Examination of the state-controlled roads from Birdsville to Bedourie and Birdsville to Windorah

#### Introduction

On 17 April 2023, the Transport and Resources Committee (the Committee) resolved to conduct a public works inquiry into the state-controlled roads from Birdsville to Bedourie and Birdsville to Windorah to examine public works projects on the Eyre Developmental Road (between Birdsville and Bedourie) and Birdsville Developmental Road and the Diamantina Developmental Road (between Birdsville and Windorah).

The Committee Report No. 46 tabled on 30 November 2023 outlines the Committee's inquiry process and includes three recommendations. The first of these recommendations is that the Legislative Assembly note the contents of the report. In accordance with section 107 of the *Parliament of Queensland Act 2001*, the government response to recommendations 2 and 3 is below.

#### Response to Recommendations

#### Recommendation No. 2

The Committee recommends the Department of Transport and Main Roads (TMR) should consider a) flexibility when applying national guidelines for low volume roads in areas that experience high seasonal levels of road use, particularly with respect to the width of seal necessary to locate additional overtaking lanes of sufficient length to mitigate the reported impact of dust reducing visibility, and b) the need for appropriate signage to inform road users of the length of overtaking lane available.

### **Government Response**

The government has considered and is supportive of part (a) of the recommendation as it refers to an approach already adopted by TMR, specifically:

- TMR designs the state-controlled road network in accordance with requirements outlined in the Austroads Guide to Road Design (AGRD) Part 3: Geometric Design and the Road Planning and Design Manual 2nd Edition Queensland practice January 2024 Volume 3 Guide to Road Design (RPDM).
- The national AGRD—as accepted by TMR's RPDM—inherently acknowledges the need to exercise flexibility in all aspects of road design in response to competing context-sensitive site-specific factors. This design guidance is noted in AGRD Part 1: Objectives of Road Design, Chapter 3. A brief overview of the guidance includes that:
  - road design is a complex task in which judgement and experience play significant roles
  - road design is an iterative process that requires a designer to exercise judgement and experience while practically applying accepted technical guidelines and continually evaluating the design to assist in the selection of appropriate values for the design elements
  - every road project is a unique undertaking and can never be precisely repeated
  - there are no 'off the shelf' solutions that will fully address all situations encountered, and the rigid application of charts, tables and figures is unlikely to lead to a successful design outcome
  - the development of an optimum solution needs to be within the context of the project and balances often competing and contradictory site-specific factors

- due to the nature of the design process, the final design solution cannot generally be considered as 'correct' or 'incorrect' but rather a site-specific balance of efficiency (in terms of moving traffic), safety (in terms of fatal and serious injury crash reduction), or costs (in terms of construction costs, life-cycle costs and environmental impacts)
- the key function of a road is to cater for the performance characteristics of its users (motorised or otherwise)
- it is recognised that in some circumstances, site or project-specific constraints—
  including financial—may prohibit the use of one or more design parameters that would
  typically be preferred
- performance-based analysis and design provides a key basis for the exercise of design flexibility and anticipates the performance effects of design decisions on aspects that include:
  - traffic operational efficiency
  - existing and expected future crash frequency and severity
  - o construction cost
  - o future maintenance cost
  - functional classification
  - o use by each transportation mode
  - accessibility for persons with disabilities
  - available right-of-way
  - o existing and potential future development
  - o operational flexibility during future incidents and maintenance activities
  - stakeholder input
  - o community impacts and quality of life
  - historical structures
  - o impacts on the natural environment.

In relation to the roads that are the subject of this inquiry, TMR tenders specific examples of its applied flexibility regarding the seal width delivered to gravel roads and the length of overtaking opportunities.

It is noted that current design standards for single lane roads with less than 150 vehicles per day requires a seal width of 3.7 metres to 4.5 metres wide. The Annual Average Daily Traffic (AADT) volume of the roads near Birdsville relevant to this inquiry are:

- Birdsville Developmental Road (Morney Birdsville) 42 vehicles per day (Traffic Analysis and Reporting System (TARS), 2022)
- Eyre Developmental Road (Bedourie Birdsville) 42 vehicles per day (TARS, 2022)
- Diamantina Developmental Road (Windorah Bedourie) 56 vehicles per day (TARS, 2022).

The AADT is the number of vehicles on a road in a 24-hour period, averaged out over a calendar year. The AADT for these roads therefore takes account of the temporary increase in traffic volume associated with annual events such as the Birdsville Races and Big Red Bash.

Despite the low traffic volumes recorded on these roads, TMR recognises the changing traffic environment associated with the annual events and has customised its approach to deliver a seal width almost double that required by current design standards.

TMR's approach in its Central West District is to seal very low volume gravel roads to a six-metre seal on an eight-metre pavement, allowing for greater safety benefits by providing a longer length of sealed road and enabling eight-metre seals at identified overtaking opportunity locations.

TMR has also developed a customised strategy to improve overtaking opportunities on targeted sections of the road network in the area.

This approach aims to provide overtaking opportunities every 20–25 kilometres for a minimum length of two kilometres on reduced-width segments of a road or four kilometres where the road is unsealed to allow adequate time for a vehicle's dust cloud to clear prior to an overtaking opportunity. This exceeds the length required by design standards in the RPDM.

It is noted that overtaking on single-lane roads requires the overtaking vehicle to travel in the opposing traffic lane for a period of time. TMR will consider longer lengths of overtaking opportunities, however, notes this is only possible where safety requirements, road geometry, road conditions and funding allow.

TMR will not compromise on ensuring the safety of road users.

Both of the customised approaches, outlined above, demonstrate TMR's flexibility in localising its approach wherever safe and possible to do so.

In regard to part (b) of the recommendation, the government has considered this request and is supportive in-principle noting that overtaking opportunities on the subject roads, where relevant, are currently signposted with 'Overtaking Opportunity'. TMR will initiate a review of this signage in the 2024–25 financial year to identify improvements to future signage including adding details about the length of the overtaking opportunity.

#### Recommendation No. 3

The Committee recommends the Minister for Transport and Main Roads and Minister for Digital Services considers urgent steps to pave and seal the remaining 15.7 kilometres of unsealed length of the Eyre Developmental Road between Birdsville and Bedourie to ensure that Birdsville is no longer the only township in the Central West District located on a state-controlled road that does not have a fully sealed access. In making this recommendation, we are aware of the significant flood mitigation that is required for the roads subject of this inquiry and urge TMR to continue consulting with local landowners on the length's optimal design.

### **Government Response**

The government has considered this recommendation and is supportive in principle, noting the following qualifying factors.

TMR has well-established robust planning processes for determining the relative priority of the many competing needs across Queensland's transport network. Central to these processes is the annual development of the Queensland Transport and Roads Investment Program for consideration and approval by the Minister for Transport and Main Roads and Minister for Digital Services.

As indicated in the TMR submission to the inquiry and as evidenced by recent expenditure and ongoing planning activities on the Eyre Developmental Road (Bedourie – Birdsville), the Queensland Government considers progressive sealing of this road a priority. However, in determining future funding priorities, the government must balance competing transport priorities across Queensland within the available funding.

Notably, since 2019, TMR has invested more than \$23 million to seal another 36 kilometres of unsealed sections on this 185-kilometre link. These works were undertaken given this link's status as the highest ranked unsealed road priority in TMR's Central Queensland Region.

This priority status remains in place and, as a result, TMR is progressing planning activities in consideration of the technical and cost complexities involved with upgrading this final section of the road.

The remaining unsealed segment is located within significant river catchments of the Lake Eyre Basin, including the Cuttaburra Crossing – a permanent waterhole and wetland on Eyre Creek. There are multiple concrete floodways on the approaches to the Cuttaburra section to be considered in addition to the main crossing.

Planning projects funded under the Transport System Planning Program are underway for both the pave and seal works and a major structures upgrade at Cuttaburra Crossing.

The \$300,000 pave and seal planning project is proceeding with a route study expected to be finalised in late 2024.

The \$350,000 structures upgrade planning project is in the early stages, with the business case expected to be finalised in mid-2025.

TMR continues to seek additional funding—through various state and federal government programs—to upgrade this road and understands the importance of fully sealing this link to improve the liveability of Birdsville. TMR also recognises the importance of local input and will engage with relevant councils and landowners to optimise design outcomes.

The Committee in its report concluded the recently completed works on this road and all future works will be delivered in accordance with section 94 of the *Parliament of Queensland Act 2001* to ensure:

- the work is suitable for its purpose
- the work is necessary and advisable
- the work is reasonable value for money
- the costs and recurrent costs of the work are reasonable
- the work has a positive impact on the community, the economy and the environment
- the procurement method for the work is suitable
- the balance of public and private sector involvement for the work is satisfactory
- the performance of the constructing authority in regard to meeting specifications, delivery timeframes and budget requirements, and contractual obligations.