



DESIGN
COMMISSION
FOR WALES
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26 April 2018

Dear Colleagues

National Assembly for Wales Consultation: State of Roads in Wales

Thank you for the opportunity to provide material for consideration as part of this consultation.

Below we set out our views and draw attention to lessons we have learned from the numerous road infrastructure projects upon which we have commented. We also attach for your attention copies of the Design Review Reports associated with projects, some of which have also been submitted to enquiry procedures. All are available publicly and can also be found on our website www.dcfw.org

In addition we attach a note on the role of the Design Commission for Wales which we trust is helpful.

We look forward to hearing from you.

Yours sincerely

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General:

Highway condition in Wales warrants improvement and routes suffer particularly from insufficient maintenance. Maintenance can be piecemeal, necessitating repeated treatments, particularly after winter/snow conditions undermining surface quality. This short term 'patch up' approach does not use resources to best effect. Road surface quality in towns, villages and cities undermines active travel ambition and safety particularly for cyclists – for whom collapses/pot-holes can represent serious safety challenges.

Connectivity along with efficient, attractive, frequent and affordable public transport options all warrant improvement - they currently result in heavy personal vehicle/car use, contributing to congestion on several major routes. Investment in road widening/relief proposals should be carefully assessed as to their impact and whether they relieve or compound existing difficulties. Sufficient modal shift is not yet being achieved, planned for or strategically invested in.

More specifically:

Wales must aspire to achieve public value for the long term through design excellence, if it is to invest significant sums of public money in infrastructure projects. It must do so in the interests of sustainability and in line with the duties and objectives of the Well-being of Future Generations Act, Active Travel Act and emerging place-led planning policy. This legislative and policy context prioritises mixed mode active travel, public transport use beyond the private vehicle, and establishes a hierarchy which should be at the core of the vision for any new infrastructure. This should include designing for a street hierarchy, filtered permeability, and active travel, pedestrian, cycle and bus lanes.

In order to deliver the maximum regeneration benefit of road infrastructure investments, place-making should be at the core of the design process. At street level engaging in community street design is a means of better serving the needs of the locality by aiming for high quality, safer and more attractive streetscapes, contributing to the encouragement of active travel use. Far greater use should be made of integrated green infrastructure and measures which make routes more attractive and likely to attract greater use.

The design of road infrastructure should be undertaken by a multi disciplinary design teams including landscape architects and structures architects, civil and structural engineers. These differing but complimentary professional skills contribute to better and more creative problem solving, ensuring a solution which responds appropriately to context whilst meeting the functional requirements of all users. It is important that this multi disciplinary design work is captured to add value and not eroded or 'value' engineered through the procurement process, but that important design approaches and qualities become essential requirements of the employer in the construction contract documents. Whilst early contractor involvement (ECI) may assist this it does not in our experience always lead to procurement outcomes that realise wider benefits or secure quality and value for the long term.

New road infrastructure where it is fully justified and can demonstrate wider public benefit, should be designed for longevity by giving early and full consideration to current and future needs, in terms of movement and the integration of other services. The WelTag tool may also benefit from further refinement.

Investing in robust materials at the delivery stage is likely to save money in the long term by reducing maintenance requirements. A focus on short term capital undermines the potential for long term value to be captured.

Lessons can be drawn from various major road schemes upon which the Design Commission has commented upon and brought its expertise to, via its national Design Review Service. Despite there often being a lack of design ambition, refined design quality is increasingly being seen when creative design and engineering collaboration is evident and where specialist structures architects are retained. Some Trunk road schemes can demonstrate the value of a 'reverse engineering' approach, which minimizes deviations from existing road lines and the extent of cut and fill needed, and treating the landscape quality and biodiversity as constraints to which value adding solutions can be found.

Where structures are required greater use could be made of best practice IABSE Guidance and the Welsh Government should routinely retaining client side design expertise of the highest level to ensure sound decision making for long term value.

The reports and comment of the Design Commission for Wales are often submitted to the Planning Inspector at enquiry, however are not always utilised in the best way. At times it is assumed or suggested at enquiries that DCFW 'approves' structures or design approaches. This is not the case and should be addressed through changes to the submission and consideration of evidence at enquiry.

Whilst we have seen huge commitment and greater consideration of the importance of design objectives for quality coming through in many schemes, it is not fully understood and the relevant expertise is not reflected in the project teams. Procurement methods are not yet appropriately tuned toward capturing quality or protecting the client interest, and therefore public value. The Design Commission can at times be met with resistance to its comment on these aspects in the name of 'best value'. However we are aware of significant budget challenges on some projects, without, we understand, the achievement of sufficient quality. A focus on minimising capital cost can lead to unrealistic budget projections, particularly where topographical and other landscape contexts are insufficiently tested in the design analysis necessary at the earliest project stages.

The comment of the Design Commission for Wales is expert and advisory and whilst it constitutes a material consideration in the planning process, it is not statutory. We attach relevant Design Review Reports for consideration.

List of Design Review Reports on Road and Transport – along with links to A465, M4 and proposed 3rd Menai Crossing

<https://dcfw.org/?s=A465&cat=3&x=0&y=0>

<https://dcfw.org/?s=M4&cat=3&x=0&y=0>

<https://dcfw.org/?s=Menai+Crossing&cat=3&x=0&y=0>

Scheme name	DCFW Ref	Dates reviewed
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A55, 3 rd Menai Crossing	160	15.03.18
A40 Llandewi Velfrey to Penblewin	144	15.06.17
Llanfoist to Abergavenny Footbridge	118	10.08.16 17.11.16
Dyfi Bridge, Machynlleth	92	14.01.16
A487 Caernarfon to Bontnewydd Bypass	81	20.08.15
M4 corridor around Newport	77	14.11.07 23.04.18 09.06.15 22.10.15
A483/A489 Newtown Bypass	27	30.01.14 20.03.14 23.10.14 14.01.16
A465 section 2	75D/3	16.05.12 31.01.13 25.10.13
A465 Tredegar to Brynmawr	67A	06.07.11
A470 Erwood Glanwye	62B	17.11.10
A465 Heads of the Valleys	62A	17.11.10
A4477 St Clears to Red Roses	53A	24.03.10
A55 Britannia Bridge	38D	19.11.08
A470 Cwmbach to Newbridge	34B	11.06.08
Pont y Werin Footbridge, Cardiff	31H	16.01.08
M4 Magor to Castleton	30G	14.11.07 15.04.08
A470 Porthmadog Bypass	29B	11.07.07
A470 Gelligemlyn	26B	10.01.07
A40 Canaston Bridge	20D	01.02.06
Usk Footbridge, Newport	10B	03.12.04
Porth and Lower Rhondda Relief Road	2A	01.08.03 01.03.05

Finally we also include below a note about DCFW's role and structure. We trust this correspondence is helpful.

The Design Commission for Wales is a company limited by guarantee (DCFW LTD), without share capital and incorporated in 2002 as a wholly owned subsidiary of the National Assembly for Wales, now Welsh Ministers, pursuant to the Government of Wales Act 2006. The Commission receives funds from the Welsh Government for its activities, carried out in pursuit of the Objects of the Company as set out in its Memorandum of Association. These are:

- *To champion high standards of design and architecture to the public and private sectors in Wales through promoting wider understanding of design issues and the importance of enhancing the built environment across all sectors, including the organisation of exhibitions, meetings, seminars and conferences.*
- *To promote design practice that is compatible with the scheme made by the National Assembly for Wales under Section 121 of the Government of Wales Act 1998 ("the Sustainable Development Scheme"), promoting best practice in energy efficiency, waste disposal and access to public transport.*
- *To promote design practice compatible with the highest standards in relation to the promotion of equality of opportunity and social inclusion.*
- *Whilst promoting excellence in prestige projects to have due regard also to the promotion of excellence in day to day developments such as residential estates and industrial units*

In addition to the company Objects the Commission responds to a number of requirements set out annually by its Sponsor department, the Planning Directorate of the Welsh Government. These are agreed annually as part of the annual planning process and reflected in DCFW's Annual Plan each year. DCFW also responds to requirements from other Welsh Government portfolio areas, major projects or Ministerial requirements. DCFW responds to legislation and policy requirements pursuing its Objects through Client support and training, the National Design Review Service and through its events, publications and networks. DCFW operates throughout Wales and across private, public and third sectors.

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