# Transport Adaptation Action Plan 2027–31

## DRAFT FOR CONSULTATION
## JUNE 2026


VICTORIA
Australia

ISBN 978-1-76176-892-7
(pdf/online/MS word)



## Accessibility

To receive this document in an alternative format, phone the Customer Contact Centre on 136 186, email customer.service@deeca.vic.gov.au, or contact National Relay Service (www.accesshub.gov.au/) on 133 677. Available at DEECA website (www.deeca.vic.gov.au).

# Contents

# Acknowledgement of Country

We proudly acknowledge the First Peoples of Victoria. We acknowledge their ongoing strength in practising the world's oldest living culture.

We acknowledge the Traditional Owners' lands, waters and skies on which we live and work. We also pay our respects to their Elders past and present.

We are committed to working in partnership with Gellung Warl to ensure transport planning, infrastructure, operations, and related activities respect Country, support cultural practices, and contribute to broader community aspirations now and into the future.

**Description of artwork**

Aaron (Gunaikurnai) 'Movements Between the Five Clans' 2019, acrylic on canvas. 'The tracks are going between the five clans of the Gunaikurnai and the hands are the symbols of my spirit travelling around the campsites.' This artwork was created through programs provided by the Torch. The Torch provides art, cultural and arts industry support to Indigenous offenders and ex-offenders in Victoria. The Torch aims to reduce the rate of re-offending by encouraging the exploration of identity and culture through art programs to define new pathways upon release.

# Victoria is committed to building our resilience to climate change

The Victorian Government has some of the most ambitious emissions reduction targets in the world and while actions to reduce emissions continue, the Victorian Government is also focussed on improving the management of climate change related risks and building the state's climate resilience to the unavoidable impacts that are locked in.

These efforts are anchored in the *Climate Action Act 2017,* with five-yearly updates to climate science knowledge and adaptation planning for statewide systems.

Victoria's first system-based adaptation action plans were released in 2022. The *Transport Adaptation Action Plan 2022-26* established foundational measures to strengthen resilience, improve understanding of climate risks, and inform future transport planning, infrastructure upgrades, and emergency preparedness.

Building on these foundations, *Victoria's Climate Change Strategy 2026-30* identifies adaptation priorities that inform this *Transport Adaptation Action Plan 2027-31*.

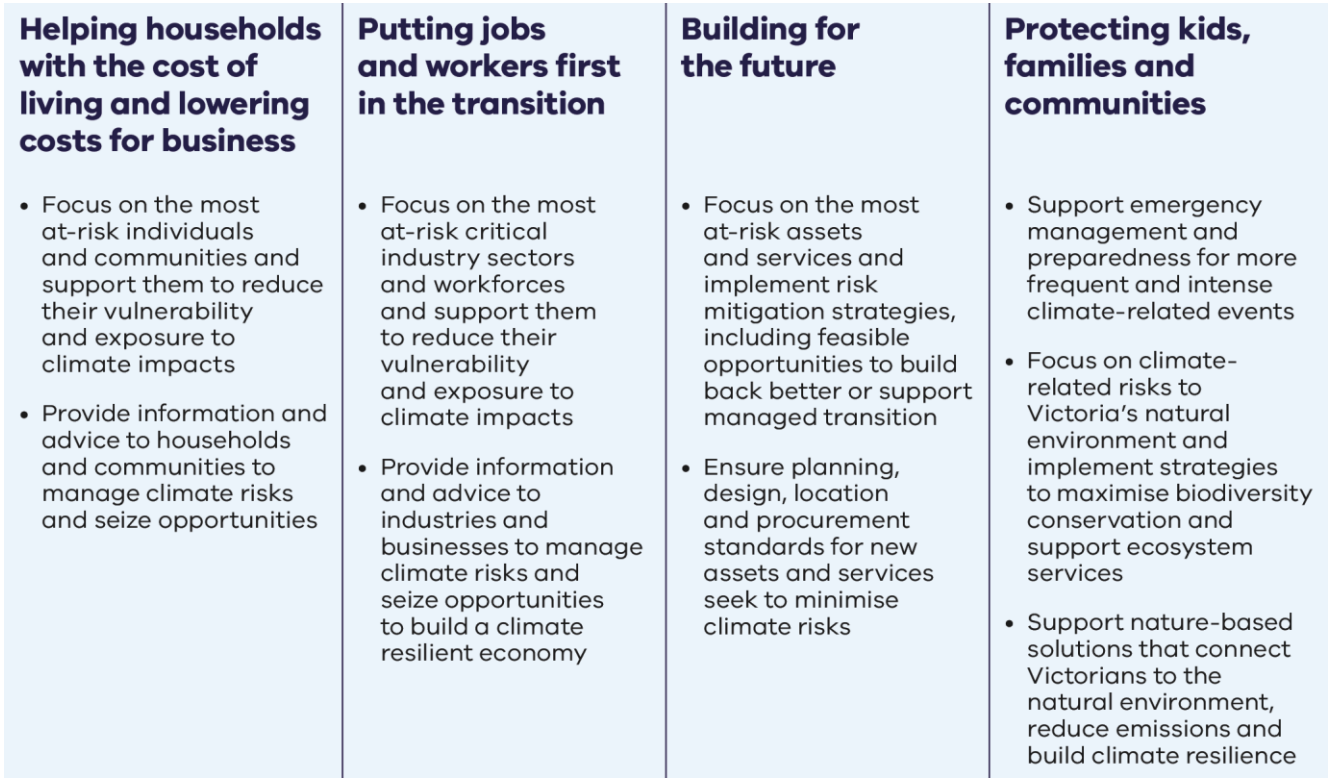


**Figure 1 Climate Change Strategy 2026-30 identifies adaptation priorities**

The 2027–31 plan is underpinned by our commitment to support self-determination for Traditional Owners to care for Country and culture in a changing climate and to benefit from the transition. We acknowledge Statewide Treaty and the establishment of the First Peoples Assembly of Gellung Warl as the democratically elected representative body for First Peoples in Victoria, and will engage with the Assembly in the finalisation of this plan.

## Building resilience requires different types of adaptation action

Adaptation is a process of adjusting to the actual or expected effects of climate change.

Adaptation action can take many different forms. While direct action to reduce risks, such as upgrading infrastructure to withstand the impacts of extreme events, is essential, it requires a solid foundation of enabling actions to target effort and create sustained change. For instance, ensuring changing climate and adaptation is embedded in decision making processes, and engaging with and learning from others, to inform direct action.

The Victorian Government is implementing the priorities of the *Climate Change Strategy 2026-30* by committing to adaptation actions that:

- Ensure climate change is considered in decision-making processes and operations, and that practitioners across government have the knowledge and skills to act
- Use the latest climate science to understand risks and opportunities, draw on the lived experience of communities, and use structured risk assessments to identify adaptation options and priorities
- Support others to adapt by providing information, resources and training, while working with other jurisdictions and the private sector so everyone plays their part
- Directly reduce risks to those Victorians who are most vulnerable, to Victoria's public assets and services, and to Victoria's natural environment, including by preparing for and recovering from emergencies.

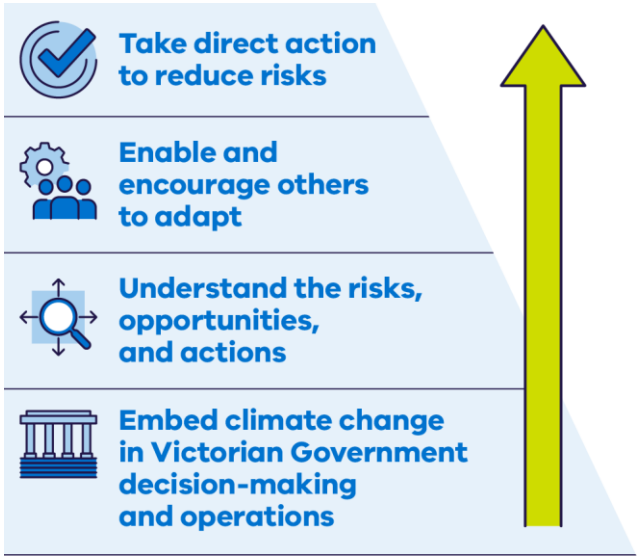


**Figure 2 Types of adaptation**

# The transport system is essential for people, goods, and the economy

## System scope

Victoria's transport system, defined under the *Transport Integration Act 2010* and the *Climate Action Act 2017*, includes infrastructure, services, and operations that enable the movement of people and goods. The system is closely interconnected with other systems, including energy, water and built environment, which together influence transport resilience outcomes.

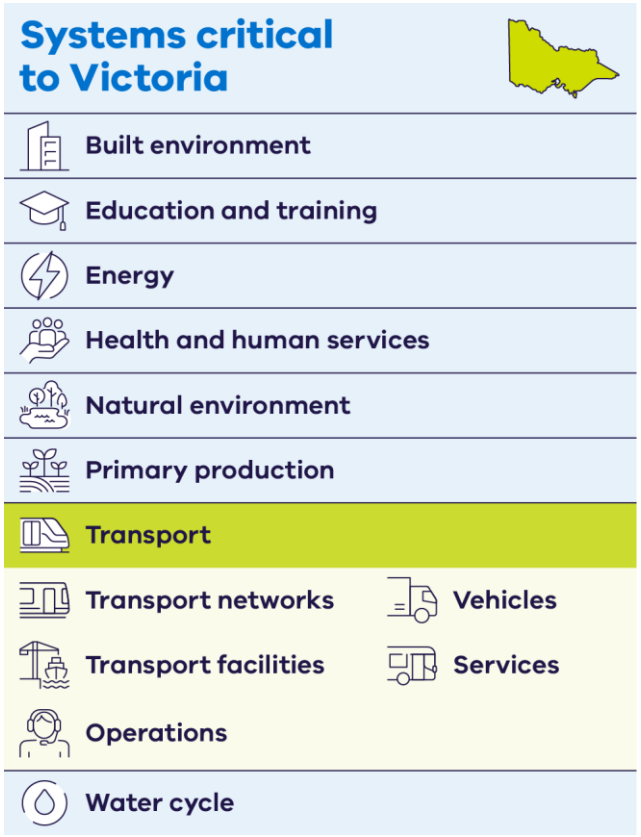


**Figure 3 Components of the transport system**

## Roles and responsibilities

Adapting Victoria's transport system requires coordinated action across multiple stakeholders.

Together, these groups strengthen system reliability, support emergency response, and enhance adaptive capacity under changing climate conditions.

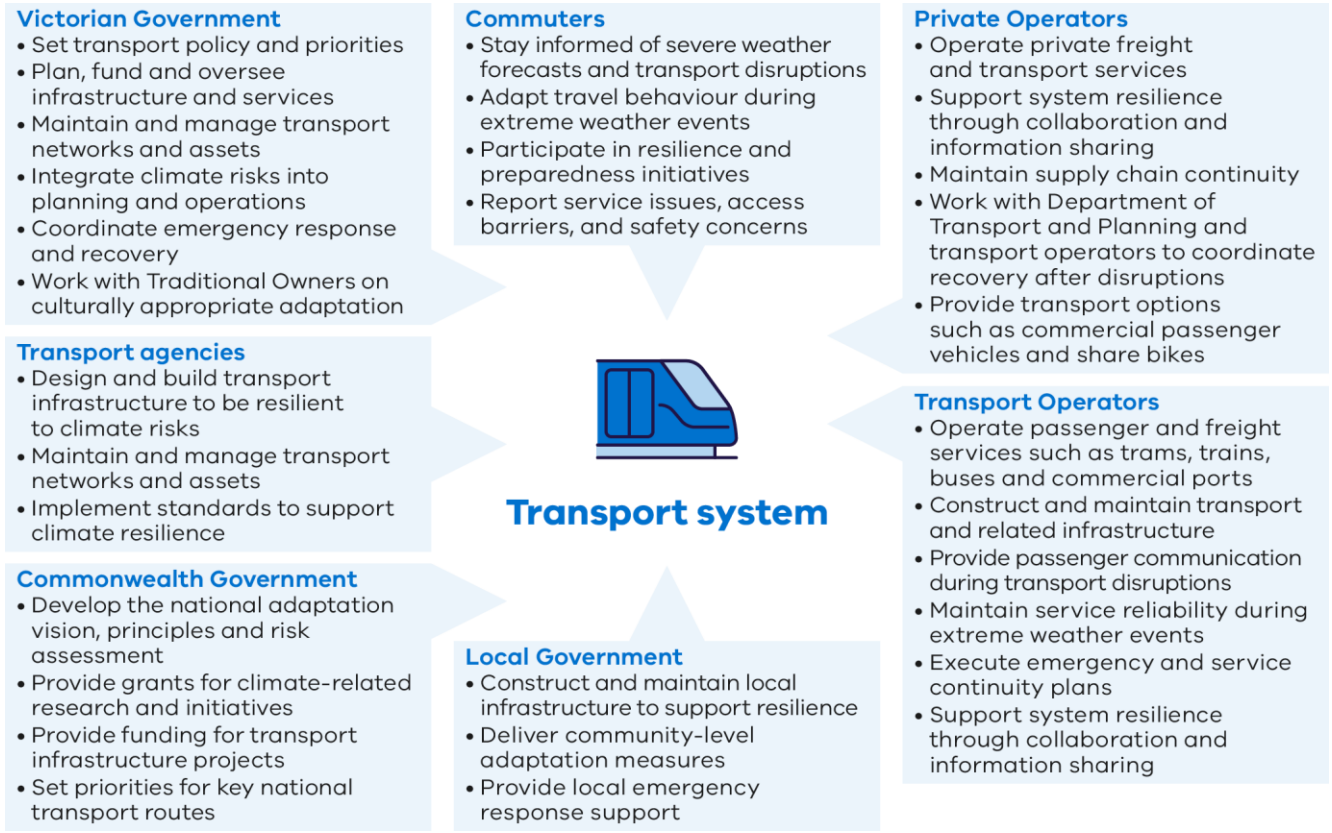


**Figure 4 Roles and responsibilities in the transport system**

# Climate change brings risks and opportunities

Victoria's climate has become warmer and drier and we are experiencing more frequent and intense climate hazards.

As the climate continues to warm, climate hazards will continue to change.

These changes pose significant risks to individuals, communities, ecosystems, industries and infrastructure.

## Climate risks to the transport system

Victoria's transport system faces rising climate risks from heatwaves, bushfires, floods, storms, high winds, and drought.

These hazards compromise connectivity, public transport and emergency response. They also create cascading impacts across energy, water and built environment systems, for example by disrupting access to critical facilities, and affecting infrastructure that communities and supply chains rely on.

Building resilience requires climate-ready planning, investment in durable infrastructure, and collaboration across government, industry, and communities to keep Victoria's transport networks safe, reliable, and adaptable.

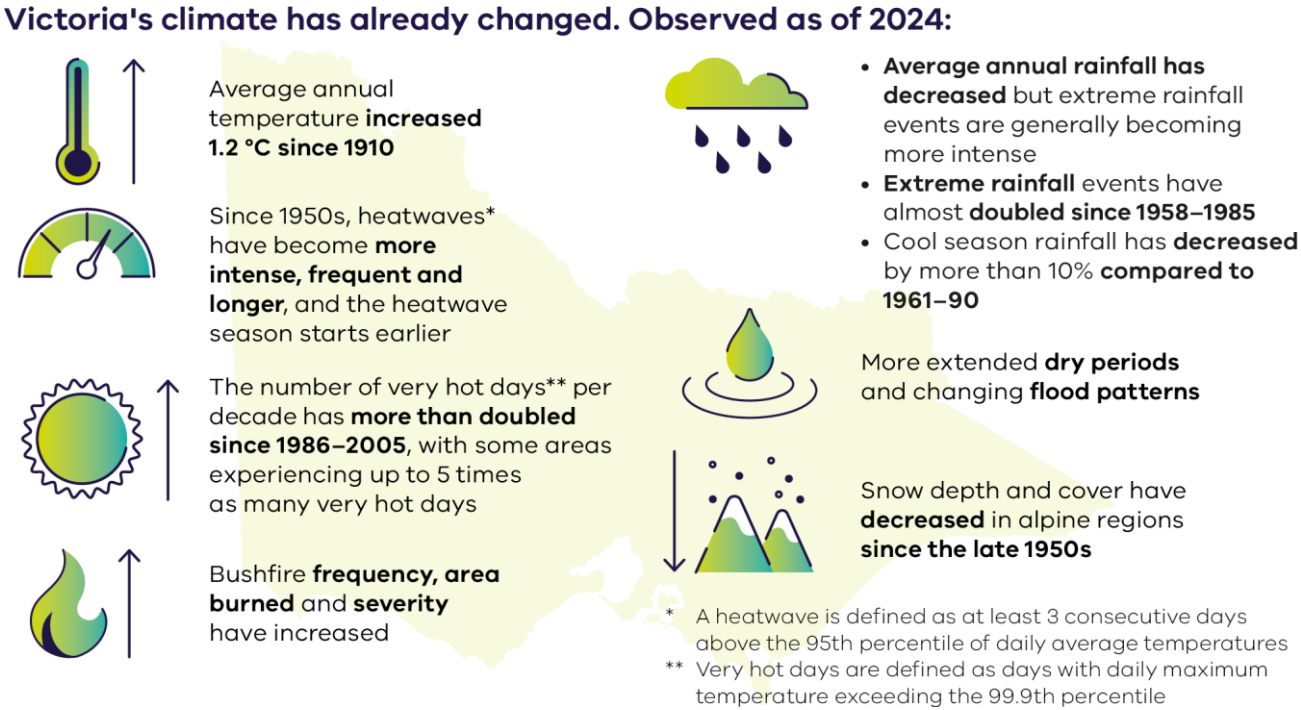


**Figure 5 Climate change in Victoria**


**Figure 6 Key climate risks facing the transport system**

| Risk | |
|---|---|
| 1 | Service disruptions, asset failure and costly repairs increase due to damage to road and rail infrastructure caused by more frequent and severe extreme weather events (especially flooding during intense rainfall events). |
| 2 | Speed restrictions, asset degradation, service delays and safety risks increase due to rail buckling, overhead line sag, structural stress and signalling failures caused by increasing heat extremes. |
| 3 | Communities are isolated and emergency response capabilities compromised due to damage and disruptions to transport access and evacuation routes caused by increasing extreme weather events. |
| 4 | Low-lying coastal transport infrastructure are subjected to degradation and long-term service viability risks due to erosion, saltwater intrusion and coastal change caused by gradual sea level rise and storm surges. |
| 5 | Damage to bridges increase as drainage systems are overwhelmed by extreme rainfall events and flooding. |
| 6 | Disruption to businesses and supply chains due to damage to freight and logistics networks, caused by extreme weather events. |
| 7 | Passengers, pedestrians, cyclists and transport workers' health, safety and comfort and workforce capacity are reduced due to extreme weather events and urban heat island effects. |
| 8 | Damage to transport corridors, prolonged transport disruptions and road or rail line closures increase due to landslips caused by destabilised slopes as a result of drought and vegetation loss, bushfire and intense rainfall events. |
| 9 | Interruptions to port operations and delays to passenger and freight movements due to damage to coastal transport assets and service disruptions caused by sea level rise, severe storms and high winds. |
| 10 | Maintenance costs, insurance exposure and operational complexity for transport agencies and operators rise due to damage to transport assets caused by increasing extreme weather events and changing climate. |
| **Opportunity** | |
| A | System resilience and reliability: Adaptation investments improve network reliability and reduce long-term disruption costs. |
| B | Asset modernisation and innovation: Climate pressures accelerate infrastructure upgrades and adoption of advanced technologies. |
| C | Improved planning and decision-making: Climate data supports better long-term planning and asset prioritisation decisions. |

# Our current adaptation action

## Ensure standards for new assets and services seek to minimise climate risks

Between 2022-26, the Victorian Government advanced foundational measures to embed climate resilience across the transport system.

Initiatives included:

- planning and assessment of rail and road infrastructure to better manage climate risks
- targeted land stabilisation and drainage works to reduce vulnerability to landslip and flooding
- trials of climate-resilient infrastructure design, including cool pavement treatments, greening, and shading interventions.

Climate considerations were also increasingly incorporated into infrastructure planning, design, and procurement processes to inform future investment decisions.

These activities strengthened understanding of the potential impacts of extreme weather and climate change, laying the groundwork for more resilient infrastructure and providing a strong basis for adaptation actions for 2027-31.

## Great Ocean Road's Wye River Bridge

Spanning the Great Ocean Road between Lorne and Apollo Bay, the new Wye River Bridge is a major upgrade to one of Victoria's most iconic coastal transport corridors. Replacing the former structure, the reinforced concrete bridge provides a safer, more resilient crossing for an exposed marine environment.

The 50-metre, triple-span bridge was elevated by approximately 600 millimetres, improving clearance above the river and reducing exposure to high tides and storms. This elevation enhances its ability to withstand severe weather and supports network reliability along this vital route.

Built to contemporary engineering standards, the bridge carries loads of over 100 tonnes, accommodating heavier vehicles and freight while supporting long-term structural performance. Safety upgrades include a wider deck and shoulders, a dedicated ocean-side pedestrian footway, higher protective barriers, and improved drainage, enhancing access and safety for motorists, cyclists, and pedestrians.

Following a severe storm in January 2026 and record flash flooding along the Great Ocean Road — the bridge remained standing and reopened shortly after a safety inspection confirmed no structural issues. Its performance reflects its climate-resilient design, built to withstand significant environmental forces.

This project demonstrates how climate resilience can be integrated into infrastructure design to support long-term reliability, showing how transport networks can address climate risks and extreme weather challenges for Victorian communities, visitors, and industry.


## Focus on most at risks critical assets and services

The Victorian Government has been focusing on strengthening the resilience of Victoria's transport system to support the ongoing movement of people and goods during climate-related disruptions.

Key initiatives include contributing to the development of the *National Freight Resilience Plan* and assessing climate exposure along major transport routes to inform future upgrades and emergency planning.

These initiatives have improved understanding of system risks that will enable the transport system to continue operating safely and reliably under future extreme weather and climate conditions. A resilient transport system, in turn, supports other key systems, including health, primary production and the built environment, by ensuring the ongoing movement of essential goods, access to healthcare and emergency services, and the continued functioning of critical infrastructure.

## Deer Park Station

The new Deer Park Station, delivered as part of the Mt Derrimut Road level crossing removal project in 2023, demonstrates how sustainable transport infrastructure can help support climate resilience for public transport commuters and staff.

The station features Victoria's first rooftop garden on a railway building, home to more than 5,500 native grasses and wildflowers which are visible from the station forecourt and Melbourne-bound platforms.

This green roof forms part of the more than 50,000 native plants across the Deer Park Station precinct, with landscaping covering approximately 44 per cent of the entire site. Together, these plantings help create cooler public spaces, reduce storm water runoff, improve water quality, support biodiversity, align with the *Greening the West Strategy* and enhance the look and feel of the precinct.

As part of the project, the new station car parks were also treated with CoolSeal, a light-coloured pavement coating that reflects more sunlight than traditional asphalt. This treatment reduces surface and ambient temperatures by up to 15 degrees, helping create a cooler, safer and more comfortable environment for commuters while reducing heat island effects.

Together, these measures show how transport projects can go beyond service delivery to strengthen climate resilience, better manage heat and water, and help build greener, more climate-ready communities.

## Focus on the most at risk individuals and communities

Transport climate adaptation efforts have focused on supporting emergency preparedness and maintaining safe, accessible services during extreme weather events.

Key initiatives include:

- improved bushfire and grassfire risk modelling and mitigation planning through enhanced roadside assessment and mapping
- collaborative programs with Emergency Recovery Victoria to strengthen emergency response and recovery capability
- engagement with critical infrastructure operators through the *Transport Sector Resilience Network* to support coordinated responses to climate events.

These initiatives improved understanding of system vulnerabilities and supported the development of tools and processes that will enable better protection of communities during future climate-driven disruptions.

## Support self-determination

The Victorian Government is committed to supporting Traditional Owners' self-determination, enabling them to care for Country and culture amid a changing climate.

Through the Department of Transport and Planning and associated agencies, the Victorian Government is building thriving places and connecting communities by integrating Traditional Owners' knowledge into transport and land use planning. This respects Country while strengthening roads, rail and other infrastructure against climate risks like floods, heatwaves, and bushfires.

These efforts strengthen Victoria's transport system for current and future challenges. They ensure reliable connections for communities while protecting cultural values linked to transport networks

# We are committed to further action

Climate change is increasing pressure on Victoria's transport system.

This plan builds on progress made in 2022-26 to strengthen the transport system's climate resilience.

The following actions focus adaptation efforts, guiding long-term resilience, climate risk management, and operational readiness to support individuals, communities, essential freight and supply chains and maintain service continuity.

**Adaptation types**

- Take direct action to reduce risks
- Enable and encourage others to adapt
- Understand the risks, opportunities, and actions
- Embed climate change in Victorian Government decision-making and operations

**Figure 4 Adaptation types**

## Action 1: Integrate climate-adaptive principles into planning and design of transport infrastructure to enhance the long-term resilience of Victoria's transport network.

**Adaptation type:**

**Led by Department of Transport and Planning**

This action focuses on considering climate risks early in planning and design, helping infrastructure stay fit-for-purpose over time. It addresses long-term risks to assets, service reliability, and the safe movement of people and freight.

Priorities include applying climate-informed design standards and resilience considerations into transport projects. Initiatives to support this action will incorporate climate risk assessments at the planning and project approvals stage, investing in upgrades and maintenance that address identified network vulnerabilities and trialling place-based measures, such as green infrastructure, where they improve asset performance and resilience.

Other initiatives will enable design guidance and climate data to inform decisions early. This will ensure resilience and adaptation are addressed at the most practical and cost-effective stage of project delivery.

Through these initiatives, transport assets will better contribute to the resilience of essential public infrastructure, supporting individuals, communities, supply chains, and the broader transport system while also reducing long-term lifecycle costs.

## Action 2: Embed climate risk management into procurement, delivery and asset management to minimise exposure to heat, flooding and other extreme weather events.

**Adaptation type:**

**Led by Department of Transport and Planning**

This action focuses on managing climate risks across transport infrastructure and services to support commuters to access safe and reliable transport networks and services in a changing climate.

Priority initiatives for this action include updating asset management systems to capture relevant data and considering how to apply climate risk assessment considerations into procurement processes and franchise agreements. Other initiatives to support this action will explore how transport operators can assess and manage climate risks and how targeted monitoring, maintenance and infrastructure renewal can help address system vulnerabilities.

This action also strengthens workforce and industry resilience through initiatives that seek to reduce worker exposure to heat and extreme weather, while supporting transport-dependent industries to manage climate related risk. Building on existing asset management and sustainability practices, initiatives to deliver on this action will improve consistency and organisational capability, while supporting the continued reliability of essential infrastructure and transport services.

## Action 3: Strengthen transport system readiness and response to climate events to improve safety, service continuity and recovery for Victorian communities.

**Adaptation type:**

**Led by Department of Transport and Planning**

This action strengthens the system's ability to prepare for, respond to, and recover from climate-related disruptions, protecting Victorians and maintaining equitable access to transport services, including vulnerable individuals and communities, while supporting the continued movement of freight.

Initiatives supporting this action include enhancing early warning tools, strengthening emergency management coordination, identifying high-risk locations, and improving disruption

support for at-risk commuters. Other initiatives will help households, individuals, communities and industries to better understand climate risks and how to respond effectively.

Through initiatives which will consider the governance frameworks, build on established emergency management arrangements and apply lessons from past events, the action will promote continuous improvements in preparedness, response, recovery, and service continuity. Strengthened operational readiness will reduce disruption impacts on individuals, communities and industry while ensuring transport continues to support other critical systems, including health, energy, water, primary production and the built environment.

# Glossary

| Term | Definition | |
|---|---|---|
| **Adaptation** | Any process of adjusting to actual or expected climate and its effects that— (a) in human systems, seeks to moderate or avoid harm or exploit beneficial opportunities; and (b) in natural systems, may be facilitated by human intervention. | The Climate Action Act 2017 |
| **Adaptation Action Plans** | The Victorian Government's plans across 7 systems in the *Climate Action Act 2017* plus energy to ensure Victoria's climate resilience, now and in the future. The systems are: built environment, education and training, energy, health and human services, natural environment, primary production, transport and water cycle systems. | DEECA, The Climate Action Act 2017 |
| **Climate change** | Changes in the state of the climate, including an increase in the occurrence of extreme weather events, long-term changes in weather patterns and sea-level rise, attributed directly or indirectly to human activity. | Victoria's Climate Science Report 2024 |
| **Climate Change Strategy** | A 5-year plan that outlines the Government of Victoria's priorities in relation to— (a) adaptation; and (b) the reduction of greenhouse gas emissions; and (c) planning for the State's transition to meet the challenges of climate change and to capitalise on the opportunities created by climate change. | The Climate Action Act 2017 |
| **Climate hazard** | A natural or human-caused event or condition that may cause damage and loss | Victoria's Climate Science Report 2024 |
| **Climate risk** | The potential negative effects of a climate hazard, including environmental, societal and financial impacts, which includes consequences on lives, livelihoods, health and wellbeing, ecosystems and species, economic, infrastructure, services, social and cultural assets. | IPCC 2021 |
| **Disaster** | A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic or environmental losses and impacts. | Victoria's Climate Change Strategy 2026-2030, IPCC AR6 |
| **Extreme weather** | A weather event that is rare at a particular place and time of year. Examples of extreme weather events are heatwaves, bushfires, storms, floods and droughts. | Victoria's Climate Science Report 2024, IPCC AR6 |
| **Maladaptation** | Actions that may lead to increased risk of adverse climate-related outcomes, including via increased greenhouse gas emissions, increased vulnerability to climate change, or diminished welfare, now or in the future. Maladaptation is usually an unintended consequence. | IPCC AR6 |
| **Mitigation (of climate change)** | A human intervention to reduce the sources or enhance the sinks of greenhouse gases. | IPCC AR6 |
| **Resilience** | The ability of a system, community or society exposed to climate hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management. | Victoria's Climate Change Strategy 2026-2030 |

dtp.vic.gov.au

VICTORIA
Australia

2244