Annual Sustainability Report –

Gateway WA

June 2016

mainroads WESTERN AUSTRALIA

Annual Sustainability Reporting Template for Major Projects with IS commitments	**Period Covering July 2015 to June 2016**
This reporting template is to be used as a basis for a MRWA major project to produce a stand-alone sustainability report. While these indicators are a basis to what the report should include the author should be aware that they produce a report targeted at the intended report audience (it is linked to MRWA's Annual and Sustainability Report) and it should include all information necessary so that it can be read as a stand-alone report. This report is also an opportunity for the project to showcase its sustainability credentials and strengthen the project partners reputation for sustainable development. The indicators below are loosely based on the indicators of the Global Reporting Initiative (GRI) v4. Main Roads encourages the use of GRI principles when developing a public sustainability report for a major project and many of the indicators can be explained or defined further by referring to the information and guidance available via the GRI website. Data from the monthly reporting should also be considered for inclusion in the reporting.	
Project Name	**Gateway WA**

Topic	**What to report?**	**Content Reported**
General Project Information	General Project Overview including: -location; length; who is involved; project value; improvements considered; reasons for these improvements; other reasons why the project is important; values, principles, standards and norms project has adopted; governance structure	The Gateway WA Project will create landmark road infrastructure around the Perth Airport and the freight and industrial hubs of Kewdale and Forrestfield. Gateway WA is the largest infrastructure project ever undertaken by Main Roads WA and aims to improve the safety and efficiency of one of the State's most important transport hubs, where road, rail and air services connect. The project involves a major upgrade of Tonkin Highway (between Great Eastern Highway and Roe Highway) and Leach Highway (between Orrong Road and the Perth Airport), including the construction of 5 new interchanges, local road improvements, pedestrian and cyclist facilities, landscaping and urban design. Tonkin Highway is a critical link in the Perth Road network helping to form a major ring road system around the eastern side of the city. It carries significant freight volumes and passenger vehicles through all hours of the day and this volume is expected to grow in the future. This particular area of the network is especially complex. In a distance of just over 8 kilometres, Tonkin Highway intersects with three of Perth's major highways and the access roads to the Kewdale industrial area and airport terminals. The $1 billion Gateway WA Project is being jointly funded, with the Federal Government

Topic	What to report?	Content Reported
		contributing up to $686.4 million. The entire upgrade was completed by March 2016, ahead of the planned consolidation of the domestic and international terminals at the Perth Airport.
Why is Sustainability important to this project?	Statement from most senior decision maker on why sustainability and sustainable development is important to the project Highlight the top Sustainability aspects for the project and why they were determined to be the top aspects	Gateway WA's mission is to deliver sustainable landmark road infrastructure around the Perth Airport and the Kewdale Freight Precinct. In doing so, Gateway WA is committed to achieving sustainable economic, environmental and social outcomes for the project, from inception through to completion and beyond.
Status of Infrastructure Sustainability rating	Is the project registered for a rating? What is targeted rating? What rating has been achieved to date? Any other important progress information IS credit case study or outstanding achievement for sustainability	"Excellent" (63.6) As Built rating achieved 2016 "Excellent" Design rating achieved 2014 Achieved a Level 2 Innovation credit for a intersection design first built in Australia
Report Profile	Specify reporting period; previous report (if any); reporting cycle i.e annual; point of contact(for report and project); state if any of	Reporting Period - July 2015 to June 2016 Point of contact - Amy Elkington

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	the information is subject to external assurance	
Water use by Source	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement	Water used for the construction of the project was sourced entirely from the local groundwater aquifer with exceptions only made for water required for potable purposes. Dewatering and construction water management plans were developed for each sub-area of the project to manage adverse impacts of groundwater consumption. Across the project water was sourced from a series of production bores and consumption reported annually to Department of Water. Abstraction volumes were monitored through flow meter readings and tracked monthly via spreadsheet ensuring compliance with licenced volumes. An initiative to make use of remote groundwater level logging equipment was used to manage drawdown impacts in sensitive areas during intensive groundwater use. Water levels were checked daily where required via a dedicated website.
Scheme/potable	Water purchased from the scheme in litres	2,897,000
ground water	Water pumped from bores in litres	104,256
surface water	Water pumped from rivers, lakes or harvested in litres	Nil
recycled water	Recycled or waste water use (typically from another industry) in litres	Nil
Carbon Emissions & Energy	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do	Energy on a highway construction project is mainly diesel in plant and trucks, to mix, haul and place a range of materials; this also represents a significant proportion of project costs. A significant effort therefore goes into refining design details and construction methodology to minimise the quantity of materials required, and to source off-site materials as close as possible to site. Examples of energy-saving outcomes include:

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	so. Provide a case study of an initiative or achievement	
		Tonkin Highway / Leach Highway interchange design refinement. The original design provided for free-flow movements to save operational fuel and emissions in the long term. The refinement of the design through extensive design iterations resulted in the design of shallower baths which require less dewatering during construction and operation. This was achieved through a combination of varied road geometry, a shallower structural depth on bridges, and gaining approval from relevant authorities for partial penetration of aviation constraint surfaces. The length of concrete bath structures was also considerably reduced, with consequent reduction in demand for high-energy materials such as cement concrete.
		Drainage along Leach Hwy way changed from pumped to gravity system, eliminating operational energy requirements in the long term
		High modulus asphalt – The changing of asphalt binder from the traditional Class 320 bitumen to Class 600 was adopted to enable a higher modulus asphalt, which in turn means a thinner deep lift asphalt pavement for the same design life of 40 years. This resulted in an approximate 10 percent reduction in total asphalt quantity for the project. This is not only a significant cost saving but also reduces greenhouse gas emissions.
		Minimising total earthworks volume by optimising road geometry (e.g. lower embankments, raise cuttings) and minimising imported fill quantity and haul distance (e.g. maximise cut-to-fill and finding closer sources of imported)
		Purchase of two electric cars in the ‘pool’ fleet to encourage more serious consideration of cleaner, more efficient transport energy sources
		Use of LED street-lighting through the aviation constraints area, rather than the traditional HPS luminaires.

Topic	What to report?	Content Reported
Energy usage by source in megajoules		
From fuel	Fuel usage by type and split by on-road and off-road in litres	On-road: 403,076.45L Off-road: 828,736.23L
From electricity	Total Electricity purchased from the grid in kwh	485349.50 kwh
% from renewable sources	report the % of renewable energy mix in fuels, the kwh purchased from the grid or the amount produced from significant renewable energy installations on site and not included in total energy purchased from the grid	Nil
Energy saved	Report in kwh or litres of fuel the energy saved from any energy saving initiative implemented.	N/A
Materials Usage	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement	Important aspect of the project, as expressed in relevant project management plans and actions undertaken throughout the 2015 year.
		Through approval of this Sustainability Management Plan, the Board and senior management of Gateway WA commit to: • ensuring the elements of sustainability are considered during decision making processes; • fostering a culture of sustainability across the project by demonstrating practical, tangible outcomes, particularly in areas such as reducing waste, recycling and reuse of materials

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		To support our commitments, the following targets were set for the project: • Recycle significant proportions of spoil, inert waste and office waste generated by the project. • Use recycled sand to supply a significant proportion of uncontaminated fill requirements, subject to available supply. • Remediate a significant proportion of our own waste soils to a level that it is suitable for use as fill and/or landscaping
		The objectives of this Topsoil and Mulch Management Plan are to: • Minimise the risk of the spread of dieback and weeds due to road construction activities along the project alignment; • Protect and manage natural resources to maximise rehabilitation success, soil seed germination, soil microbial activity and establish vegetation consistent with adjacent communities; • Reduce the potential for soil erosion; and • Maximise the conservation and re-use of topsoil for construction purposes
		Materials on a highway construction project represent a significant proportion of project costs. A significant effort therefore goes into refining design details and construction methodology to minimise the quantity of materials required, and to maximise re-use of available materials.
		Gateway WA was awarded with the 2015 Waste infinity award for reducing waste and the total quantity of imported materials in recognition of the re-use of degraded topsoils and treated ASS.
Total materials used in tonnes	as per MRWA materials reporting survey	Sand - 25230 Gravel - 49980 Crushed Limestone - 1000 Crushed Rock - 76000 Asphalt - 105388 Concrete - 5496
Total recycled materials used in tonnes	as per MRWA materials reporting survey	7400
Total materials planned to be used in tonnes	Give estimates of total materials required as per the final design	
Total recycled materials	Give estimates of total recycled materials the	

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planned	project is committed to using as per the final design	
Total materials disposed of.	Total materials disposed of in tonnes (as per MRWA materials reporting survey); report the disposal method - recycling, landfill, on-site storage, composting, other	Recycled - 29 Landfill - 12
Environmental	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement	Fundamental (compliance) requirement of the project, as expressed in Project Website, Project Objectives, Construction Environmental Management Plan
		Sustainability > Environment Gateway WA is passionate about undertaking the Perth Airport and Freight Access Project with environmental care, aiming to minimise any adverse impacts associated with the works.

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		Sustainability > Environment The Gateway WA project operates in accordance with a series of Construction and Operation Environmental Management Plans, approved by the Department of Sustainability, Environment, Water, Population and Communities (now Department of the Environment) and the Department of Environment and Conservation (now Department of Environment Regulation). These plans can be viewed (http://gatewaywa.com.au/sustainability/environment/) •Construction Environmental Management Plan •Surface and Groundwater Management Plan •Rehabilitation and Landscape Management Plan •Stakeholder Engagement Management Plan •DotE Annual Compliance Report 2013/2014 •The Way We Operate
		10. To minimise adverse impact to the environment, road and path users, and local businesses and residents 11. To respect the significance of the natural environment and Aboriginal heritage 13. Meet the needs of current and future generations through the integration of environmental protection, social advancement and economic prosperity by way of sustainable planning, design and construction.
		Main Roads referred the Project to the WA Environmental Protection Authority (EPA) for determination under Section 39a (7) of the Environmental Protection Act 1986. The Project was determined to not require assessment by EPA. Gateway WA obtained approval from DER to clear native vegetation for the purposes of constructing this Project. The Project was referred by Main Roads to the Commonwealth DoE. DoE confirmed that the Project was a Controlled Action under the Act, and therefore a PER was required for formal assessment. Approval under the EPBC Act was obtained in February 2013. Both State and Federal approvals are subject to a range of environmental conditions and commitments.
		In order to comply with relevant environmental legislation, approval conditions and the management of impacts to the local environment, Gateway WA has defined a

Topic	What to report?	Content Reported
		series of objectives, targets and performance indicators for each environmental issue/aspect.
		Minimise vegetation clearing. No clearing or disturbance during construction outside pre-defined clearing lines, as outlined in EPBC approved area and State Clearing Permits.
		Ensure impacts on Threatened and Priority Flora and communities are adequately identified and minimised during construction. Areas containing Threatened and Priority Flora species and communities not to be disturbed are clearly delineated in the field for the duration of the construction works in that area.
		Ensure impacts on protected fauna – in particular Black Cockatoo and quenda habitat- are adequately identified and minimised during construction. Protected fauna habitat is marked on design drawings and flagged or fenced off during the duration of construction.
		Avoid the spread of dieback from known areas, and its introduction to uninfested areas, as a result of construction works. No new dieback infestations identified immediately adjacent to the construction area in areas of significance such as conservation zones or TECs
		Maintain existing surface water hydrology. No physical damage to wetlands beyond a maximum of 5 m from the edge of earthworks unless no other means of access or required, or for safety reasons
		Re-use/re-establish Threatened or Priority Flora species within the Project revegetation. Where suitable conditions exist, re-establish Conospermum undulatum and other, relevant, threatened species within the project revegetation area.
		Minimise impacts on the environment, community and personnel upon discovery and remediation of contaminated land. Correct removal and disposal of contaminated soils and groundwater.
Planned/actual Clearing	Estimate the amount of land that is to be cleared in Ha or give actuals	Approximately 161.96 ha in total, Materials Data sheet shows data for clearing
Planned/actual rehabilitation	Estimate the amount of land that is only temporarily cleared and is to be rehabilitated in Ha or give actuals; report	Materials Data sheet.

Topic	What to report?	Content Reported
	status of rehabilitation at the close of reporting period; report size and location of rehabilitation	
Planned/actual Offsets	The amount of environmental offsets that the project is committed to delivering in Ha or actuals; report if a third party is involved in these offsets and who the third party is and their level of expertise; report status of offset at the close of the reporting period; report size and location of offset	3 ha of restoration/rehabilitation 120 individuals of *Conospermum undulatum* 635 individuals of *Macarthuria keigheryi* No Third Party involvement in delivery of offsets.
Protected Areas and areas of high biodiversity value	Report if the project is impact either directly or in-directly protected areas or areas of high biodiversity value outside of protected areas. Report: geographic location; position of area in relation to project; Listing of protected status; the attribute of the protected area or high biodiversity value area; report nature of significant direct and indirect impacts on biodiversity i.e. pollution, pests, reduction of species, habitat conservation, ecological processes (salinity or changes in groundwater); species effected, extent of impacts, duration or impacts, reversibility or impacts, run-off or discharge,	TEC's cleared for construction of the Roe/Tonkin Interchange, impacts reported in 2014, no additional impacts to areas of high biodiversity or protected areas occurred in 2015 or 2016
List of significant species/habitat	Give details of significant species and habitat that is directly or indirectly impacted by the project	PER provides details of project impacts

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Amount Spent on Environmental Offsets	linked to Planned/actual Offsets In regards to types of offsets that could result in financial payments, please see the list below: • Vegetation establishment - Planting, direct seeding or topsoil respread - Control of Weeds and Pests - Fencing (Installation/removal) - Weed Matting/mulch (installation/removal) • Purchase of Offset Land • Provision of Funds for Research • Provision of Funds for the maintenance of conservation land (including establishment of firebreaks, fencing and feral animal control) • Provision of Funds for the purchase of Land • Translocation programs of vegetation • Site preparation (ripping or mounding soil) • Funds can be used for Adaptive management • Funds can be paid to the WA Environmental Offsets Fund • Nesting boxes/ Artificial Dreys (in lieu of breeding trees)	Not publicly available. The documents should be on TRIM though. Ask Elizabeth Johnston for them.
Environmental Impact Assessment	Has the project been subject to an EIA and will there be on-going monitoring	Public Environmental Review (PER) Includes the ongoing monitoring
Environmental Impact Assessment	Are the results of the EIA publically available? If so, where? (link)	(https://www.mainroads.wa.gov.au/Documents/Public%20Environmental%20Report%20-%20web%20page%20version.u_3776820r_1n_D12%5E23172103.PDF)

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Economic	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement	
Planned BCR and other measures of productivity	WARES	N/A
No. of people employed by project supply chain	No. of people have been inducted to site Total Employee wages	5,687 total inductions 101 wages employees in July 2015, number declined since then.
No. of businesses engaged by the project	No. of contractors awarded contracts for delivery of the project	Approx. 489 Contractors Approx. 424 Suppliers
$ spent buy local	Value of purchases or contracts awarded to business located within the regional location of the project including local employment, training, research & innovation	Value of Contracts Awarded $6,581,980.62
$ spent aboriginal enterprise	Dollar spend on registered aboriginal enterprises http://www.abdwa.com.au/home.asp?cmd=	$6,626,882.65
$ spent disability enterprise	Dollar spend on registered disability enterprises http://wade.org.au/	

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Legacy Project, 'additional' infrastructure or service supported	Is a legacy project (or additional infrastructure or services) delivered for this project? If so, describe. Include $ spent, linkage to local community needs i.e. is a defined goal of a local council etc, what is the extent of the impact of the project? Positives? Negatives? Were these investments commercial, in-kind or pro bono engagements	1) Wildflower Way Extension to Orrong Rd Interchange - $682,421. 2) AB Footbridge - Estimate Value $1,026,632 - $450K (Contributed by MRWA) = $576,632 Contribute by CPB Contractors
Planned legacy project BCR		1) Wildflower Way Extension to Orrong Rd Interchange - $682,421. 2) AB Footbridge - Estimate Value $1,026,632 - $450K (Contributed by MRWA) = $576,632 Contribute by CPB Contractors
Local workforce development	No. of FTE equivalents sourced from the MRWA region that the project is taking place in Proportion of senior project management hired from local community (WA)	
Workforce Development	Average hours of training per year per employee by gender, and by employee category % of employees receiving regular performance and career development reviews by gender, and by employee category	Training hours were worked out on traineeships only (no other supplementary skills training) 229 average hours female 237 average hours male 250 average hours salaried 204 average hours wages 32% Salaried 68% Wages 77% Male 23% Female 94% employees received a Performance Development Review at the commencement of 2015.
Value of overall project/contract	Value of contract(s) awarded for the project	$510,500,052

Topic	What to report?	Content Reported
Average Property value before and after project (difference compared to overall property values		N/A - Asset Capitalisation of the Project Value has not been premeditated
Savings to freight or contribution to Gross State Product		N/A
Risk to Climate Change	Value of Asset at Extreme or High Risk to Climate Change Actions to adapt the asset to Climate Change	N/A
Fines or sanctions	Value and nature of any fines or sanctions from non-compliance with laws and regulations (i.e. environmental or safety etc)	Nil
Diversity of entire project workforce	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement	
% women in workforce	No. of FTE equivalent positions held by women No. of women inducted to site	23% Staff 12% Wages
% women in senior positions	No. of FTE equivalent management/ senior positions held by women	0%

Topic	What to report?	Content Reported
	expressed as a percentage	
% aboriginals in workforce	No. FTE equivalent positions held by aboriginal people No. of aboriginal people inducted to site	6 FTE equivalent positions held by aboriginal people - 3 staff, 3 wages 1 subcontractor inducted to site
Safety of entire project workforce (includes sub-contractors)	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement	
	Project Website (www.gatewaywa.com.au):	Our commitment > Safety The health and safety of our people and the community is the ultimate priority for Gateway WA. Safety and environmental considerations underpin everything we do, from planning through to construction and delivery.
	Project Objectives:	9. To improve safety in keeping with the State Government's "Towards Zero" road safety initiative
	Extract from Safety Management Plan	Gateway WA Safety and Health Policies demonstrate management commitment through the creation of compulsory requirements. To achieve our safety and health objectives we: § Provide a safe working environment for all employees, contractors and the public. § Encourage personal responsibility for safety and health behaviour. § Provide a supportive safety and health culture with visible, accountable leadership. § Implement effective knowledge capture and transfer through lessons learnt and analysis of incidents. § Develop our leaders to promote safety and health excellence by consultation that encourages ownership and continuous improvement in safety and health behaviours,

Topic	What to report?	Content Reported
		practices and outcomes. § Provide rehabilitation support and services to employees who suffer work related injury or illness.
% of workforce represented in formal health and safety committees		10%
Types of injury		Medically Treated and First Aid Injuries
Lost time injury rate		0
Fatalities		Nil
Workers with high incidence or high risk of specific diseases		Nil
Stakeholder Engagement	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement	Key component of the project as expressed in Project Website, Project Objectives, Benefits Management Plan, Stakeholder Engagement Management Plan and KRA performance framework

Topic	What to report?	Content Reported
		Our commitment > Community Engagement In development of the Project Master Plan, the comments and ideas raised by stakeholders and the community helped identify local needs and preferences, and guide the assessment of issues and options developed by the project team.
		7. To achieve strong project support through effective and collaborative engagement with the community and stakeholders; 10. To minimise adverse impact to the environment, road and path users, and local businesses and residents
Results of Value Assurance Review		Refer below
Effective Communication	Results of stakeholder engagement surveys	5
Addressing community concerns	Results of stakeholder engagement surveys No of community concerns addressed. Top topics or concerns raised by community or stakeholders	5
Social Impact Assessments	Was the project subject to a Social Impact Assessment?	See above
Social Impact Assessments	Is the results of the SIA publically available? If so, where?	N/A
Indigenous rights and consultation	Details of any Indigenous consultation undertaken by the project Detail any issues raised by indigenous communities impacted by the project	Consultation was undertaken for Area 11. No major concerns raised other than the desire to undertaken site monitoring during Hale Rd Clearing works. Monitoring was conducted during November of 2015.

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Road Safety	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement	The management approach to traffic management with respect to sustainability was mainly cost and safety driven. An example of this, is the offset of the temporary barrier crash leading crash attenuator to the roadway. At the commencement of the project, the crash attenuators were being installed 0.3m from the nearest lane. This was increased to 1m early in the project to reduce the likelihood of vehicles striking the attenuator. There was a reduction in the number of strikes being recorded which reduced the barrier repair costs and increased the safety to the road user. A similar strategy was the installation of barrier reflective delineation at the base and on top of the barrier. Whilst there was an increase in cost for the delineation, this was offset by the reduced number of barrier strikes due to the barrier being more visible in poor visibility conditions. This again translated to a reduction in barrier repair costs and an increase in road safety. A spin off of this could also attributed to receiving a good rating for user satisfaction throughout the project. MRWA adapted this initiative into their standards (Code of Practice for works on roads) and require barrier delineation for temporary barriers installed along the roadway.
Traffic Management	Details of Road Safety Initiatives for traffic through the project site	Temporary Road side barriers to contain high speed arterial routes associated with the project. This includes the end treatment attenuators installed on the approaching terminals to the barriers. The temporary barriers were installed along Tonkin Highway, Leach Highway and Roe Highway. Variable electronic speed signs were used on the project to provide greater visibility to the speed limits and draw the drivers attention to them. As the signs were mounted on posts, they also were more likely to remain displaying the speed limit than temporarily mounted signs - in temporary arrangements.

Topic	What to report?	Content Reported
Incident Frequency	No of serious traffic incidents within project boundary compared to volume of traffic	The Gateway WA Project is aware of only one serious traffic accident that occurred over the course of the project within the project network. With respect to the definition of serious accident, this was an accident that had resulted in long term injury, permanent disfigurement or death. This over the course of a three year period. The accident could largely be attributed to driver negligence and carelessness rather than a direct result of the road network. Tonkin Highway carries approximately 60,000 vehicles per day, Leach Highway carries 32,000 vehicles per day and Roe Highway 65,000 vehicles per day. The low frequency recording can be attributed to the reduced speed limits and barrier containment along the road alignments. The high standard of temporary delineation and pavement marking on temporary alignments are also contributing factors. With respect to the permanent road network delivered, the grade separated interchanges along Tonkin Highway, Roe Highway and Leach Highway in conjunction with the road safety barrier separation between opposing carriageways will lead to a significant reduction in serious accident frequency on the road network.
Road Safety Upgrades	Detail of Road Safety initiatives implemented as part of road design or upgrades	Grade separated interchanges - This reduces the volume of traffic 'crossing' at grade in opposing directions or perpendicular to each other thus reducing the likelihood and frequency of serious traffic accidents Contained dual carriageways - road safety barriers provide full containment of opposing carriageways reducing the risk of high speed 'head on collisions' Principle Shared Path (PSP) network - An extensive PSP network provided complete separation of cyclists and pedestrians from the high speed road environment along Tonkin Highway, Leach Highway and Roe Highway. Street Lighting - Highway grade street lighting has been provided along the full length of Tonkin Highway, Leach Highway and Roe Highway as well as the PSP network. Prior to the Gateway WA project, there were extensive sections of Roe Highway and Tonkin Highway that did not have any street lighting.

Topic	What to report?	Content Reported
Community Amenity	Details of community amenity and facilities to improve road side areas (and in turn encourage travellers to take breaks etc) Details of any road design for crime prevention	Street Lighting - Highway grade street lighting has been provided along the full length of Tonkin Highway, Leach Highway and Roe Highway for the extents within the extents of the Gateway WA project boundary, as well as the associated PSP network. Prior to the Gateway WA project, there were extensive sections of Roe Highway and Tonkin Highway that did not have any street lighting.
Sustainable Transport	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement	Emergency bays have been installed along Tonkin Highway, Leach Highway and Roe Highway to enable motorists to stop if required. The bays have an emergency telephone with direct connectivity to the Main Roads WA Traffic Operation Centre. With respect to crime prevention, Tonkin Highway, Leach Highway and Roe Highway, as well as the PSP network have street lighting along the full length within the Gateway WA Project.
Cycling and Pedestrians	Details of any Cycling and Pedestrian facilities provided by the project	Approximately 21kms of Principle Shared Path and local access connections have been provided along Tonkin Highway, Leach Highway and Roe Highway. This was a significant priority to the project planning. The PSP network uses underpass and over pass facilities to bridge and cross high speed road environments
Road Based Public Transport	Details fo any facilities or design features aimed at improving road based public transport or access to rail based public transport	Approximately 21kms of Principle Shared Path and local access connections have been provided along Tonkin Highway, Leach Highway and Roe Highway. This was a significant priority to the project planning. The PSP network uses underpass and over pass facilities to bridge and cross high speed road environments . The PSP network encourages cyclists and pedestrian transport methods in lieu of driving a motor vehicle.
Travel Smart	Details of any initiatives to encourage sustainable transport by the project team. % breakdown of trips of workforce getting to and from site: Vehicle; public	Nil

Topic	What to report?	Content Reported
	transport/bus; cycling	
Feedback	Give an opportunity to provide feedback on the report, including providing contact details and how to do this.	Nil