

CRJO Regional Submission



Australian Government Inquiry into the Implications of Severe Weather Events on the National Regional, Rural and Remote Road Network



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Executive Summary

Background to the Inquiry

This submission to the Standing Committee is made on behalf of the Canberra Regional Joint Organisation of Councils (CRJO) and its member Councils. This submission was endorsed by the CRJO Board on 24 February 2023. The submission addresses the specific focus of the Standing Committee inclusive of progressive adaptation of the existing road network to provide a more resilient future. The submission addresses the impacts of bushfire, flood, storms, drought, heat and coastal impacts.

This evidence-based submission highlights the specific challenges in the CRJO region. However, the solutions being implemented and/or proposed offer universal applicability for regional communities across Australia.

The Australian Government's House of Representatives Standing Committee on Regional Development, Infrastructure and Transport is inquiring and seeking to report on the implications of severe weather events on the national regional, rural and remote road network (Inquiry into the implications of severe weather events on the national regional, rural, and remote road network – Parliament of Australia (aph.gov.au)). The inquiry includes a particular focus on:

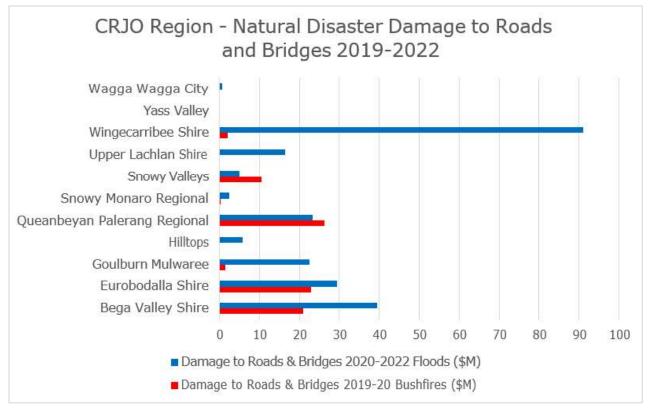
- Road engineering and construction standards required to enhance the resiliency of future road construction;
- Identification of climate resilient corridors suitable for future road construction projects;
- Opportunities to enhance road resilience through the use of waterproof products in road construction;
- The Commonwealth's role in road resilience planning; and
- Related issues

The focus of the Committee is consistent with the National Climate Resilience and Adaptation Strategy (National Climate Resilience and Adaptation Strategy 2021 to 2025 (dcceew.gov.au)). That strategy identifies the need to pro-actively adapt roads to better withstand the impacts of severe weather events and the changing climate. It also highlights the failure to act will see the economic cost of natural disasters across Australia increase from an estimated \$38B per annum in 2021 to \$73B per annum by 2060 (Deloitte Access Economics, reporting to the Australian Business Roundtable for Disaster Resilience and Safer Communities).



Disaster Experience Across the CRJO

Councils within the CRJO have experienced *up to twelve declared natural disasters each* including preceding drought, bushfires, floods, storms and ocean storm impacts over the last three years. *These natural disaster events have resulted in approximately \$305M* in damage to road and related transport infrastructure across our region (excluding Snowy Valleys Council) as covered under the Government's Natural Disaster Funding Arrangements.



Graph E1 – Damage to Roads under Natural Disaster Funding Arrangements Across the CRJO from 1 July 2019 – 30 June 2022

Note:

Yass Shire Council suffered no disaster damage in this period but over \$4m in disaster damage in early 2023-24.

As a result of the 2019-20 bushfires, the lack of resilience of the road network resulted in:

- i) Significantly increased levels of risk to the community, first responders and early recovery personnel.
- ii) Significant challenges bringing in emergency services resources to assist with the response effort and/or providing connections from airports and/or sea to key destinations.



- iii) Sadly, delays in retrieving deceased persons and in treating, rescuing or euthanising impacted stock and wildlife.
- iv) Extreme difficulties in safely evacuating community members (including tens of thousands of visitors over peak summer holiday periods).
- v) Major challenges during the disaster response including re-supply of essential food, fuel and other supplies and provision of safe access by other agencies to facilitate restoration of other critical infrastructure (such as power and telecommunications).
- vi) Major disruption to regional communities and our regional economy.
- vii) Significant adverse impacts in the short to medium term on the well-being of regional communities.
- viii) Extended periods of unplanned peak workloads creating a significant shortage supply for infrastructure design and delivery, and extreme fatigue within the local workforce during recovery.

The adverse impact of the multiple floods, wind and rain storms that followed the bushfires was extensive. This was exacerbated by the fragility of the scorched landscape immediately following the bushfires, with slopes vulnerable to extensive erosion, high levels of ash and debris washing into drains and watercourses disrupting normal drainage paths. Burnt trees also fell randomly creating high risk for the community and workers.

These subsequent events also significantly disrupted recovery efforts, often washing temporary recovery measures away and changing the scope of recovery works needing to be designed and delivered, as damage upon damage extended with each passing event. Administratively, this became a nightmare with each Council recording thousands of damage sites across their networks and trying desperately to track initial damage, extended damage and recovery efforts.

The extensive period of wet weather since February 2020 also resulted in a major decline in the condition of the overall local and regional road network with numerous road failures including potholes, edge break, shoves and other pavement failures. These types of damage are often not covered under the provisions of the natural disaster relief arrangements pushing the cost back to our member Councils with the scale of the task exceeding the financial capacity of most Councils.

Our member Councils are addressing these challenges in efficient and innovative ways. However, their efforts to create a more resilient future must overcome existing legacy deficiencies across the transport network, an on-going shortfall in funding, inefficient institutional arrangements between levels of Government, uncertain future funding models, on-going wet weather resulting in repeat damage &/or failures, and a shortage in skills and capacity within the LG and the consulting and contractor workforce.



Some Councils also highlight the adverse impact of large-scale green power schemes are having on existing local roads and as a result of new local road assets being 'gifted' to Councils without adequate funding to meet on-going costs. Whilst member Councils support the pursuit of measures to reduce climate change, the Australian Government should work with State Government to mitigate the cost shift to Local Government.

The Role of Improved Infrastructure Planning and Funding Certainty

Critical to building future resilience is better infrastructure planning.

Critical to good infrastructure planning and the development of skills and capacity of the workforce, is greater certainty of funding availability and quantum over the medium to long term. This is especially true in regional areas where the dependence on grants from State and Australian Governments is a large proportion of our Councils' funding source for work on roads.

Improved infrastructure and long-term financial planning is often stifled as the grant funding beyond the current financial year is unknown or at best an uncertain estimate with uncertain timeframes.

The Australian Government needs to take a more significant role in ensuring Local Government is more sustainably funded, particularly across region Australia where the scale of the road asset base compared to population is disproportionally high.

The Australian Government should also provide greater guidance on the intent of funding provided to Local Government to ensure national objectives such as those laid out in the National Climate Resilience and Adaptation Strategy (and the National Road Safety Strategy <u>National Road Safety Strategy 2021-30 | Office of Road Safety</u>) are achieved. This would improve the return on investment for Government through a more resilient economy and reduced future disaster claims for repair of damage.

The CRJO has piloted the Resilience Blueprint project (<u>Blueprint for a Resilient South East NSW – Canberra</u> <u>Region Joint Organisation</u>).

An integral part of the Resilience Blueprint is the preparation of critical infrastructure resilience plans for each Council and/or the region. If funding support is provided by the Australian Government, **the CRJO stands ready to pilot the preparation of critical infrastructure resilience plans for each of its member Councils.**



These infrastructure resilience plans would greatly assist communities and all levels of Government target specific actions to optimize investment of funds and take account of social equity issues. These plans should then be integrated into each Council's transport network, asset management, long term financial plans, delivery programs and annual budgets to ensure the required actions are achieved with regular progress reporting back to the community.

Improved infrastructure planning provides a more pro-active approach to improving resilience of road networks whilst offering:

- i) improved integration of road safety, capacity, freight, multi-modal and livability outcomes on a whole-of-network and/or route basis.
- ii) significant efficiencies in the delivery of works and better integration with other agencies to provide whole of Government efficiencies. For instance, improved infrastructure planning allows integration with other service providers to plan, locate or relocate services in advance, which otherwise cause projects delays and/or increased risk to worker safety during tight delivery timeframes to meet grant funding deadlines.
- iii) identification of opportunities to better align with other infrastructure (e.g., power, telecommunications, water, sewer (e.g., aligning a power line with a road corridor may make the power network more resilient)
- iv) better identification of the critical role specific roads play in providing a line of defense for firefighting purposes (e.g., a fire break, a place of last resort for backburning operations).
- v) improved optimization through the re-use of materials delivering cost savings, 'Circular economy' and environmental benefits.
- vi) reduced whole of Government costs, including limiting future costs to the Australian and NSW Governments under the Natural Disaster Funding Arrangements (NDFA).

An example of this advanced level of road network planning has been undertaken by Eurobodalla Shire Council through the development of the following strategic documents:

- i) Eurobodalla Road Safety Plan 2019-22 (<u>Eurobodalla-Road-Safety-Plan-2019-2022.pdf</u> (nsw.gov.au))
- ii) Northern Area Transport Network Plan (<u>Northern-Area-Transport-Network-Plan.pdf</u> (<u>nsw.gov.au</u>))
- iii) Draft Southern Area Transport Network Plan (<u>Draft Southern Area Transport Network Plan</u> (<u>nsw.gov.au</u>))
- iv) Eurobodalla Critical Infrastructure Plan (attached as Appendix A)



This latter document addresses the resilience of critical infrastructure including roads, water, sewerage, telecommunications and power supply infrastructure based on the lessons learnt from the lived natural disaster experience during the 2019-20 bushfires and the subsequent ten declared natural disaster floods since. Earlier versions of this resilience plan guided recovery efforts at Eurobodalla. This lived experience has broader application to other regional communities and serves to highlight the many challenges during recovery. An example of the challenges outlined in this submission, and successes during recovery have been documented with photographs in report IR22/024 to the Eurobodalla Shire Council meeting held on 13 September 2022 (see Council's web-site at Agenda of Ordinary Meeting - Tuesday, 13 September 2022 (nsw.gov.au) and Attachment-A-Infrastructure-Recovery.pdf (nsw.gov.au).

At the current time, most regional Councils are too highly dependent on individual grants, as opposed to certain levels of on-going grant funding support aligned to the scale of the asset. In regional areas, when combined with typically smaller rate bases and the limitations of NSW rate pegging, the current uncertain funding model is insufficient to address the resilience challenge, or indeed sound road network planning.

Many individual grant applications also fail to yield successful outcomes, creating significant inefficiencies within Government-to-Government funding arrangements. When grant success does come, the funding profile for regional Councils is often lumpy with significant peaks that prove difficult to resource, leading to project delays and frustration from all parties working under this current inefficient individual grant funding model. Councils can also struggle to meet matching funding requirements on these larger scale projects.

The Roads to Recovery Program is by far the most successful and efficient targeted grant funding model between the Australian Government and Local Government, however the on-going funding levels are insufficient to address the scale of the future resilience challenge.

Additionally, NSW Councils contribute significantly financially as well as operationally to State Government emergency management agencies, being the NSW Rural Fire Service, NSW State Emergency Services and NSW Fire & Rescue. This is an arrangement based only on history, with poor alignment to the core functions of Councils and significant inefficiencies for all parties. The NSW Roads and Transport Directorate Roads Congress resolved to advocate to move this cost burden of these NSW Government agencies back to the NSW Government. This has also been a policy platform of LGNSW and many Councils directly across the State. In return, Councils could agree to directing the equivalent funds for a period of not less than five years toward improving resilience of the transport network. As the current expenditure on these NSW Government emergency services agencies is substantially an operational expense for Local Government, removing these costs from Councils would allow more sustainable funding and a greater borrowing capacity within Councils to accelerate resilience improvements to the transport network. This would ultimately reduce the cost of future damage in natural disasters and the costs needing to be borne by the NSW and Australian Governments under the NDFA.



In NSW, many roads and tracks used to access individual properties are Crown roads owned by the NSW Government. Crown Lands are not resourced to provide any engineering expertise and/or resources to recover these roads. The NSW Government often looks to Councils to assist, despite Council resources typically being stretched well beyond capacity to address the thousands of challenges on their own local road network. The Australian Government should work with the States to develop an improved response and recovery arrangement for these roads, preferably through NSW Government agencies (e.g., Transport for NSW and/or NSW Public Works Advisory).

The universal experience (the crisis) over the last three years is perhaps best summarized by one practitioner from our member Councils who stated:

"Since 2019, Council has had 9 storm/flood events and the constant wet conditions along with these events has meant a logical or structured maintenance schedule has been disregarded and we have been acting purely reactively and constantly reassessing which job is the highest priority for safety and resilience (priorities seemed to change every other day). Resourcing of these works and the organising of these works has been one of our major struggles, including our administration staff being overwhelmed with road maintenance requests from residents, a lack of asset inspectors to provide feedback and information, a lack of staff to manage natural disaster funding requirements and processes and a lack of crews and plant to keep our large road networks at a safe and serviceable level. It has been difficult to increase permanent staff numbers with the uncertainty of so much additional work and funding into future years and unfortunately, we cannot seem to get many (if any) suitable casual staff. While it has not been ideal conditions to undertake construction projects, we have still had to postpone several Capital Projects to fall construction staff and plant back to maintenance. This has caused issues and additional workload in regards to existing funding deadlines for these projects.

Additionally, we try to utilise contractors wherever possible to supplement our own workforce, but the availability of suitable contractors, while understandable, has been a real issue in getting jobs done in a timely and efficient manner. Procurement of goods and services has also been a major issue in getting work done when required, the procurement process for larger value works seems to take up valuable time both in manpower and delaying works. Greater funding certainty would most definitely assist council's Infrastructure department to staff appropriately and fund a structure that will be sustainable and provide an acceptable service level."

In summary, greater funding certainty and more efficient Government to Government funding models are critical to:

 the efficient development and delivery of infrastructure resilience, road safety, freight, capacity and livability outcomes prioritized on a whole of network basis and;



the development of a more sustainable workforce with skills and capacity needed to deliver high quality and timely outcomes.

RECOMMENDATION

This submission calls on the Australian Government to:

- Increase the Australian Government's Roads to Recovery Program from \$500m to \$1B per annum ongoing across Australia from 2023-24.
- Index the annual Roads to Recovery allocations aligned to the construction cost index plus the growth in the road asset base to maintain funding levels in real terms.
- Revise the Roads to Recovery Statement of Intent to include the development of local road resilience plans and the integration of natural disaster adaptation strategies into Council transport, asset management, long term financial plans, delivery programs and annual budgets.
- Allow Councils to utilize Roads to Recovery funding to develop road resilience, road safety and road network management plans on a one-off 50/50 funding basis with a maximum limit of \$50,000 per Council (subject to increasing the overall funding).
- Decouple the roads component of the Local Roads and Community Infrastructure Program and extend a new \$250m per annum Community Infrastructure Program 2025-26 onwards.
- As a minimum, double the Australian Government's Bridge Renewal Program from \$85m per annum to \$170m per annum to target improving the resilience of local road routes (with a priority on replacing timber/hybrid bridges, causeways and other vulnerable structures).
- Work with Local Government NSW and the NSW Government to negotiate the removal of emergency services levy charges from NSW Councils for the NSW Rural Fire Service, State Emergency Services and NSW Fire and Rescue in return for a commitment from Councils to develop formal road resilience plans and spending the equivalent amount of funds on the resilience of roads for a period of not less than five (5) years.
- Develop new guidelines for the Natural Disaster Funding Arrangements to allow increased flexibility to build back better with fast efficient approval mechanisms suited to enabling timely recovery work post-disaster.
- Work with State Governments to ensure improved arrangements are put in place for the provision and on-going care of roads servicing large scale green power projects such as wind and solar farms to reduce the cost shift to Local Government.
- Work with State Governments to reduce red tape and provide additional Government resources to enable faster approvals for road infrastructure construction, maintenance and management, including during disaster recovery works.
- Provide a financial incentive program to assist Local Government employ, train and develop new Cadet Engineers.



- Work with professional bodies such as the Institute of Public Works Engineering Australasia to rebuild the capacity and skills of public works personnel within and servicing Local Government, with a specific focus on whole of road network planning, road drainage, road pavements and road surfacing.
- Work with universities to increase the focus on whole of road network planning, road drainage, road pavements and road surfacing in future Engineering degree course curriculum.
- Continue to support apprenticeship programs to develop new and existing workers in the operational skills required to build and maintain roads.
- Support on-going research into cost effective resilient road materials and independent product review by specialized bodies such as the National Transport Research Organisation (previously ARRB) with appropriate guidelines and training programs to imbed this into practice.
- Continue to collaborate with State and Local Governments, business and the international community to address longer term climate change.

This submission also identifies examples of the development of more resilient routes for roads and highlights the critical role some Council roads play in providing a more resilient transport network in parallel to the State highways network. Collaboration across Governments (including across State borders) to develop these alternate routes will accelerate positive outcomes in overall community resilience and help drive economic development and higher productivity outcomes across regional Australia.

The submission also identifies a range of known proven resilience improvement techniques, including:

- i) focusing efforts on the sound engineering improvements that will have a major positive benefit, the most important being bridges, stormwater structures and drainage improvement (including maintenance), road pavements and road resurfacing.
- ii) ensuring all Councils have appropriate risk management policies and codes of practice in place linked to road hierarchy and available resources, to prioritise defects.
- iii) rebuilding the skills and capacity of the existing and future workforce in the fundamentals of road network management, construction and maintenance.
- iv) simple modifications to current road standards.
- v) proven products with further research required on those being tested or under trial.
- vi) wider use of technologies to improve the quality of outcomes.
- vii) identification of increasing challenges to resilience (such as the adverse impacts of higher mass and autonomous vehicles, and the adverse impacts of large scale green power projects on local roads), and development of solutions.