Accessible to everyone

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Highlights

- TMR re-accredited as a 'Certified Customer Service Organisation' by the Customer Service Institute of Australia.

- Continued with Smart Ticketing project tests and trials, with 98.4 per cent positive or neutral customer feedback on the new devices installed on light and heavy rail.

- Launched trials of on-demand transport on the Gold Coast which provides flexible, booked and shared transport for people looking to travel around the same time within defined areas.

- Continued the School Transport Assistance Scheme working with 479 delivery partners, providing more than 1472 school routes using approximately 1838 buses.

- Continued to implement actions contained in the *Disability Action Plan 2018–2022* to improve accessibility of the passenger transport network.

- Progressed the development of a digital licence for Queenslanders, with the pilot to expand to Townsville in late-2022 followed by a state-wide rollout in 2023.

- Continued delivery of *Queensland Freight Action Plan 2020–2022* that includes over $600 million in infrastructure.

- Installed Intelligent Transport Systems technologies at heavy vehicle rest areas as part of the Bruce Highway heavy vehicle rest area trial, with positive feedback from users.

- Continued to modernise Queensland's fleet of wheelchair accessible taxis as part of the $21 million Wheelchair Accessible Taxi Grant Scheme.

- Shortlisted applicants for the supply of trains and construction of the facilities, to deliver 65 six-car passenger trains as part of the $7.1 billion investment in the Queensland Train Manufacturing Program.

- Released an *Environmental Sustainability Policy*, encouraging innovative solutions to minimise the environmental footprint and embed environmental sustainability in TMR's work.

- Approved bus operators for more battery electric buses to be rolled out across the Translink network, as part of TMR's commitment that all new urban buses in South East Queensland will be zero emission from 2025.

- Concluded the *Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015–21*, which delivered more than 130 initiatives including significant behaviour change initiatives and over $1.22 billion invested into safety infrastructure.

- Made school children safer with flashing school zone signs installed at 1190 school zones since 2012, and an additional 100 school zones scheduled to have signs installed during 2022–23.

- Delivered StreetSmarts road safety campaigns and activities during 2021–22 to improve road safety in Queensland, including the successful 'All good. All bad' campaign providing critical drink driving reminders throughout summer.

- The Maritime Enforcement Team completed 3200 vessel intercepts in 2021–22, enhancing direct engagement with the boating community and keeping Queensland waterways safe.

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Shaping our products and services to customers' changing needs

Certified Customer Service Organisation

TMR was reaccredited as a 'Certified Customer Service Organisation' against the *Customer Service Institute of Australia's* (CSIA) *International Customer Service Standard 2020–2025* (ICSS) in March 2022.

ICSS accreditation confirms that TMR's systems and processes are aligned, and that they support a 'Customers First' culture, and excellence in customer service and experience.

In TMR's March 2022 ICSS assessment, the CSIA noted that TMR's accreditation results are among the best achieved by any organisation assessed against the ICSS.

Connecting with Queenslanders through Transport Talk

Transport Talk is TMR's online customer community that enables customers to share their thoughts, ideas and insights on transport-related topics that help shape the direction of Queensland's transport future.

In 2021–22, more than 6300 Transport Talk members from across Queensland, have engaged in over 18,300 interactions and shared their views on a range of transport related issues including:

- accessibility and inclusion on the transport network
- customer experiences when interacting with TMR via digital channels
- customer satisfaction with on-demand transport services
- customer perceptions of electric vehicles
- investment priorities for the Bruce Highway.

The Transport Talk community continues to help TMR to understand and respond to customer needs and expectations, now and well into the future.

> For more information
> https://www.tmr.qld.gov.au/transportTalk

QLD*Traffic* improvements

Further improvements to the QLD*Traffic* suite of services were undertaken during 2021–22 to provide travellers in Queensland with up-to-date traffic and road condition information, allowing informed journey decisions.

QLD*Traffic's* suite of services include:

- QLD*Traffic* website
- iPhone and Android smartphone applications
- 13 19 40 phone service
- open data feeds.

Key improvements delivered during 2021–22 included:

- publishing images associated with events, flooded roads, and congestion
- a trial to expand traffic camera functionality to include publicly available flood cameras onto the QLD*Traffic* website
- road lookup functionality to show road ownership.

The services continued to see significant use throughout 2021–22. Increases during wet weather events show the QLD*Traffic* application downloaded over 100,000 times, the QLD*Traffic* website accessed nearly four million times, and more than 135,000 phones calls received by the 13 19 40 phone service.

The QLD*Traffic* service has published more than 32,900 tweets. The engagement garnered through QLD*Traffic* twitter is consistently high, indicating that this is a valuable service for many Queenslanders.

School Bus Upgrade Scheme

In 2021–22, TMR contributed $11.58 million to the purchase of 32 school buses and two seatbelt upgrades through the School Bus Upgrade Scheme (SchoolBUS).

SchoolBUS provided capital funding to assist contracted school bus operators to replace their fleet with buses that meet the latest safety standards. This ensured increased safety for Queensland students travelling to and from school on contracted services.

> For more information
> https://www.tmr.qld.gov.au/Travel-and-transport/School-transport/
> Assistance-schemes/School-Bus-Upgrade-Scheme.aspx

Taxi Subsidy Scheme

The Taxi Subsidy Scheme (TSS) is an initiative designed to provide an affordable and accessible transport option for people with severe disability, and includes a subsidy paid by the Queensland Government of half the total taxi fare, up to a maximum of $25 per trip, and access to subsidised taxi travel in other Australian states and territories.

In 2021–22, the scheme assisted 52,179 Queenslanders to access more affordable taxi travel. During 2021–22, 1,492,150 subsidised taxi trips were taken by TSS members, with subsidies of more than $12.90 million (ex GST) paid. As at 30 June 2022, TMR paid an average subsidy of $8.64 (ex GST) per trip.

The Queensland Government also allocated $7.3 million to the lift payments incentive for drivers of Wheelchair Accessible Taxis (WAT) to prioritise services to members identified as requiring a wheelchair to travel. This lift payment incentive is paid in addition to the TSS payment. 386,729 trips attracted the lift payment incentive to WAT drivers.

> ⬇ **For more information**
>
> https://www.qld.gov.au/disability/out-and-about/subsidies-concessions-passes/taxi-subsidy

Smart Ticketing

Smart Ticketing project tests and trials continued to be progressed during 2021–22. The project is responding to customer needs, by providing more choice in how TMR's customers plan and pay for their public transport journeys. In addition to *go* card and cash, customers will be able to pay using their contactless Visa, Mastercard and American Express debit and credit cards, smartphone, smart watch or smart device.

Customers will also have access to more reliable travel information via an integrated ticketing and journey planning app. Customer insights are actively being used to inform the project with a focus on being accessible and inclusive.

With one of the fastest and highest uptakes of open loop contactless payment systems globally, Smart Ticketing project achievements in 2021–22 included:

- more than 1.16 million Smart Ticketing trips on the Gold Coast Light Rail (G:link) made by customers using Visa, Mastercard and American Express contactless payment methods since new ways to pay were launched in December 2020

- nearly 23,000 Smart Ticketing trips made by customers on the first heavy rail trial of Smart Ticketing on the Ferny Grove train line since it launched in early-June 2022

- positive customer feedback from 98.4 per cent of the 21,500 customers surveyed on their experience of using Smart Ticketing on the Ferny Grove train line trial

- successful installation of more than 230 Smart Ticketing gates across our 19 gated stations in South East Queensland continues in preparation for the first heavy rail trial of Smart Ticketing payment methods on the Ferny Grove line.

> ⬇ **For more information**
>
> https://translink.com.au/about-translink/projects-and-initiatives/smart-ticketing

Case Study

Digital Service Design Office

Service Design is a human-centered design approach that equally values customer experience and the business process. TMR has established a Digital Service Design Office (DSDO) to establish enterprise capabilities and provide a strong foundation for future digital service delivery.

The DSDO offers business areas and projects strategic guidance, enterprise design resources, mentoring and delivery partnership to support digital service design capability uplift and maturity at TMR.

Recent achievements include:

- exploring the customer experience of application and approval for the Taxi Subsidy Scheme, which identified customer experience improvements and reduced waste administering the scheme

- investigating customer pain points and potential future states for the Written Off Vehicle Scheme, as well as identifying key safety objectives and processes to resolve these

- identifying a range of improvements to make paying fines online simpler and more accessible for customers through user experience testing and prototyping alternative solutions with the Queensland Disability Network

- developing and releasing of the first version of TMR's Digital Design Playbook, the first of the DSDO's enterprise design resource suite that makes digital service design repeatable and scalable

- collaborating with other Queensland Government agencies and Australian jurisdictions to leverage the Digital Design Playbook to help deliver benefits to their customers.

On demand transport

As the transport environment continues to evolve, TMR continues to look for new mobility options which can support the delivery of a single integrated transport system which is accessible to everyone.

In March 2022, TMR launched trials of on demand transport on the Gold Coast at Nerang, Highland Park and Pacific Pines.

On demand transport provides flexible, booked and shared transport for people who are looking to travel at around the same time within defined operating areas.

The Gold Coast trial services operate flexibly to provide greater public transport coverage, increase access to services and effectively connect people to key destinations within their communities.

The trial of demand responsive transport in Logan continues with more than 175,000 passenger trips taken since its inception in 2017–18. The trial has been extended to 30 June 2023 while the new integrated Via technology platform for on demand transport is piloted on the Gold Coast and Hervey Bay. The technology platform will be considered for a number of on demand services, after successful trial completion.

> **For more information**
> https://www.translink.com.au/travel-with-us/on-demand

Concessional fares for disadvantaged community members

TMR continued to provide concessional fares on rail, ferry, bus, and light rail services to ensure mobility and access across Queensland for those in the community who are disadvantaged.

In 2021–22, $283.10 million was provided in concessions and assistance to pensioners and seniors, veterans, students, people with a disability and their carers, job seekers, and asylum seekers to make public transport more affordable. Assistance ranges from public transport concessions, ticketing products, and subsidised transport schemes.

> **For more information**
> https://www.translink.com.au/tickets-and-fares/concessions

School Transport Assistance Scheme

The School Transport Assistance Scheme (STAS) helps eligible students travel to and from school on rail, bus, ferry, and tram services. In 2021–22, approximately $183 million of funding assisted about 130,000 recipients, making it one of the largest state government schemes.

The scheme can cover all or part of a student's transport costs between home and school, with the focus of assisting those students who do not have a school in their local area, students living in isolated areas of the state, and for low-income families.

The department works with 479 delivery partners, providing more than 1472 school routes using approximately 1838 buses. Throughout 2021–22, TMR worked to achieve a simpler, more customer focused STAS through targeted amendments including the reduction of red tape for service providers by removing the requirement for a signed copy of the Recipient Created Tax Invoice to be returned, and the introduction of special assistance for families impacted by natural disasters.

> **For more information**
> https://www.qld.gov.au/transport/public/school/school-transport-assistance

School transport operator payments

TMR provided funding assistance to 430 private operators to deliver school transport services in regional Queensland. Payments for these services in 2021–22 totalled $157.8 million (GST exclusive).

South East Queensland school transport services are paid as part of integrated urban and school transport service contracts and included in payments listed in Appendix 5.

> A full list of school transport operators in regional Queensland and payments is available on the Queensland Government Open Data Portal
> https://www.data.qld.gov.au

Case Study

Fairer fares and zones for regional public transport users

The Regional Refresh Program is rolling out changes to 16 regional urban bus networks across Queensland to deliver fairer, more consistent zones and fares, and improved customer service options for regional public transport users.

The program will see standardised fares and zones implemented across regional areas and the transition of all remaining *qconnect* branded networks to the Translink service model, to prepare for the future rollout of Smart Ticketing payment options across the whole of Queensland.

Under the new fare and zone structures, fares for the majority of adult and concession trips will remain the same or decrease slightly. Customers will also have access to new Translink customer channels, including the Translink website and journey planner, the MyTranslink app, and the Translink contact centre.

To prepare for the changes, in early-2022 the project team commenced a significant program of engagement with local bus delivery partners, local government agencies, and elected State representatives. This will ensure the changes meet the needs of local communities ahead of full implementation in 2022–23.

Disability Action Plan

TMR continued to implement actions contained in the *Disability Action Plan 2018–2022* to improve the accessibility of the passenger transport network for customers with a disability.

Key updates during 2021–22 included:

- $191.5 million (including $80 million Federal contribution for Brisbane Metro) allocated to the Passenger Transport

Infrastructure Investment Program for upgrading existing and new accessible public transport infrastructure

- responded to the Commonwealth's Consultation Regulation Impact Statement regarding proposed stage one reforms to the *Disability Standards for Accessible Public Transport 2002*

- held five accessibility reference group meetings which included representatives from government, industry and disability advocacy groups, including out-of-session engagement on key projects.

⊡ For more information
https://www.tmr.qld.gov.au/Travel-and-transport/Disability-access-and-mobility/Disability-Action-Plan

Passenger Transport Accessible Infrastructure Program

The Passenger Transport Accessible Infrastructure grants program provides funding assistance to local governments upgrading their existing passenger transport facilities to comply with the *Disability Discrimination Act 1992* (Cth).

These funding contributions allow local governments to:

- enhance safety and accessibility of the transport network for everyone

- modernise passenger transport facilities to comply with the *Disability Discrimination Act*

- apply consistent design standards across the passenger transport network.

In 2021–22, funding assistance was provided to 16 local governments across Queensland to support more than 250 bus stop upgrades to meet accessibility standards. In addition, funding assistance was also provided towards upgrading long-distance coach stops in regional and remote areas.

The success of these programs is built on the partnership approach with local governments, and other state government agencies, working together to deliver a single integrated transport network accessible to everyone.

⊡ For more information
https://www.tmr.qld.gov.au/Travel-and-transport/Public-transport/Public-transport-infrastructure-grants

Modernisation of the Disability Standards for Accessible Public Transport 2002

TMR has continued its critical role in the reform of the *Disability Standards for Accessible Public Transport 2002* (Cth) (Transport Standards), in partnership with the Department of Infrastructure, Transport, Regional Development and Communications.

As both the Chair and Secretariat for the National Accessible Transport Taskforce, entrusted with leading the reform process, TMR has worked

with taskforce members throughout Stage Two of the reform to ensure the Transport Standards remain efficient and effective, are fit for purpose, and meet the current needs of Australian society.

TMR led the delivery of 39 of the 54 areas of reform for Stage Two, collaborating with working group members from the Australian Government, states and territory jurisdictions, the disability sector, transport sector, and subject matter experts.

The Consultation Regulation Impact Statement for Stage Two was released in March 2022.

⊡ For more information
https://www.infrastructure.gov.au/infrastructure-transport-vehicles/transport-accessibility/reform-disability-standards-accessible-public-transport-2002-transport-standards

Case Study

Co-designing a TMR Easy Read style

Working with customers who live with diverse cognitive and intellectual abilities, TMR ran a pilot in 2021-22 to co-design a more inclusive way to present information and create easier-to-read documents.

The pilot explored complex documents with a range of customers and investigated the use of Easy Read as an option. Easy Read is an accessible and alternative style of communication that uses images, simple language, and white space to convey information. However, there are no global Easy Read standards.

Throughout the pilot, 48 prototype pages were created, more than 1500 findings emerged, and a specific TMR Easy Read style was co-designed. The new style significantly increased customer comprehension of information and provided them with a greater sense of independence and trust in the department. Customers were quoted saying: 'It's easy, it explains everything clearly', 'It's not overwhelming' and 'I'm not getting a headache.'

Easy Read versions have been developed for a range of departmental communications including the TMR Complaints Management Policy and other factsheets. They are especially helpful for customers with low literacy, intellectual disabilities, and who are time poor or use English as a second language.

⊡ For more information
https://www.tmr.qld.gov.au/About-us/Contact-us/Compliments-and-complaints/Easy-to-read-complaints-policy

New Customer Service Centre in Bundamba

A lease was signed in early-2022 for a new Department of Transport and Main Roads Customer Service Centre in Bundamba.

The new centre located at 28 Brisbane Road, will offer a full range of services including licensing, registration and other services to the community.

The new location has been chosen to provide expanded and improved services for the region, following the closure of the Redbank Select Service Centre in December 2020.

This new location will provide a safe and accessible facility that prioritises safety, functionality and accessibility for staff and the community.

The new centre is expected to open in late-2022, weather permitting.

Move Together campaign

In June 2022, TMR launched the Move Together social media campaign aimed at encouraging respectful and inclusive behaviour on public transport.

Move Together was developed from an identified need to improve the behaviour and attitudes of public transport users towards vulnerable passengers. This is the first phase of a three-year campaign that will drive social change through a strong call to action about the practical things that can be implemented to improve the public transport experience for everyone.

This campaign is a critical initiative for TMR and is an action from the TMR *Accessibility and Inclusion Strategy* that was launched in 2020. It is another step in the journey to achieving TMR's vision of creating a single integrated transport network accessible to everyone.

> For more information
> https://www.translink.com.au/travel-with-us/accessibility/move-together

Translink brand modernisation

After more than 15 years in the market, TMR updated the Translink consumer brand to a more modern, consistent, and user-friendly representation of the evolving services we are delivering, now and into the future.

The modernised brand was first applied to the Translink website and digital channels in March 2022 and will be progressively rolled out across the public transport network over time.

The new brand features an updated logo, new fonts, and a bold, more accessible colour palette, using pink and navy as the primary brand colours. Meeting visibility and accessibility requirements was a key focus of the new branding.

TMR is taking a practical, low-cost approach to the rollout, by only updating branding when it makes sense to do so, either in line with new projects or through existing maintenance programs.

Case Study

Gold Coast on demand transport trial

Operating seven days a week, on demand transport is a flexible, shared option for customers to connect with essential services in the local area and the wider Translink public transport network.

In March 2022, a new two-year on demand transport trial was launched in two areas of the Gold Coast, Pacific Pines and Nerang, Highland Park. More than 4000 Translink On Demand app downloads were recorded and around 11,000 trips taken across the two areas as at 30 June 2022.

Using a go card, customers simply touch on and off when they board and leave an on-demand service. Customers can pre-book and manage their trips from their smartphone using our new Translink On Demand app or by calling the Translink call centre.

On demand transport improves public transport coverage for northern Gold Coast residents in locations where regular public transport services are not available or possible. Community feedback has been positive for on demand transport with convenience a standout feature.

Digitising customer interactions

Digital transformation

TMR has continued to progress digital transformation of service delivery in 2021–22. Customers increasingly prefer to complete their transactions digitally, with use of TMR online services growing year on year. Further enhancements to online services have significantly improved the customer experience which has contributed to this growth. These included:

- easier change of address across more online services

- extended choice to receive transaction documents by email

- simplified language and instructions across many online services

- updated and improved online service look and feel

- expanded messaging services to support customers needing help while transacting online.

TMR has also expanded its Robotic Process Automation (RPA) program in 2021–22. RPA has been implemented for 12 more business processes which has delivered infringement processing efficiencies, completing customer refunds, processing disability parking permits and medical condition reporting. RPA has

improved response times for customers and freed staff to focus on more complex customer enquiries.

Processes for staff working in the field are also undergoing digital transformation. TMR Transport Inspectors perform a manual, paper-based, process for capturing and recording information obtained during Approved Inspection Station audit activities. To improve these processes, a new digital auditing tool will be implemented in September 2022 to deliver a more streamlined compliance auditing process through workflow redesign and automation of manual processes.

Messaging service for customers

Following a successful pilot in February 2021, TMR's customer service staff implemented messaging as an ongoing offering to TMR customers.

Messaging allows customers to use their mobiles and other electronic devices to have a conversation with customer service staff on their terms, avoiding waiting on the telephone or attending a customer service centre. By utilising an SMS-style of conversation, customers can go about their day and be notified when TMR has further information for them.

As we look toward the future, TMR is implementing bots and other automated tools to help our customers on their online journey. This will work toward improving website interactions and reducing wait times for customers who need assistance.

From the implementation of messaging in May 2021 until March 2022, over 80,000 conversations have been conducted with customers in the messaging environment.

Online buoy mooring management system trial

Following last year's online buoy mooring payment trial, TMR has successfully implemented online payments for all buoy moorings throughout the state.

This initiative has been well received by customers with a 73 per cent take-up state-wide. The change replaces the need for customers to physically attend a TMR customer service centre.

As the change has been so well received and successful, TMR is now rolling out similar options for other customer transactions.

MyTranslink app

The MyTranslink app was rebranded in March 2022 as part of the broader Translink brand modernisation project to update Translink's corporate identity. Throughout 2021–22, an average of 142,000 customers use the app each week.

> **For more information**
> https://www.translink.com.au/mytranslink

Digital Licence App

The digital licence app is a Queensland Government initiative that allows customers to access their licence and other government issued credentials through a mobile device. The digital licence will make it easier and safer for Queenslanders to share their information and control how much information they share with others.

In 2020, TMR piloted digital licences on the Fraser Coast, receiving a 94 per cent customer satisfaction rating. The pilot is being expanded to Townsville in late-2022 with a state-wide rollout to follow in 2023.

The digital licence will not be mandatory. A physical version of the licence will continue to be issued for the foreseeable future.

> **For more information**
> https://www.tmr.qld.gov.au/About-us/News-and-media/Digital-Licence-App-media-assets

NaviLens

Translink's Digital Futures Program has recently completed an exciting Australian-first Proof of Concept of a publicly available solution called NaviLens.

Via an app, the NaviLens solution allows customers to scan colourful machine-readable codes on their phone to access real-time information, wayfinding and audible experiences for people with visual impairment.

The NaviLens codes which were installed in King George Square Station in March 2022, can be scanned from up to 20 metres away and within a fraction of a second can provide extremely accurate positioning and distance information.

Key customer stakeholder groups such as Vision Australia and Guide Dogs Queensland participated in testing the solution at King George Square Station and feedback was very positive.

The learnings gathered from the trial will help to inform any potential future applications for the solution.

Realigning TMR with the new national datum

Since 2018, TMR has been preparing for a full transition of geospatial data and systems to Australia's new national datum—Geocentric Datum of Australia 2020.

Datum is the base information that Australian coordinates are derived from. This information is used widely across TMR.

In late-2020, TMR's Geocentric Datum of Australia 2020 Transformation commenced migrating systems and data to better align with global satellite positioning systems.

During 2021–22 TMR's current geospatial and survey systems and data were successfully migrated to the new datum ensuring seamless transfer and use of spatial data to plan, construct, and maintain Queensland's transport network.

Technical training and support have been provided to ensure that capability exists broadly across TMR and the civil construction industry.

Case Study

Smart Ticketing on track with new rail travel trial

Customers participating in the first Smart Ticketing trial on Queensland Rail's network have embraced the new ways to plan and pay for public transport in South East Queensland.

Launched on the Ferny Grove line on 6 June 2022, more than 98.4 per cent of the 21,500 Smart Ticketing customers surveyed during the month of June provided positive feedback.

Customers welcomed the new ways to pay with Visa, Mastercard and American Express and described new pink Smart Ticketing equipment as easy to use and identify during transit. Developed by Gilimbaa artist, Elisa Jane Carmichael (Quandamooka) 'The Connecting Thread' artwork design on the equipment symbolises and reflects the unique landscape of Queensland, exploring rainforest, bush, freshwater, saltwater, desert and the pathways that connect country and people.

Nearly 23,000 Smart Ticketing trips were made by customers on the Ferny Grove line trial to 30 June 2022. The Ferny Grove trial comes on the back of the successful Smart Ticketing trial on the Gold Coast Light Rail (G:link) in December 2020, which recorded more than 1.16 million Smart Ticketing trips to 30 June 2022.

Engaging with industry

National Services Transition to the National Heavy Vehicle Regulator

The National Services Transition is an operational reform program being undertaken by TMR and the National Heavy Vehicle Regulator. It will investigate a potential transition of TMR's heavy vehicle regulatory services, such as on-road heavy vehicle compliance, to the National Heavy Vehicle Regulator for direct delivery.

In July 2021, the Minister for Transport and Main Roads announced Queensland's involvement in the National Services Transition Program, which aims to provide consistent and streamlined regulation of heavy vehicles across participating Australian jurisdictions. Queensland is the last participating jurisdiction to investigate a transition of services to the National Heavy Vehicle Regulator.

TMR is undertaking a detailed due diligence process to ensure a strong understanding of existing service delivery arrangements that will inform the draft National Heavy Vehicle Regulator Concept of Operations. This collaborative process will guide how future heavy vehicle regulation will be conducted in Queensland.

Heavy Vehicle National Notice development

TMR has continued to work closely with the National Heavy Vehicle Regulator and Queensland industry to develop National Notices.

These notices provide an alternative means of efficiently providing heavy vehicle access to Queensland's road network, without the requirement for a permit.

During 2021–22, a new Notice for Special Purpose Vehicles, such as heavy mobile cranes, weighing up to 40 tonnes, was developed and other National Notices have been enhanced to ensure practicality for industry stakeholders.

Industry relationships

In 2021–22, TMR worked closely with industry groups to develop new and updated specifications and technical notes to assist industry in delivering effectively for all Queenslanders.

TMR continued to engage with and consult, different stakeholders on an ongoing basis. These include but are not limited to:

- AustRoads
- Australasian Railway Association
- Queensland Bus Industry Council
- Public Transport Association Australia New Zealand
- Australian Flexible Pavement Association
- Cement and Concrete Aggregates Australia
- Civil Contractors Federation
- Waste Recycling Industry Association of Queensland
- Consult Australia
- Queensland Major Contactors Association
- RACQ
- ITS Australia
- Roads Australia
- AustStab
- Engineers Australia
- Australian New Car Assessment Program
- Queensland Trucking Association and Livestock Carriers
- Institute of Public Works Engineers Australia
- Infrastructure Association of Queensland.

TMR worked closely with Queensland industry partners at a national level via Austroads. The collective is comprised of Australian and New Zealand transport agencies which represent all levels of government.

Through the National Asset Centre of Excellence, an initiative by TMR and the Australian Roads Research Board, a range of new collaborative research activities are in progress.

The Transport Infrastructure Collaboration Taskforce, a joint forum between the department and the civil transport industry, was established in 2021 to drive greater collaboration in procurement and delivery to address key industry challenges. The Taskforce delivered two key outputs in 2021–22, the TMR-Infrastructure Industry Engagement Charter and the Collaborative Procurement and Delivery Model Concept Paper.

Queensland Freight Action Plan

The *Queensland Freight Action Plan* is a rolling two-year plan which actively supports and informs a range of national, state, regional and local government plans.

This ensures a clear line of sight, and alignment with Our Future State - Advancing Queensland's Priorities, TMR's strategic plan, the *Queensland Freight Strategy—Advancing Freight in Queensland, National Freight and Supply Chain Strategy and National Action Plan*.

It supports Queensland's freight system as a key enabler for the vital components of our economy, including production, distribution and trade.

Through collaboration with industry, it provides the opportunity for businesses to be efficient, keep shelves stocked, deliver online shopping, access construction materials on site when needed and for household waste to be collected every week.

The *Queensland Freight Action Plan* is consistent with the *Queensland Freight Strategy—Advancing Freight* in Queensland's shared commitments and critical enablers including:

- build effective partnerships
- unlock economic opportunity
- smarter connectivity and access
- resilient freight system
- safer freight movements
- quality freight data
- skilled workforce.

For more information

https://www.tmr.qld.gov.au/business-industry/Transport-sectors/Freight/Queensland-freight-strategy-advancing-freight

Heavy vehicle rest area trial

The Bruce Highway heavy vehicle rest area trial began in 2020 to provide heavy vehicle drivers with real-time information about the availability of rest areas.

The availability of this information has enabled drivers to better plan their journeys and rest breaks. The trial was in response to the *Heavy Vehicle Safety Action Plan 2019–21*.

Intelligent Transport Systems technologies were installed at heavy vehicle rest areas along the Bruce Highway during 2021–22 at:

- Ogmore
- Gin Gin
- Miriam Vale
- Waverly Creek
- Christmas Creek
- Helens Hill
- Warrego Highway
- Gregory Developmental Road
- Landsborough Highway
- Flinders Highway.

The rest area upgrades during 2021–22 include:

- advanced information roadside warning signs approximately 10 kilometres ahead of the rest area to provide information on parking availability in real-time
- solar powered lighting and solar and wind power
- Closed-Circuit Television Cameras (CCTV)
- automatic number plate recognition cameras to increase safety and security for drivers at the rest area.

Feedback from the trial has been positive, with more drivers using the heavy vehicle rest stops.

Temporary traffic management harmonisation

In 2021–22, TMR remained committed to ensuring the safety of road users and workers at road work sites across Queensland. TMR harmonised the Manual of Uniform Traffic Control Devices and temporary traffic management standards in Queensland with nationally recognised best practices of Australian Standard 1742.3 (2019) and Austroads Guide to Temporary Traffic Management.

The new standards improve protection for workers when they are performing construction and maintenance work on our roads and ensures the network remains accessible to all road users who need to travel through road work sites.

TMR is also working with a national reference group to establish the Austroads Innovative Temporary Traffic Management Device and Solution Assessment which will assess innovative devices and

solutions for use in temporary traffic management environments on public roads in Australia and New Zealand.

TMR continues to engage with industry to improve compliance with these standards and to identify innovative practices that improve safety outcomes.

Delivering with partners

Wheelchair Accessible Taxi Grant Scheme

Now in its third year, the four-year Wheelchair Accessible Taxi Funding program continues to modernise Queensland's fleet of wheelchair accessible taxis.

The $21 million program supports the taxi industry by providing accessible transport options for people with reduced mobility.

Funding was provided for new wheelchair accessible taxis to replace ageing vehicles or those written off by an accredited insurance provider, such as unrepairable or too costly, to repair.

The program also offers funding for replacing a conventional taxi with a wheelchair accessible taxi in some areas. Eligible taxi operators can apply for 50 per cent funding (a maximum of $45,000) towards the purchase of a new vehicle.

The scheme is administered by the Queensland Rural and Industry Development Authority. A total of 118 applications were received from across Queensland in 2021–22 of which, 105 were approved. In total, since inception, 275 applications have been received, 234 approved and 187 fulfilled and vehicles operating.

> For more information
> https://www.tmr.qld.gov.au/business-industry/Taxi-and-limousine/Industry-information/Taxi/Wheelchair-accessible-taxis

Bus driver safety initiatives

Following the completion of the Queensland Bus Driver Safety Scheme in 2020, TMR has continued to work with the bus industry to ensure improved safety measures such as driver barriers are incorporated in the renewal of the fleet in coming years.

An independent review of bus driver barriers by PricewaterhouseCoopers identified future approaches for bus driver barriers. In March 2022, the Minister for Transport and Main Roads announced that driver barriers would be mandatory in all new urban service vehicle purchases from 1 July 2022.

Delivery partners have the flexibility to choose the barrier that best suits their operating environment, based on a risk assessment of their operating environment, consultation with their workforce and vehicle models in their fleet.

TMR is working with delivery partners to implement this approach, which also includes a focus on supporting measures such as de-escalation training.

In partnership with the Queensland Bus Industry Council (QBIC) and Griffith University, TMR launched the Minimising Passenger Hostility de-escalation training program in June 2021 to assist drivers in managing customer aggression.

This resource is available to all urban service drivers via the QBIC website and has received positive feedback. Between June 2021 and April 2022, 352 drivers from 43 different organisations across Queensland have accessed the training.

Bus driver safety also continued to be supported during 2021–22 through:

- deploying Translink Senior Network Officers in areas where incidents are occurring

- delivering partner-led enforcement using Network Officers (formerly known as customer service officers) including in Townsville and Cairns

- implementing a smart ticketing system that will limit the driver's role in cash handling across Queensland.

TMR continued to engage with industry and other key stakeholders on bus safety issues and best practice initiatives to keep bus travel safe for everyone.

> For more information
> https://translink.com.au/about-translink/projects-and-initiatives/bus-driver-safety-review

Queensland Bus Driver of the Year Awards

The winners for the 2021 Bus Driver of the Year Awards were announced at the Queensland Bus Industry Council's annual conference in April 2022.

The winners of each category were:

South East Queensland Bus Driver of the Year

- Kate Addley (Transdev, Capalaba)

Regional Queensland Bus Driver of the Year

- Jaswinder (Jessie) Singh (Bus Queensland, Toowoomba)

School Services Bus Driver of the Year

- John Maddy (CDC, Sunshine Coast)

More than 1200 nominations were received for the 2021 awards. The awards celebrated drivers who went above and beyond to deliver excellent customer service and recognised all Queensland bus drivers for the critical role they played in keeping Queenslanders connected to work, study, essential services and each other during COVID-19.

⌓ **For more information**
https://www.translink.com.au/news-and-media/competitions-and-offers/bus-driver-awards

Regional Roads and Transport Groups

The Roads and Transport Alliance (Alliance) is a partnership between TMR and Queensland local governments, represented by the Local Government Association of Queensland.

Central to the Alliance are 17 Regional Roads and Transport Groups (RRTG), representing 67 local governments across Queensland, including seven First Nations local governments.

RRTGs are the primary decision-making bodies that determine regionally prioritised improvements to their communities' transport infrastructure utilising Transport Infrastructure Development Scheme (TIDS) funding.

In 2021–22, 235 projects were delivered, with joint investment of more than $120 million in local roads, safer school drop-off areas, and active transport infrastructure.

Projects that used TIDS funding during 2021–22 included:

- Far North Queensland RRTG, Mareeba Shire Council: Bower Road, widen and seal; $500,000

- Outback RRTG, Boulia Shire Council: Boulia - Tobermorey Road (Donohue Highway), pave and seal; $1.047 million

- Scenic Valleys RRTG, Ipswich City Council: Springfield Greenback Arterial, Springfield Parkway to Eden Station Drive, duplicate two to four lanes; $705,446.

⌓ **For more information**
https://www.tmr.qld.gov.au/rrtg

TMR's first digitised mailroom

TMR continues to face a changing work environment, requiring the management of customer population growth and face-to-face demand through digital migration increases whilst continuing to deliver an efficient, quality service to customers and stakeholders.

In May 2021, TMR partnered with Australia Post to pilot the digitisation of mailroom functions. The objective of this pilot was to streamline and digitise select functions of TMR's mailroom that were conducted in-house.

Benefits to TMR since the implementation of the Digitised Mailroom in November 2021 have included:

- reducing touch points and cost of the previous inbound mail process

- ensuring business continuity that supports a purpose-driven, capable and agile workforce

- more efficient utilisation of TMR's available workforce capacity state-wide and redirection of resources.

TMR is committed to exploring significant opportunities for robotic process automation to drive further efficiencies of the digitised mailroom and achieve enhanced customer experience.

Transport Academic Partnership

The Transport Academic Partnership 2020–25 is a $3.7 million agreement between TMR, Motor Accident Insurance Commission, Queensland University of Technology, Griffith University, and The University of Queensland.

The partnership continues to facilitate innovative transport research and development and builds mutual capability across government, industry, and academic sectors. The partnership supports the mutual delivery of an annual work program of projects across various transport topics.

Research projects during 2021–22 included:

- improved fatigue management in the rideshare industry

- accessible designs for automated passenger transport vehicles

- opportunities for MaaS in regional Queensland

- enhanced use of TMR's digital video data

- sustainable disposal of derelict ships

- future options for fuelling of electric buses.

The agreement also facilitates an internal procurement strategy to ensure eligible research and development projects can be delivered quickly and efficiently. The established partnerships provide prompt and innovative benefits for all parties.

⌓ **For more information**
http://www.tmr.qld.gov.au/Community-and-environment/Research-and-education/Transport-Academic-Partnership

Electrical licence partnership

The Electrical Safety Office (ESO) within the Office of Industrial Relations (OIR) has partnered with TMR to improve ESO licensing processes. TMR will work closely with OIR to deliver this initiative to mitigate the risk of fraudulent electrical licence use.

Since 2016, TMR has delivered the High-Risk Work Licence on behalf of OIR and this initiative is an extension of the positive partnership built between these two agencies.

OIR seeks to leverage TMR's capabilities to streamline application processes, strengthen identity verification, and leverage TMR's counter network and card production services.

Like the Working with Children (Blue Card) project delivered on behalf of the Department of Justice and Attorney-General and the Worker Screening Clearance Cards delivered on behalf of the Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships, this initiative is another opportunity to deliver making services more accessible to Queenslanders.

Queensland Train Manufacturing Program

The Queensland Train Manufacturing Program (QTMP) was established to meet the increasing demand on rail transport in South East Queensland over the next 10 years.

TMR committed $7.1 billion to deliver 65 six-car passenger trains manufactured at a purpose-built manufacturing facility at Torbanlea, in the Maryborough region and a train stabling and maintenance facility at Ormeau.

An expression of interest phase for the supply of trains and construction of the facilities was completed with the announcement of three shortlisted applicants in June 2021. The shortlisted applicants entered the request for proposal phase in November 2021, which closed in mid-2022, with a successful applicant planned to be announced late-2022.

TMR conducted multi-criteria assessments to identify suitable sites for the manufacturing and rail facility. The Torbanlea site was gazetted in December 2021. A land acquisition process has commenced for the preferred site in the Gold Coast region for the rail facility. The successful applicant is expected to commence construction of the facilities from early-2023, with the first tranche of trains delivered from 2025.

The QTMP will deliver a pipeline of work over the next decade that will support skills development and training as well as hundreds of construction and manufacturing jobs in Maryborough and regional Queensland.

In forming design requirements for the new fleet, TMR incorporated all recommendations from the New Generation Commission of Inquiry and is working closely with Commissioner Michael Forde and the Queensland Accessible Transport Advisory Council.

TMR undertook early and comprehensive engagement with the disability sector to co-design the new trains and ensure a fully compliant fleet that is accessible and functional for all passengers.

⌨ **For more information**
https://www.tmr.qld.gov.au/projects/Queensland-Train-Manufacturing-Program-QTMP

New Generation Rollingstock

The New Generation Rollingstock (NGR) fleet has provided reliable public transport for South East Queensland since it was introduced in 2017, delivering more than 476,000 passenger services. The fleet consistently achieves more than 99 per cent availability for day-to-day passenger services.

NGR trains have played an important part in delivering public transport throughout COVID-19, allowing the standard timetable services to continue throughout the year. TMR has provided additional cleaning and sanitisation on public transport, including on the NGR fleet.

Work is underway to modify the NGR fleet to allow them to travel on the Cross River Rail infrastructure. These modifications include installation of onboard hardware for European Train Control System Level 2, Automatic Train Operation and Platform Screen Doors.

The $335.7 million NGR accessibility upgrade program is proceeding, with the 23rd NGR train currently undergoing upgrades.

Accessibility upgrades include:

- a second accessible toilet module on every NGR train
- 10 per cent increase in circulation space inside the toilet modules
- improved sink design
- more grab/handrails
- priority seats increased from 24 to 88 per train.

The fleet upgrade is being delivered at the Downer facility in Maryborough. The design of the upgrades came after intensive consultation with a project working group from the disability sector, using an innovative co-design process.

The accessibility upgraded NGR fleet are scheduled to be back in service by 2024. TMR will continue to engage with the disability sector throughout the upgrade process.

⌨ **For more information**
https://www.tmr.qld.gov.au/projects/New-Generation-Rollingstock

European Train Control System

A project to introduce European Train Control System (ETCS) signalling technology is underway to significantly improve safety and support more efficient services. The state is investing $717.3 million in the ETCS project for Cross River Rail to make the rail network work smarter and build future capacity for more services.

Benefits of ETCS technology include increased safety, capacity, efficiency, and reliability for the inner-city rail network. It is also necessary for the safe operation of Cross River Rail's twin tunnels.

Queensland Rail trains will be upgraded with the ETCS. This involves the delivery and integration of new trackside equipment, data radio systems, a rail traffic management system, and onboard train equipment. The technology includes axle sensors that detect the train's speed and new touchscreens in the driver's cabin.

The fitment of ETCS onboard equipment on passenger trains is ongoing and in February 2022 a Queensland Rail passenger train successfully operated in an ETCS Level 2 mode on the purpose-built test track at the Redbank fitment facility. Level 2 mode is continuous supervision of train movement with constant communication via GSM-R (Global System for Mobile Communications—Railway) between the train and trackside. This significant milestone demonstrates the successful integration of the infrastructure and technology used to make the system work in a test environment.

A key focus during 2021–22 was the works to commission the Shorncliffe Pilot Line which runs from Boondall to Shorncliffe. The Shorncliffe Pilot Line will enable a number of integration testing and readiness activities to support the Cross River Rail tunnel opening.

On 22 December 2021, TMR entered into the ETCS Program Alliance Agreement with Hitachi Rail along with Queensland Rail and the Cross River Rail Delivery Authority. This collaborative contracting model helps bring all parties closer together in delivering ETCS on the network.

Some key achievements during 2021–22 to support progress on the Shorncliffe Pilot Line were as follows:

- the successful completion of end-to-end integration of the functions required for the Shorncliffe Pilot Line in the test lab
- the Rail Management Centre was fitted and powered with the new control system.

The first radio mast and supporting signalling infrastructure was installed at Sandgate to enable dynamic testing to occur on the Shorncliffe line in July 2022.

Preserving our history and heritage

Environmental sustainability

Aiming to be an industry leader in environmental sustainability, TMR released its *Environmental Sustainability Policy* during 2021–22. The main objective of the policy is to protect the environment by moving beyond compliance and encouraging innovative solutions to minimise the environmental footprint and embed environmental sustainability in its work.

Key to the policy's success will be collaboration with stakeholders in its implementation.

TMR has also developed a *Waste 2 Resource Strategy* outlining how it will achieve its vision to become a zero-waste organisation and transport industry leader through circular economy practices.

The strategy encourages the use of recycled materials and sets principles for their use, such as:

- the end result provides as good, if not better, performance than conventional materials
- they do not harm the environment, the community or workers
- they do not cause long-term operational issues
- they are 're-recyclable'.

> **For more information**
>
> https://www.tmr.qld.gov.au/Community-and-environment/ Environmental-management/Environmental-sustainability-policy
>
> https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Project-waste-reporting

Sustainability and recycled materials

TMR is committed to supporting the Queensland Government's *Waste Management and Resource Recovery Strategy* as outlined in TMR's *Waste 2 Resource Strategy*, using recycled materials in the construction and maintenance of the state-controlled road network.

In 2021–22, key achievements included:

- continuing to use recycled tyres (crumb rubber) in sprayed seal surfacings
- undertaking additional trials using recycled tyres (crumb rubber) in asphalt (following on from the trials done in 2020–21)
- continuing research into the potential to expand the responsible use of (selected) recycled waste materials in roads
- continuing research into the potential to responsibly use recycled waste plastics (e.g., for road furniture for example, bollards, posts or retaining walls)
- continuing to use insitu stabilisation (in-place recycling) techniques by pulverising the road and mixing various stabilising agents (including cement, bitumen, fly ash and slag) to strengthen and rejuvenate pavement.

Minimising impacts on native fauna

TMR continued to implement initiatives during the construction and operation of transport infrastructure to minimise impacts on native fauna and to ensure compliance under state and federal legislation.

In 2021–22, a range of projects were delivered in addition to business-as-usual activities, such as the installation of fauna infrastructure on projects.

Key achievements during 2021–22 included:

- inspection and, where required, repair over 19 kilometres of koala exclusion fencing as part of a 4 year $5 million maintenance and rectification program for koala exclusion fencing in North Coast Region

- vegetation remediation under bridges over Big Maria Creek and North Hull Creek in Far North District to provide for Southern Cassowary Movement

- delivery of six kilometres of koala exclusion fencing, three arboreal fauna crossing poles, 44 nest boxes and multiple dedicated aquatic and terrestrial crossing structures on the Mount Lindesay Highway project in South Coast Region

- targeted social media campaign to reduce southern cassowary vehicle collisions in Far North Queensland

- displaying koala awareness messaging on departmental variable message signs for drivers during the koala breeding seasons to reduce koala vehicle collisions in South East Queensland.

TMR also initiated the commencement of updates to the Fauna Sensitive Road Design Manual to ensure the manual continues to provide best practice guidance on how to deliver transport infrastructure that better accommodates the needs of native fauna.

> **For more information**
> https://www.tmr.qld.gov.au/Community-and-environment/
> Environmental-management/Land/Fauna-management

Zero emission buses

As set out in the *Zero Emission Vehicle Strategy*, TMR has made a commitment that from 2025 all new urban buses in SEQ will be zero emission buses, and for regional Queensland, implementation will begin between 2025–2030.

Since July 2021, TMR has given approval to the following bus operators for more battery electric buses to be rolled out across the Translink network during 2022:

- Sunbus Sunshine Coast introduced five Yutong electric buses across its routes on the Sunshine Coast

- Marlin Coast Sunbus will introduce five Yutong buses on its network in Cairns operating from the new Portsmith depot

- Clarks Logan City will introduce ten BusTech ZDI electric buses across the Logan network. These buses will be charged using Tritium chargers, locally built in Queensland with 100 per cent renewable energy accredited by GreenPower

- Surfside Buslines will introduce ten BYD/Volgren buses on the 777-airport route from its newly built dedicated electric bus depot at Currumbin

- Hornibrook Buslines will introduce 16 ZDI electric buses onto its network in northern Brisbane. These buses will operate from its zero-emission depot at North Lakes which will charge the buses using 100 per cent renewable energy accredited by GreenPower

- Translink will introduce its own two Volvo/Volgren buses onto the Spring Hill loop service in late-2022.

Logan Coaches continue to operate its BYD/Gemilang battery electric buses delivering Translink's first zero emission bus route to the community at Yarrabilba.

Transdev Queensland lead the way with its pathfinding BYD/Volgren battery electric bus, known as Aurora 3, which operates across Redland Bay.

Both Logan Coaches and Transdev are providing critical learnings to enable a successful transition ahead of the 2025 commitment.

Woorabinda community

The Director-General has continued in his role as Government Champion for Woorabinda marking the eighth year of TMR working with the community.

While quarterly visits were impacted by the effects of COVID-19 and weather events, TMR continued to work with the Mayor and Chief Executive Officer to progress the community's agenda during 2021–22 including:

- working with the community on its response to COVID-19

- continuing works under the Memorandum of Understanding, designed to build the community's capability in road infrastructure

- working with council to:
  - plan access in and around a new housing subdivision
  - plan and install road safety treatments around schools
  - secure funding to replace the town's water supply reservoir.

TMR will continue to work to achieve improved economic and social outcomes, and address barriers to effective service delivery in the region.

Creating sustainable outcomes for First Nations Queenslanders

During 2021–22 TMR's commitment to working with First Nation Queenslanders was taken to new heights, with the establishment of the Indigenous Strategy Team. The team's initial focus is to co-design a strategy which creates sustainable economic outcomes for Aboriginal peoples and Torres Strait Islander peoples.

TMR will have a roadmap to increasing and sustaining procurement spend with Aboriginal and Torres Strait Islander businesses, maturing the cultural capability of the workforce, strengthening the Indigenous Employee Network, creating culturally inclusive spaces for the customers and employees, and identifying opportunities to celebrate First Nations cultures within TMR's service delivery.

The strategy is building on existing partnerships with the Woorabinda and Cape York communities, and directly aligns with the Australian Government's commitment to Closing the Gap, the *Queensland Government's Reconciliation Action Plan 2018–2021*, and 2032 Brisbane.

Reconnecting the community after natural disasters

In 2021–22, TMR spent $111.09 million repairing state roads following natural disasters, including:

- reconstructing 73.7 kilometres of road pavement

- repairing 322 earthworks and batter locations

- repairing 55 structures (including bridges and culverts)

- clearing 319 silt and debris locations.

A significant reconstruction program is underway after extensive severe flooding across South East Queensland in late-February and March 2022. This will repair major road damage across 22 local government areas, including numerous landslips, widespread pavement damage and scouring around bridges and culverts.

TMR completed design for slope stabilisation works to repair bushfire damage at Cunninghams Gap, with construction to start in September 2022.

Heavy rainfall in the Gold Coast hinterland in December 2020 caused a significant landslip on Tamborine Mountain Road, which is due to reopen in August 2022 following repairs.

Assistance for these projects will be provided through the jointly funded Commonwealth-State Disaster Recovery Funding Arrangements.

> ⊡ **For more information**
> https://www.tmr.qld.gov.au/projects/programs/natural-disaster-program

Road Safety

Queensland Road Safety Strategy and Action Plan

The *Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015–21*, concluded at the end of 2021 alongside the *Queensland Road Safety Action Plan 2020–21*, the third and final action plan under the strategy.

More than 130 initiatives were delivered during this seven-year period, including delivery of significant behaviour change initiatives, and over $1.71 billion invested into safety infrastructure through the Targeted Road Safety Program.

Highlights from the final year of the *Queensland Road Safety Action Plan 2020–21* included:

- delivery of a world-leading camera enforcement program that detects drivers using their mobile phones illegally or not wearing a seatbelt

- new education programs for drink drivers

- reforms to the Alcohol Ignition Interlock Program.

In April 2022, the *Queensland Road Safety Strategy 2022–31* and Queensland *Road Safety Action Plan 2022–24* were released, reaffirming Queensland's commitment to zero road trauma by 2050.

The strategy takes a new approach to road safety that involves responding to community needs at the local level, building partnerships with new stakeholders, and leveraging new technologies and data sets to improve road safety outcomes.

Remade transport regulations

During 2021, TMR undertook the rewrite of three significant regulations—Driver Licensing, Vehicle Registration and the Vehicle Standards and Safety regulations.

In combination, these regulations govern significant aspects of the Queensland road network. The new regulations were made by Governor in Council, and commenced on 1 September 2021.

Community Road Safety Grants Scheme

In 2021–22, the Community Road Safety Grants scheme awarded $23,440,181 over four and a half years to 18 community organisations for the delivery of Learner Driver Mentor and Road Safety Education Programs across Queensland.

Learner Driver Mentor Programs provide disadvantaged people with the opportunity to complete the supervised driving requirements of Queensland's graduated licensing system through organising and managing the support of a volunteer mentor network and vehicles.

Road Safety Education Programs aim to equip children, adolescents and young people with the attitudes, skills and knowledge they need to become safer road users.

Since 2013, the Community Road Safety Grants scheme has awarded more than $45 million to 536 community-based road safety education initiatives.

Examples of grants awarded during 2021–22 included:

- Queensland Police-Citizens Youth Welfare Association (PCYC) awarded $4.5 million to deliver a Learner Driver Mentor Program to 11 locations across Queensland

- the Royal Automobile Club of Queensland Limited (RACQ) awarded $3.15 million to deliver five in-school road safety

education programs influencing student behaviour to adopt life-saving road safety strategies

- Road Safety Education Limited awarded $2.925 million to deliver the RYDA program targeting secondary school students through a series of practical workshops that aim to change the way young people think about road safety

- $670,500 to You Belong Australia Ltd to deliver a Learner Driver Mentor Program for people from culturally and linguisticly diverse backgrounds located within the Toowoomba region

- Central Queensland Indigenous Development Limited awarded $292,500 to deliver a Learner Driver Mentor Program to the community of Woorabinda.

> ⊡ **For more information**
>
> https://www.qld.gov.au/transport/safety/road-safety/community-road-safety-grants

Targeted Road Safety Program

The Targeted Road Safety Program delivers cost-effective, high-benefit infrastructure safety treatments on the state-controlled and local government road networks, to treat locations with a significant crash history or other identified safety problems.

The Program has 13 sub-programs, including:

- high risk roads

- safer roads sooner

- black spot program

- mass actions

- route actions

- vulnerable users.

As at 30 June 2022, the Targeted Road Safety Program delivered a record $494.9 million in safety treatments across Queensland during 2021–22. It is primarily funded from the Camera Detected Offence Program (CDOP) and the Australian Government Road Safety Program and significantly improves safety on the state's road network.

One of the major projects delivered in 2021–22 was $14 million to install or replace rest areas on main highways across the State, including the Capricorn, Landsborough, Cunningham, Warrego, Moonie, Leichhardt, Gore and Bruce highways.

Other major projects included $8 million to pave and seal at Monto–Mount Perry Road (Mail Bag Creek to Kerwee Road); $7.49 million for Town Entry Treatments in Far North Queensland; $6.79 million upgrade of Carnarvon Highway and Warrego Highway intersection; $6.01 million for pavement strengthening and widening on the Landsborough Highway (Winton–Kyuna); and, $6.59 million to improve cycleway facilities on the Bruce Highway (Benaraby–Rockhampton).

School Transport Infrastructure Program

Since it began in 2018–19, the $20 million School Transport Infrastructure Program (STIP) has improved the safety and operation of schools through enhanced school transport infrastructure.

The STIP aims to improve safety and provide long-term solutions for one of the Queensland's most vulnerable road user group, school children.

94 projects have been approved for funding in the past four years, with STIP funding infrastructure projects including school drop off and pick up zones, car parks, footpaths, wombat crossings, traffic islands and signs.

As at 30 June 2022, 89 of these projects have been delivered.

The STIP complements the Transport Infrastructure Development Scheme which provides funding to local governments for transport related initiatives which support state government objectives.

It also complements other ongoing initiatives to improve safety in and around Queensland schools, including the Flashing School Zone Sign Program, the School Crossing Supervisor Scheme and the Community Road Safety Grants Program.

Flashing school zone signs

School children across Queensland are safer with flashing school zone signs installed at 1190 school zones since the program began in 2012.

Funded by the Camera Detected Offence Program, flashing school zone signs have been installed at sites across the state, including:

- Rockhampton Grammar School

- Warwick West State School

- Bowen State High School

- MacKillop Catholic Primary School, Mackay

- a number of sites in South East Queensland.

An additional 100 school zones are scheduled to have signs installed during 2022–23.

Case Study

Drink driving reform

Drink driving is a 'Fatal Five' driving behaviour and is responsible for more than 20 per cent of the lives lost each year on Queensland roads. Besides the human costs, death and serious injuries involving drink drivers cost the Queensland community an average of $741 million each year.

September 2021 saw the roll out of the most significant package of drink driving reforms since the introduction of random breath testing. These reforms incorporated two key elements: an expansion of the existing Alcohol Ignition Interlock Program (Interlock Program), and the introduction of education programs to support people to separate drinking from driving.

In the Interlock Program, participants must have an alcohol ignition interlock fitted to any vehicle(s) they drive. Before they can be re-licensed, first-time drink drivers must complete a short online education program. Repeat drink drivers must complete a more comprehensive face-to-face education program as a condition of completing the Interlock Program.

The education programs compliment the Interlock Program, which is now performance-based. This means a drink driver cannot remove the interlock until they have demonstrated they have separated their drinking from driving.

Within the first year, more than 5000 people have completed the short online education program, with 99 per cent reporting that they believe they are unlikely to drink and drive again.

For more information
https://www.qld.gov.au/transport/news/features/harsher-penalties-for-drink-drivers

Road Safety Data Bureau

To better understand the social and economic costs of road trauma in Queensland, the Road Safety Data Bureau was established in 2019 to conduct complex analysis of road crash and trauma data from various government agencies.

The team includes representatives from TMR, the Queensland Police Service, Queensland's Motor Accident Insurance Commission and Queensland Health's Jamieson Trauma Institute.

The Bureau's purpose is to consolidate, integrate and analyse road crash-related data from all member agencies. The results will inform whole-of-government decision making and approaches to road safety policy and programs.

Major research projects undertaken in 2021–22 included:

- *Queensland Road Safety Strategy* Modelling—this project aimed to develop a Queensland road crash profile as well as a model of expected future road trauma trends to help inform the design of the next Queensland Road Safety Strategy and Action Plan
- 'Out-of-scope' fatal road crashes and fatalities—this project aimed to understand the extent, nature, and circumstances of out-of-scope fatal crashes and fatalities, as well as to identify the breadth and nature of information available to all relevant agencies on out-of-scope fatalities to better inform road safety initiatives.

Takata Airbag Compulsory Recall Process

TMR worked with the Australian Competition and Consumer Commission, government agencies, and the automotive industry to assist in removing faulty Takata airbags from Queensland roads. This included taking action against the registration of vehicles subject to the compulsory Takata recall.

After a series of escalating actions focused initially on higher-risk vehicles, TMR removed these dangerous vehicles from the road network. Approximately 800,000 Queensland vehicles were originally subject to the compulsory recall. Ultimately, TMR cancelled the registration of over 2,500 of these vehicles, whose owners failed to respond to multiple requests to have the airbags replaced.

Queensland Road Safety Week

The seventh celebration of Queensland Road Safety Week was held from 16 to 20 August 2021 and encouraged Queenslanders to 'Sign up for road safety'.

Participants were able to show their support by creating a sign featuring their road safety message and sharing it via the StreetSmarts website or social media channels. This online activation was introduced in 2020 in response to public health guidelines restricting the ability to hold public events.

Participants were particularly active via social media, utilising the campaign hashtag of #QRSW2021. A range of resources were available on the Queensland Road Safety Week website to support participation efforts, and the promotional campaign performed well across all digital channels.

The Queensland Police Service provided invaluable support across social media and also produced a video series to support the week.

StreetSmarts road safety campaigns

The StreetSmarts road safety initiative delivered campaigns and activities during 2021–22 to improve road safety in Queensland.

The successful 'All good. All bad' campaign provided critical drink driving reminders throughout summer (December–January 2022), and the 'You lapse, You Lose' risky driving campaign ran during Easter (April–May 2022).

'Crash test' (seatbelts) ran in regional Queensland in July, and motorcyclists were targeted in the 'Ride Craft' campaign (September–November 2021).

StreetSmarts also supported a significant campaign program about road safety reforms during 2021–22 including:

- the introduction of seatbelt and mobile phone enforcement cameras: 'Is it worth it?' (June–November 2021)
- 'Drink Driving Reforms – Alcohol Ignition Interlock' campaign (September–October 2021)
- new penalties for speeding, not wearing a seatbelt and running red lights 'Anywhere, Anytime'. (Phase 1 May– June 2022)

With over 165,000 followers, StreetSmarts 'always on' social media channels (Facebook, Instagram, Snapchat and Twitter) delivered relevant, timely and targeted road safety messaging reaching around one million individuals monthly.

Drink driving reforms

On 10 September 2021, TMR introduced tough new drink driving reforms, to improve road safety outcomes on Queensland roads.

The reforms include a focus on education and how to separate drinking from driving. Two new education programs were introduced, an online course for anyone convicted of a drink driving offence and a face-to-face comprehensive program for repeat offenders.

The Alcohol Ignition Interlock Program was enhanced to be a performance-based program to further educate participants before completing the program. It has also been expanded to include all mid-range and above offenders, as well as all repeat drink driving offenders. If a TMR customer chooses not to participate in the program, they will not be eligible for a driver's licence for five years.

A new online portal was delivered on 25 March 2022, designed to help participants to track their progress while on the program support behaviour change, while also enhancing online capability to submit applications.

> **For more information**
>
> https://www.qld.gov.au/transport/safety/road-safety/drink-driving/drink-driving-education-programs
>
> https://www.qld.gov.au/transport/safety/road-safety/drink-driving/interlocks
>
> https://www.qld.gov.au/transport/safety/road-safety/drink-driving/plan-drive-survive-hub

Mobile phone distraction and seatbelts

Illegal phone use and non-seatbelt wearing contribute significantly to the number of lives lost and serious injuries on Queensland roads each year.

In partnership with the Queensland Police Service, TMR commenced the roll out of new camera technology to detect illegal mobile phone use while driving in July 2021. In an Australian-first, this technology also detects front seat occupants who fail to wear a properly fitted seatbelt.

Fixed and portable cameras were introduced in urban and regional areas across Queensland enabling those committing these dangerous behaviours to be caught anywhere, anytime.

TMR also strengthened road rules relating to mobile phone use on 26 July 2021. A driver must not have a mobile phone in their hand or resting on any part of their body, including their lap, while driving—regardless of whether the phone is on or in use. Previously the rule only applied to drivers holding the mobile phone in their hand.

From 26 July to 30 October 2021, a three-month warning letter period for camera-detected offences was applied to encourage drivers to change their behaviour. Penalties for camera-detected mobile and seatbelt offences commenced on 1 November 2021.

Programmed Vehicle Inspection Reforms

A Programmed Vehicle Inspection is a mandatory vehicle safety inspection conducted at scheduled periods for certain higher risk vehicles. Following the personalised transport reforms in 2017, vehicles such as taxis, booked hire vehicles and limousines, were transitioned from six monthly inspections to annual inspections.

As part of the Programmed Vehicle Inspection Reform project, TMR introduced further changes to how Programmed Vehicle Inspections are managed in Queensland.

The changes provided greater consistency in relation to inspection requirements for the balance of the passenger transport fleet, addressed practical challenges for vehicles owners undertaking inspections in remote Queensland and standardised the categorisation of light and heavy trailers to be consistent with other jurisdictions.

Rest Area Upgrade project

TMR manages more than 1100 roadside amenities on the Queensland state-controlled road network. These amenities are established primarily to meet the needs of long-distance travellers and are aimed at reducing fatigue-related crashes while enhancing the travel experience.

The jointly funded Road Safety Program has so far committed $34.85 million to the Rest Area Upgrade Project to provide new and upgrades to existing roadside amenities, to encourage drivers to stop and rest, which may reduce fatigue-related crashes.

Although the scope varies from site to site, generally major construction activities include upgrades to toilet facilities, accessibility for all road users, shade shelters, table and picnic facilities, solar lighting, and pavement rehabilitation and all-weather spray seal access.

The Rest Area Upgrade Project has so far completed upgrades at 90 locations across Queensland, with another 13 locations of tranche three works across South Coast, Wide Bay and Mackay/Whitsunday Districts scheduled for completion before 30 September 2022.

Case Study

Mobile phone and seatbelt cameras

Mobile phone and seatbelt cameras have been operating since December 2021 throughout Queensland to improve road safety. Distracted driving is a major cause of road crashes and contributes to almost 20% of serious injuries on Queensland roads, with use of a mobile phone while driving just as dangerous as drink driving. Not wearing a seatbelt contributed to almost one quarter of all fatalities between 2016 and 2021 on Queensland roads.

The introduction of the cameras is to help reduce the occurrence of mobile phone and seatbelt offences and their associated injuries and fatalities.

Although 141,812 infringements have been issued since the program started, the average overall detections of mobile phone offences has reduced, indicating positive changes in driver behaviors.

Between December 2021 and March 2022, an average of 22,360 detections of probable distracted driving were received per month. Between April and July 2022, this had reduced to an average of 18,035 detections. The same number of cameras were operating during these time periods.

The funds from camera detected offences are reinvested in road safety initiatives and education programs.

 For more information

https://www.tmr.qld.gov.au/Safety/Road-safety/
Camera-Detected-Offence-Program

Rail safety

TMR enhances rail safety outcomes in Queensland through initiatives that complement the activities of the Office of the National Rail Safety Regulator (ONRSR).

TMR continues to maintain the *Rail Safety National Law (Qld) Act 2017* in consultation with ONRSR and other stakeholders, ensuring that Queensland's interests are reflected in any legislative amendments.

TMR provides rail safety-related policy advice to the Queensland Government, maintains regulatory oversight of the safe transport of dangerous goods by rail and provides support to accredited tourist and heritage rail operators.

TMR leads the Queensland Level Crossing Safety Group in overseeing the *Queensland Level Crossing Safety Strategy*, which brings together relevant stakeholders to work collaboratively on current level crossing safety issues in Queensland.

The Director-General continues in his role as a board member of the Australasian Centre for Rail Innovation and TMR is an active member of the National Level Crossing Safety Committee.

During 2021–22, TMR engaged with stakeholders and worked with ONRSR on its proposal to mandate in-cab audio and visual safety recording equipment for all mainline and freight locomotives. The benefits of installing this equipment includes assisting accident/incident investigations and to improve safety.

Marine safety

Marine fatalities and marine injuries

In 2021–22, reported marine incidents in Queensland included 13 fatalities and 38 serious injuries. The number of reported marine incidents involving at least one Queensland Regulated Ship (QRS) has substantially decreased from 397 to 346 and the number of fatalities has fallen as the result of a reduction in the number of persons overboard incidents resulting in a fatality.

Figure 3 below indicates the number of people who have died during the last ten financial years in a reported marine incident that involved at least one QRS (post-2013) or one recreational ship (pre-2013).

These people have been classified as masters or passengers of boats, the masters or passengers of personal watercraft (PWC), swimmers which includes divers, snorkelers, and water skiers, which includes anyone being towed by a vessel of any kind.
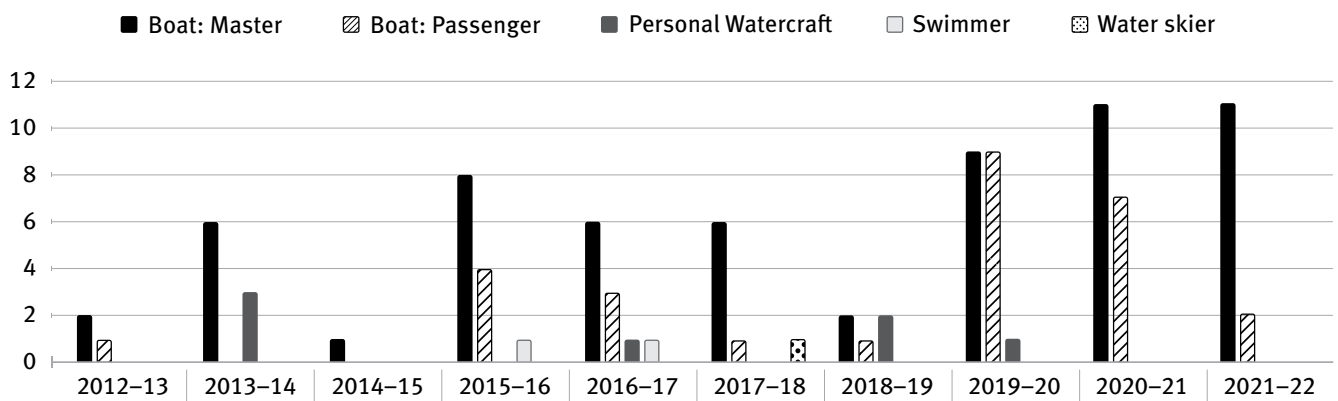
Figure 3: Marine fatalities in Queensland

Figure 4 indicates the number of people who have been admitted to a hospital during the last ten financial years for the treatment of injuries sustained in a reported marine incident that involved at least one QRS.

These people have been classified as the masters or passengers of boats, the masters and passengers of PWC, swimmers, which includes divers, snorkels, and water skiers which includes anyone being towed by a vessel of any kind.

Figure 4: Serious injuries from maritime incidents in Queensland
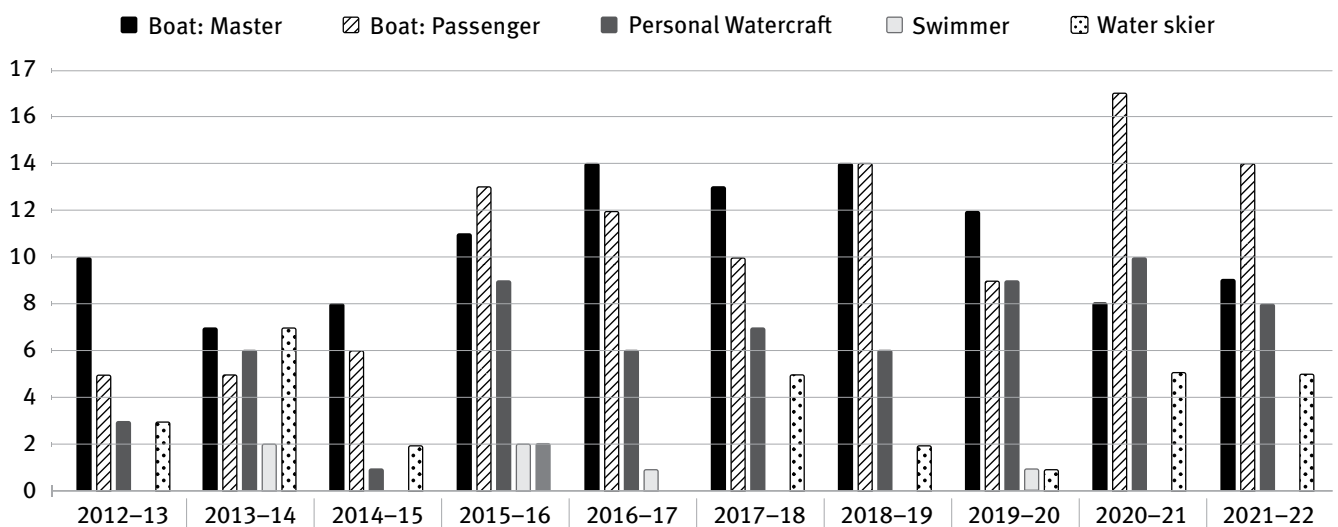
War on Wrecks

Along with a commitment of $20 million in 2018, a War on Wrecks Taskforce was established to address the issue of derelict and abandoned vessels in Queensland waterways.

The Taskforce undertook community consultation and made recommendations in 2019 which collectively seek to develop a culture of responsible boat ownership to reduce derelict vessels into the future.

Given the broad range of maritime matters the recommendations address, licensing, vessel registration and identification have been prioritised.

During 2021–22, TMR and partner agencies removed 100 derelict vessels across Queensland. There were an additional 36 derelict vessels removed by their owners or by other means and a further 44 that are no longer present which includes those made seaworthy by the owner.

Since the War on Wrecks program was established in 2018 owners have repaired or resolved 422 boats. Cumulatively, as of 30 June 2022 there are 1026 fewer derelicts in Queensland waters then when the program commenced.

TMR will continue to support the Taskforce in its work to monitor derelict removals, implement the recommendations and engage with the community on ways to enhance safety on Queensland's waterways.

Boatsafe program compliance

BoatSafe provides competency-based training and assessment for the licensing of recreational ship and personal watercraft masters.

During 2021–22, MSQ undertook more than 100 compliance observation audits to monitor BoatSafe Training Organisations and/or BoatSafe Training Providers as part of the program's compliance activities.

A focus on the practical delivery of the BoatSafe program has provided an opportunity for accredited trainers to review how they structure and deliver the prescribed competency training. This has resulted in trainers connecting to more considered parallels to real-world recreational boating practices, such as voyage planning.

The number of students trained under the BoatSafe program has remained steady in 2021–22, whilst the number of accredited trainers has reduced by 40 trainers throughout the state in this period. This has resulted in a more sustainable training platform for BoatSafe training organisations and BoatSafe training providers. Current trainers have seen a growth in their small businesses and several trainers in the position to expand or purchase new training ships and equipment.

MSQ continues to develop a cooperative and collaborative approach to compliance to drive continual improvement and marine safety with industry.

Smartship expansion

Smartship Australia plays an important role assisting with port developments and training marine pilots, ship officers and tug masters to safely move ships.

Training for ports and their ships draws on the extensive mariner experience of instructors and Smartship's technical support to create and deliver a customised, high fidelity simulation and challenging training experience.

Projects during 2021–22 included:

- expansion of training facilities to now cover over 1500 m2 including a new flagship lecture facility, a second tug simulator and space for new services (e.g., Vessel Traffic Services)
- tug simulator ultra-high resolution display array upgrade and refit of computer hardware thus improving the fidelity, visual interface and the customer experience
- state-of-the-art audio-visual system for the new lecture facility with seamless integration with multiple media sources.

Smartship continues to collaborate with pilotage providers to design and develop effective training to meet their needs within its simulated environment.

It is also through these partnerships that Smartship has built up an extensive library of ports (over 80) and one of the world's largest catalogue of ship models (close to 200).

In 2021–22, Smartship's distance training services have been further developed and new services added to ensure that customers have access to online training that meets their needs. An example of this is the blended Electronic Chart Display Information Systems course launched in October 2021. This course now has a mix of theory delivered via online tutorials and three face-to-face practical sessions in-house.

In addition, Smartship has continued to support Tug Master training and contingency skills development and is working closely with tug companies to expand the training available to Tug Masters.

Maritime Enforcement Team

The Maritime Enforcement Team (MET) undertakes enhanced compliance and education activities on Queensland's Waterways.

In 2021–22, MET completed 3200 vessel intercepts enhancing direct engagement with the boating community and keeping Queensland waterways safe. From July 2021 to January 2022, MET undertook the majority of MSQ's border patrols on the Gold Coast and engaged extensively with recreational boaties and PWC operators to highlight water safety.

MET coordinated targeted safety campaigns with MSQ compliance partners, Queensland Police Service, SEQ Water, Queensland Parks and Wildlife, Queensland Water Police and Queensland Boating and Fishing Patrol during 2021–22.

Exercise CABIN

Under Australia's *National Plan for Maritime Environmental Emergencies* (National Plan), TMR is required to conduct regular exercises to test Queensland's response capability for a maritime environmental emergency. In 2022, the state ship-sourced marine pollution response exercise was held in Gladstone.

MSQ hosted the exercise from 21–23 June 2022. The exercise, named 'CABIN' involved an oil spill response in the vicinity of the Gladstone Harbour.

The exercise was multi-agency and multi-jurisdictional, with engagement and ongoing consultation underway with traditional owners, as well as relevant Australian and Queensland government departments.

The exercise was aimed at testing the operational management of a response under the National Plan and the *Queensland Coastal Contingency Action Plan* and their integration with Queensland's disaster management arrangements in the Gladstone region.

Exercise 'CABIN' also involved a training component as a refresher on emergency management principles and a comprehensive user acceptance testing for a new incident tracking database.

Safety messaging

MSQ has undertaken a planned program of campaigns during 2021–22 to deliver risk-based safety messaging to a Queensland- wide audience.

In October 2021, MSQ participated in National Safe Boating Week with all other state marine safety organisations. The theme was Safety Equipment. In early-2022, MSQ's 'Fatal Five' safety messaging was launched aligning the fatal five road safety messages with matching marine risks.

Another focus during 2021–22 has been publishing critical marine safety messaging during cyclone and flooding events that have affected waterways in Queensland on TMR's social media platforms.

MSQ work with other state water safety organisations such as Queensland Police Service (Water Police), Department of Agriculture and Fisheries, inland waterways managers, and marine rescue groups to ensure the boating public are aware of how to stay safe on the seas and inland waterways.

Trainee Marine Officers

In April 2021, TMR welcomed four MSQ trainees to be based in Cairns, Townsville, Mackay and Hervey Bay.

The Marine Officer traineeship program offers opportunities for young Queenslanders to immerse themselves in the maritime industry. The trainees have completed all practical components of their Coxswains Certificate of Competency qualification, with the final theory training and examinations delivered in May 2022.

In addition to the vessel qualifications, trainees have acquired forklift licences, working at heights and marine pollution response qualifications. These formal qualifications combine with practical skills acquired in all facets of MSQ marine operations.

Whilst the next stage is up to the trainees and their individual aspirations, experience suggests the marine industry remains keen to embrace the graduates with employment opportunities across coastal Queensland's waterways.

Case Study

Channel beacon replacements build resilience through innovation

The Cairns and Weipa channel beacons in far north Queensland are critical to the safety of large ships that handle a variety of commodities including bulk exports, general cargo and fuel, as well as cruise ships, supply barges to remote communities, tourist vessels, and recreational boaties.

MSQ's investment to replace beacons—12 in the Cairns channel and 18 in the channels to Weipa—will improve the quality and serviceability of the navigation beacons.

MSQ's local staff and its engineering expertise, combined with that of local waterway users, informed the improved design and infrastructure components for the beacons. Taking the approach of replacing the beacons under one contract resulted in better value than the usual approach to have individual contracts for each port.

MSQ also partnered with the Infrastructure Sustainability Council to pilot the IS Essentials toolkit and drive sustainable design and delivery methods. As a result, the channel beacons off Cairns and Weipa will have more resilient stainless-steel ladders and sustainable solar marine lanterns with technical advancements to extend the life and reduce maintenance times and risks for MSQ's service teams.

Upon completion in 2022, the project's innovations will reduce maintenance times and costs, provide a more reliable and safe service to vessel Masters, and minimise risks of damage to Barrier Reef and Gulf of Carpentaria environments and the critical port infrastructure that supports the economy of Far North Queensland.

Designing solutions that create value

Light Emitting Diode (LED) lighting replacement project

In 2021–22, TMR replaced 3000 obsolete road lights with high performing LED luminaires and Smart Light Control units.

More than 35,000 road lights were identified for replacement on state-controlled roads and over 17,000 have been installed since delivery commenced in 2017.

Combining LED road lighting with smart light technology has delivered the following benefits:

- greatly improved lighting quality
- reduced energy consumption by up to 45 per cent
- reduced operating and maintenance costs
- longer lifecycle
- improved road safety and environmental conditions
- improved asset management processes
- enabled intelligent controls and performance monitoring capability.

In collaboration with the Endeavour Foundation, TMR has recycled 95 per cent of legacy luminaires. As of 30 June 2022, over 90 tonnes of scrap metal were saved from ending up in landfill.

The project is ahead of schedule to deliver the remaining Smart LED road lighting by 2026.

Ipswich Connected Vehicle Pilot

The Ipswich Connected Vehicle Pilot (ICVP), that ran over 12 months, concluded in September 2021. Cooperative equipment was retrofitted into 355 public participant vehicles enabling them to interact with 29 instrumented traffic lights and a central cloud service covering 300 square kilometres of Ipswich.

The pilot was used to generate driver safety warning for red lights, pedestrians crossing, road works, hazards, and back of queues on motorways—supplemented by the provision of speed limits. A simulator was also used to examine vehicle-to-vehicle warnings for emergency braking and slow vehicles.

The participant's speed data was analysed with and without warnings indicating a 20 per cent reduction in crashes. Participants also reported a positive rating of 7 to 9 out of 10.

The ICVP was delivered by TMR, in partnership with the Motor Accident Insurance Commission, Telstra, Queensland University of Technology, iMOVE Australia, Ipswich City Council and the Commonwealth Department of Infrastructure, Transport, Regional Development and Communications.

> ⊡ **For more information**
> https://www.qld.gov.au/transport/projects/cavi/ipswich-connected-vehicle-pilot

Audio tactile line marking program

In 2021–22, TMR completed Stage one of the statewide audio tactile line marking project. Over 1000 kilometres of audio tactile line marking was installed along the edge and centre line of rural state-controlled roads.

Audio tactile line marking is a proven road safety treatment that is effective in reducing the risk of run-off-road and head-on crashes, particularly where driver fatigue and/or inattention are contributing factors.

Stage two works commenced early-2022 and included audio tactile line marking on prioritised roads in Cairns, Mackay, Central Queensland, Wide Bay and North Queensland which have a history of fatigue related crashes.

The project is jointly funded by the Australian and Queensland governments as part of the $415 million Road Stimulus Package. The program aims to deliver road safety improvements across Queensland and to provide an immediate boost to the economy and local jobs.

Cooperative and Highly Automated Driving pilot

The Cooperative and Highly Automated Driving pilot successfully delivered two regional demonstrations of its Cooperative and Automated Vehicle (CAV), 'ZOE2'; during 2021–22.

From 27 to 29 August 2021, 1000 attendees at the Gold Coast Show visited the 'ZOE2' display to learn about Australia's most advanced CAV. The team spread awareness regarding levels of automation and automated vehicle capabilities. It also included research into public perceptions led by, project partner, Queensland University of Technology (QUT).

Then from 6 to 10 June 2022 the team ran a public dynamic demonstration in Bundaberg where they showcased several Australian first CAV scenarios to 18 participants.

'ZOE2' navigated 4.5 kilometres in automated mode through suburban streets, adapting speed through 2 school zones, maneuvering through more than 20 intersections, and picking up participants with a driverless summon where no human was in the driver's seat of the vehicle.

The project is co-funded by the Motor Accident Insurance Commission and is being delivered with the support of QUT, iMOVE Australia and other pilot partners.

Managing structures with virtual Weigh-in-Motion data

Virtual Weigh-in-Motion (vWiM) leverages existing heavy vehicle data collection systems, to enhance value, data quality, coverage, and evidence-based decisions.

The concept of vWiM was developed during research by the National Asset Centre of Excellence, an initiative by TMR and the Australian Roads Research Board.

vWiM is supporting improved bridge management decisions by increasing the effective coverage and quality of heavy vehicle data across Queensland.

vWiM has been applied to bridges on the Bruce Highway, Peak Downs Highway, and Kennedy Highway to quantify how bridges respond to heavy vehicles accessing the network to enhance the sustainability of the bridge network.

A program of continual improvement is integrating vWiM into bridge and access management decision-making while supporting road and user safety and compliance management.

Reducing the impact of network disruption

Queensland Disaster Management Arrangements

The *Disaster Management Act (2003)* forms the legislative basis for the Queensland Disaster Management Arrangements (QDMA).

These arrangements recognise partnerships between government, non-government organisations, industry, and the community working collaboratively to ensure the effective coordination of planning, services information, and resources necessary for a comprehensive disaster management approach. TMR provides functional support regarding transport systems and is the hazard specific lead agency for ship sourced pollution events.

The Director-General leads TMR's recovery and reconstruction of roads and transport networks for disaster affected communities and provides strategic oversight for implementation and delivery of resilience initiatives. The Director-General is a member of the State Disaster Coordination Group, Queensland Disaster Management Committee, the Leadership Board Recovery Sub-Committee, and is Chair of the Roads and Transport Functional Recovery Group.

The QDMA also underpin TMR's approach to disruptive event management. Annual programs such as the Preseason Program and Business Continuity Management Program are aligned with QDMA principles and support TMR in reducing the impact of network disruption.

TMR's business continuity management program has been in place since 2010. The program includes a broad range of collaborative initiatives including a community of practice, annual discussion-based exercise initiatives and promotion of business continuity awareness activities. The outcomes from these initiatives are reported in a consistent manner and an annual review is undertaken for continuity of business processes across all business areas of TMR.

The 2021–22 severe weather season saw numerous and ongoing responses to COVID-19 and multiple disruptive events including Central, Southern and Western Queensland rainfall and flooding December 2021, Ex-Tropical Cyclone Seth in January 2022, and South East Queensland Rainfall and Flooding February–March 2022.

Events saw district and regional staff consistently provide direct management of impacts in support of the state led response through the State Disaster Coordination Centre.

TMR supported numerous COVID-19 programs via committees and working, response and recovery groups with government and industry partners and facilitated the delivery of COVID-19 specialist worker, essential worker, transport plans, and critically essential worker applications.

Preparations for the severe weather season are supported by TMR's annual preseason program, the purpose of which is to encourage a sustainable and consistent departmental approach to disruptive event management and in doing so, support staff in understanding their roles and responsibilities as outlined under the QDMA.

Queensland Transport Security Program and Queensland Security and Counter-Terrorism Strategy

Under the Council of Australian Governments *Intergovernmental Agreement on Surface Transport Security 2005*, Transport Ministers are accountable for delivering transport security outcomes, which includes the threat of terrorism.

TMR works in partnership with the Queensland Police Service, the surface transport industry, and local, state, and Australian governments' partners to help prepare for, prevent, respond to, and recover from significant security incidents.

Operating under the guidance of the *National Surface Transport Security Strategy, Australia's Strategy for the Protection of Crowded Places from Terrorism, the National Counter-Terrorism Plan and the Queensland Counter-Terrorism Strategy, Protecting Critical Infrastructure and Systems of National Security Regulatory Reforms*, the Transport Security Program includes:

- national and state surface transport counter-terrorism policy coordination

- regulation and security of Queensland's Security-Identified Surface Transport Operations

- facilitation of Queensland's Transport Precinct Security Program

- support to State Major Event Security Planning and police operations

- facilitation of intelligence and information sharing events for transport and transport hub operators

- critical infrastructure protection.

Roadway Flood Data Exchange

Disseminating information about the condition of TMR's road network is essential for the public to navigate Queensland roads.

TMR has worked collaboratively with the Bureau of Meteorology (BoM) during 2021–22 to establish the TMR - Bureau of Meteorology Roadway Flood Data Exchange.

The exchange includes roadway flood level data collected from TMR owned ITS Roadway Flood Monitoring Sites being sent to BoM and TMR receiving selected relevant flood data from the very extensive range of BoM Queensland-wide existing field flood monitoring stations.

The implementation of this system-to-system interface for exchanging the flood monitoring data between both agencies aims to improve the availability and coverage of data for both agencies and optimises the investment in new monitoring assets.

ICT asset disaster recovery

ICT Asset Disaster Recovery Plan continues to play a vital role in ensuring TMR maintains resilient with highly available ICT systems that support frontline employees and ensure essential services are provided to the community.

In 2021–22, TMR continued to place a key focus on the capability of vital systems ensuring support for business continuity. This was driven by the following factors:

- continued response to COVID-19

- natural disasters

- increased demand for online engagement by TMR's customers

- large scale remote working arrangements support.

Key achievements during 2021–22 included:

- transitioned regional network services to whole-of-government managed service arrangements

- refreshed remote desktop and connectivity solutions

- established Cloud Business Office to drive the transition to contemporary and resilient online services

- continued investment in TMR's information security management system, including security tools, processes, and the risk management framework.

Case Study

TMR and Bureau of Meteorology strategic relationship

Since 2018, TMR has held a strategic relationship with the Bureau of Meteorology (the Bureau) to support planning and response to weather events. Over the past year, this relationship has been crucial to the department's response to multiple weather events that have impacted the state.

Each year, the Bureau supports the department in pre-season engagement activities. This preparation was put to the test when high intensity rainfall events commenced in the Central and Southern Queensland regions in November 2021. Wide Bay/Burnett region was subsequently impacted in January 2022.

In February–March 2022, multi-day rainfall records were broken across southeast Queensland, resulting in riverine flooding. The intense and sustained rainfall, coupled with saturated soils in catchments, caused major flooding across many catchments in South East Queensland.

These events impacted the whole transport network—road, rail and maritime. The department made critical safety decisions to close roads, cease public transport services and suspend maritime operations. This impacted communities and the broader Queensland economy.

The department relied on the intelligence and support from the Bureau to ensure that planning and response decisions were considered and efficient. Detailed forecast information from the Bureau informed TMR's approach, delivering improved outcomes for stakeholders and customers.

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