

Matagarup Bridge enhances patron connectivity between East Perth, Burswood Peninsula and Optus Stadium. The bridge helps move eventday patrons away from residential streets in East Perth and connects them to Perth CBD and car park facilities. It will also provide year-round access for residents and the community to playgrounds, picnic and barbeque areas plus a network of walking and cycling tracks. It is set to become an iconic tourist attraction.

Matagarup Bridge, named in recognition of the cultural significance of the immediate Swan River area to the local Whadjuk community, is a key component of the Optus Stadium integrated transport plan.

Matagarup is the name given by traditional custodians to the area around Heirisson Island and means 'place where the river is only leg deep, allowing it to be crossed'.

The bridge arch assembly and complex lifting process was a feat of engineering, a process not previously undertaken on an infrastructure project in Western Australia.

Matagarup Bridge was delivered by the Swan River Pedestrian Bridge Alliance (SRPBA) comprising Main Roads, York Civil and Rizzani de Eccher. The central bridge arch, made from two 'wishbone' structures, is approximately 72 metres above the water at its highest point and the steel and concrete deck stretches 370 metres from bank-to-bank with a steel cable-stay span of 160 metres at its centre. Two smaller arches, either side of the central arch, complete the overhead structure.

Only two concrete piers are located in the river, respecting the area's heritage and minimising impact on the Swan River. The bridge deck is at least nine metres wide, wider at pause points, and includes shelter.

The steel bridge components were supplied and fabricated via a sub-alliance between Main Roads, York Civil, Rizzani de Eccher and Western Australian company Civmec. Sub-contractors Fremantle Steel and Adwest provided bridge deck and balustrade works respectively.

To accommodate future plans for a tourism venture, a walkway and lookout has been provided in the large central river arch. To see videos taken during construction, visit our YouTube site.



We actively support the State Government's Aboriginal participation policy through several initiatives that have provided significant opportunities for Aboriginal employment within our projects and work activities.

The Strategic Business Case for Aboriginal Employment Initiatives was developed in consultation with key representatives from Aboriginal communities across the state, government agencies and contractors to identify what initiatives we can implement to improve the livelihood of Aboriginal people.

Championed and led by the Aboriginal Employment Initiatives Taskforce these initiatives include:

- Creation of a Senior Advisor Aboriginal Engagement role dedicated to exploring opportunities and engagement with Aboriginal businesses. This role is currently under recruitment.
- Development of a Program Implementation Plan framework based on the prioritised list of strategies in the business case.
- Incorporation of contract clauses for mandatory requirements for Aboriginal participation, including dedicated Aboriginal trainees and employment targets in our Road Network maintenance contracts; and stretch targets for employment of Aboriginal people and businesses, and incentive payments for major works.
- Formation of an Aboriginal advisory group comprising of external Aboriginal business leaders.

 Piloting the mandatory requirement for Aboriginal Participation Plans with weighted criteria and price preferences for other Capital Works tenders as well as the Goods and Services tenders.

All contracts in the Metropolitan Region require a minimum of 10 per cent of the workforce to comprise of Aboriginal people. In addition, a target of 2 per cent of engaged businesses are to be an Aboriginal business registered on the Aboriginal Business or Supply Nation directories.

Regionally, we are not only reaching our targets, but exceeding them. In the Mid West-Gascoyne Region and Wheatbelt Region, currently 37 per cent and 23 per cent of the workforce respectively, comprise of Aboriginal people.

Other major achievements within our projects include 86 per cent Aboriginal employment on site in the first month of construction of the Broome Cape Leveque project, of which 95 per cent were local. For the Wyndham Spur and Maggies Jump Up sections upgrades, more than 45 per cent of total labour hours were undertaken by Aboriginal people. For the Bow River Bridge, 31 per cent of total labour hours were conducted by Aboriginal people.

This is a new era for Main Roads. It is estimated that 170 Aboriginal employment opportunities have been created as a result of our initiatives. These enable a focussed approach to increasing employment of Aboriginal people and businesses across our organisation and ultimately, within the road and bridge construction and maintenance industry.



Core to our 'Safe System' approach is the belief that no person should be killed or seriously injured on our roads. In line with this belief, Main Roads joined experienced staff from the Road Safety Commission and the Western Australia Police Force to conduct a road safety review on Indian Ocean Drive, between Two Rocks and Lancelin. Responding to an increase in serious crashes along this section of road, the review examined road safety risk, road engineering and driver behaviour.

Using a 'Safe System' approach, the team reviewed the issues and released a report in November 2017 that outlined a number of recommendations including:

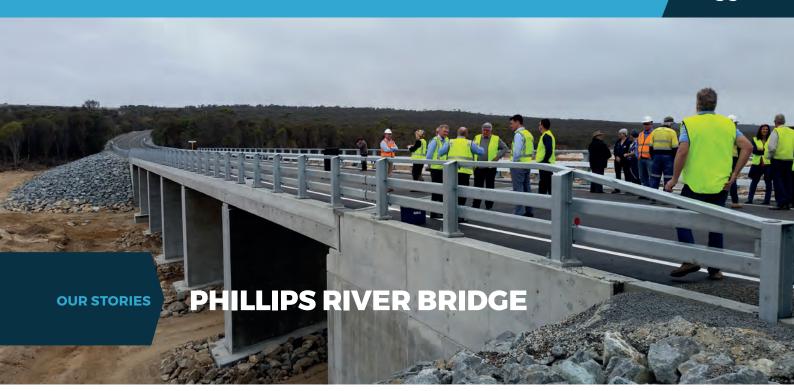
- immediate reduction in the speed limit as an interim measure to support other short term infrastructure improvements
- interagency communication and education strategy
- increase in police presence, focusing on unsafe road use
- centre and edge line maintenance to enhance visibility and reflectivity
- · installation of audible edge and centre-lines
- · improved signage
- · vegetation clearing to improve sight lines
- design review of intersections between Two Rocks and Lancelin
- · assessment and management of roadside
- · Wide Centre-Line Treatment.

Support from the state and federal governments was provided in the form of \$7 million funding in 2017-18 for the construction of four overtaking lanes on Indian Ocean Drive, between Two Rocks and Lancelin.

Additionally, the state government committed \$20 million from the 2018-19 budget for seal widening incorporating a Wide Centre-Line Treatment to be applied to the section of road. Relatively new to Western Australia, the treatment provides a one-metre wide centre-line coupled with audible line marking. This creates a greater separation between opposing traffic, allowing for additional reaction time if a driver unintentionally drifts across the centre-line towards oncoming traffic. This treatment is also included in the design of four new overtaking lanes between Seabird and Lancelin, which commenced in April 2018.

The combined effort to undertake a review of this magnitude highlights the State Government's commitment to road safety. We will continue to monitor the safety performance of Indian Ocean Drive and further measures will be recommended on a priority basis as required across the road network.

To see more about the review and the works being done, videos are available on our YouTube Channel.



During February 2017, more than 60 per cent of the Great Southern Region road network sustained damage due to widespread flooding. The preliminary estimate of damage to State Government assets was \$26.5 million.

The Phillips River Bridge, located on South Coast Highway approximately 23 km west of Ravensthorpe, was one of the most severely impacted sites with the structure completely destroyed by the floods. Connecting local communities east and west of the river, the bridge provided access to a broad range of goods and services and medical facilities. The loss of the bridge, and the approaches to it, left communities isolated and caused significant social and economic challenges.

Temporary restoration works were immediately undertaken using local contractors and innovative contracting arrangements. In March 2017, east and west connectivity was restored with the establishment of a side-track around the site.

In parallel to the side-track construction, designs were drawn and contract arrangements put in place to re-establish this permanent connection.

Working closely with the Shire of Ravensthorpe and local contractors to fast-track its reinstatement, we were able to open the new Phillips River Bridge to all road users in February 2018. The new structure is double the length and 1.5 metres higher than its predecessor. Most importantly, it has been constructed to withstand a one in 100 year flood event, similar to that experienced in 2017.

We have received many compliments about the new bridge and our responsiveness, with thanks from local communities.



The new Mandurah Traffic Bridge has increased traffic capacity and provides the community with an iconic structure and improved amenities in the heart of Mandurah.

Replacement of the old bridge, which opened in 1953, was necessary as it had reached the end of its life and no longer had capacity for current volumes of traffic.

We formed a collaborative partnership with the City of Mandurah, working closely with the community and design and construction contractor Georgiou Group to complete the new Bridge.

The stunning, new curved structure was incrementally launched in 13 segments from a specially constructed concrete casting bay on the western foreshore over Mandurah Estuary to the eastern foreshore.

The new bridge's four traffic lanes are divided by a concrete median with a separate five metrewide pedestrian and cyclist path located on the north-side of the bridge.

The bridge was open to traffic in December and local schoolchildren, who recently wrote about the significance of the Mandurah Traffic Bridge, were among the first to cross on the new structure's extra lanes.

Completing the roadworks before the busy Christmas trading period helped to boost and improve access for the community to the shopping and cafe precincts in Mandurah.

Demolition of the old bridge and work to complete paths, feature boardwalks, fishing platforms and landscaping were completed in March 2018.

A community picnic on Mandurah's eastern foreshore was held in April 2018 to celebrate the official completion of the new bridge. The project has been a great example of collaboration between government agencies and engagement with the community and stakeholders.



The seven kilometre Margaret River Perimeter Road extends from Airport Access Road north of Margaret River to the Bussell Highway south of Margaret River. Improvement works are underway to provide an alternative, high standard route for heavy vehicles around the town of Margaret River. This work will also improve traffic flow on Bussell Highway, increasing transport efficiency and reducing travel times for road users.

Construction of Stage Two followed a significant program of community and stakeholder engagement. The aim was to generate support for the project and assure all stakeholders that we would manage and mitigate any potential impacts. This involved extensive liaison with local community groups and the residents who would be affected during construction.

Direct contact with residents prior to work commencing provided everyone with a clear understanding of what was occurring during the project and what to expect in terms of the works being delivered and what that might mean for them.

From 2012, a Community Reference Group consisting of residents, interest groups, environmental stakeholders, cycling and walking groups, business organisations and the local Shire was formed.

The Group had input into the design and was responsible for the inclusion of a pedestrian bridge that will separate pedestrian and cyclists from the traffic bridge ultimately improving safety and increasing community amenity. The bridge links to existing trails from town, Darch Book and through to the 10 Mile Dam.

Community activities, such as site visits prior to construction, were critical to gain an understanding of the road footprint and clearing requirements in such an environmentally sensitive area.

In mid-2017 we conducted road alignment walk throughs providing an opportunity to explain the clearing at the entrance to town, and how we would undertake major landscaping and revegetation to beautify the area. In addition, a Shire-wide briefing ensured all staff were aware of the project by generating an understanding of construction processes and project benefits.



After more than two years of design and construction, the southern section of NorthLink WA was completed while managing 70,000 vehicle movements along Tonkin Highway each day.

Now at freeway standard, the free-flowing link with six lanes between Guildford Road and Reid Highway is the first section of this \$1.02 billion State and Federally funded initiative and is already proving it was worth the wait.

Completed by John Holland, the southern section includes around six kilometres of four metre-wide shared path with local connections providing a safe and environmentally friendly way for cyclists and pedestrians to travel.

The Hampton Park Primary School community is now using the new Tonkin Highway underpass, which features artwork created with the school's 2017 final year students.

Further along Tonkin Highway, joint-venture contractor Great Northern Connect has the central section taking shape with the design complete and construction works at the half-way mark.

The four bridges and four underpasses are also taking shape at the Tonkin Highway and Reid Highway interchange. Once complete, this will be the state's largest interchange.

June 2018 saw the majority of noise walls in place, all road bridges started, earthworks more than half-way completed and asphalt works 35 per cent complete.

CPB Contractors began work on the northern section in January 2017 and have now completed the design phase. The majority of clearing is finished and drainage and earthworks have progressed, allowing construction to continue safely through the winter months.

As part of our ongoing commitment to keep the community informed we are doing regular updates about the works on the Project website. Including video footage of the works as they progress.



We began trialling full freeway closures for the completion of routine maintenance in late 2017.

In March 2018, in collaboration with DM Roads, we successfully completed a full closure of the Mitchell Freeway, over five nights, for routine maintenance works.

More than 280 people from nine organisations came together, working under one closure and one set of traffic management, coordinated by DM Roads' Electrical Services team.

The full closure enabled all required maintenance activities on a section of freeway to be completed. This included drainage inspections and verification; vegetation maintenance; replacement of electric light units, lamps and gear trays; barrier repair works; line marking; and litter collection and roadside sweeping.

At the same time, the Public Transport Authority were able to take advantage of the closure to complete essential barrier and vegetation works along the rail corridor.

Completing routine maintenance works during a full closure had significant safety benefits for workers, who otherwise face numerous hazards and near misses when members of the public enter or drive unsafely near worksites. Full closures almost completely remove this risk and ensure workers can concentrate on the task at hand, thereby also improving productivity.

Full closures also significantly reduce the impact on the travelling public. If completed under standard traffic management, these works would have required the freeway to be closed for 38 nights, as opposed to just 5.

In addition, the financial benefit is notable, resulting in savings of almost \$200,000, funds that have been reinvested into the maintenance budget to ensure our roads remain safe, efficient and reliable.

The success of these works has led to plans for full freeway closures to be used as our standard approach for freeway maintenance.



We are delivering a project to complete the sealing of the Broome Cape Leveque Road on behalf of the Shire of Broome. The remaining 90 kilometres of road will be sealed improving access to Aboriginal communities and local industry, especially during the wet season when there can be lengthy road closures.

The 205 kilometre local government road under the care of the Shire of Broome provides the main transport link through the Dampier Peninsula. The route enables vehicle access to the estimated 1,425 population including 71 Aboriginal communities, pastoral stations, pearling industries and tourist destinations.

The project was identified as a priority in the Northern Australia Infrastructure Audit as a road requiring upgrade. The audit acknowledged the significant influx of tourists to the region during June to October often resulting in a tripling of the population from 13,000 to around 40,000 people.

Using the State Government's new Aboriginal Procurement Policy and the Australian Government's Framework to maximise indigenous employment and business opportunities in Northern Australia, a Project Procurement Strategy was developed. It set Aboriginal engagement targets and included strategies to maximise Aboriginal employment and business engagement.

These targets include seeking to achieve Aboriginal employment of 45 per cent, of which 80 per cent will be local and Aboriginal business engagement at 20 per cent. To ensure these targets are met, all tender documents contain clauses relating to Aboriginal employment and training. In addition, preferences are applied for local and Aboriginal businesses and employment under an extensive Plant Panel contract.

The project will be delivered over three to four years to ensure the employment outcomes are sustained. While the project is in its early stages, 12 of the 16 contracts awarded to date have been to local Aboriginal businesses. Aboriginal employment on site in the first month of construction was 86 per cent, of which 95 per cent were local people from Broome and the Dampier Peninsula. The project and delivery approach is being embraced by local Aboriginal people.

Minister for Transport, the Honourable Rita Saffioti participated in a traditional smoking ceremony with Aboriginal elders and community members at the site locally known as 'Dinner Camp'. Traditional Custodians from Jabirr Jabirr / Ngumbarl, Bindunbur, Yawuru, Bardi and Jawi also took part in the ceremony and were joined by local contractors Nirrumbuk, Roadline and the Main Roads' project team. As part of the celebrations fifteen Aboriginal Elders spoke about what the project meant to them.





Perth's Optus Stadium is a 60,000-seat, multipurpose venue capable of hosting a diverse range of events. One of the most significant innovations for this venue has been to achieve a predominantly 'public transport' mindset, successfully catering for over 50,000 people at once, when Perth has an acknowledged 'private vehicle' orientated culture.

The Stadium precinct includes a purpose-built train and bus station to accommodate large crowds attending events at Optus Stadium and surrounding area. All events at Optus Stadium are joint-ticketed, which means the cost of public transport is included in event tickets for three hours either side of the event. The number of public transport ticket users confirms the strategic target of 80 per cent has been regularly met or exceeded since the stadium began operating.

Underpinning the strategic Traffic Access Plan is the Operational Event Plan (OEP), developed by the Transport Portfolio partners, working collaboratively with relevant government and non-government entities. The OEP is the transport, traffic, cycling and pedestrian management solution to suit any type of event. The Plan has been universally adopted to ensure we can achieve positive stadium traffic management outcomes.

Since its opening in January 2018, Optus Stadium has successfully hosted a range of events. The events, closely monitored and managed through the Real-Time Operations Team at the Traffic Operations Centre, more recently the Road Network Operations Centre, in the Stadium Incident Room and by numerous on-ground responders; collectively keep patrons' safe and traffic moving.

The stadium project has far-reaching benefits for the Perth community through new revenue opportunities from provision of food and beverages within the stadium, which attracts international sporting and entertainment events, and where possible increasing business in the neighbouring suburbs. We are proud to be working closely with our Portfolio colleagues and teams associated with events to ensure everyone can quickly, easily and safely get to and from the stadium.



The Wildflower Capital Initiative is a crossagency program that seeks to promote Perth by showcasing the unique local flora as a wildflower theme in the design and character of public open spaces and major infrastructure. It is part of a state-wide initiative (Wildflower Way) with a focus on enhancing the community and tourist experience of WA. The benefits of this initiative include:

- promotes Perth as a 'Wildflower Capital' and a starting point for regional wildflower tourism
- improves the aesthetic of the city for visitors and ties in with various tourism initiatives such as the Kings Park Wildflower festivals
- promotes water wise and native planting practices
- · supports the Urban Forrest Strategy
- provides an overarching framework for already existing wildflower planting initiatives
- promotes exposure and understanding of Nyungar culture by floristically demonstrating the six Nyungar Seasons.

We have committed to establish and maintain feature wildflower plantings and urban design treatments at 10 selected locations on major roads in the Perth metropolitan region as our contribution to the initiative. We have collaborated with Botanic Gardens and Parks Authority, Office of the Government Architect, Burswood Park Board, Department of Planning, City of Perth, and relevant local government authorities to develop a detailed implementation strategy. Three Wildflower Capital Initiative sites were established in the winter of 2017:

- Graham Farmer Freeway at Victoria Park Drive near the stadium
- · East Parade
- Causeway East near Victoria Park Bus Transfer Station.

More than 30,000 individual native, iconic Western Australian plants were planted across the three sites, with species selection reflecting the cycle of the six Nyungar seasons. The use of mulch and hardscape treatments was incorporated for visual enhancement of the feature areas. The wildflower theme has also been incorporated into urban design treatments at selected bridges, walls and screens with the restoration of murals and repainting of retaining walls.

The Wildflower Capital Initiative is an extension of our long accepted practice of using local native species in landscaping works and will continue in 2018 and 2019.



The partnership we built with contractor John Holland to develop a sustainability culture across the NorthLink WA southern section team has delivered award-winning results.

Setting and pursuing ambitious targets the team worked together to achieve a 'leading' rating score of 93 - the highest WA score ever and the second highest Infrastructure Sustainability (IS) Council of Australia score in Australia for a transport infrastructure project.

The team also took out two 2017 Sustainability in Infrastructure Awards.

- The IS Impact Award recognises the project that exhibits the most outstanding leadership and greatest contribution to advancing infrastructure sustainability in Australasia.
- The IS Outstanding Achievement Award recognises the IS certified project that has demonstrated the highest overall excellence and sustainability achievements.

Aiming to deliver a genuinely sustainable project, the southern section team embraced the sustainability challenge and used it as a catalyst to promote innovation across all areas of economic, environmental and social responsibility.

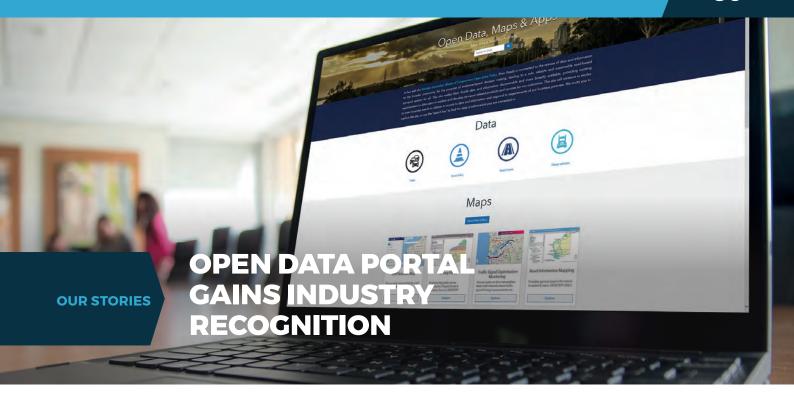
The team's commitment to reframing the engineering challenge achieved sustainability initiatives across design, procurement and construction phases.

Lifecycle assessment tools were used to assess the environmental aspects and potential impacts of the project over its design life, enabling the potential impacts to be evaluated and interpreted to better inform decision-makers.

Some of the initiatives include:

- · adaptive and dimming lighting
- asphalt treatments that improve and extend the life of pavement as well as optimising recycled product
- design initiatives including a three-pin arch pedestrian underpass
- awareness raising including a supplier sustainability day
- a four metre-wide shared path for pedestrians and cyclists
- a grade-separated roundabout at Morley Drive offering safety benefits for motorists and a reduction of conflict points; this encourages a free-flowing interchange that reduces congestion and associated emissions
- trial of a solar powered permanent Variable Message Sign using wireless communication technology.

We define sustainability as a commitment to 'creating lasting benefits through an integrated consideration of social, environmental and economic aspects in all that we do'. To facilitate this commitment, sustainability has been included across all NorthLink WA project objectives.



We established our leading position in relation to the Western Australia Whole-of-Government Open Data Policy by this year releasing more data sets through our 'Open Data, Maps and Apps' portal and gaining industry recognition.

Bringing together 275 existing data sets, Open Data, Maps & Apps provides greater public access to our data in one manageable and easy to use platform.

The data provided through the portal can be used to build innovative apps and tools for WA commuters. It enables developers and data users to access road asset data as well as near real-time, statistical road and transport information via feeds that can be used to develop transport-related products and services for the community.

Our data is already being used by a range of organisations, including Perth Airport and Google, on applications designed to make it easier for road users to plan their journeys and keep up to date with traffic conditions.

Over time, more data sets will be made available and the portal will evolve into a broader public platform for exploring, visualising and downloading open data. With industry engagement the portal will increasingly be used as a platform for more collaboration across the transport industry to provide faster, smarter and more responsive services to the community.

The successful introduction of the platform was recognised by government and industry when we received a Leadership in Government award at the Western Australia OpenGov Forum in December.

In May 2018, the portal was one of four projects shortlisted for the Award for Most Effective Government Solution at WA's INCITE Awards, recognising performance in information, technology and telecommunication. It was also shortlisted for the Institute of Public Administration 2018 Achievement Award for Best Practice in Collaboration between Government and Non-Government Organisations.

The Open Data Portal project is an outcome of our Innovation and Research Program.



Sharni Bennell joined our South West office as a business services trainee in late 2016. Having grown up in Bunbury, Sharni spent three years in Port Hedland before returning home to complete years 11 and 12 at Manea Senior College.

Sharni's opportunity to work with us as a trainee came through the Nudge Community Engagement and Recruitment Process.

Nudge is a for-purpose charity that focuses on getting young people into jobs and training opportunities. It is committed to empowering business through community employment.

Supported by the Nudge team, Sharni quickly demonstrated her drive and determination to become a valued member of the South West Region's Business Services team, undertaking tasks including records management, business and administrative support.

This same dedication and determination was directed towards her Certificate IV in Business Administration studies. Sharni completed her training ahead of time in 2017 and was successful in obtaining a role as a Business Support Officer in the South West Region.

Sharni's achievements were recognised and rewarded at South Regional TAFE's 2017 awards presentation night acknowledging students who had demonstrated outstanding performance and academic excellence. Sharni came away from the night with the South West Zone Trainee of the Year Award and the South Regional TAFE Trainee of the Year Award. She was also awarded a Certificate of Excellence for her studies.



Our Manager Traffic Management Services Jerko Ostoic is a regular guest speaker on 882 6PR radio talkback session with Oliver Peterson. Jerko provides a direct conduit to Main Roads for radio listening members of the public, every second Wednesday from 3.30pm to 4.00pm. Listeners can raise concerns, share knowledge and ask questions about Main Roads' matters.

Through radio, we can share our knowledge of the network, clarify responsibilities and promote our services such as the Customer Information Centre, Real Time Traffic Operations, Incident Response Services, the fault reporting system, live Travel Map, our website and the social media forums we have available.

We benefit greatly from the invaluable insight gained through the talkback sessions, to better understand the issues that matter to members of the community and our road users. Engaging with the public via radio is not new for us and similar radio spots were a regular feature some years ago.

More recently the WA Police, who also provide regular talkback opportunities on 6PR, were receiving numerous questions on road-related matters, in response to the significant public interest, we re-established our regular talkback arrangement.

Jerko has an extensive and broad knowledge of the road network and has cultivated collaborative partnerships with local government, built from a career spanning more than 20 years in Traffic Management Services. He has been a guest speaker on 11 talkback sessions since they commenced in October 2017. From the diverse calls he has fielded, 22 follow-ups were required, relating to traffic signal timing, line-marking and intersection layouts, safety, projects, street lighting and council configuration of traffic signals.

His 6PR radio broadcasts with Oliver Peterson on Perth LIVE can be heard via podcast or call in to have your question answered.



As we are directly managing the federally funded Broome Cape Leveque Road upgrade project, we needed accreditation from the Office of the Federal Safety Commissioner which works with industry and government on health and safety standards on Australian building and construction projects.

The audit involved an in depth review of our Safety Management Systems in an array of categories. Specific attention was paid to:

- Occupational Health and Safety Management System compliance
- risk management and the integration of design into the risk management process
- high-risk operational activities
- · auditing
- the commitment of our senior management implementing Main Roads' operational health and safety systems.

With the hard work of a dedicated project team, we obtained the accreditation with minimal corrective actions.

A six monthly maintenance review will be conducted by the Office of the Federal Safety Commissioner in which the Corporate Safety Team will continue to work with the Regions to ensure health and safety are the foundations on which we deliver direct-managed federally funded projects.

We are taking the opportunity to apply improvements and lessons learnt through this process to improve our existing corporate practices.