

Prospectus for better transport in South Wales *affordable & sustainable alternatives to a New M4*

Ymgyrch Erbyn y Traffordd Lefelau ~ Campaign Against the Levels Motorway
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“We cannot build our way out of traffic and transportation problems”
County Surveyors’ Society Wales¹

Executive Summary

The Campaign Against the Levels Motorway is an alliance of local people, Community Councils and environmental organisations, who all seek an alternative to a New M4 motorway.

The current proposal to build a new M4 motorway cutting across the Gwent Levels to the south of Newport is unsustainable and unaffordable at present and for the foreseeable future. The scheme has been under discussion for over 15 years but has so far failed to be included in the roads programme. This is unsatisfactory as the inability to resolve the transport needs for south east Wales causes planning blight and limits decision making at the local and regional level. This Prospectus is intended to unblock this impasse by offering a set of alternatives to the construction of a new motorway, which address the issues the motorway was attempting to solve. These alternatives are cheaper, more lasting and without the significant environment impact that would result from the construction of a New M4.

A range of transport options are considered by CALM with a favoured package of measures drawn from the various options put forward. These have the following main elements:

- a) Integrated local transport planning for Newport, Cardiff and surrounding areas;
- b) Making better use of existing road capacity;
- c) Traffic/demand management.

¹ Evidence from the County Surveyors’ Society Wales to the WAG Sustainability Committee

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Introduction

The Campaign Against the Levels Motorway is an alliance of local people, Community Councils and environmental organisations, who all seek an alternative to a New M4 cutting across the Gwent Levels to the south of Newport. The Gwent Levels are nationally known for their archaeological³ and wildlife⁴ value, hence their statutory designations. They provide significantly a high quality of life for local residents, with the area's tranquility being appreciated by both local people and visitors to the area alike. The CALM Alliance seeks to preserve this unique area of countryside, and is against the Welsh Assembly Government's plans for a New M4.

This campaign is not backward-looking. The CALM Alliance acknowledges that it is crucial for the needs of all in South Wales to be met. As a result, we produce this Prospectus for Better Transport in South Wales which described our preferred transport alternatives.

We are not a campaign which looks solely to protect social and environmental quality. We also recognise the importance of ensuring continued mobility, and having healthy economic conditions such that we have the best chance of providing sustainable development for all.

Objective of this Prospectus

This is a prospectus of options for sensible investment in transport – and linked decision-making in planning and social policy. But to what end? In producing this prospectus of options, we have this objective:

² Evidence from the County Surveyors' Society Wales to the WAG Sustainability Committee

³ Rippon, S. *The Gwent Levels: the Evolution of a Wetland Landscape*, CBA Research Report 105 (York 1996)

⁴ Summary of interest at <http://www.gwentwildlife.org/gwentlevels.htm> and CCW SSSI citations

To enable mobility for all, in an affordable manner, which respects our environment and local quality of life, and which also is in line with the needs of a modern economy.

The options in this Prospectus will put sustainable development into practice – marrying the needs of society, the environment and the economy, to give a better Wales. As the Welsh Assembly Government puts it in its definition of sustainable development, this means meeting “*the needs of all human life, within the carrying capacity of supporting ecosystems, without compromising the ability of future generations to meet their own social, economic, environmental and cultural needs*”.⁵

Assessment of the current situation

Parts of the UK’s motorway network are regularly congested at peak times. Some parts of the UK’s motorway network also have high accident rates. The M4 around Newport experiences both of these situations. It has a high frequency of junctions, a two-lane section through the Brynglas Tunnels and intermittent hard shoulder.

At most times, there is steady traffic flow along the M4, with journey times being slower at rush hour. Long delays have arisen following accidents which have led to road closure to allow infrastructure repairs, vehicle recovery and police investigation of the accident causes.

The situation with the M4 around Newport has become a major *cause célèbre*, attracting considerable media attention and public comment. This is providing a climate of perception which has led many to claim that this is both:

- (1) The principal transport problem in Wales;
- (2) An issue which can only be satisfactorily addressed by a New M4 across the Gwent Levels Sites of Special Scientific Interest.

With respect to Point 2, this document outlines transport safety, management and road-capacity measures which provide an affordable and sustainable alternative to a New M4 across the Gwent Levels. However, before concentrating on these alternatives, it is worth considering Point 1. There is considerable reason to question the widespread perception that the existing M4 is the most significant transport problem in Wales. Firstly, access to basic transport provision dominates the lives of many, as a result of personal health and economic situations, combined with the available public and social transport infrastructure. Secondly, the integration of Wales as a nation, and people’s social and business needs are affected by the slow speed of north-south connections. This is in sharp contrast to the fast east-west connections offered in South Wales (by the A40,

⁵ Starting To Live Differently: The Sustainable Development Scheme of the National Assembly for Wales. 2006.

the A465 Heads of the Valleys road, the A449 and the M4) and in North Wales (by the A55).

Thirdly, there is no real evidence showing that the M4 around Newport is **the** limiting factor in speed and reliability of road transport around South Wales. There is very limited integrated Wales-wide understanding of current traffic flows, the extent of suppressed demand as a result of current road conditions, accident frequency and severity, and the extent and severity of current rush-hour blockages.

At present, regular commuters and business travelers around South Wales know that the slowest parts of their journeys, and those which take disproportionately longer at peak times, are urban routes, off the motorway network. It takes an enormous time to get through Newport and Cardiff at rush hour, and then further time finding somewhere to park. There are regular queues on most roads leading **onto** the motorways. There is regular congestion at junctions and roundabouts across the South Wales Valleys. Increased motorway capacity through a New M4 will tie up our investment in a scheme which will encourage car use, creating a ripple of even greater congestion problems in feeder routes and urban areas across south-east Wales.

Transport Options: The Full Range

There are a range of different options for managing and investing in transport in south Wales. Indeed, consideration of the appropriate range of options is a statutory requirement under Environmental Impact Assessment and Strategic Environmental Assessment Regulations.

In addition to the New M4 proposal, which WAG has prioritised since the Ministerial Announcement in December 2004, the CALM Alliance believes that the following are also options which must be considered:

1. Integrated local transport planning for Newport, Cardiff and their hinterland;
2. Making better use of existing road capacity;
3. Traffic/demand management;
4. Road pricing;
5. Widening of the existing M4;
6. South Wales and Valleys light rail / tram network.

The CALM Alliance feels that a combination of options 1-3 will provide the most cost-effective and practical approach. It is these options which are discussed further in this document. We consider that the combination of these options provides a clear alternative to the New M4 project. We think this gives best value whilst achieving outcomes which are socially and environmentally advantageous; perhaps more surprisingly, it is becoming clear that these alternatives to a New M4 will also provide better economic prospects for Wales.

We doubt that there is a significant economic case for the New M4. We feel this will be shown by the forthcoming New M4 Outline Business Case, and the independent critique of its economic analysis which the CALM Alliance will be seeking.

Other measures will provide greater short-term stimulation to the Welsh economy. Furthermore, we anticipate that long-term economic competitiveness will be best served by using high environmental quality as a key marketing proposition for Wales. The CALM Alliance's proposed package of measures will increase future Welsh economic competitiveness by reducing the need to travel and by reducing our economic sensitivity to the price of oil.

This is in line with the Highways Agency strategy:

A Route Management Strategy (RMS) is a new method of planning our roads for the future. It looks at the whole picture by assessing the use and needs of a particular route with the intention of making better use by:

- *Spending available money more effectively*
- *Making road planning tie in better with regional transport and planning decisions*
- *Allowing all users of the route to have their say. Local people often know more about local problems and what the solutions might be. (Highways Agency website <http://www.highways.gov.uk/roads/projects/4658.aspx>)*

Transport Alternatives: The CALM Alliance's favoured approach

The package of measures favoured by the CALM Alliance has the following main elements:

- a) Integrated local transport planning for Newport, Cardiff and their hinterland;
- b) Making better use of existing road capacity;
- c) Traffic/demand management.

There is some similarity in this package to the 'Hybrid Option' favoured by the 1999 Welsh Office Common Appraisal Framework⁶ study. It is striking that our conclusion broadly matches that which was brought to the Welsh Office ten years ago. However, our Prospectus for Better Transport in South Wales represents a fresh analysis. It stems from the experience of the active members of the CALM Alliance and discussion with many individuals and groups. It benefits further from Welsh and UK transport policy development over the last decade.

Integrated local transport planning

⁶ M4 motorway between Magor and Castleton, Common Appraisal Framework Study Summary Report. Report by Ove Arup & Partners Consulting Engineers to The Welsh Office. April 1999.

The final draft of the south east Wales Transport Strategy has been recently published⁷, whilst there is also a 2004 Newport Transport Strategy⁸. There are social and environmental imperatives behind the emphasis on public transport in these policy documents, with an integrated approach to transport, including investment in effective public transport, being seen as essential to maintaining the economic prospects of the area. Furthermore, 2009 sees WAG consultation on the National Transport Plan.

The CALM Alliance wishes to see the principles behind these strategies carried forward to an investment strategy that concentrates on the value-for-money options which integrate social, economic and environmental factors. The public transport proposals in these documents generally meet these requirements. The New M4 does not.

This area is a very complex one, and it would serve no purpose to repeat the expertly developed public-transport infrastructure proposals in these documents. Instead, those measures which the CALM Alliance considers to be of particular benefit are highlighted below.

The CALM Alliance seeks action for integrated local transport planning by:

- Investment in rail capacity:
 - Development of park and rail-ride facilities, with free parking, linked to frequent 'clock-face' services at:
 - Additional stations on the Great Western mainline, at Magor, and between Newport and Cardiff;
 - Caerleon and Pontypool on the Newport – Manchester mainline;
 - Completing the Ebbw Vale to Newport rail-link;
 - Improved journey time and frequency of services from South Wales to mid and North Wales, Birmingham and Bristol;
- Review of integration of bus/coach/rail services to Newport and Cardiff, including consideration of measures to address speed of bus & coach travel through urban areas;
- Review of bus services intended to meet needs of commuters for major centres and places of work, ensuring integration with rail links;
- Subsidy for bus and rail fares to encourage modal switch from the car to public transport;
- Measures to encourage walking and cycling and their integration with the other elements above;
- Enhanced promotion of integrated public transport information.

Making better use of existing road capacity.

⁷ Final Draft Regional Transport Plan, SEWTA, December 2008

⁸ A city-wide Transport Strategy for Newport, Final Report, July 2004. Report prepared for Newport Unlimited by Arup in association with DTZ Pieda Consulting.

Recent years have seen significant development of traffic management measures on motorways, such as the M42 and M25, including hard-shoulder running and variable speed limits. Technology such as CCTV and speed cameras allow for the management and regulation of such measures. WAG is already commissioning a traffic management system on the existing M4. This should enable management of flows, and a reduction in accidents.

Furthermore, more radical measures are possible on the existing M4. The motorway was constructed as an urban Newport by-pass, and as a result has four intermediate junctions in the 8 miles between the Coldra junction (J24) and the Tredegar House junction (J28).

The CALM Alliance wishes to see further consideration of the following options for making better use of existing road capacity:

- Closure of the M4 High Cross junction (J27);
- Integrated treatment of J25, J25a and J26, such that:
 - East-bound entry is prevented at J26;
 - West-bound exit is prevented at J26;
 - Investigation is given as to whether the existence of J25a improves traffic flows or increases lane-changes and risk on the M4, with consideration being given to its closure in either or both directions;
- Successful implementation of a traffic management system on the M4;
- Consideration of measures to increase safety and capacity at the Tredegar House junction (J28) and Coldra junction (J24)⁹;
- Implementation of the Events Management Strategy for Newport¹⁰, with integration of park-and-ride facility to the east of Newport with Event Management Plans for Cardiff events¹¹;
- Accident and emergency planning, to ensure a minimum of disruption following incidents, and fast re-opening of the M4 should closure be required;
- Action to increase capacity of existing alternative routes, such as the Southern Distributor Road and A48 between Cardiff and Newport;
- Action to ensure that peak-time or accident avoidance 'rat-running' does not lead traffic onto inappropriate rural or residential routes, such as the B4239 coast road between Cardiff and Newport, through signage to appropriate alternative routes, and signage, speed-limits and/or other traffic calming measures on inappropriate routes as required;
- Consideration of opportunities to increase alternative routes in a low-impact manner, as may come forward with European-funding within the South Wales Valleys, and if land becomes available at the Llanwern Steelworks site.

⁹ Note – work is being undertaken at present at the Coldra Junction; consideration needs given to whether any further improvements can be made once the commissioned work is complete.

¹⁰ Newport Unlimited Major Events Strategy; Infrastructure Requirements and Event Management Plan, May 2004, produced by Ove Arup & Partners Ltd.

¹¹ Reference made in Section 2.4, pg 2 of the above

Traffic/demand management

For some people, particularly the disabled, travelling by private car or taxi is essential. For others, the private car is the mode of choice, particularly where:

- The additional journey and parking cost (beyond the costs already incurred in car ownership) are less than the public transport cost;
- and/or the journey time is shorter by the car than would be the case by public transport;
- and/or the journey or the day's pattern of journeys could not all be readily met by public transport.

It should also be remembered that there are many car-less households in Wales, particularly in conurbations and the South Wales valleys. Furthermore, many individuals from households with cars do not have use of a car at all times. The subject of traffic & demand management is sometimes presented as an attack on personal freedom and choice. It is important to remember that it is the private car, thanks to its high initial ownership cost and some people's unwillingness or inability to drive, which is not universally available. It is emphasis on meeting some people's desire to drive more or faster, rather than investing in public transport, which actually disenfranchises important parts of society.

To some extent, similar considerations determine whether transport modes other than road are employed for movement of commercial freight.

The CALM Alliance seeks action to manage demand for road-space by:

- Active support from WAG, political parties and wider civic circles for financial measures to:
 - Increase fuel tax, to subsidise public transport;
 - Provide fuel tax rebates for public transport providers;
 - Compensatory measures to meet the needs of essential car-users (e.g. the disabled);
 - Fare schemes to encourage public transport usage as an alternative to the car;
- Land-use planning measures to concentrate development around nodes which can be effectively networked by public transport, and to limit provision of car parking;
- Consideration of how car parking charges can recognise the wider societal cost of private transport, and generate revenue to invest in public transport, whilst addressing the competitive advantage of out-of town retail or business locations which currently offering free parking;
- Implementation of 'green travel to work plans' for all significant public sector employers, combined with measures to encourage similar action for private and voluntary sector employers;
- Encouragement of regular home-working;

Encouragement of increased use of telephone and the internet for business communication.

Appendix 1: Overview of the 1999 Common Appraisal Framework (CAF) study

The CAF study was commissioned by The Welsh Office to provide a Common Appraisal of options to provide relief to the M4, as part of their commitment to evaluating realistic alternatives to road schemes.

The objectives for the transport alternatives assessed were as follows:

- To provide relief from the anticipated effects of increasing traffic levels on the M4 around Newport between Magor and Castleton; and
- To appraise options on the basis of acceptable environmental, financial, economic and safety criteria.

Three realistic, possible and affordable scenarios were identified:

- Road building;
- Enhancing public transport; and
- Traffic/demand management.

Road building

This comprised the building of the M4 Relief Road (now called the New M4), at an estimated cost of £340m¹².

Enhancing public transport

This comprised:

- Rail measures:
 - Electrification of the Great Western mainline between Swansea and London;
 - Line capacity improvements;
 - Construction of a 'Newport Avoidance Line'
 - Cardiff – Bristol Temple Meads – Bath infrastructure and rolling stock improvements;
 - Cardiff to Birmingham increased speed, frequency and capacity improvements;
 - Cardiff – Shrewsbury – North Wales journey time improvements;
 - Abergavenny station improvements;
 - Re-opened station at Caerleon;
 - Valley Lines signalling improvements;
 - Light rail in Cardiff;
 - Re-introduction of passenger services on Ebbw Vale – Newport – Cardiff line, with 9 re-opened stations;
 - New station at Magor designed for park and ride;
 - New station at Duffryn designed for park and ride;

¹² CALM believes that the cost of the project will have now more than doubled, and possible trebled to c£1bn, *before* the cost of borrowing to finance the scheme is factored in.

- Coach measures:
 - Measures for 15% improvement of coach journey times in urban areas;
 - Improved bus/coach/rail interchange in Newport;
- Local public transport measures:
 - Measures in Cardiff to reduce bus journey times by 30% and passenger waiting times by 20%;
 - Routing of buses via rail station in Newport, combined with measures to reduce bus journey times by 30% and passenger waiting times by 10%;
 - Enhancements to improve access to Bristol Temple Meads station;
- Cycling measures:
 - Improved local accessibility and infrastructure to quadruple number of cycle trips;
- Walking measures:
 - Improved local accessibility and infrastructure to reduce number of car trips of less than 2 miles by one quarter;
- Freight measures:
 - To improve road / rail integration, up-grade rail freight capacity and to increase the competitiveness of rail.