

Accident cluster sites and fatal road accidents on the Welsh Trans-European Road Network, 2015-2017

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Key points

Between 2015 and 2017 there were 28 accident cluster sites on the Welsh Trans-European Road Network (TERN). These contain 128 accidents with a personal injury and 13 of these were accidents in which at least one person was killed or seriously injured (KSI) KSI.

In North Wales:

- there are 5 roads on the TERN route
- there was 1 accident cluster site on the A55 which resulted in 4 accidents with a personal injury and no KSI accidents
- there were no accident cluster sites on the A494, A483, A5 and the A550
- there were 8 fatalities reported on the TERN roads.

In South Wales:

- there were 8 roads on the TERN route
- there were 27 accident cluster sites, with a total of 124 personal injury accidents, of which 13 were KSI accidents
- the M4 had 12 accident cluster sites, with 54 personal injury accidents, 5 of which were classed as KSI
- there were 7 cluster sites on the A48 and there were no cluster sites on the M48, A40 or the A449
- there were 21 fatalities reported on the TERN roads.

About this bulletin

European directive 2008/96/EC requires that road users be informed of locations with high accident concentrations on roads in the Trans European Road Network (TERN).

This annual bulletin identifies such concentrations of accidents – those with at least four personal injury accidents in a 3-year period within a 100m diameter.

The accident statistics presented here refer to Police recorded personal injury road accidents.

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Accident cluster sites

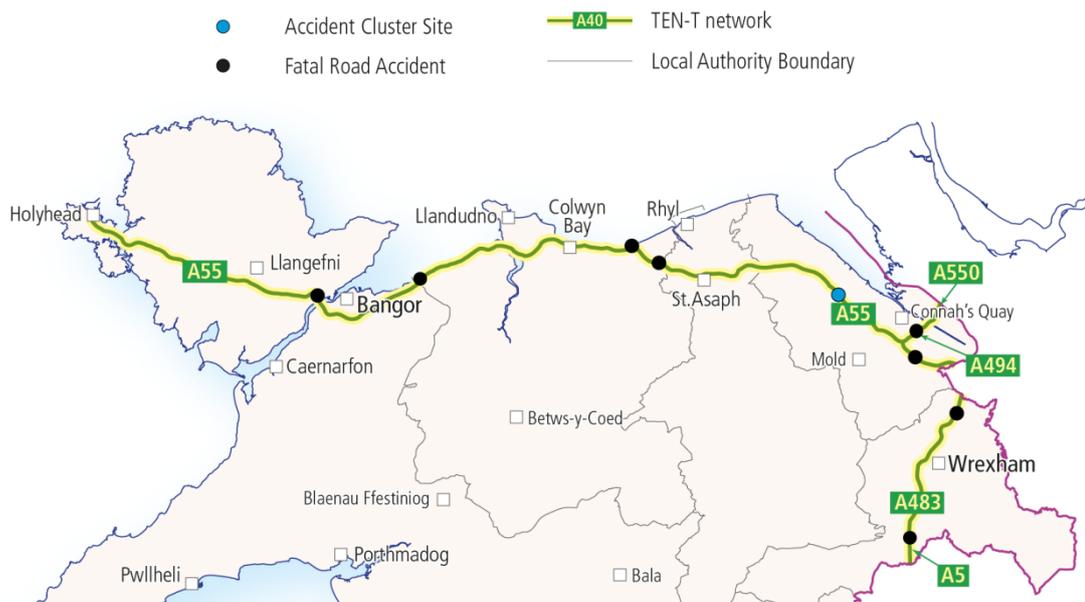
The definition for cluster sites as they are presented in this statistical bulletin is at least four personal injury road accidents in a 3-year period within a 100m diameter. The 3-year period covers 2015 to 2017 inclusive.

In **North Wales**, there are 5 roads on the TERN route:

- A55 (between the English border and Holyhead)
- A494 (between Ewloe to Deeside Park)
- A483 (between Chirk to English border)
- A5 (between the English Border to Halton)
- A550 (between Deeside Park and the English Border).

In North Wales, (Map 1) there was 1 accident cluster site on the A55, and no accident clusters were found on the A494, A483, A5 and A550.

Map 1: Accident clusters and fatal accidents on TERN in North Wales, 2015-17



In **South Wales**, There are 8 roads (9 different routes as the A40 is split into two sections) on the TERN route, 5 of which are in South East Wales and 4 of which are in South West Wales.

The TERN roads in **South East Wales** ([Map 2](#)) are:

- A465 (Abergavenny to Neath)
- M4 (entire length)
- A40 (English border to Abergavenny)
- A449 (Raglan to M4 motorway)
- M48 (entire length).

The TERN roads in **South West Wales** (Map 3) are:

- A40 (Carmarthen to Fishguard Harbour)
- A4076 (Haverfordwest to Milford Haven)
- A477 (St Clears to Pembroke Dock)
- A48 (Pont Abraham to Carmarthen).

In South Wales there were 27 accident cluster sites, 15 of which were in South East Wales and 12 in South West Wales. In South East Wales there were 12 accident cluster sites on the M4 and 3 on the A465. In South West Wales, the A48 had 7 cluster sites, the A40 and the A477 both had 2 accident cluster sites and there was 1 on the A4076.

Information about the Welsh TERN cluster sites, including locations and the number of personal injuries, is provided in data tables on the [Statistics and Research Website](#).

Map 2: Accident clusters and fatal accidents on TERN in South East Wales, 2015-17



Map 3: Accident clusters and fatal accidents on TERN in South West Wales, 2015-17

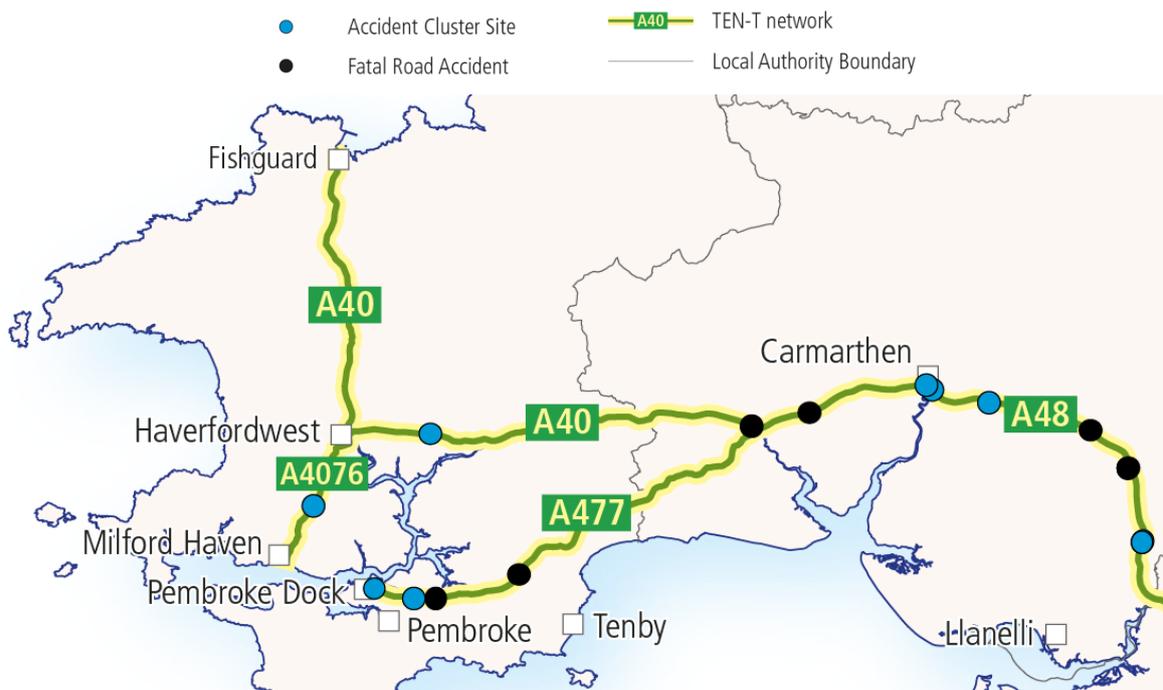


Table 1: Accident clusters and fatal accidents on Welsh TERN, 2015-17

	TERN roads	Number of cluster sites	Total personal injury accidents at cluster sites	KSI accidents at cluster sites	Fatal accidents on TERN roads
North	A55	1	4	0	5
	A494	0	0	0	1
	A483	0	0	0	2
	A5	0	0	0	0
	A550	0	0	0	0
South East	A465	3	12	1	3
	M4	12	54	5	9
	A449	0	0	0	2
	M48	0	0	0	1
	A40	0	0	0	0
South West	A40	2	10	1	2
	A4076	1	4	0	0
	A477	2	8	2	2
	A48	7	36	4	2

Source: Welsh Government analysis of Stats 19 Road Accident data

Supplementary information

This statistical bulletin sets out the location of identified accident cluster sites on the roads of the TERN in Wales. The TERN in Wales represents part of the overall Welsh trunk road network, which in turn is part of the total Welsh road network. This bulletin does not cover accident cluster sites on roads in Wales other than TERN (see 'Exclusions' below). The TERN network in Wales is mapped on page 6.

Diagram 1

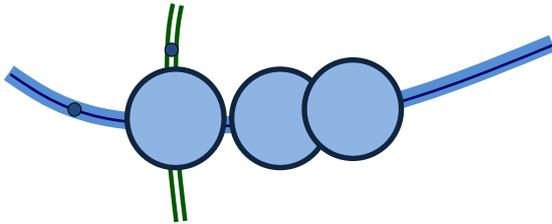


Diagram 1 (left) shows 3 cluster sites, two of which overlap by one accident. In this bulletin, total number of accidents at cluster sites refers to unique accidents, i.e. those in the overlap are only counted once.

Background

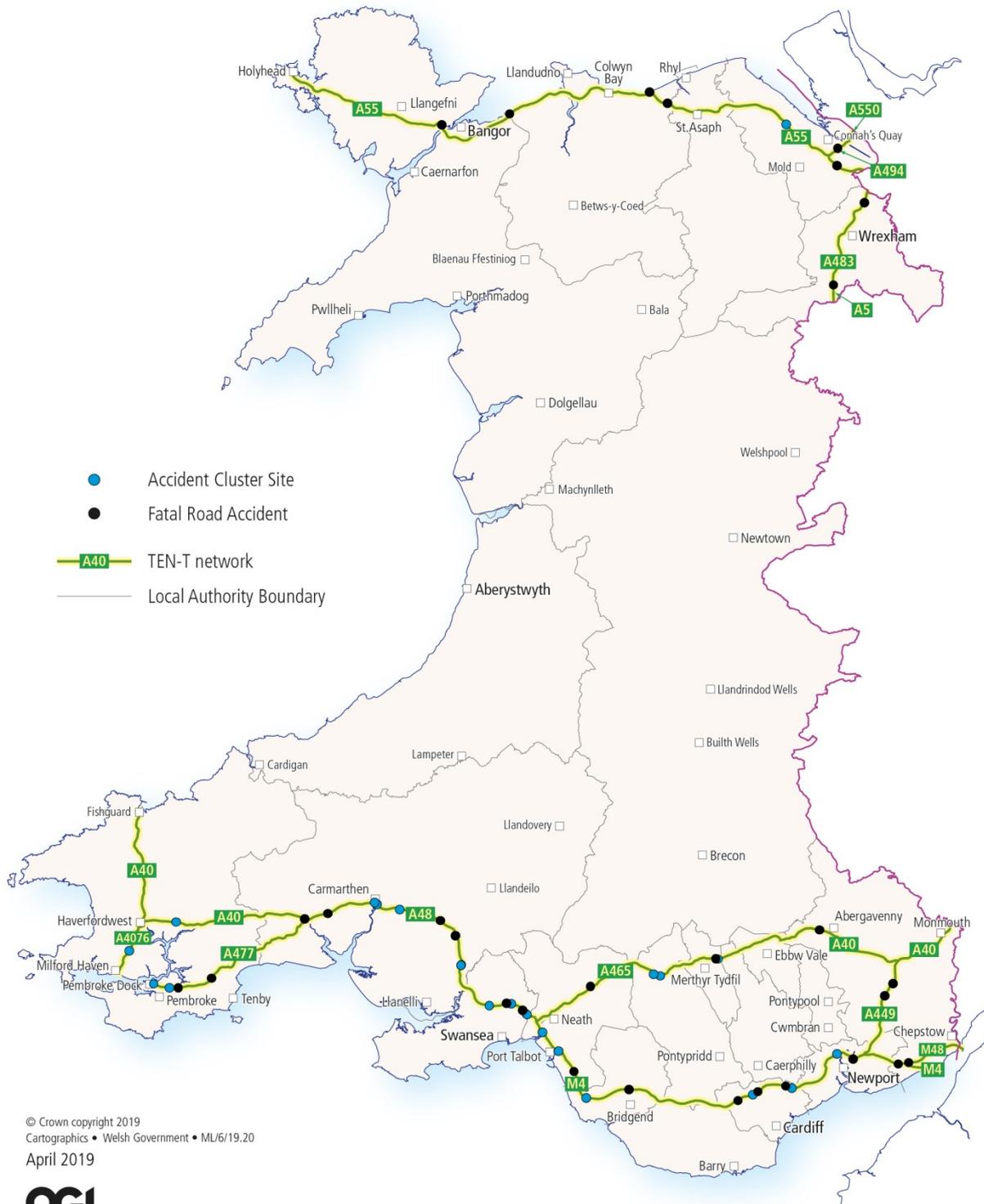
European Directive 2008/96/EC, requires specific road safety procedures for the TERN. One of these procedures is the identification, analysis, ranking and targeting of road sections with the highest potential for reducing accidents. In order to achieve this objective, the directive requires that road users be informed of locations with high accident concentrations. This annual statistical bulletin publishes the location of accident clusters on the TERN roads in Wales.

The Trans-European Road Network (TERN)

The TERN is a network which comprises roads, railway lines, inland waterways, inland and maritime ports, airports and rail-road terminals throughout the 28 Member States. The TERN in Wales is shown on Map 4 and listed in Table 2. The section through North Wales runs from Holyhead in the West to the border with England in the East. In South Wales it runs from Fishguard and Milford Haven in the West to the English border on the M48, M4 and A40.

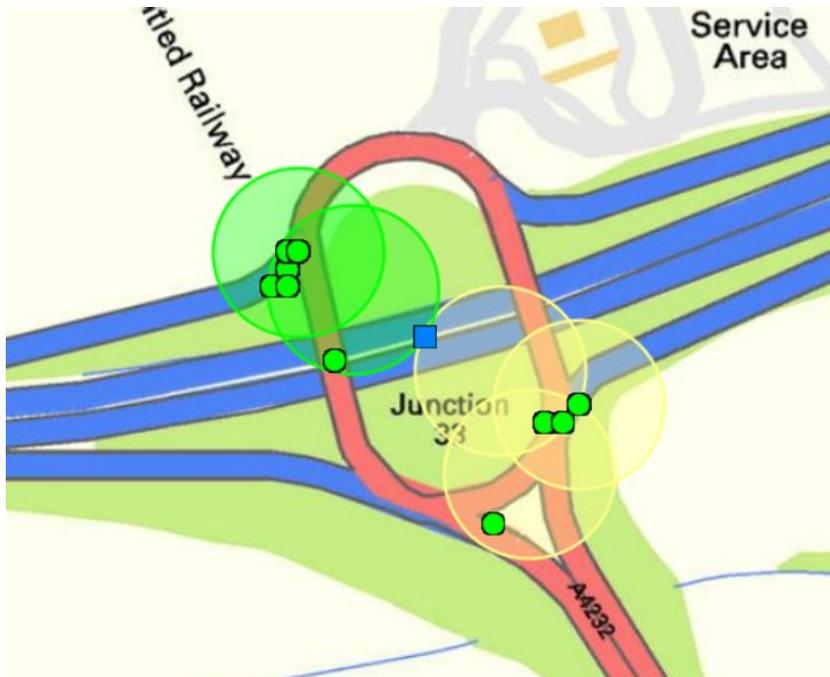
Map 4: TERN roads in Wales

Accident Cluster Sites and Fatal Road Accidents on the Welsh Trans-European Road Network, 2015-2017



Methodology for identifying clusters

An example of a cluster site is illustrated below with the collisions recorded around Junction 33, Cardiff West along the M4. As shown in the below map, there is an overlap in terms of accidents across some of the cluster sites though we have used 'unique' accidents for the purpose of total accidents at cluster sites, so those accidents in the overlaps are counted only once.



Exclusions

The purpose of this bulletin is to provide information on high accident concentration sections on the TERN, as required by European directive 2008/96/EC. It does not provide information on the wider road network in Wales, nor does it specifically reflect Welsh Government's priorities on road safety interventions.

Table 2: Routes on the Welsh element of the Trans-European Road Network (TERN):

Road name	Location
M4	Entire length (English border to Pont Abraham roundabout)
M48	Entire Length (English border to M4 J23 Rogiet)
A48	Pont Abraham to Carmarthen (Pont Abraham roundabout to Pensarn roundabout junction with A40)
A40	Carmarthen to Fishguard Harbour (Pensarn roundabout to Goodwick roundabout)
A477	St Clears to Pembroke Dock (St Clears roundabout junction with A40 to Waterloo roundabout)
A40	English Border to Abergavenny (English border to Hardwick roundabout junction with A465)
A449	Raglan to M4 Motorway (Raglan junction with A40 to Coldra roundabout junction with M4)
A465	Abergavenny to Neath (Hardwick Roundabout junction with A40 to Llandarcy roundabout junction with M4)
A55	English Border to Holyhead (English Border to Holyhead port end of A55)
A494	Ewloe to Deeside Park (Ewloe junction with A55 to Deeside Park interchange with A550)
A550	Deeside Park to English Border (Deeside Park interchange with A494 to English border)
A5	English Border to Halton (English border to Halton roundabout junction with A483)
A483	Chirk to English border (Halton roundabout junction with A5 to English border)
A4076	Haverfordwest to Milford Haven (Salutation Square roundabout to Victoria Bridge roundabout)

Key quality information

1 Context

The cluster site criterion of four personal injury accidents in three years in a 100m radius is contained in the Welsh Government document entitled "Guidelines for the Submission of Road Safety Schemes". Below is an extract from the section of this document that deals with the identification of sites:

"The assessment of the network should involve the study of collision patterns for a specified period (e.g. 3 years) according to location, circumstances and the vehicles and casualties involved and to subsequently compare them with national and regional averages The current criterion used for selecting clusters is 4 personal injury collisions in a 3 year period within a 100m radius."

These sites, and the sites of fatal accidents, were identified using the 'Welsh Government Accident Recording and Analysis Program' to analyse Stats19 Road Accident data.

1.1 Related publications

Related publications are available on the [Statistics & Research website](#)

2. Definitions

Accidents/Road Accidents: A personal injury accident which occurs on the public highway.

KSI Accident: A road accident in which one or more casualties are Killed or Seriously Injured.

3. Relevance

European Directive 2008/96/EC, requires specific road safety procedures for the TERN. One of these procedures is the identification, analysis, ranking and targeting of road sections with the highest potential for reducing accidents. In order to achieve this objective, the directive requires that road users be informed of locations with high accident concentrations. This annual statistical bulletin publishes the location of accident clusters on the TERN roads in Wales.

There are a variety of organisations that use the Welsh road traffic accident and casualty data. The Welsh Government uses road traffic collision and casualty data to help set road safety policy. It is also used for performance indicators, both for the Welsh Government's Transport Strategy and for some Health Performance indicators. They are also component indicators in the Welsh Government's Child Poverty and Prosperity for All strategies.

Other users include Highway Authorities, covering the Welsh Government, which is responsible for the motorway and trunk road network, and local authorities, which are responsible for other roads in Wales. Other bodies involved in road safety include the Safety Camera Partnership, Trunk Road Agents, and Police & Community Safety Partnerships.

4. Accuracy

The statistics refer to personal injury accidents on public roads reported to the police and forwarded to the Welsh Government. The police compile statistical data about road traffic accidents and casualties (called STATS19 data) for the Welsh Government and the Department for

Transport (DfT). This follows police attendance at accidents that involve any personal injury, together with members of the public reporting personal injury accidents directly to the police.

This data is obtained from administrative sources and thus may be affected by changes in procedures within those systems.

There is some possibility of under-reporting and under-recording as well as for the misclassification of accidents though these are minimised by local authorities and the Welsh Government conducting a number of data validations. For example, Welsh Government data analysts may query the location of an accident with a police force when the grid reference of an accident is in a different local authority to the one specified in the data return. These issues are discussed in more detail in a Statistical Article [Road casualties quality report](#)

This article also summarises the sources and methods used to compile the road accident and casualty figures for Wales. It also reviews the quality of the resulting figures in terms of the six dimensions of statistical quality of the European Statistical System. The aim is to provide background information about road casualty statistics for Wales in a single document for all users of the published statistics.

6. Timeliness and punctuality

Statistics on Police recorded road casualties for Wales in 2017 were published on 14 August 2018 and were followed by the release of road accidents and casualties (where, when and who) 2017 which provides users with more information. Related publications are available on the [Statistics and Research website](#).

Results for Great Britain were published by the Department for Transport in September 2018 in [Reported road casualties in Great Britain main results: 2017](#).

7. Accessibility and clarity

This statistical bulletin is pre-announced and then published on the [Statistics & Research website](#). Road Accident statistics for Wales are available on [StatsWales](#) and in our [interactive dashboard](#).

8. Comparability and coherence

One accident may give rise to several casualties. Casualties are subdivided into killed, seriously injured and slightly injured categories. Casualties reported as killed include only those cases where death occurs in less than 30 days as a result of the accident. They do not include those who died as a result of natural causes (e.g. heart attack) rather than as a result of the accident, nor do they include confirmed suicides.

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators (“national indicators”) that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016 and this release does not include any of the national indicators.

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the [Well-being of Wales report](#).

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

Further details

The document is available at: <https://gov.wales/accident-cluster-sites-and-fatal-road-accidents-welsh-trans-european-road-network>

Next update

May 2020 (provisional)

We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided to stats.transport@gov.wales

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