



Chris Steel MLA
Minister for Transport and City Services
Minister for Skills
Special Minister of State

Member for Murrumbidgee

Mr Luke Gosling AOM MP
Chairperson
Standing Committee on Regional Development, Infrastructure and Transport
PO Box 6021
Parliament House
Canberra ACT 2600

Dear Mr Gosling

RE: INQUIRY INTO THE IMPLICATIONS OF SEVERE WEATHER EVENTS ON THE NATIONAL ROAD NETWORK

Thank you for your letter of 5 December 2022 inviting an ACT Government submission on the Committee's inquiry into the implications of severe weather events on the national road network. I understand the Committee is concerned about the increasing deterioration of the nation's road network, particularly in regional, rural, and remote areas as recent weather has impacted many Australians.

I am pleased to provide the ACT Government submission regarding the implications of severe weather events on ACT's roads as below:

ACT context

The ACT community and the broader region rely on the ACT road network for the movement of goods and the provision of services including emergency response, freight, cyclists, personal mobility devices, public transit (e.g., buses) and private transit (e.g., cars). The ACT road network comprises more than 3,200 kilometres of sealed roads with an asset value exceeding \$4.2 billion. These roads are classified as either territorial or municipal roads, equivalent to roads managed by a State and



Local Government. Key regional links, which are complemented by the ACT's orbital freight network, are identified through the ACT Transport Strategy 2020.

In addition, the ACT Government's conservation estate has over 2,800km of primarily unsealed management trails that traverse a wide variety of managed lands including wilderness area, national park, water catchments, nature reserves, special purpose reserves and commercial plantations. The trail network is important to support a wide range of land management, emergency access, critical infrastructure (water, electricity, communications and air traffic control management), public access and bushfire response purposes.

Rainfall prevailing from the La Niña weather pattern since 2020 has caused widespread impacts to ACT's road users. While the ACT was spared some of the severe immediate flooding impacts experienced in other jurisdictions, it is expected that the medium and longer term implications will be significant. The findings from this inquiry are anticipated to inform ongoing resilience improvements for the ACT.

The rate of pothole maintenance rectification works per month since 2020 has on average been 3-4 times the equivalent rate between 2017 – 2020. Large rainfall events such as during October 2022 resulted in accelerated pavement deterioration, experienced by road users, in the short term, as hundreds of new potholes formed across ACT's road network. Funding to increase routine maintenance since 2020 has been provided by the ACT Government and through the Australian Government's Local Roads and Community Infrastructure Program. The ACT Government appreciates that an ongoing systemic solution is required to improve resilience. As such, the ACT Government has recently reset / fundamentally changed its strategic approach to pavement maintenance.

The relatively high rainfall for the ACT since 2020 has also resulted in damage to, and accelerated deterioration of, road pavements across the network. Sites are progressively being addressed through rehabilitation works funded by the ACT Government and through the Australian Government's Roads to Recovery Program. The full extent of pavement damage will be further investigated by assessing trends in pavement strength data, which has been captured annually by the ACT Government for the arterial road network for more than 20 years.

In recent years, the increasing frequency and intensity of natural disasters has also impacted on the quality of the trail network. The Orroral Valley fire and subsequent floods events has degraded the trail network, with some areas now impassable. In relation to the trail network, the ACT Government has initiated a program of work aimed at triage, repair and strategic planning for a climate resilient network. This includes a network audit focusing on condition, structural integrity and alignment of all trails, potential for re-alignments and decommissioning of at-risk infrastructure, revision of management trail construction and maintenance standards and a holistic upgrade of the asset management plan for this network.

During the last 18 months, the ACT Government has comprehensively reviewed its strategic road maintenance and renewal program. This program has undergone a fundamental reset for delivery from 2023 with a 52% increase in planned annual expenditure on road maintenance. Key elements include adopting earlier intervention targets to minimise cracking (to minimise water ingress) and roughness. This program places a very high emphasis on the importance of providing the community

with better, safer, smoother and quieter roads that will reduce the associated cost implications for road users.

The ACT's new strategic road maintenance and renewal program will provide more climate resilient roads within the ACT. The additional road maintenance and renewal investment is informed through research undertaken by the Australian Road Research Board (ARRB) over many years to improve the function performed by ACT roads. This investment increases the total area of resurfacing, with a key increase planned for asphalt works.

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

The process to update and adopt new engineering and construction standards in the ACT is efficient but is actively reliant on research / publications prepared by others and early adoption within neighbouring NSW. The ACT Government is actively involved with Austroads and, being a relatively small jurisdiction compared to neighbouring states, the ACT has a focus on being an early and fast adopter of new standards.

Roads across the ACT have been constructed to the standard of the era. This has resulted in newer arterial roads being constructed to a higher standard that is more durable / less susceptible to damage. Older arterial roads such as part of ACT's orbital freight route were constructed with a thin bituminous surfacing on a granular base with a shorter design life, which carries additional performance risks of accelerated pavement failure when compared to equivalent new road construction standards. Pavement strength improvements are undertaken progressively across the network through rehabilitation works as required. Whilst higher standards generally decrease whole of life costs, they also rely on higher upfront investment.

The success of road engineering and construction standards is also highly reliant on quality assurance and quality control checking at the design and construction stages. Industry has a key role in ensuring integrity to the specified standards prior to handover of road related assets for public asset management.

Other key examples of standards, specifications and standard drawings that are important to enhance road resilience are associated with stormwater (flood protection and drainage), active travel, bridge loading capacity (supported by the Australian Government's Bridge Renewal Program) and signage. Recent weather patterns will prompt the need to further review and improve existing standards and will likely have associated cost implications.

Identification of climate-resilient corridors suitable for future road construction projects

New road corridors in the ACT are generally considered as part of land use planning and then subsequently in more detail through estate development planning. However, the ACT Planning Strategy 2018 identifies a shifting emphasis that aims to work towards delivering up to 70% of new housing within the existing urban footprint. This shift in focus places a higher emphasis on maintaining and improving the resilience of existing transport corridors.

Existing road corridor areas form important strategic bushfire management zones across the ACT such as Outer Asset Protection Zone and Strategic Fire Advantage Zone. Future road construction

projects would aim to further enhance bushfire protection. In relation to flooding, the ACT's urban riverine flood map¹ shows that the ACT road network is relatively less susceptible to riverine flooding. However, the ACT is susceptible to localised 'flash' flooding, which is anticipated to increase in frequency and intensity with climate change. Overland flood modelling is undertaken as part of road construction projects to identify potential susceptibility to flooding.

Rainfall events since 2020 serve as a reminder of the need for a flexible and thus resilient transport system, able to adapt to outside events. The ACT Government's Climate Change Strategy 2019-2025 and ACT Transport Strategy 2020 identifies a range of actions associated with the smarter use of roads. This includes anticipating and preparing for future trends, such as the uptake of heavier electric vehicles as well as adopting management practices that are flexible and demand responsive to enable rapid change should the conditions require it.

As an example, the ACT Government recognises Intelligent Transport System (ITS) initiatives as an efficient and effective way to improve road network resilience. During the 2021-22 mid-year budget review, the ACT Government provided funding for an initiative aimed to improve ITS capability for strategic road corridors. This includes providing ITS infrastructure to improve real-time data for network operations so that changes can be rapidly implemented to traffic signals and messaging systems to assist the community with journey planning and minimise traffic delay. Extension of this initiative in the future with support from the Australian Government would assist to further improve network operations and resilience.

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

The ACT Government has an established process to review and adopt products for use in road construction. In addition, the ACT Government is also aware that Austroads is developing a National Product Approval Framework, which will improve consistency.

As previously identified, the ACT Government has recently increased funding for strategic road maintenance and renewal. This program will reduce the time between preventative and corrective waterproofing treatments and also enhance opportunity to improve road resilience through new and innovative products (e.g., increase the use of recycled material in asphalt).

The ACT's strategic road maintenance and renewal program is annually modelled by ARRB with new condition data, to develop an indicative works program. Treatment selection is validated following field investigation and is peer reviewed. Industry is proactive in contacting the ACT Government to trial or adopt new and innovative products for use in road construction including preventative, corrective and routine maintenance programs.

The Commonwealth's role in road resilience planning

The ACT Government acknowledges the need for the inquiry into the implications of severe weather events on the national regional, rural, and remote road network, which aims to improve the resilience of the nation's road network.

¹ <https://app2.actmapi.act.gov.au/actmapi/index.html?viewer=flood>

As identified in the ACT Government submission to the 2020 Royal Commission into National Natural Disaster Arrangements, the ACT considers that the current mechanisms and criteria to request (and receive) national involvement in emergencies is somewhat unclear and should be reviewed, given that the frequency of future natural disasters on a national scale is likely to be higher. Improved consistency and clarity regarding the various funding mechanisms for disaster prevention, response and recovery will ensure governments can have appropriate investments recognised and are incentivised to invest in the critical areas of prevention and resilience.

The ACT Government appreciates funding provided from the Australian Government to support transport in the ACT. Programs such as Roads to Recovery and the Local Roads and Community Infrastructure program are key exemplars of efficient and effective programs. The National Partnership Agreement on Land Transport Infrastructure – October Budget 2022-23 Schedule² for the ACT provides the latest list of transport infrastructure initiatives which receive funding from the Australian Government.

The ACT Government relies on partial funding from the Australian Government to deliver significant capital projects concerning rural roads, as they are often long, more susceptible to damage from severe weather and, in the case of the ACT, often service residents across the border in New South Wales.

The Australian Government currently classifies rural roads in the ACT as urban roads, despite being outside of Canberra's urban footprint. This is because all roads in the ACT are classified as urban roads regardless of whether they are in an urban area or not. The ACT is home to a variety of rural roads, some of which are largely unsealed and are not 'urban', such as Boboyan Road, Smiths Road, Brindabella Road and others. These roads only attract a 50% funding contribution from the Australian Government. In contrast, the same sections of road across the border in New South Wales are classified as rural/regional roads, and therefore have attracted an 80% funding contribution from the Australian Government in recent years.

The Australian Government recently advised the ACT Government that it has changed its approach to the funding of rural/regional roads so that funding going forward would be on a 50:50 basis with the relevant state or territory. Such a change in policy is regrettable and will make it more difficult for small jurisdictions such as the ACT to sufficiently upgrade and maintain its rural/regional roads in the face of more frequent severe weather events going forward.

The ACT Government recommends that the Australian Government reconsider roads in the ACT, which are rural/regional roads and not in Canberra's urban footprint, as rural/regional, thus attracting 80:20 funding for agreed projects as has occurred in other jurisdictions in recent years. This would increase emphasis on upgrading the resilience of ACT's regional roads. A program that targets road resilience improvements would also be welcomed.

The ACT Government considers that although not specifically instructed in its terms of reference, the Inquiry should also consider broader mitigation strategies relating to climate change, in recognition that transport emissions are a key contributor and the importance of reducing environmental impacts with roadworks (e.g., increasing the use of recycled materials and reducing the need to use virgin materials).

² [ACT 2022-23 October Budget NPA Schedules.xlsx \(federalfinancialrelations.gov.au\)](https://www.federalfinancialrelations.gov.au/ACT-2022-23-October-Budget-NPA-Schedules.xlsx)

Cost escalation

Since the start of the COVID-19 pandemic in 2020, there has been a significant and unforeseen escalation in the cost of construction materials and resources due to supply chain issues and increased demand. In relation to road rehabilitation works through Roads to Recovery, there has been an extraordinary escalation in construction costs from 2020 with price increases for gravel, asphalt and bitumen increasing by up to 35 per cent. This has resulted in the ACT being able to undertake less works with the indicative funding allocation, at a time when there's a need for additional rehabilitation works, due to extensive road damage caused by high rainfall in the ACT since 2020.

The ACT Government has already largely utilised its entire Roads to Recovery budget for the current four-year period, with new funding not forecast to be available until the 2024-25 financial year. This is impacting the ACT's ability to progress several critical shovel-ready road rehabilitation projects. As such, I'd like to draw the Committee's attention to the level of Roads to Recovery funding from the Commonwealth as needing to be increased in line with recent cost escalation.

Thank you again for the opportunity to make a submission, and we look forward to receiving the Inquiry's recommendations.

Yours sincerely



Chris Steel MLA
Minister for Transport and City Services

22 February 2023