



Transport for NSW

Responses to post-hearing questions

**Standing Committee on Regional Development,
Infrastructure and Transport**

**Inquiry into the implications of severe weather
events on the national regional, rural, and remote
road network**

Hearing Date – Tuesday 4 July 2023

RESPONSES TO POST-HEARING QUESTIONS

QUESTIONS ON NOTICE

QUESTION 1. (Page 12 – 13)

CHAIR: Before you ask your question, I didn't ask everyone else if there was anything else to be said about the climate resilient corridors from any of our other witnesses? Please feel free now.

Mrs Andrews: We could provide more detail to the committee if that would be useful on those specific case studies, but what we've done is looked at it from a resilience perspective as well as what would be required from safety and reliability, to really uplift those four areas as key resilient parts of the network in terms of ensuring connectivity for customers but also access-egress and emergency evacuation routes during the point of disruption and natural disaster.

ANSWER:

Transport for NSW recently completed an assessment of four state road corridors to understand how National Service Level Standards could be applied to measure natural disaster exposure and vulnerability, and to demonstrate how resilience planning can be integrated into the way we plan, deliver and operate the transport network.

The National Service Level Standards are an Australian Government framework that establishes nationally consistent service performance levels for every road on the network, benchmarked against other roads of similar function to determine the magnitude of deficiency to be addressed. This measurement also identifies and prioritises interventions which improve service levels provided to customers.

The four case studies were:

- Bells Line of Road / Chiefly Road
- M1 Pacific Highway between Yelgun to Chinderah
- Gwydir Highway between Grafton and Glen Innes
- Illawarra Highway at Macquarie Pass.

The case studies followed the National Service Level Standards framework to identify the context of each road corridor, data metrics on its current performance and investigations of shocks, stresses, disruptions, risk due to natural hazard and implications on function and form.

The assessment demonstrated the National Service Level Standards framework can assist in prioritisation, but further work is required to set targets and measurements for resilience at a corridor/route level. The assessment also highlighted the opportunities of taking a 'one network' approach to the way the three levels of government prioritise network resilience outcomes to ensure it is considered from a whole of network perspective.

RESPONSES TO POST-HEARING QUESTIONS

QUESTION 2. (Page 13)

Mr Buchholz: What percentage of the state budget goes to the transport portfolio? I think that would be another interesting data collection point for us to have federally.

Mr Fuller: In terms of the percentage of the state budget, my understanding—and we can clarify this and get a direct quantification—is that we're in the order of 15 per cent or a bit above that, is my understanding, in terms of the whole-of-government budget.

ANSWER:

As per the 2022-23 NSW State Budget, 15 per cent of the recurrent budget and 72 per cent of the capital budget is allocated to the Transport portfolio.

RESPONSES TO POST-HEARING QUESTIONS

QUESTION 3. (Page 15)

Mr Zappia: In terms of the cost, I'm just looking at, for example, a highway. The upfront cost per kilometre of bitumen versus concrete—can you give me a rough idea of what the difference would be? I assume the concrete is dearer, but are we talking 50 per cent dearer or 25 per cent or 100 per cent? I have no idea. I'm just trying to get my head around the kinds of differences one would expect if the choice was made to build a concrete road versus a bitumen road. Can you provide some insight as to the difference in cost between a concrete road and a bitumen road?

Mr Grosskopf: I think we'd have to take that one on notice and give you a couple of different case studies rather than try and give you a viable number.

ANSWER: The decision about pavement type and treatments is influenced by several factors including cost, environmental elements such as geology and soil stability, and community considerations such as noise impacts.

Different pavement types are suitable for different conditions. Typically, a successful rigid (concrete) pavement relies upon good support from the underlying layers and subgrade, and in some areas, due to high settlement or expansive soils, rigid pavement is unsuitable unless extremely expensive earthwork solutions are first implemented.

For example, on the Pacific Highway, sections on the Ballina Bypass and Woolgoolga to Ballina have been constructed as a flexible pavement. This is due to there being areas of high settlement making a rigid solution unsuitable, even though significant portions of these projects are located on sound foundations, which is constructed as a rigid pavement.

It is important to note that significant areas of the western NSW network are located on highly expansive clay soils. This requires an extremely expensive foundation treatment to make them suitable for rigid pavements, particularly if these are on heavily trafficked routes. A project at Marsden on the Newell Highway is an example of a poor performing rigid pavement on black/expansive soil.

Costs relating to a pavement type are influenced by a range of factors. To provide a general view on an indicative cost difference:

- Typical Flexible pavement (granular) surfaced with bitumen seal = 1 (commonly \$100 - 120/m²)
- Typical Flexible pavement (Asphalt) = 2.5
- Typical Rigid pavement (Plain Concrete) = 4
- Typical Rigid Pavement (Jointed Reinforced) = 5

Note small concrete pavement repairs = 10 (commonly \$1,000-\$1,200/m²)

RESPONSES TO POST-HEARING QUESTIONS

QUESTION 4. (Page 16)

Mr Buchholz: Mr Grosskopf, can you come back to us with what you think we can—how we can strengthen the relationship? I think your opening comments, or those of one of the other lads, mentioned that issue around acquittals. Can you just lean into that space as well?

ANSWER:

The NSW Government noted opportunities in its submission to the inquiry to partner with the Australian Government to provide strong leadership for resilience outcomes in how we plan, fund, prioritise and delivery transport infrastructure. These focused on five recommendations to:

- Improve Disaster Recovery Funding Arrangements;
- Improve support and partner more effectively with local government;
- Elevate resilience of transport networks at the Infrastructure and Transport Ministers Meeting and respective Senior Officials Committee;
- Develop national road infrastructure resilience guidelines; and
- To create a common data environment for resilience to aid decision making for targeted investment.

In addition to these recommendations, Transport for NSW considers there are opportunities for improved partnerships between all tiers of government.

Positive experiences with federal disaster funding support occur when there is effective coordination between the federal, state/territory governments (coordinating and administering agencies), and local authorities.

However, ongoing challenges are experienced because of onerous and inflexible processes, facilitation of fund disbursement, and discrepancies into the understanding or interpretation of eligibility criteria which can hinder the recovery process. There is a need for greater clarity in guidelines and streamlined processes that allows for flexibility in addressing unique circumstances and the adoption of innovative solutions to enable the timely allocation of funding required to support swift and effective restoration of transport infrastructure.

Closer collaboration and partnerships between the federal, state/territory governments, and local government is required to address these challenges. The recovery of transport infrastructure assets is complex, and an understanding of the specific transportation challenges is required for strategic and targeted allocation of funding. This collaborative approach would improve coordination and ensure a more efficient recovery effort.

An enhanced focus on betterment in the allocation of disaster funding would also improve the long-term resilience of transport infrastructure, reduce impacts to communities and provide greater public value into the future. The current funding arrangements do not facilitate effective implementation of resilience outcomes during recovery. Investing in mitigation measures, such as designing infrastructure to withstand future hazards, reduces the impact of future disasters and improves overall preparedness.