

Written evidence submitted by Mr Colin Rowland, Isle of Wight Council (CWR0048)

1. What is the scale and nature of the risks posed by coastal erosion and landslips to communities, the economy and the environment? (Highway Authority Perspective)

Evidence-Based Response (with hyperlinks)

The Isle of Wight's transport network is increasingly vulnerable to **coastal erosion and landslips**, particularly in the southern and eastern coastal zones. These hazards pose a **direct threat to public safety, emergency access, economic connectivity, and long-term infrastructure viability**.

Scale of Risk to Transport Infrastructure

Over the past two years, multiple road closures have occurred due to land movement, including:

- **Leeson Road, Bonchurch** – was closed from December 2023 due to a major landslide involving 14 million cubic metres of displaced earth. The closure severed a key route between Ventnor and Shanklin, impacting emergency services, school transport, and local businesses (OnTheWight report). The route has subsequently been reopened at a considerable cost to the council which also includes significant ongoing monitoring and emergency arrangements.
- **Belgrave Road, Ventnor** – closed in March 2025 following a rockfall. The site has been inaccessible to pedestrians and standard vehicles and requires specialist geological assessment (OnTheWight). Work has since commenced to secure the exposed scarp and retaining wall and to clear the rockfall, again at considerable expense to the council.
- **Bath Road and Gills Cliff Road** – retaining walls affected by ongoing instability and landowner access issues, limiting maintenance and monitoring (OnTheWight).
- **Newport Road (the graben)** – subject to long-term monitoring due to underlying geological instability, that require ongoing future investment and route planning.

These closures have **disrupted daily life, isolated communities, and increased pressure on alternative routes**, many of which are narrow, steep, or unsuitable for heavy vehicles.

Economic and Community Impacts

- **Emergency Access Delays**
Ambulance and fire services have reported delays due to detours and restricted access in landslide zones. This is particularly critical in Ventnor and St Lawrence, where topography limits alternative routing.
- **Business Disruption**
Tourism-dependent businesses in Ventnor and Bonchurch have experienced reduced footfall and logistical challenges. Delivery routes have been extended, increasing costs and reducing service reliability.
- **Public Transport and School Routes**
Bus services have been rerouted or suspended in affected areas, impacting school attendance and access to healthcare.

Environmental and Maintenance Challenges

- **Drainage and Groundwater Management**
Many affected roads are located in areas with historic soakaway systems and poor drainage. Increased rainfall and rising groundwater levels exacerbate instability, requiring costly interventions such as dewatering and slope reinforcement.

- **Monitoring and Engineering Limitations**

The Island Roads network includes tiltmeters, extensometers, and piezometers at key sites like Leeson Road, but coverage is limited. Funding constraints prevent expansion of monitoring to other vulnerable zones.

Conclusion

The scale and nature of landslip and coastal erosion risks to the Isle of Wight's transport network are **severe and escalating**. Without sustained investment in **resilient infrastructure, real-time monitoring**, and **multi-agency coordination**, the Island faces long-term disruption to mobility, safety, and economic stability.

What strategies are currently in place, or needed, to reduce the risks of landslips and coastal erosion, and what research gaps exist? (Highway Authority Perspective)

Evidence-Based Response (with hyperlinks)

The Isle of Wight's transport network is increasingly affected by landslips and coastal erosion, particularly in the southern corridor. While some strategic frameworks exist, the Highway Authority lacks sufficient funding, integrated planning, and technical capacity to proactively manage these risks at scale.

Current Strategies

- **Emergency Monitoring and Response**
Island Roads maintains geotechnical instruments at high-risk sites such as Leeson Road, including tiltmeters, extensometers, and piezometers. These support reactive closures and emergency planning but do not prevent failures.
- **Shoreline Management Plan (SMP)**
The [SMP](#) identifies transport infrastructure at risk and outlines long-term policies for intervention or managed retreat. However, implementation is constrained by capital funding and prioritisation of flood risk over slope instability.
- **Planning Policy – CCMA**s
The [Island Planning Strategy](#) includes Coastal Change Management Areas (EV16–EV19), which restrict development in unstable zones. These policies support managed retreat but do not address the need to maintain or reroute strategic transport links.
- **Reactive Engineering Works**
Temporary stabilisation measures (e.g. mesh netting, drainage improvements) have been deployed at sites like Belgrave Road and Bath Road, but these are short-term and often delayed due to landowner access issues (OnTheWight).

Alternative Route Options

- **Upper Ventnor and Wroxall Diversion**
Used during Leeson Road and Undercliff Drive closures. This route is longer and includes steep gradients, posing challenges for heavy vehicles and emergency services.
- **Niton to St Lawrence Access (Westbound)**
A new access road and bridleway were constructed following the 2013/14 landslips, but no eastbound vehicular access exists from Ventnor to St Lawrence.

- **Newport Road and Godshill Diversions**
Used during A3055 closures. These rural routes are narrow and not designed for sustained high traffic volumes.
- **Rights of Way Network**
Non-vehicular access is supported via bridleways and footpaths, but many are affected by erosion and weather conditions.
- **Strategic Transport Planning**
The [Island Transport Plan 4 \(2025–2040\)](#) proposes resilience upgrades to secondary roads, improved signage, and investment in walking and cycling infrastructure.

Strategies Needed

- **Integrated Transport and Geotechnical Planning**
A dedicated landslip risk register for transport infrastructure is needed, aligned with geological mapping and climate projections.
- **Permanent Monitoring Expansion**
Real-time instrumentation should be extended to other vulnerable corridors, including Newport Road (the graben), Gills Cliff Road, and Undercliff Drive.
- **Drainage and Groundwater Management**
Historic soakaway systems contribute to slope instability. A programme to retrofit drainage and dewater saturated ground is urgently needed, but currently unfunded.
- **Utility Coordination**
Leaking water mains and sewer infrastructure exacerbate ground movement. Utilities must be required to assess and mitigate infrastructure risks in landslip zones.
- **Alternative Corridor Investment**
Strategic modelling is needed to identify and invest in alternative corridors that can serve communities if primary routes are lost. This includes widening, strengthening, and reclassifying secondary roads.

Research Gaps

- **Climate-Linked Landslip Modelling**
There is limited modelling of how increased rainfall and groundwater levels will affect slope stability and transport infrastructure.
- **Cost-Benefit Analysis of Intervention vs. Retreat**
Economic modelling is needed to compare the cost of stabilisation works with managed retreat and rerouting.
- **Socioeconomic Impact Mapping**
Transport disruption affects vulnerable populations disproportionately. Mapping these impacts would support targeted investment and resilience planning.

3. What are the social, economic, and psychological impacts of landslips and coastal erosion on affected communities? And how can these be addressed? (Highway Authority Perspective)

Evidence-Based Response (with hyperlinks)

Transport disruption caused by landslips and coastal erosion has **far-reaching consequences** for communities on the Isle of Wight. The closure of key roads such as **Leeson Road, Belgrave Road,**

and **Undercliff Drive** has led to **isolation, economic hardship, and increased stress**, particularly in Ventnor, St Lawrence, Bonchurch, and surrounding areas.

Social Impacts

- **Community Isolation**
Road closures have severed direct links between communities, forcing long detours via Wroxall, Godshell, or Newport. Residents in St Lawrence and Bonchurch have reported feeling cut off from essential services, including healthcare, schools, and shops.
- **Access to Services**
Emergency services face delays due to detours and narrow alternative routes. Public transport routes have been suspended or rerouted, affecting mobility for those without private vehicles.
- **Disruption to Daily Life**
Parents, carers, and workers face longer commutes and reduced reliability of transport services. Vulnerable groups, including the elderly and disabled, are disproportionately affected.

Economic Impacts

- **Business Losses**
Tourism-dependent businesses in Ventnor and Bonchurch have experienced reduced footfall due to access issues. Seasonal trade has declined, and delivery logistics have become more complex and costly.
- **Property Devaluation**
Properties in landslide-prone zones have seen reduced market value and increased insurance premiums. Some homeowners face difficulty selling or insuring their homes due to proximity to unstable infrastructure.
- **Increased Public Costs**
The cost of emergency response, temporary stabilisation, and long-term monitoring is rising. The Highway Authority must divert resources from routine maintenance to reactive landslide management.

Psychological Impacts

- **Stress and Anxiety**
Residents living near unstable roads report heightened anxiety during periods of heavy rainfall or visible ground movement. The uncertainty surrounding future access and property stability contributes to mental health strain.
- **Loss of Confidence in Infrastructure**
Repeated closures and lack of long-term solutions have eroded public trust in the resilience of the transport network. This affects perceptions of safety and reliability.

Addressing the Impacts

1. **Community Engagement and Communication**
Regular updates via platforms like OnTheWight and Council briefings help maintain transparency. However, more proactive engagement is needed, including community forums and resilience workshops.
2. **Transport Resilience Planning**
Investment in alternative routes, signage, and real-time traffic information can reduce

disruption. The [Island Transport Plan 4](#) proposes upgrades to secondary roads and modal shift strategies.

3. **Mental Health and Wellbeing Support**

The Council's August 2025 Committee Report recommends integrating wellbeing services into coastal risk planning. This should include referrals, counselling, and frontline staff training.

4. **Economic Recovery Measures**

Targeted support for affected businesses, including rate relief, marketing assistance, and infrastructure grants, can help offset losses.

5. **Housing and Relocation Policy Reform**

Transport disruption should be recognised as a factor in housing allocation and relocation support, especially where access is permanently compromised.

4. Is there sufficient support available to those who have sustained damage or loss of property due to landslips or coastal erosion, and are items such as financial compensation, relocation assistance, and wellbeing services considered in this support? (Highway Authority Perspective)

Evidence-Based Response (with hyperlinks)

From a transport and infrastructure standpoint, the Isle of Wight Highway Authority faces **significant limitations** in supporting communities affected by landslip-related road closures and associated property and economic losses. While emergency response mechanisms exist, **long-term recovery, demolition, and rebuilding efforts are underfunded**, and there is **no structured compensation or relocation support** for those impacted by infrastructure failure.

Current Support Mechanisms

- **Emergency Response Coordination**

The Council's [Emergency Management Team](#) provides evacuation and emergency housing during major incidents. Island Roads supports reactive closures and monitoring, such as at Leeson Road, but these efforts are short-term and do not address long-term displacement or economic recovery.

- **Planning Policy – CCMAAs**

The [Island Planning Strategy](#) includes policies EV16–EV19 for Coastal Change Management Areas, which restrict development and support managed retreat. However, **no formal relocation funding** or housing allocation prioritisation exists for residents affected by transport-related isolation or infrastructure loss.

- **Landslide and Coastal Loss Coordinator**

Appointed in 2025, this role supports vulnerable communities but does not include authority or funding to rebuild transport links or compensate for economic losses ([Council announcement](#)).

Funding and Support Gaps

- **No Compensation for Infrastructure Loss**

Residents and businesses affected by road closures (e.g. Belgrave Road, Bath Road, Undercliff Drive) receive **no compensation** for loss of access, reduced property value, or economic disruption. Insurance often excludes ground movement, and there is no national scheme for geological hazard recovery.

- **No Funding for Demolition or Reinstatement**

The Highway Authority lacks capital to demolish unsafe infrastructure or rebuild lost routes. For example, the 2013–14 Undercliff Drive collapse led to partial reinstatement, but eastbound access remains permanently severed, with no funded plan for restoration.

- **No Mechanism for Economic Connectivity Recovery**

Businesses and communities cut off by landslips face long-term economic decline. There is **no dedicated funding stream** to restore connectivity, reroute transport, or support regeneration in affected zones.

- **Utilities and Infrastructure Risk Management**

Leaking water mains and historic soakaway systems contribute to slope instability. Utilities are **not currently mandated** to assess or mitigate infrastructure risks in landslip zones, and there is **no funding mechanism** for retrofitting drainage or dewatering systems.

Recommendations for Improvement

1. **Multi-Agency Recovery Framework**

All Risk Management Authorities (RMAs), including the Environment Agency, utilities, and transport bodies, must contribute to a shared recovery strategy that includes demolition, rerouting, and economic regeneration.

2. **Compensation and Relocation Support**

National policy must recognise infrastructure loss due to geological hazards as a qualifying criterion for housing allocation, relocation grants, and business support.

3. **Infrastructure Resilience Funding**

Establish a capital fund for rebuilding strategic transport links, retrofitting drainage, and restoring economic connectivity in landslip-affected zones.

4. **Utility Accountability**

Require water boards and infrastructure providers to assess and mitigate risks from leaking assets and groundwater infiltration in unstable areas.

5. **Wellbeing and Legal Support Services**

Embed mental health, legal, and financial advisory services within local authority recovery teams to support residents affected by transport disruption.

5. Are emergency services and local authorities sufficiently resourced and trained to respond to the increasing risks of landslips and coastal erosion linked to extreme weather events, particularly in rural, coastal and hard-to-reach areas? (Highway Authority Perspective)

Evidence-Based Response (with hyperlinks)

The Isle of Wight's Highway Authority and emergency services face **growing challenges** in responding to landslips and coastal erosion, especially in **steep, rural, and geologically unstable areas** such as Ventnor, Bonchurch, St Lawrence, and the Undercliff. While reactive systems are in place, **resource limitations, training gaps, and infrastructure constraints** hinder effective response and long-term resilience.

Current Capacity and Response Mechanisms

- **Emergency Management Team**

The Council's [Emergency Management Team](#) coordinates multi-agency responses to major

incidents, including evacuation and emergency housing. However, their capacity is stretched during concurrent events such as flooding and landslips.

- **Island Roads Monitoring and Closure Protocols**

Island Roads deploys geotechnical monitoring equipment (e.g. tiltmeters, extensometers, piezometers) at high-risk sites like Leeson Road, enabling data-driven closure decisions. Yet, coverage is limited and not replicated across all vulnerable corridors.

- **Community Emergency Plans**

The Council promotes [Community Emergency Plans](#) to improve local preparedness. These plans are voluntary and vary in quality and scope across parishes.

Challenges in Hard-to-Reach Areas

- **Access Limitations**

Landslips frequently sever key transport routes, such as Undercliff Drive and Leeson Road, delaying emergency response and isolating communities. Alternative routes are often narrow, steep, or unsuitable for emergency vehicles.

- **Training Gaps**

Emergency responders require specialised training in geotechnical hazards, slope stability, and evacuation in unstable terrain. The Council's [Learning and Development portal](#) does not currently offer targeted courses for geological hazard response.

- **Infrastructure Vulnerability**

Historic drainage systems and leaking utilities contribute to slope instability. There is no statutory requirement for infrastructure providers to assess or mitigate these risks in coordination with emergency planning.

- **Limited Funding for Resilience Measures**

There is no dedicated capital fund for dewatering systems, slope stabilisation, or alternative route development. Emergency response remains reactive, with limited capacity for proactive infrastructure investment.

Recommendations for Improvement

1. **Multi-Agency Training and Protocols**

Develop joint training programmes for emergency services, planners, and infrastructure providers focused on landslide and erosion response.

2. **Infrastructure Accountability**

Require utilities and water boards to assess and upgrade infrastructure in landslide-prone zones, including mandatory reporting and investment plans.

3. **Funding for Groundwater Management**

Establish a national or regional fund to support dewatering systems and retrofitting of historic drainage infrastructure.

4. **Expansion of Monitoring Networks**

Extend instrumentation and data collection to other high-risk zones beyond Leeson Road, enabling early warning and proactive response.

5. **Permanent Resilience Roles**

Make the Landslide and Coastal Loss Coordinator a permanent post, embedded within emergency planning and linked to Local Resilience Forums.

6. Business cases for permanent transport resilience measures

Secure solutions for longer term security of existing routes and/or upgrade secondary roads and footpaths to serve as reliable alternatives when primary routes are lost. This includes drainage improvements and slope stabilisation.

6. To what extent is the protection of and access to significant natural landscapes and heritage sites being undermined due to coastal erosion or landslips, what are the impacts of this, and how could this be addressed? (Highway Authority Perspective)

Evidence-Based Response (with hyperlinks)

The Isle of Wight's transport network plays a critical role in enabling access to **natural landscapes and heritage sites**, many of which are located in **geologically unstable coastal zones**. Landslips and erosion are increasingly undermining both the **physical protection** and **public accessibility** of these assets, with serious implications for tourism, cultural preservation, and community wellbeing.

Extent of Impact

- **Access Severed to Heritage Sites**

Road closures such as **Leeson Road**, **Undercliff Drive**, and **Belgrave Road** have restricted access to listed buildings and historic landscapes, including:

- [Mirables, Undercliff Drive](#) – Grade II listed country house.
- [Compton Undermount, Bonchurch](#) – Gothic and Jacobean-style heritage property.
- [East Dene Pleasure Grounds](#) – Grade II registered park and garden.

These sites are located within active landslip zones and have experienced **loss of curtilage features, restricted access, and structural vulnerability**.

- **Natural Landscapes Cut Off**

The Undercliff, Ventnor Downs, and Bonchurch shoreline are designated for their ecological and geological significance. Landslips have disrupted footpaths, bridleways, and scenic routes, reducing public engagement and recreational use.

- **Tourism and Cultural Identity at Risk**

The Island's tourism economy relies heavily on access to coastal viewpoints, heritage trails, and historic settlements. Transport disruption reduces visitor numbers and undermines the viability of heritage-led regeneration.

Transport Challenges

- **No Eastbound Access to St Lawrence from Ventnor**

Since the collapse of Undercliff Drive in 2014, eastbound vehicular access has not been reinstated. This has permanently altered connectivity and reduced access to heritage assets in St Lawrence and Niton.

- **Footpath and Bridleway Erosion**

Coastal erosion and slope instability have damaged rights of way, including the **Coastal Path** and **Bonchurch Landslip Trail**, limiting safe pedestrian access to natural and historic sites.

- **Limited Alternative Routing**

Diversions via Wroxall, Godshill, and Newport are longer and less scenic, reducing the appeal of heritage tourism and increasing travel costs.

Recommendations for Protection and Access

1. **Transport-Integrated Heritage Risk Mapping**

Combine geotechnical and heritage data to identify priority access routes for protection and investment.

2. **Adaptive Access Infrastructure**

Develop alternative viewing platforms, signage, and digital interpretation tools to maintain public engagement with inaccessible sites.

3. **Resilient Route Investment**

Upgrade secondary roads and footpaths to serve as reliable alternatives when primary routes are lost. This includes drainage improvements and slope stabilisation.

4. **Heritage Transport Planning**

Embed access to listed buildings and landscapes into transport resilience strategies, ensuring that cultural assets are not isolated by infrastructure failure.

5. **Funding Alignment**

Align transport, heritage, and environmental funding streams to support integrated protection and access solutions. This includes capital investment in rerouting, signage, and visitor infrastructure.

October 2025