



Mr Luke Gosling OAM, MP,
Chair of House of Representatives Standing Committee on Regional Development,
Infrastructure and Transport
PO Box 6021
Parliament House
Canberra ACT 2600

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

Dear Mr Gosling,

The Australian Local Government Association (ALGA) welcomes the opportunity to make a submission to the House of Representatives 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*.

ALGA is the national voice of local government in Australia, representing 537 councils across the country. In structure, ALGA is a federation of State and Territory Local Government Associations. This submission should be read in conjunction with any separate submissions received from State and Territory Associations as well as individual councils.

ALGA makes the following key recommendations in response to the inquiry:

- 1) That the Commonwealth and state and territory jurisdictions collaborate on the development of a sustainable road funding model for properly maintaining the local road network through better upfront investment so that it is more resilient to the effects of severe weather.
- 2) Consideration should be given by the Commonwealth to creating resilient alternative routes to major corridors that are susceptible to flooding or severe rainfall events.
- 3) Where climate resilient corridors align with council managed roads, a program should be established to provide councils with the contracts for future road construction projects using similar direct funding mechanisms as successfully employed through programs such as the LCRIP which uses the Roads to Recovery funding mechanism to distribute funds directly to councils without the need for an unnecessary and time-consuming grant applications process.

- 4) That the Commonwealth work with the road construction industry to take a leadership role in driving the widespread adoption of the latest pavement materials across the country.
- 5) Councils should be supported in trialling new road construction methods and stand ready to be utilized by the Commonwealth to pilot new road construction methods and materials where possible.
- 6) That the Commonwealth adopts a strong leadership role in efforts to improve disaster mitigation efforts, including supporting local governments through greater upfront investment in building more resilient infrastructure to minimise the much more substantial costs of replacing infrastructure destroyed by severe weather events.
- 7) That the inquiry supports [ALGA's Pre-Budget Submission Road funding proposals](#) as this funding will support our local communities to be much better positioned to withstand the effects of severe weather events in the future.

ALGA's responses to the Terms of Reference follows.

Your sincerely



Matt Pinnegar

ALGA Chief Executive

ALGA's Response to the Terms of Reference:

Road engineering and construction standards required to enhance the resiliency of future road construction

ALGA understands there are several high-quality guides to road construction that are readily accessible to road builders around Australia. These include publications from Austroads, ARRB and other roads and transport agencies. While there have been calls from some parties for the development of national roads standards, ALGA understands that this is not practical as the materials used in road construction vary widely because of the quality and type of materials that can be sourced near the site of each road construction or reconstruction site.

Concerns have also been raised with ALGA regarding the quality of road construction work outsourced to third-party contractors who win tenders with low bids and then deliver correspondingly lower quality road construction outcomes. There may be an opportunity for minimum standards to be embedded in contracts for road construction by third-party contractors that is relatively easy to enforce so that evidence of poor-quality construction within a designated period that are identified can be properly rectified at no further cost to the customer.

ALGA has received advice that while the use of recycled materials and fostering the circular economy should be encouraged, it should not be at the potential expense of road pavement stability and longevity. This may mean that there needs to be appropriate quantities of virgin materials used in road construction (where possible) to help achieve the best balance between using recycled materials and achieving better long-term outcomes for the resilience of the road network.

However, while road construction standards and engineering methods are one part of the picture, this is not the major reason that we have witnessed the extensive damage seen across the road network in the eastern states caused by successive La Nina events. In the case of roads managed by councils, many of the roads that were damaged by torrential rain and flooding were susceptible to severe damage because of systemic underinvestment in the local road network. This is evident in the 2021 ALGA State of the Assets Report that indicated ahead of the severe weather events the amount of local government road stock in poor condition.

The 2021 [ALGA State of the Assets Report](#) revealed that roads managed by councils have a replacement cost of over \$204 billion, with \$17.8 billion of this road infrastructure rated as being in poor condition with \$16 billion rated as having poor function and \$14.3 billion considered to have poor capacity. It should come as no surprise that the local road network which has been decimated in some areas was extremely vulnerable to the sustained rain and flooding events that followed the report's completion across 2022 and into 2023.

Had these roads been properly funded and maintained in the first instance, it is probable that the extensive damage many of these same roads suffered would have, at the least, been mitigated and quite possibly prevented. As Engineers Australia explains in its report, [Climate Change and Transport](#) (2020):

Adaptation to climate change in transport infrastructure should be planned for the life of the infrastructure. If we expect a bridge or railroad to last 100 years, then it should be designed to operate safely in the climate range forecast in 100 years' time. The following issues are foreseeable and should be considered in planning, design and construction of new infrastructure, and maintenance and operation of existing infrastructure:

- Allow for higher average temperatures, and a larger range of extremes in design, including thermal expansion, heat degradation, and passenger comfort.
- Maintain or improve micro-climate in urban works by planting trees for shading and providing breeze corridors to reduce the urban heat island effect and improve liveability.
- Allow for sea-level rise and storm surge increases in coastal transport links
- Plan for a wider range of extreme events such as bushfires, cyclones, and floods.

Greater initial investment in building more resilient roads will save a substantial amount of money for taxpayers in the future. As Deloitte Access Economics [has highlighted](#), the cost per annum to the nation of disaster recovery efforts is around \$40 billion and this is likely to rise to at least \$73 billion annually by 2060. Further, the US Federal Insurance and Mitigation Administration [has identified](#), every \$1 spent on mitigation saves \$6 on recovery grants. This makes the case for greater upfront investment in funding more resilient roads a clear priority as this investment will help to ensure that our economy does not take a massive hit as it has in through recent adverse weather events. Upfront mitigation investment will keep supply chains open and will also ensure that communities can recover quickly as road access is not cut off allowing help to make it to those in need.

It is important to acknowledge that councils have a massive task in managing roads under their stewardship, which represents 77 percent of the total road length in Australia, or around 678,000 km. Yet councils raise just 3.5 percent of all the taxes raised by the three tiers of government. Unlike state, territory and federal governments, councils derive no direct income from the vehicles that use their road networks to help for their construction and maintenance. This leaves councils in a position where they are heavily reliant on state, territory, and federal grants programs for road funding. However, it is clear the current model for funding the local road network is unsustainable. For the freight industry, the fragmented nature of road funding for council roads has resulted in a fragmented road network that is unable to ensure reliable and effective end-to-end access to deliver the freight task. For local communities, the recent severe weather events have meant seeing roads and vital community connectivity cut off, and road safety infrastructure well below the standards enjoyed by people living in metropolitan regions.

Recommendation 1: The Commonwealth and state and territory jurisdictions collaborate on the development of a sustainable road funding model for properly maintaining the local road network through better upfront investment so that it is more resilient to the effects of severe weather.

Identification of climate resilient corridors suitable for future road construction projects

ALGA supports the need to identify and target climate resilient corridors for future road construction projects as this investment is necessary to ensure that critical road freight supply chains can withstand future severe weather events. It will also ensure that there are certain corridors that will remain open to assist with recovery and rebuilding efforts for communities that are hit by natural disasters.

ALGA understands that there are several initiatives underway that will assist the government in the identification of climate resilient corridors. These include the [iMove Key Freight Routes](#) project, the Commonwealth's work on National Service Level Standards, and the NHVR's Strategic Local Government Asset Assessment project that has been targeting bridge and culvert assessments on key freight routes on the local road network. Naturally, Infrastructure Australia will also be able provide strategic advice in this regard.

ALGA can advise that in many instances, councils are well placed to support these future road construction projects, and where possible, the Commonwealth should tap into council work forces to help deliver these projects. Councils are often the largest employers in their local communities and a reliable project pipeline is important in helping councils with their forward planning for staff employment, training, and job retention requirements. The delivery of these road construction projects by councils also helps to maintain skill levels in regional communities while construction materials are often sought through local supply chains, helping to keep local economies thriving. Competitive grants programs should be avoided where possible, as these are a drain on council resources. Funding for these types of projects can be delivered quickly and effectively through funding mechanisms such as those used for the successful Local Roads and Community Infrastructure Program (LRCIP).

Consideration should also be given to providing greater funding to creating resilient alternative routes to major corridors that may remain susceptible to flooding or severe rainfall events. Jurisdictions like the Northern Territory which is reliant on single national freight routes and in need of much more investment in the maintenance and upgrade of alternative corridors and to a standard suitable to withstand the movement of significant numbers of heavy vehicles. This includes alternative routes that may traverse different state or territory boundaries. The recent cutting of the national network's Great Northern Highway at Fitzroy Crossing means freight is currently being diverted via alternate routes putting additional pressure on roads in neighbouring jurisdictions and increasing the wear and tear on roads not designed to support these types of movements. This will only create a situation where accelerated consumption of these roads will leave them vulnerable to severe weather events in the future.

Recommendation 2: Consideration should be given by the Commonwealth to creating resilient alternative routes to major corridors that are susceptible to flooding or severe rainfall events.

Recommendation 3: Where climate resilient corridors align with council managed roads, a program could be established to provide councils with the contracts for future road construction projects using similar direct funding mechanisms as successfully employed through programs such as the LCRIP.

Opportunities to enhance road resilience through the use of waterproof products in road construction

Pavement technology has continued to evolve with many effective developments that offer cost-effective solutions for enhancing road resilience through the use of waterproof products in road construction, but also resilience to the effects of the climate more broadly, including the protecting roads from the damaging effects of UV light. ALGA recently partnered with the Australian Road Research Board (ARRB) to [highlight the importance of enhancing road resilience](#) through creating eco-friendly pavements that are more durable using crumb rubber. The benefits of crumb rubber used with the right mix of bitumen and other compounds has been shown by RMIT (in collaboration with ARRB) to halve the rate of sun damage and can potentially save governments millions of dollars in road maintenance costs in the medium to long term.

The Queensland Department of Transport and Main Roads (TMR) has been pioneering the use of foamed bitumen [to excellent effect](#). Queensland, like NSW and Victoria, saw extensive damage to its road infrastructure following the recent severe weather events along the east coast. However, where roads were made from foamed bitumen, they proved so resilient to the effects of flooding that when the flood waters subsided, foamed bitumen roads were reopened to traffic within days. Where roads were made using more traditional methods but subjected to the same conditions, they were often severely damaged and in need of reconstruction. [TMR has partnered with ARRB](#) to create the National Asset Centre of Excellence (NACoE) which has been operating for nearly a decade to develop and trial experimental pavement surfaces and techniques like foamed bitumen, the use of crumb rubber and EME2, a high modulus asphalt. The Commonwealth could play a leading role in expanding the adoption of the technology developed by the NACoE more widely across Australia.

Councils have been at the forefront of using new pavement technologies, including leading the use of recycled materials in roads, over many years – in part, driven by the need to drive their scarce road funding dollars further. It is a proud tradition that has continued and can be seen in the recent [Australian-first use of a new road construction method](#) combined with the use of foamed bitumen by the Central Coast Council. The approach produces a reconstructed road in less time, reuses more of the existing road material while reducing greenhouse gas emissions. Councils across Australia stand ready to lead the piloting of new more resilient pavement

technologies should the Commonwealth seek to further explore the development and deployment of innovative pavements through pilot projects.

Recommendation 4: The Commonwealth work with the road construction industry to take a leadership role in driving the widespread adoption of the latest pavement materials across the country.

Recommendation 5: Councils should be supported in trialling new road construction methods and stand ready to be utilized by the Commonwealth to pilot new road construction methods and materials where possible.

The Commonwealth's role in road resilience planning

Moving forward, the Commonwealth has a major role to play in leading resilience planning efforts. While it has played a very important role in disaster recovery efforts, limitations on disaster recovery funding that does not allow for betterment has been a major point of contention repeatedly raised by the local government sector. It is pleasing that the Commonwealth is now shifting its position in relation to this as it is futile to replace infrastructure that has been demonstrated to fail in certain conditions with "like-for-like" infrastructure that will inevitably remain vulnerable to catastrophic damage when severe weather next strikes.

This is why [ALGA welcomed](#) the passing of the Australian Government's Disaster Ready Fund (DRF) legislation which will deliver \$200 million per annum for vital disaster mitigation projects in response to our lobbying efforts and in line with the 2014 Productivity Commission recommendation. In ALGA's submission to the *Inquiry on Lessons to be Learnt following the 2019-20 bushfire season*, we noted that the Commonwealth has historically spent 97 percent of disaster funding on disaster recovery and only 3 percent on preparation and mitigation. This new legislation represents a long overdue to shift this emphasis to targeted upfront investment to reduce the damage bill from disasters in the future. As Deloitte Access Economics advises in its [Building Resilient Infrastructure](#) (2016) report:

...carefully targeted investment in resilience measures now will reduce Australian Government expenditure on natural disaster relief and recovery by more than 50% by 2050. We also found that in 2015 the total economic cost of natural disaster events in Australia exceeded \$9 billion, or about 0.6% of gross domestic product. These costs are expected to rise to an average of \$33 billion per year by 2050." [p. 2]

Recommendation 6: That the Commonwealth adopts a strong leadership role in efforts to improve disaster mitigation efforts, including supporting local governments with greater upfront investment in building more resilient infrastructure to minimise the much more substantial costs of replacing infrastructure destroyed by severe weather events.

Any related issues

ALGA has long advocated for more substantial investment in regional and rural road networks. Had these calls been heeded by previous governments, it is reasonable to conclude that the level of devastation witnessed across these road networks on the east coast of Australia in particular, would not have been as substantial. We have highlighted many of these calls for greater investment in local government infrastructure in the [ALGA Pre-Budget Submission 2023-24](#).

Investing in local government as a trusted partner with the Commonwealth will allow us to provide the services and facilities local communities need to prepare for the future more effectively and efficiently. These are not just local issues – they are national priorities and include:

1. Fair increases to Financial Assistance Grants to at least 1% of Commonwealth taxation revenue, which includes a road funding component.
2. An increase in Roads to Recovery funding from \$500 million to \$800 million per year over four years, and to make permanent the \$20 million per year allocation for South Australian roads.
3. Making the Local Roads and Community Infrastructure Program permanent at \$500 million per year and indexed annually.
4. Investing \$300 million per year over four years to bolster key freight routes to help local government better support freight productivity to support the implementation of Heavy Vehicle National Law reforms.
5. Investing \$250 million per year over four years on top of Disaster Recovery Funding to immediately enable disaster declared regional councils to support communities, repair infrastructure and rebuild to a more resilient standard.

Additionally, ALGA recently joined a new [Rural Roads Alliance](#) that includes GrainGrowers, the National Farmer's Federation (NFF), and the Australian Livestock and Rural Transporters Association (ALRTA). The alliance was formed in response to the extensive damage to the regional road network following the recent flooding events. The alliance is calling for an emergency funding package, that includes, in addition to the road funding asks above a one-off injection of \$1 billion over four years directed at regional road and infrastructure reconstruction for councils impacted by flooding and other natural disasters to ensure the rebuild is to a standard more resilient to future disaster events. The alliance is also calling for a targeted funding boost through the Roads of Strategic Importance program to improve the long-term climate resilience of freight networks.

The devastating severe weather events of the past two to three years has placed the financial sustainability of councils under extreme pressure and they will require substantial financial support to help local communities and their vital road networks recover and rebuild in a way that is more resilient. Councils only raise around 3.4 percent of the total tax revenue raised by Australian governments and the damage to infrastructure left in a vulnerable state due to systemic underfunding has never been in exposed in such sharp relief. We urge the inquiry to support the funding allocations outlined in ALGA Pre-Budget Submission 2023-24 outlined above as this investment is necessary to ensure that local communities can bounce back from the recent natural disasters stronger and more resilient than before.

Recommendation 7: That the inquiry supports ALGA’s Pre-Budget Submission Road funding proposals as this funding will support our local communities to be much better positioned to withstand the effects of severe weather events in the future.

For further information on this submission please contact Sanjiv Sathiah, Director Transport and Infrastructure Policy [REDACTED]