

Environment and Sustainability Committee October 2013

Purpose

To inform Committee of ICE Wales Cymru's position in respect of current Welsh Government proposals in relation to the M4 in South east Wales, and the process to date, and to consider if the proposals have effectively balanced economic and environmental needs and interests.

M4 Corridor Around Newport (i.e. M4 Relief Road / New M4 Project)

1 Background

- 1.1 There are recognised capacity and resilience problems on the M4 around Newport. Journey times are unreliable and congestion occurs, particularly during peak travel times. ICE Wales Cymru has called for improvements for many years.^[1]

2 Issues

- 2.1 The Brynglas Tunnels have capacity restrictions and a history of problems relating to a number of fires and incidents in the twin bore, two-lane east and west bound tunnels. Major disruption to the highway network occurs when these happen that can and does spread rapidly across the region.
- 2.2 In order to make the best of the available highway network, a managed motorway scheme has been implemented that has been in operation for a relatively short while. This, however, will not resolve the issues in the medium to long term.
- 2.3 In addition an excess number of closely spaced junctions coupled with poor alignment (both horizontal and vertical) on the existing M4 conspire to lead to inefficient vehicle operation and an above average accident record for a highway of that character. Effectively the M4 in this location acts as the Newport Northern By-Pass (as it was conceived originally) and not as a strategic motorway.
- 2.4 ICE Wales Cymru recognises that considerable amount of preplanning and design already carried out to seek solutions to the problem of motorway congestion and unreliable journey times which have become increasingly worse during the period of the studies and investigations.
- 2.5 The morning and evening peak periods are lengthening such that they will eventually merge. The peak travel conditions may occur from 6am to 8pm in time.

1. ^[1] Institution of Civil Engineers Wales Cymru (2013) State of the Nation: Transport Briefing, p1; Institution of Civil Engineers Wales Cymru (2013) State of the Nation: Infrastructure 2010 Briefing, p3; Institution of Civil Engineers Wales Cymru (2013) State of the Nation: Defending Critical Infrastructure Briefing, p1:

2.6 This situation causes a great deal of concern because of the highway's fragile nature – a simple incident could have a considerable effect and cause considerable consequential delays.

3 **Solution**

3.1 ICE Wales Cymru considers that there is a proven need for the provision of a new motorway to alleviate the problems and resolve the issues.

3.2 ICE Wales Cymru considers that the proposed M4 is a key piece of the highway infrastructure and the provision will provide major benefits to the economy of South Wales. With a proven multiplier effect¹ of at least 2.84 for investment in infrastructure, the construction of the new motorway will reap both medium and long term benefits to the area. As the M4 links to and serves mid and west Wales, the benefits provided and economic growth will be felt across much of Wales.

3.3 Having considered the consultation, ICE Wales Cymru believes that the Black route – to the south of Newport will provide the optimum solution to the problems. This has been supported by ICE Wales Cymru in the past and it is considered to strike a balance between the sometimes differing needs / objectives of transport infrastructure, business needs, economic regeneration, the needs of the travelling public and not least, the environmental aspects.

3.4 In consideration of the sustainability issues, ICE Wales Cymru believes that the correct balance is struck between the environmental, financial and social aspects. Whilst the Black route traverses SSSI designated land, suitable and proportionate measures are proposed as part of the overall package. ICE Wales Cymru considers that it may be possible for the project to include further environmental measures that could even enhance the SSSI areas, i.e. instead of a detrimental effect, the project could have net positive benefits by enlarging the area of the SSSI.

3.5 Considering the air quality issues, there is a current problem on the existing motorway as evidenced by Air Quality Management Areas. The Welsh Government is already required to address this matter. It is considered that the Black route proposed will alleviate much of the ongoing problem by enabling existing and future traffic to operate more efficiently.

3.6 If the Black route is implemented, there will be considerable opportunities to enhance the local travel modes of transport along the route of the existing M4. ICE Wales Cymru believes that these measures should be investigated for implementation as part of the overall project.

¹ UK Contractors Group / LEK Consulting (2012) Construction in the UK Economy, The Benefits of Investment, p10.

4 Funding

- 4.1 ICE Wales Cymru recognises that funding of the motorway will require the provision of borrowing power for the Welsh Government. ICE Wales Cymru strongly believes that this should not be a deterrent to the enabling or provision of the required motorway.

5 Conclusion

- 5.1 There is an established link between the condition of the Infrastructure and the economy of Wales and continued investment and improvements to the transport infrastructure of Wales will assist in economic growth of Wales.
- 5.2 The construction of the new motorway will bring additional benefits of jobs to Wales on the planning, design, construction and maintenance of the motorway as well as stimulating additional jobs across Wales. The current conditions are hindering development.
- 5.3 ICE Wales Cymru strongly supports the provision of a new motorway to the south of Newport.
- 5.4 ICE Wales Cymru considers that the Black route offers the optimum solution.

Keith Jones Director, Institution of Civil Engineers Wales Cymru

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- The Institution of Civil Engineers (ICE) was founded in 1818 to ensure professionalism in civil engineering. It represents over 80,000 civil engineers in the UK and across the globe and has over 3500 members in Wales.
- ICE has long worked with the government of the day to help it to achieve its objectives, and has worked with industry to ensure that construction and civil engineering remain major contributors to the UK economy and UK exports.
- For further information visit: www.ice.org.uk and www.ice.org.uk/wales