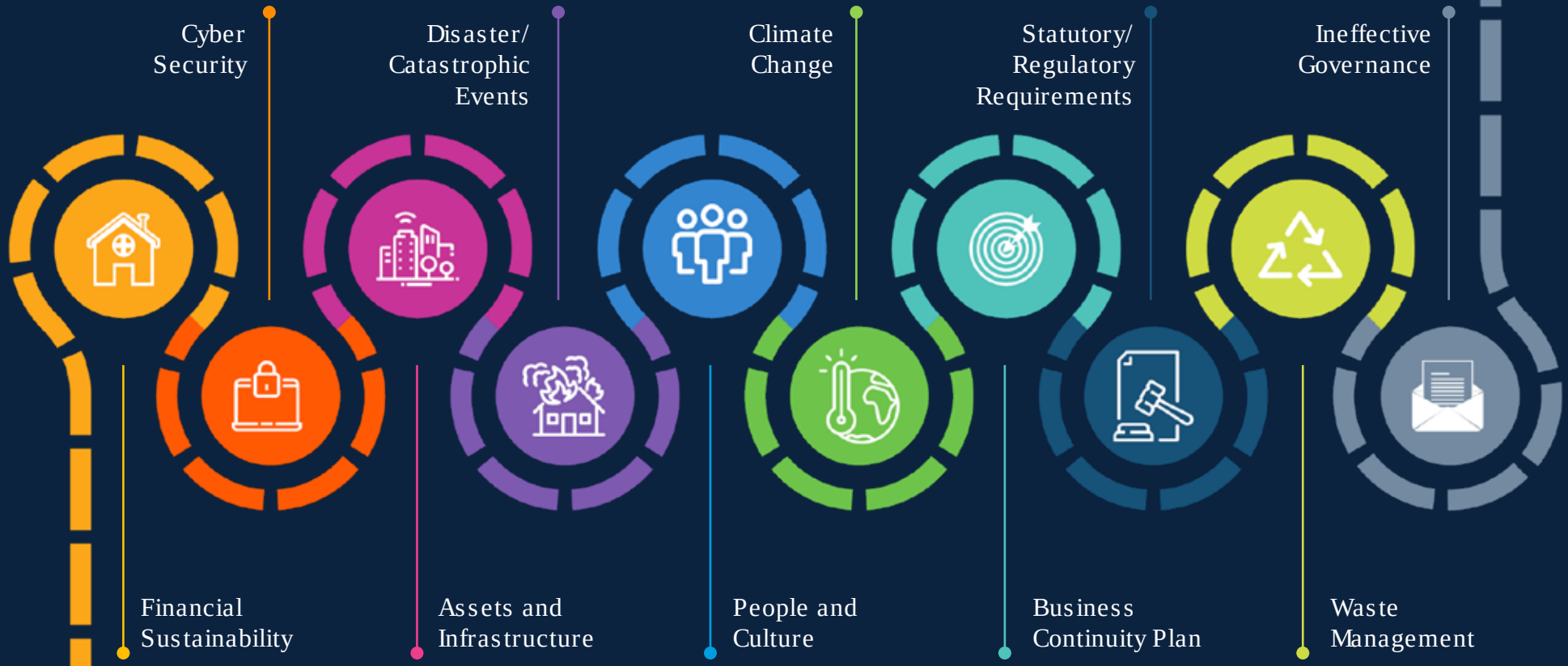
2025 ALGA Roads & Infrastructure Congress

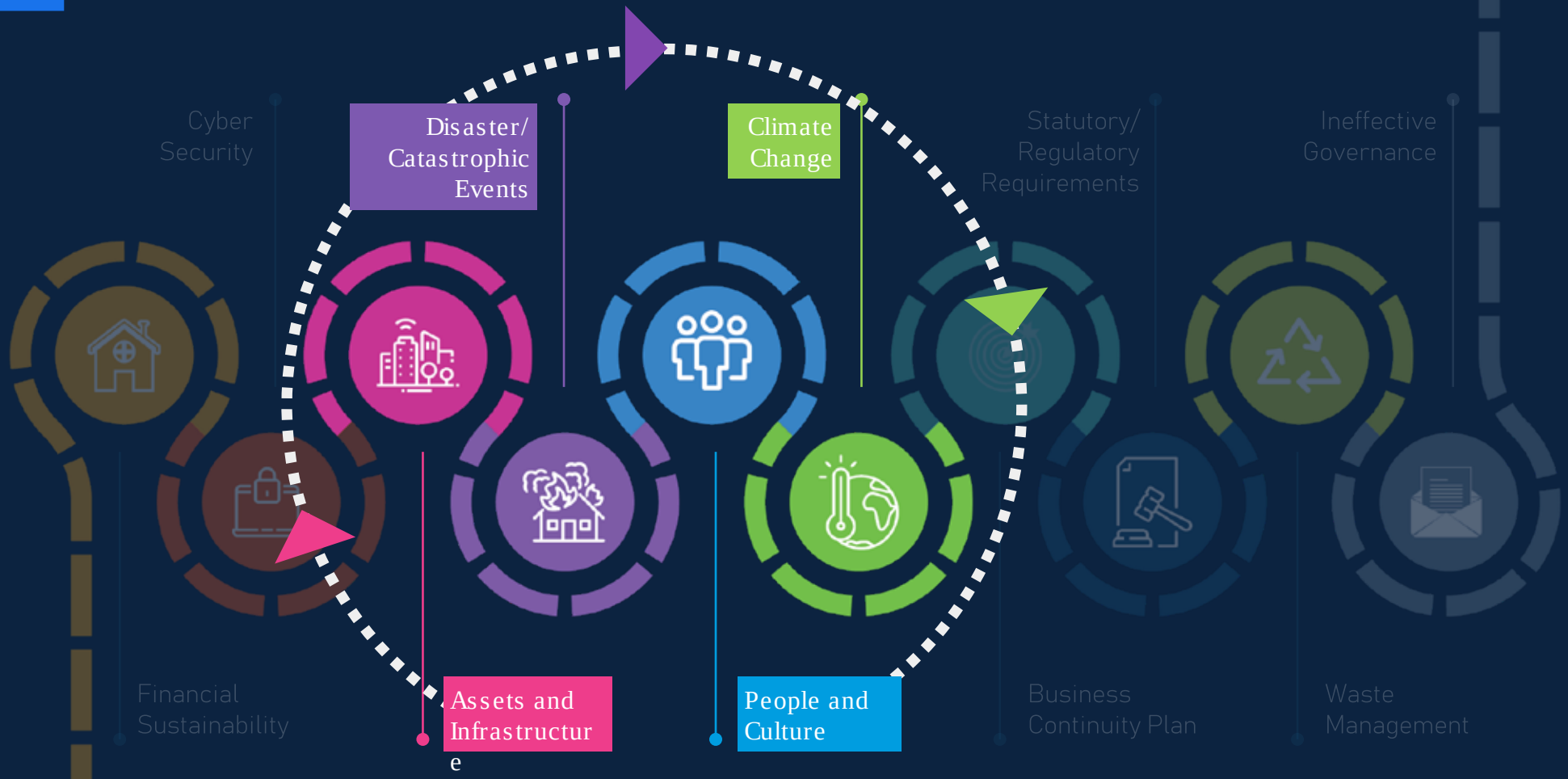
COST OF DISASTER RISK
VS
COST OF BUILDING RESILIENCE

In one word, what does Resilience mean to you?

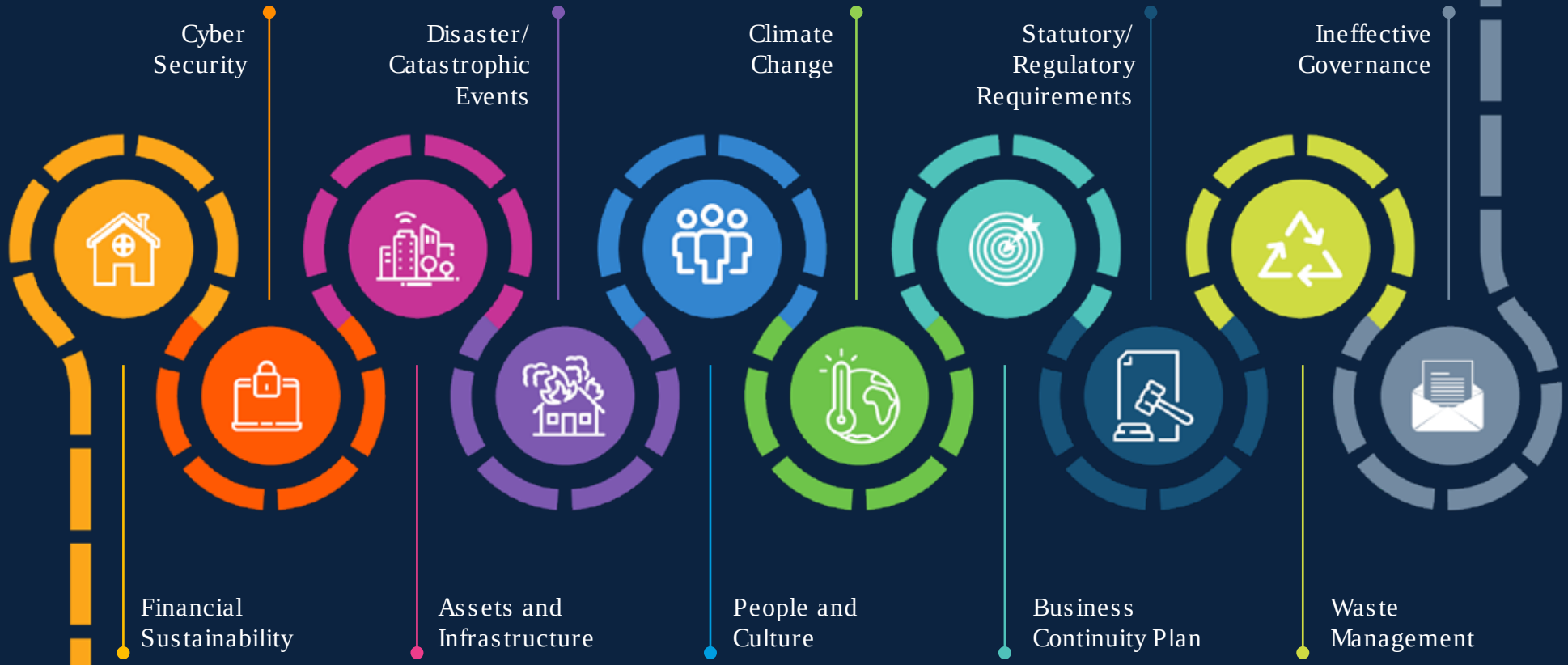
Top Risks Identified by Local Government



Interconnectivity of Risk



Top Risks Identified by Local Government

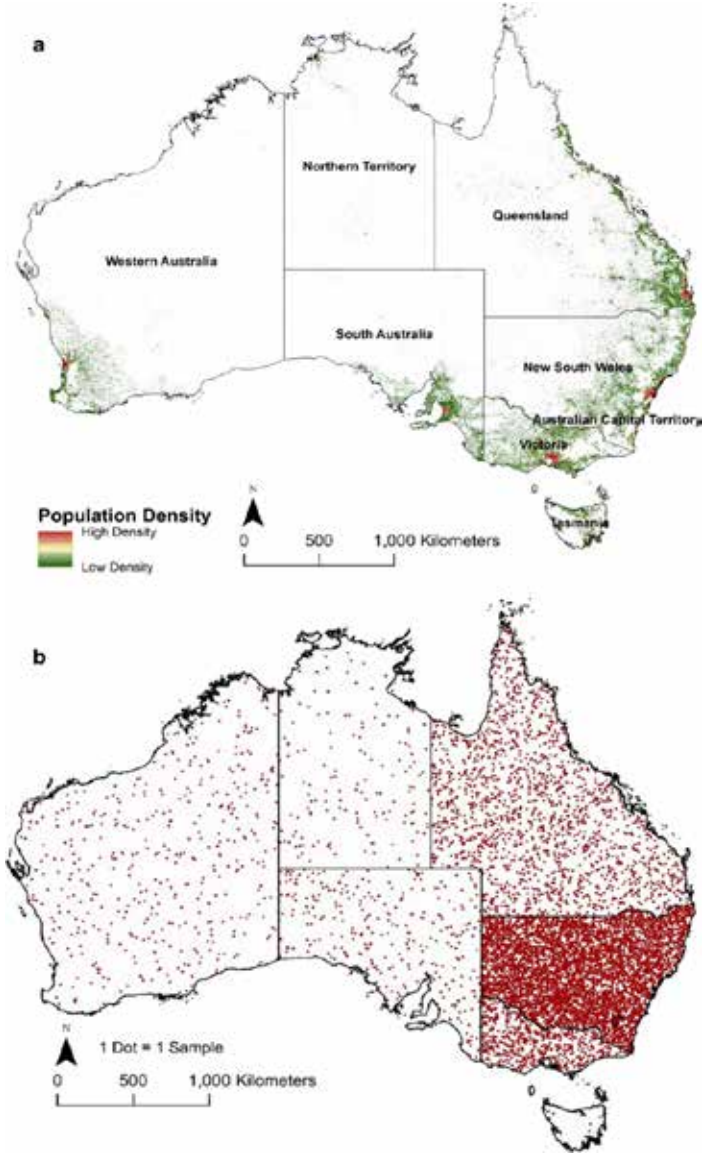


ALGA *Adapting Together – Local Government Leadership in a Changing Climate Report (June 2025)*

"With their local knowledge, experience, connections and leadership roles in their communities, local governments play a unique role in climate adaptation – by addressing local drivers of climate vulnerability, mainstreaming adaptation, and driving local investment that supports climate resilience".

"Local governments experience an inequitable delivery burden due to significant devolution of Australian Government and state/territory government adaptation responsibilities. Councils regularly act as a service provider of last resort, addressing funding inequality, market gaps and regulatory failures to ensure that community needs and expectations can still be met"

3 Things Make Australia Vulnerable to Resilience



1. Australia is an island continent

March 2025: **Total population =** **27.5million**
Projected increase 10m by 2050 = **38 million**

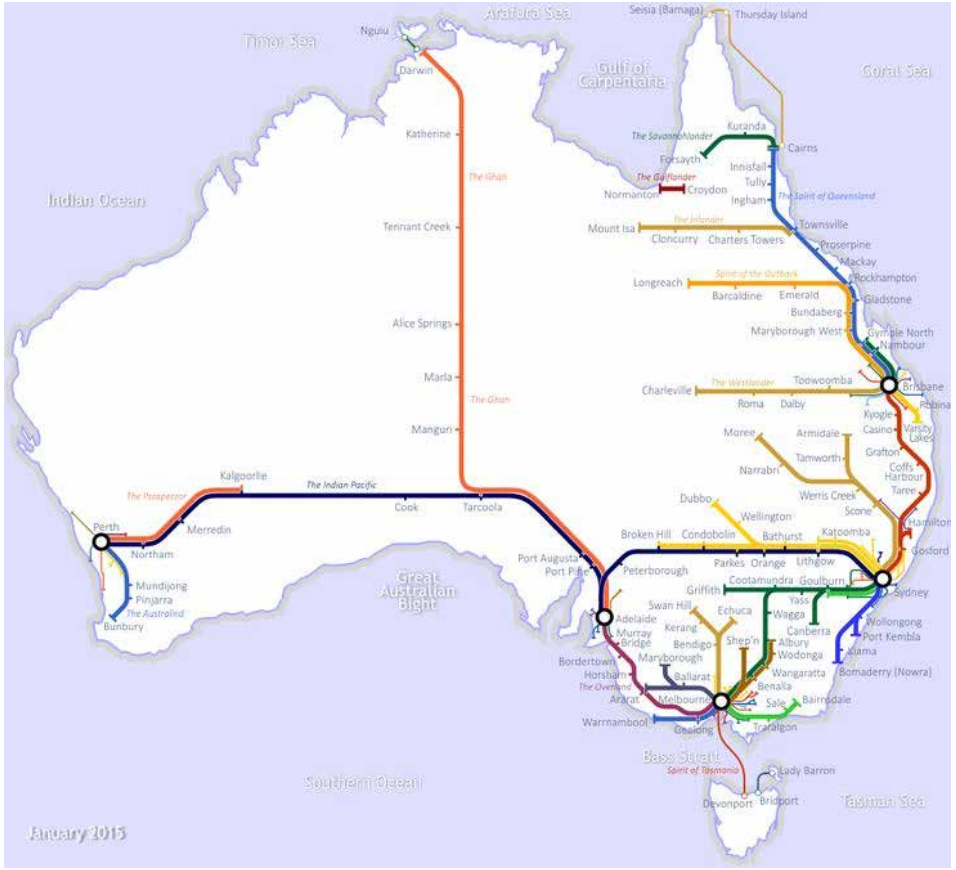
2. Over 80% of Australia's population live on the coast

65% of 80% live on the eastern seaboard
15% of 100% live in regional local government areas
5% of 100% live in remote areas

Australia's Major Road & Transport Infrastructure

3. Australia's National Land Transport Network

The network of nationally important road and rail infrastructure links with and connects key freight hubs like ports and airports. The Network is determined by the Australian Government Minister for Infrastructure, Transport, Regional Development.



Climate Council of Australia's Compound Costs: How Climate Change is Damaging Australia's Economy 2024 Report

Estimates that 27,000-35,000 km of roads and rail (worth $4.2-$6.7b) in Australia will be exposed to flooding and erosion hazards at a projected sea-level rise of 1.1m

National Climate Adaptation Report

- Identifies 10 “priority hazards” most significant impact including
  Flooding, Coastal Erosion, Storms, Cyclones, Ocean Warming, Wildfire
- Priority Risk is coastal erosion – 80% of population coastal land, property, homes, assets
- Predictions $600b wiped from the property market by 2050
- National Climate Risk Assessment value of property market could drop by $711b by 2090
- “Lifestyle” rather than “climate impacts” influence homebuyers
- “High risk” flood/coastal erosion suburbs have experienced price growth in past 12months
- Development still allowed on coastal land as planning codes out of step with climate change
- More extreme weather directly undermines liveability and safety
- State Governments to relax planning codes to allow urban infill in capital cities

In one word, describe what makes your council vulnerable.

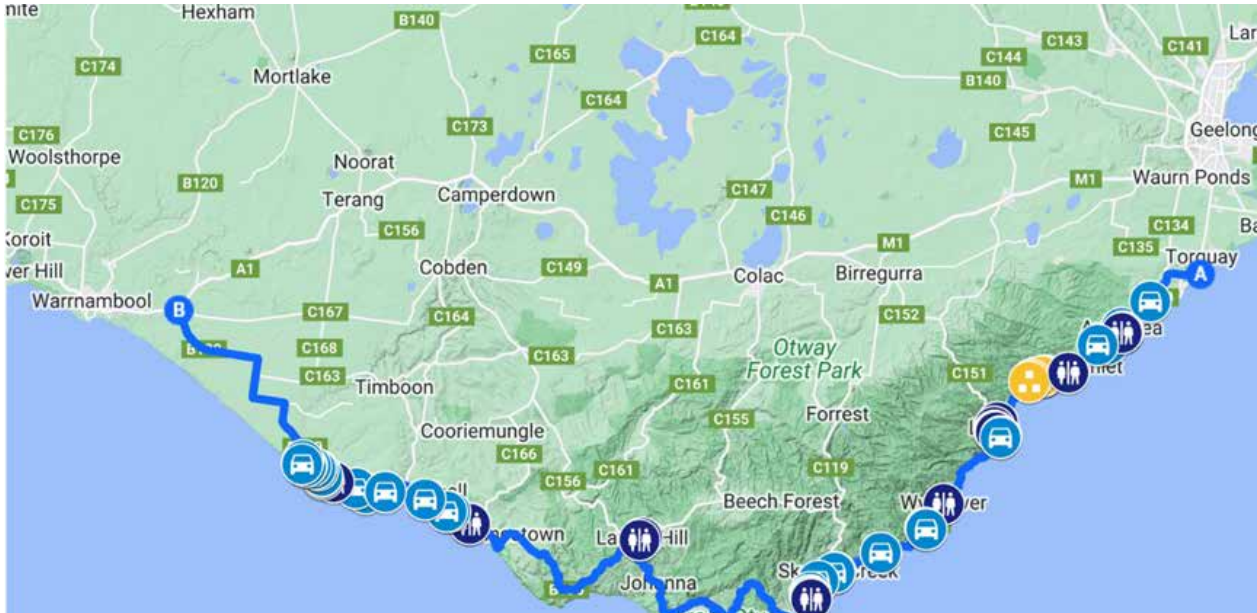
National Adaptation Plan - Investment in Mitigation vs Adaptation

- 1 national Population plan, influencing 537 local government's socio-economic environment
- 1 national Land Transport Network, supporting 537 local government areas
- 1 national Disaster Action Plan, 537 community resilience plans
- 1 national adaptation plan, 537 local government climate risk assessments across Australia
- 537 Strategic/community plans, 537 Disaster Adaptation Plans, 537 Climate Risk Needs Assessments
- Common authorising environment for councils = Local Government Act
- Guiding elements built, natural, community/social, economic/financial, governance
- Climate vulnerability and disaster risk underlying themes of the National Adaptation Plan
- National Local Government Vulnerability Profiling program (NLGVP)

MITIGATE OR ADAPT

Case Study: Great Ocean Road Victoria

- **Starting in the southeast town of Torquay and completing 243km west in Allansford, the Great Ocean Road is considered the world's largest war memorial.**
- **Built by returning soldiers and dedicated to those who lost their lives in WWI.**
- **Over 7m tourists take to the GOR every year and after 100 years of strain the cracks are starting to show.**
- **The GOR is not resilient due to increasing threats from coastal erosion, sea-level rise and severe weather, impacting its cliffs, road infrastructure and coastal ecosystems.**



GREAT OCEAN ROAD ADAPTATING to CHANGE

The world-famous tourist drive is fighting for survival amid dual threats of climate change and over-popularity.

Famous for its limestone cliffs, surf breaks and rainforests, the 242km route is close to "being loved to death"

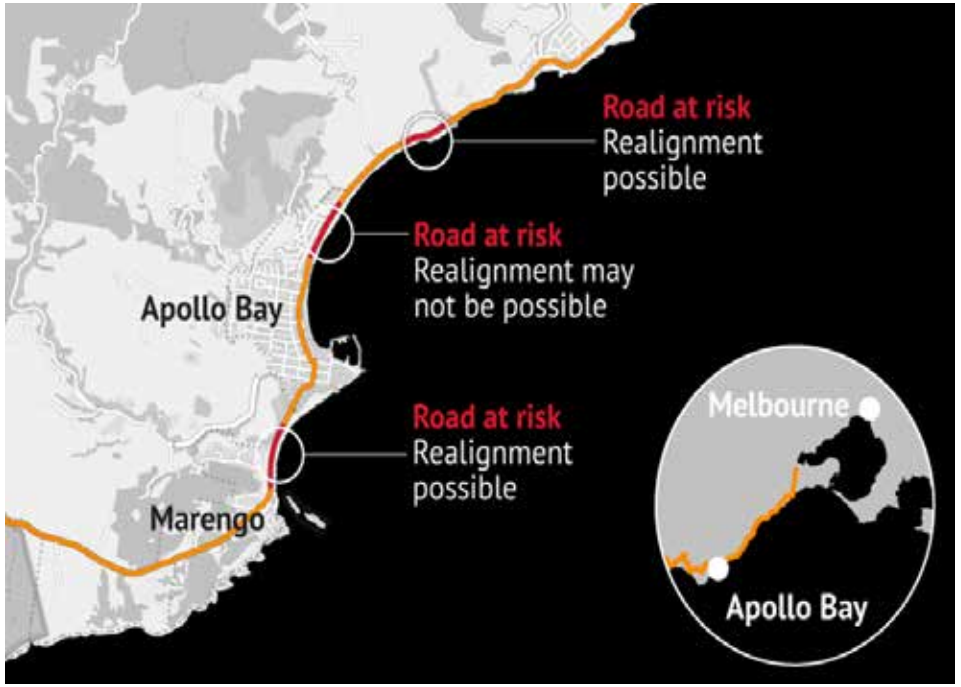
The GOR hugs the Victorian (south-west)coastline travelling through six local government areas

The road was driven on by 7.4million international and domestic tourists who spent $1.7bn in the year ending March 2024 accounting for 12.7% of the regional economy.

GOR has its own Act, is owned by the Vic State Govt and governed by the GOR Authority

The GOR Authority has significant investment in upgrades to road and inland routes to improve resilience and is being managed with long-term adaptation plans

Long-term future depends on successfully investing in, implementing resilience and adaptation strategies



For the six local government areas the resilience of Great Ocean Road impacts their vulnerability profile across the four pillars – built, social/community, natural, economic/financial.

VICTORIAN COASTAL COUNCILS ADAPTING TOGETHER IN A CHANGING CLIMATE 2100+

Case Study – Greater Gippsland Coastal Adaptation

Initiated by South Gippsland Shire Council, MAV hosted the Coastal Council of Victoria Roundtable May 2025

Victoria's Resilient Coast – Adapting for 2100+

22 Victorian local government areas

DEECA (Policy Unit), invited to provide an update on their DRF 2 funded project, the Managed Transition (Retrea*t) of Property and Assets impacted by Coastal Hazards and Sea Level rise.*

The ideal of a transition/retreat policy, as proposed by DEECA funded project has many critical aspects for consideration including land ownership and values, planning legislation, legacy assets/infrastructure, caring for natural environments, well-being of communities, economic considerations, impact for future generations.

Mitigate or Adapt : Partnerships, Engagement, Communication

Vic State Govt Coastal Adaptation Strategy 2100+

Greater Gippsland area recorded a total of 1.91 million visitors for the year ending June 2024.

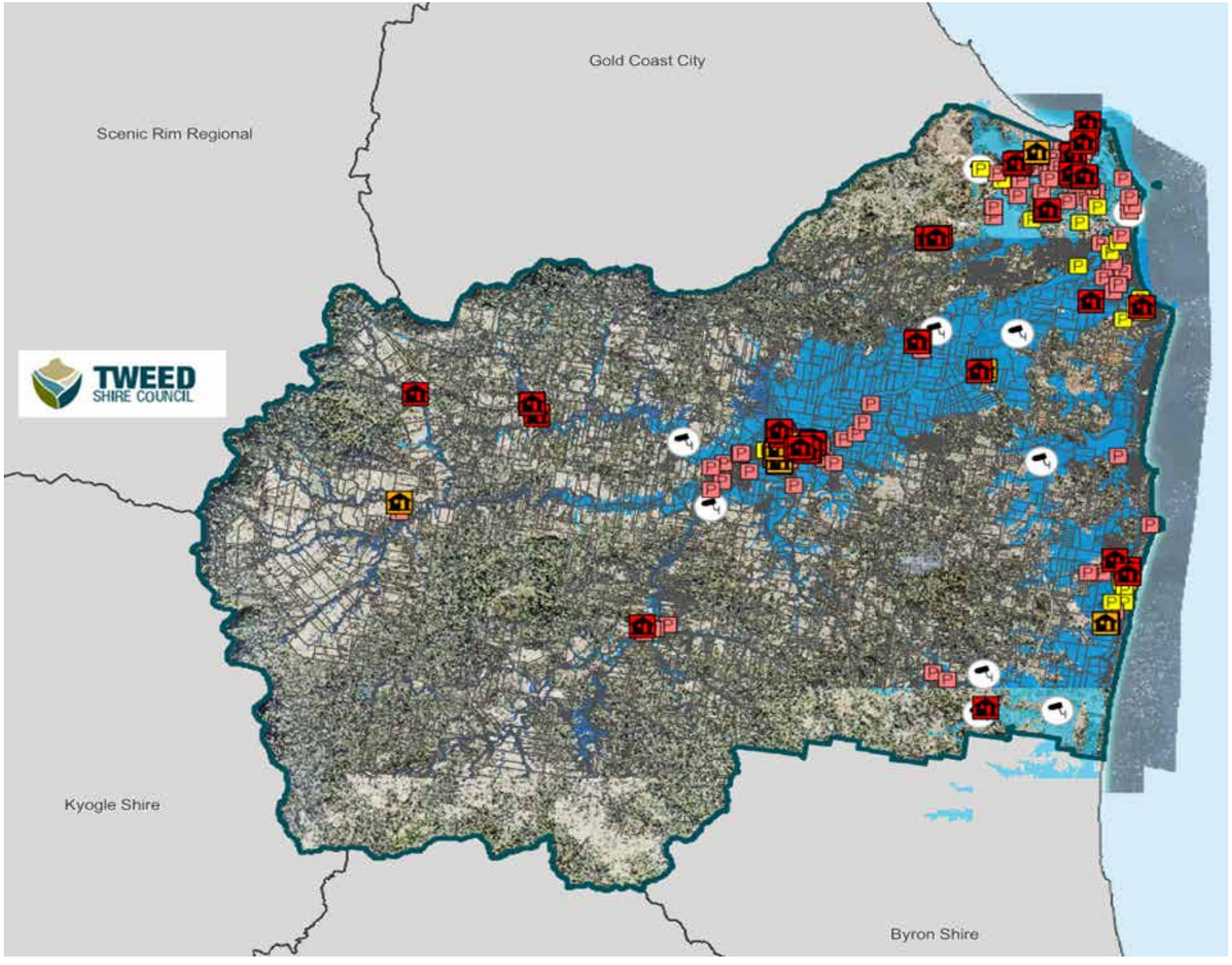
Economic impact: The increase in visitors led to a $634 million (7% increase) contribution to the Greater Gippsland economy.

Reasons for slow progress in responding to Coastal Adaptation Strategy 2100+

- uncertainty about climate change impacts
- the relatively long-time frames before impacts will be felt
- limited capability, capacity and funding to do the work within a standard council term
- an overriding need to focus on managing current coastal hazards.
- liability for planning decisions and time it takes to inform and engage communities in adaptation planning
- the need for stronger leadership at state and local levels, have also had a strong influence.

What does financing of disaster risk mean to you?

FINANCING - RESILIENCE / DISASTER RISK



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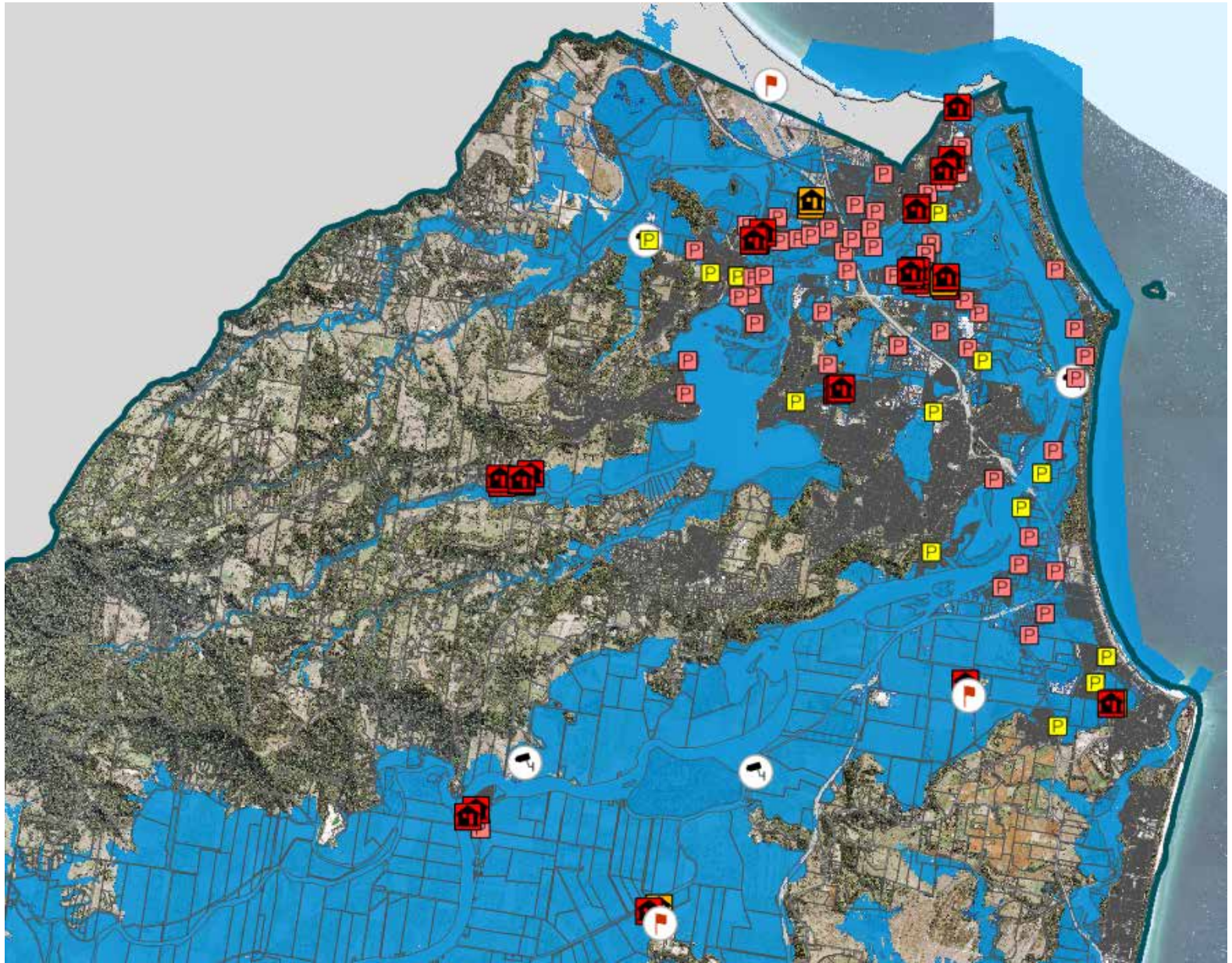

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MANAGING INFRASTRUCTURE & COASTAL EROSION TO BUILD RESILIENCE IN A CHANGING CLIMATE