint	No omission identified		
		Not Achieved			
Effluents and Waste					

GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Managing the Environment: Management of Environmental Incidents, Materials for Road Building, Waste Management: Roadsides, Buildings and Facilities			
		Environmental Footprint: Road Building Materials, Discharges to Water, Water run-off			
	103-2 The management approach and its components	Managing the Environment: Management of Environmental Incidents, Materials for Road Building, Waste Management: Roadsides, Buildings and Facilities			
	103-3 Evaluation of the management approach	Managing the Environment: Management of Environmental Incidents, Materials for Road Building, Waste Management: Roadsides, Buildings and Facilities			
GRI 306: Effluents and Waste 2016	306-2 Waste by type and disposal method	Managing the Environment: Materials for Road Building, Aspects for Sustainability Context: Materials Use	No omission identified		

		Information on waste and recycling has been provided through project reporting, where the operational control for waste management practices is with a third party and through information provided by waste disposal contractors. Compliance with the Infrastructure Sustainability Rating Tool Waste Credits assists in providing assurance for waste management practices	306-1: Known potential negative threats associated with specific materials when they are discarded. 306-4: 2.3: Reporting organisaion should report the total weight of waste prevented and the baseline and methodology for this calculation.		
	306-3 Significant spills	Managing the Environment: Management of Environmental Incidents	No omission identified		
Environmental Compliance					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Managing the Environment			

		Environment and Heritage			
	103-2 The management approach and its components	Managing the Environment			
	103-3 Evaluation of the management approach	Managing the Environment. Sustainability: Environmental Footprint			
GRI 307: Environmental Compliance 2016	307-1 Non-compliance with environmental laws and regulations	Managing the Environment: Management of Environmental Incidents			
Supplier Environmental Assessment					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Managing the Environment			
		About Us - Extent of Operations			
	103-2 The management approach and its components	Managing the Environment			
		Prequalification Process			
	103-3 Evaluation of the management approach	Managing the Environment			
GRI 308: Supplier Environmental Assessment 2016	308-2 Negative environmental impacts in the supply chain and actions taken	Managing the Environment: Management of Environmental Incidents	No omission identified		
GRI 400 Social Standards Series					
Employment					

GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		About Us - Extent of Operations			
		Keeping WA Moving			
		Employment			
	103-2 The management approach and its components	Our People			
		Aboriginal Participation			
		WA Industry Participation Strategy			
	103-3 Evaluation of the management approach	Our People: Key Performance Indicators, Our Profile			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Our People: Our Profile	No omission identified		
		Have not reported by age group or region	Age Group and Region	Information unavailable	System unavailable at time of report
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Working With Us: Benefits	Benefits have been provided which are typically available to temporary and part-time employees but there may be some variation depending on	Information unavailable	System unavailable at time of report

			the terms of employment.		
Labor/Management Relations					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Our People: Employee Relations and Recruitment			
	103-2 The management approach and its components	Our People: Employee Relations and Recruitment			
	103-3 Evaluation of the management approach	Our People: Employee Relations and Recruitment			

GRI 402: Labor/Management Relations 2016	402-1 Minimum notice periods regarding operational changes	All Main Roads industrial instruments provide for consultation mechanisms and notification of change requirements. During the last year Main Roads has undergone significant organisational change. These changes have been managed in accordance with the notification of change requirements. All agreements provide for the establishment of a Joint Consultative Committee which is the conduit for regular consultation. Updates of the status of organisational change are provided as a specific agenda item at these meetings. Updates of the status of organisational change are provided as a specific agenda item at these meetings. The agreements do not provide a specific period for notice. However, we notify employees and the unions as soon as practicable of any changes. Typically, between eight to 20 weeks' notice is given.	No omission identified		
Occupational Health and Safety					

GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Enhancing Safety, Health and Well-being: Proactive Safety, Health and Wellbeing			
		Operational Performance: Road Management			
		Temporary Traffic Management			
	103-2 The management approach and its components	Enhancing Safety, Health and Well-being: Proactive Safety, Health and Wellbeing			
		Operational Performance: Road Management			
		Temporary Traffic Management			
		Occupational Safety & Health			
	103-3 Evaluation of the management approach	Enhancing Safety, Health and Well-being: Key Performance Indicators			
GRI 403: Occupational Health and Safety 2016	403-1 Workers representation in formal joint management-worker health and safety committees	Governing Bodies: Corporate Safety Health and Wellbeing Committee	No omission identified		
		100% of the organisation and integrated business partners (ISP's) are formally represented by SHW Committees.			

	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Enhancing Safety, Health and Well-being: Proactive Safety, Health and Wellbeing	No omission identified		
Training and Education					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Our People			
		Learning and Development			
		Infrastructure Ready Skill Set Program			
		WA Industry Participation Strategy			
	103-2 The management approach and its components	Our People: Our Profile, Sustaining our Workforce			
		Learning and Development			
		Infrastructure Ready Skill Set Program			
		WA Industry Participation Strategy			
	103-3 Evaluation of the management approach	Our People: Key Performance Indicators, Developing our Employees			
		Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			

GRI 404: Training and Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	Our People: Our Profile, Sustaining our Workforce	No omission identified		
		Learning and Development			
		Infrastructure Ready Skill Set Program			
		WA Industry Participation Strategy			
	404-3 Percentage of employees receiving regular performance and career development reviews	Our People: Key Performance Indicators	Information only provided for directly employed staff, not entire workforce	Information unavailable	Information not captured
Diversity and Equal Opportunity					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Our People: Promoting Diversity and Equal Opportunity			
		Diversity			
		Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			
	103-2 The management approach and its components	Our People: Promoting Diversity and Equal Opportunity			

		Diversity			
	103-3 Evaluation of the management approach	Our People: Key Performance Indicators, Women in Leadership, Aboriginal Employment			
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Governing Bodies	Information not expressly provided, only implied.	Information unavailable	Oversight
		Our Leaders			
		Our People: Our Profile			
Non-discrimination					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Our People Promoting Diversity and Equal Opportunity			
		Improving Customer Experience: Disability Access and Inclusion Action Plan 2018-2020			
		Diversity			
		Code of Conduct			
		Action Plans: Disability Action and Inclusion Plan			
	103-2 The management approach and its components	Our People Promoting Diversity and Equal Opportunity			

		Diversity			
		Code of Conduct			
		Action Plans: Disability Action and Inclusion Plan			
	103-3 Evaluation of the management approach	Our People: Key Performance Indicators			
		Community Access: Key Performance Indicators			
		Improving Customer Experience: Community Perception Survey			
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	No incidents of discrimination	No omission identified		
Freedom of Association and Collective Bargaining					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Our People			

		Our employees are covered by enterprise bargaining agreements between the Commissioner of Main Roads and each of the unions. The process of negotiation and registration provides opportunities for key stakeholders to provide input into the provisions of the agreements. In particular recognising the needs of employees and Main Roads' business. All employees are free to join unions and we recognise the integral role of unions in the agreement making process.			
	103-2 The management approach and its components	Our People			
	103-3 Evaluation of the management approach	Our People			
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	We allow freedom and association on all our sites and operations.	Specific information on sites that may be at risk.	Information unavailable	Specific risk assessment not undertaken as this is not considered a significant risk
Rights of Indigenous Peoples					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			

		Promoting Diversity and Equal Opportunity: Reconciliation Action Plan			
		Action Plans: Disability Action and Inclusion Plan			
		Heritage			
	103-2 The management approach and its components	Our People: Reconciliation Action Plan, Aboriginal Employment			
		Managing the Environment: Management of Aboriginal Heritage Sites in Road Projects			
		Action Plans: Disability Action and Inclusion Plan			
		Heritage			
	103-3 Evaluation of the management approach	Our People: Reconciliation Action Plan, Aboriginal Employment			
		Managing the Environment: Management of Aboriginal Heritage Sites in Road Projects			
		Action Plans: Disability Action and Inclusion Plan			
		Heritage			
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	Managing the Environment: Management of Aboriginal Heritage Sites in Road Projects. Sustainability; Sustainable Transport	No omission identified		
		No incidents			
Local Communities					

GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Improving Customer Experience: Engaging with Local Communities			
	103-2 The management approach and its components	Improving Customer Experience: Engaging with Local Communities			
		Financial and Other Disclosures: Financial Targets: Actuals Compared to Budget, Significant Contractors			
	103-3 Evaluation of the management approach	Improving Customer Experience: Key Performance Indicators, Community Perception Survey			
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Improving Customer Experience: Engaging with Local Communities	No omission identified		
		Projects			
	413-2 Operations with significant actual and potential negative impacts on local communities	Projects	No omission identified		
		Travel Map			
		Interactive Map 2020			
Supplier Social Assessment					

GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Improving Customer Experience: Key Performance Indicators, Community Perception Survey,			
		Enhancing Safety, Health and Well-being: Proactive Safety, Health and Wellbeing			
		Financial & Other Disclosures - Sustainable Procurement and Buy Local			
		Prequalification			
	103-2 The management approach and its components	Improving Customer Experience: Key Performance Indicators, Community Perception Survey,			
		Enhancing Safety, Health and Well-being: Proactive Safety, Health and Wellbeing			
		Financial & Other Disclosures - Sustainable Procurement and Buy Local			
		Prequalification			

		Main Roads is a member of the Infrastructure Sustainability Council of Australia Modern Slavery Coalition which is developing a response to modern slavery and associated legislation for the road construction industry			
	103-3 Evaluation of the management approach	Improving Customer Experience: Engaging with Local Communities			
		Enhancing Safety, Health and Well-being: Proactive Safety, Health and Wellbeing			
		Financial & Other Disclosures - Sustainable Procurement and Buy Local			
		Prequalification			
GRI 414: Supplier Social Assessment 2016	414-2 Negative social impacts in the supply chain and actions taken	Improving Customer Experience: Engaging with Local Communities	No omission identified		
		Enhancing Safety, Health and Well-being: Proactive Safety, Health and Wellbeing			
		Financial & Other Disclosures - Sustainable Procurement and Buy Local			
		Prequalification			
		Project Bank Accounts			

		Subcontractor payment delay			
Public Policy					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money. Sustainability: Governance and Performance	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Our Minister, Legislation, Role and Operations			
		Additional Governance Disclosures			
		About Us			
	103-2 The management approach and its components	Our Governance Model			
		Additional Governance Disclosures			
	103-3 Evaluation of the management approach	Our Finances. Sustainability: Governance and Performance			
		Our Performance			
		Our Outcomes			
		Performance Measures			
		Auditor General's Opinion			
GRI 415: Public Policy 2016	415-1 Political contributions	Not Applicable	No omission identified		
Customer Health and Safety					

GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Road Management: Road Safety Management Progress, Pedestrian Safety Initiatives at Traffic Signals, Access and Permits			
		Road Safety. Sustainability Context: Road Safety (Customer Health and Safety)			
	103-2 The management approach and its components	Providing a Safe Road Environment. Sustainability Context: Road Safety (Customer Health and Safety)			
		Road Management: Road Safety Management Progress, Pedestrian Safety Initiatives at Traffic Signals, Access and Permits			
		Management System, Policy & Guidelines, Safe System Approach			
	103-3 Evaluation of the management approach	Road Safety: Key Performance Indicators			
		Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money			

GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Road Management: Road Safety	No omission identified		
		Management System, Policy & Guidelines, Safe System Approach			
Marketing and Labelling					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Improving Customer Experience: Key Performance Indicators, Community Perception Survey,			
		Our Commitments to You			
	103-2 The management approach and its components	Improving Customer Experience			
	103-3 Evaluation of the management approach	Improving Customer Experience			
GRI 417: Marketing and Labelling 2016	417-1 Requirements for product and service information and labelling	Our Commitments to You	No omission identified		

		Generally, this type of product or service information is not applicable to road network construction and operation. However we have extensive processes in place, most significantly road safety, environmental screening and sustainability assessment to ensure that our practices and thus our customers are adequately informed of consequences of the road network and the impacts of its use.			
Customer Privacy					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Our Sustainable Approach and Defining Materiality: Addressing our Most Important Material Issues - Value for Money	This disclosure cannot be omitted		
		Our Value Creation Model			
		About Us, Value Chain			
		Additional Governance Disclosures: Customer Privacy			
		Privacy			
	103-2 The management approach and its components	Additional Governance Disclosures: Customer Privacy			
		Privacy			
	103-3 Evaluation of the management approach	Additional Governance Disclosures: Customer Privacy			

GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	No complaints	No omission identified		