Setting a national 20mph Speed Limit in Wales
Wales Transport policy context

Robert Kent-Smith
Deputy Director Transport Strategy and Policy
Policy context
*LLWYBR NEWYDD*

**The Wales Transport Strategy 2021**

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**OUR VISION**

**An accessible, sustainable and efficient transport system**

- **Priority 1**: Bring services to people in order to reduce the need to travel
- **Priority 2**: Allow people and goods to move easily from door to door by accessible, sustainable transport
- **Priority 3**: Encourage people to make the change to more sustainable transport

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**WELL BEING AMBITIONS**

- **Good for people and communities**
- **Good for the environment**
- **Good for places and the economy**
- **Good for culture and the Welsh language**
Sustainable Transport Hierarchy

Target for public transport, cycling and walking trips: 32% → 45% by 2040
Ian Bradfield
Principal Policy Lead – Roads
Welsh Government

#20mphconf
Background and first phase

Ian Bradfield
Principal Policy Lead Roads
‘We know that 20mph zones reduce speed of traffic, reduce accidents – particularly accidents to children – and we want to see that become the default position right across Wales.’
## Welsh 20mph Task Force Group

**Final Report**  
**July 2020**

<table>
<thead>
<tr>
<th>For</th>
<th>Abstain</th>
<th>Against</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>45</td>
<td>2</td>
<td>6</td>
<td>53</td>
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</table>

**Meeting: 15/07/2020 - Plenary (Item 11)**  
**Debate: Introducing 20mph Speed Limits in Wales**

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**The Welsh Government response to the recommendations made in the 20 Mph Task Force Group Report**

Lee Waters  
Deputy Minister for Economy & Transport
Five year priorities set out in the Wales Transport Strategy to make communities safer and encourage Active Travel

20 mph included in Programme for Government 2021 to 2026, and forms part of the legislative programme
Recommendation 1

The Welsh Ministers should make subordinate legislation under Section 81(2) of the Road Traffic Regulation Act 1984 to reduce the maximum lawful speed of a motor vehicle on a restricted road in Wales to 20mph
The Restricted Roads (20 mph Speed Limit) (Wales) Order 2022

Made 13 July 2022
Coming into force 17 September 2023

The Welsh Ministers, in exercise of the powers conferred by section 81(2) and (3) of the Road Traffic Regulation Act 1984(1), and after consultation with the Secretary of State as required by section 81(5) of that Act, make the following Order.

A draft of this Order has been approved by a resolution of Senedd Cymru in accordance with section 81(3)(aa) of the Road Traffic Regulation Act 1984.

Title, application and commencement

1.—(1) The title of this Order is the Restricted Roads (20 mph Speed Limit) (Wales) Order 2022.
(2) This Order applies in relation to Wales.
(3) This Order comes into force on 17 September 2023.
### Current % Roads by Speed Limit

<table>
<thead>
<tr>
<th>Speed Limit</th>
<th>% Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>20mph</td>
<td>2.5</td>
</tr>
<tr>
<td>30mph</td>
<td>37.4</td>
</tr>
<tr>
<td>40mph</td>
<td>2.4</td>
</tr>
<tr>
<td>50mph</td>
<td>1.3</td>
</tr>
<tr>
<td>60mph</td>
<td>54.7</td>
</tr>
<tr>
<td>70mph</td>
<td>1.7</td>
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</table>

### Post 20 mph Legislation % Roads by Speed Limit

<table>
<thead>
<tr>
<th>Speed Limit</th>
<th>% Roads</th>
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<tbody>
<tr>
<td>20mph</td>
<td>36.9</td>
</tr>
<tr>
<td>30mph</td>
<td>3</td>
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<td>50mph</td>
<td>1.3</td>
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<td>54.7</td>
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<tr>
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<td>1.7</td>
</tr>
</tbody>
</table>
Recommendation 18

Welsh Government should invite local authorities to express interest in being part of a Pilot Settlements Project to make an early start on the development and refinement of the various processes needed to implement wide-area 20mph limits and to capture and collate a comprehensive data set to evaluate the impacts of the 20mph nationwide programme.
20 mph First Phase settlements
20 mph First Phase settlements have been used to develop:

- An Enforcement Strategy
- Local Comms toolkits
- Technical and Procedural Guidance

Recommendation 9: Welsh Government should publish design guidance for local authorities on typical engineering measures that may be required to support lower traffic speeds on restricted roads.

- An Exception Process for those roads to remain 30 mph
- A Monitoring and Evaluation Strategy
Recommendation 6

Transport for Wales should further develop and finalise its GIS tool for identifying potential exceptions to the national default 20mph speed limit for restricted roads. This tool should take into account both the Place and Movement functions of each section of street/road. It should be trialled and refined through the Pilot Settlements project (see Recommendation 18).
20mph Exceptions Process
20mph Exceptions Process

Potentially suitable for remaining at 30mph
Recommendations 14 and 15

Local authorities and the Police should provide routine monitoring data, including on speed, casualties and collisions, and air quality to the Welsh Government in a timely way to contribute to the evaluation of the impacts of the 20mph nationwide programme.

Welsh Government should undertake a monitoring and evaluation study so that an assessment can be made of the impact and effectiveness of the new default speed limit. This should be initiated through the Pilot Settlements project (see Recommendation 18).
## National Default 20mph on Restricted Roads

Monitoring Framework [Draft]

<table>
<thead>
<tr>
<th>Revision</th>
<th>02</th>
</tr>
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<tbody>
<tr>
<td>Issue Date</td>
<td>11 August 2022</td>
</tr>
<tr>
<td>Monitor and Evaluation Strategy</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Policy Measure:</strong> Reduce speed limit on restricted roads to 20mph</td>
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</table>

<table>
<thead>
<tr>
<th>Improve well-being of people in Wales [health outcomes, social interaction, NHS costs, local economies]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce injury and death</td>
</tr>
<tr>
<td>Encourage a change in travel behaviour</td>
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<tr>
<td>Reduce negative externalities of vehicle use</td>
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<table>
<thead>
<tr>
<th>Benefits</th>
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<tbody>
<tr>
<td>Reduce the number of vulnerable pedestrians and cyclists killed or seriously injured on the road network</td>
</tr>
<tr>
<td>Encourage mode shift from private car to walking and cycling</td>
</tr>
<tr>
<td>Reduce motor vehicle dominance in vehicle/pedestrian interactions</td>
</tr>
<tr>
<td>Reduce carbon emissions from transport</td>
</tr>
<tr>
<td>Avoid any negative net effect on air quality</td>
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</tbody>
</table>
Key Performance Indicators (KPIs)

Objectives

Reduce the number of vulnerable pedestrians and cyclists killed or seriously injured on the road network

Encourage mode shift from private car to walking and cycling

Reduce motor vehicle dominance in vehicle/pedestrian interactions

Reduce carbon emissions from transport

Avoid any negative net effect on air quality

1.1: % traffic compliance with 20mph speed limit
1.2: Change in 85th percentile speed
1.3: Change in mean speed
1.4: Vehicle journey time & variation on main through routes (difference between 5th & 95th percentile) – split by general traffic / bus

2.1: Child pedestrian (age 5-11) casualty rate, by sex & deprivation fifth, also by sex and urban/rural
2.2: Pedestrians and cyclists age 65-74 casualty rate, by sex & deprivation fifth, also by sex and urban/rural
2.3: Pedestrians and cyclists (age 75+) casualty rate, by sex & deprivation fifth, also by sex and urban/rural

3.1: Change in attitude to active travel use in built-up areas
3.2: Change in vehicle/pedestrian yield behaviours

4.1: Change in local air quality - NOx, PM10, PM2.5
4.2: Change in CO2 emissions
4.3: Scale of traffic re-assignment to alternative longer routes

5.1: Change in public attitudes to 20mph speed limits
KPIs

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Data collection / measurement methods

Semi-permanent traffic speed & veh classification monitoring devices (radar or loop) (a) ongoing in Phase 1 areas and (b) before/after in other sample locations across Wales

National level – annual OS speed data layer release
For 1.4, GPS data before/after

STATS19 – unverified (pre-release) data
Hospital data – emergency department attendances & in-patient admissions ICD-10 codes V01-V09

For 3.1 & 5.1, focus groups continue periodically in Phase 1 areas and new focus groups in other areas
For 3.2, camera surveys (a) continue periodically in Phase 1 areas
For 4.1, AQ sensors & diffusion tubes remain in three Phase 1 areas

For 4.2 & 4.3
Air Quality

KPI = “Air quality remaining same (at the least)”

• Monitoring to be undertaken at two similar ‘free flowing’ locations, one ‘inside’ the 20 mph zone and one ‘outside’ the 20 mph zone using air quality sensors

• By comparing the measurements obtained at each sensor ‘impact’ of the 20 mph speed restriction on air quality (NO2 and PM) can be estimated

• This approach attempts to ‘remove’ the influence of other factors which can influence trends in roadside air pollutant concentrations over time
Air Quality - Installation and Calibration

Where there is no power supply, large solar panel capable of powering two sensors (even during winter months), which will remain in situ during study.

Sensors typically fixed to lamppost columns at height of 2-3m to avoid tampering and to provide source of power.
## Future programme

<table>
<thead>
<tr>
<th>Task</th>
<th>Cardiff</th>
<th>Severnside</th>
<th>Abergavenny</th>
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<td>Initial calibration</td>
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National Default 20mph on Restricted Roads

Monitoring Framework [Draft]

Revision 02
Issue Date 11 August 2022
Recommendation 2

Welsh Ministers should make subordinate legislation under Section 65(3) of the Road Traffic Regulation Act 1984 to give general directions to local authorities on the appropriate placing of speed limit signs, taking into account the change in the default speed limit for restricted roads.
Changes to the Traffic Signs Regulations and General Directions 2016 (TSRGD)
The main sign changes associated with the 20 mph default speed limit:

- All current 30mph terminal signs and carriageway roundels on restricted roads will need to be changed to display 20mph
- 20mph zones will become redundant: TROs for 20mph zones will need to be revoked if they are in street-lit areas to reinstate restricted status
- 20mph repeater signs, 20mph zone/limit signs and end of zone signs will need to be removed
- Exceptions for roads that will remain at 30mph will need a TRO and 30mph repeater signs
- Any 20mph limits made by TRO that are not in lit areas will need to retain the repeaters
TSRGD Changes

• Savings

• Repeaters

• 20mph zones

• Signing humps

• Signs near schools

• Temporary signs

• Speed camera signs
Changing the signs

All current 30mph terminal on restricted roads will need to be changed to display 20mph on 17th September 2023

How to get from this?

To this overnight!