

Number: WG19741

M4 Corridor around Newport

We want your views on our draft Plan which aims to address transport related problems on the M4 around Newport



Llywodraeth Cymru
Welsh Government

www.cymru.gov.uk

**M4 Corridor
around Newport
draft Plan**

**Consultation
Document**

Strategic Environmental Assessment Environmental Report Non Technical Summary

Date of issue: 23 September 2013
Responses by: 16 December 2013



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The draft Plan and Reasonable Alternatives

Large print versions of this document are made available on request.
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Glossary

The following terms are referred to in this non-technical summary of the Strategic Environmental Assessment (SEA) Report of the M4 Corridor around Newport draft Plan.

Table (i) - Glossary of Terms

Do Minimum	This is a scenario (sequence of future events) where intervention includes doing nothing above what is already planned or committed. In this case, it includes all recent network modifications (such as the Junction 24 improvement and the Variable Speed Limit system) and any committed schemes (such as the Junction 28/Bassaleg Roundabout/Pont Ebbw Roundabout improvement and the Steelworks Access Road)
draft Plan	This is the Welsh Government's preferred strategy to solve transport related problems affecting the M4 Corridor around Newport in South Wales. If implemented, the draft Plan would lead to a new motorway (Black Route) being built to the south of Newport, alongside some complementary highway management, walking and cycling initiatives. Assessments of the draft Plan compare it to reasonable alternatives, as well as the Do Minimum scenario
EqIA	Equality Impact Assessment. A way of examining and analysing services, policies and strategies that identify existing and potential impacts on certain groups of people, and sometimes individuals
HIA	Health Impact Assessment. A process that considers how the health and well-being of a population may be affected by a proposed action, be it a policy, programme, plan or a change to the organisation or delivery of a particular public service
HRA	Habitats Regulations Assessment. A process that considers the potential effects of plans and programmes on European Sites (protected habitats)
M4 CEM	M4 Corridor Enhancement Measures. A Welsh Government initiative set up to explore and resolve issues of capacity, safety and resilience along the M4 corridor in south-east Wales

Reasonable alternatives	These are reasonable alternatives to the draft Plan, being other options that the Welsh Government considers could solve transport related problems affecting the M4 Corridor around Newport in South Wales. If implemented, the reasonable alternatives would lead to either a new dual carriageway (Red Route) being built to the south of Newport, or a motorway solution along a similar alignment (Purple Route) alongside some complementary measures.
SAC	Special Area of Conservation. Strictly protected sites with listed habitat types and species that are considered to be most in need of conservation at a European level (excluding birds)
Scheme / Project	For individual schemes or projects, the appropriate level of appraisal is more detailed, quantitative and evidence-based ¹
SEA	Strategic Environmental Assessment. A process that provides for the high level protection of the environment, by ensuring the integration of environmental considerations into the preparation of plans and programmes and to contribute to the promotion of sustainable development and environmental protection
SDR	Southern Distributor Road. In this case, the A48 Southern Distributor Road, Newport
SSSI	Sites of Special Scientific Interest. Legally protected sites for wildlife and geology conservation
Strategy, Plan or Programme	A strategy, plan or programme sets out broad objectives, identifies measures to achieve these and proposes a typically broad package of interventions to achieve the objectives. The appropriate level of appraisal is also broad, and at a strategy level, it may only be possible to undertake appraisal qualitatively ¹
TR111 Notice	Once a preferred route of a transport scheme is announced, the Welsh Government serves a statutory TR111 notice on the local planning authorities requiring the line to be protected from development
WelTAG	Welsh Transport Planning and Appraisal Guidance is a transport appraisal tool applicable to transport projects, plans and programmes in Wales. The Welsh Government requires that major transport initiatives seeking government funding are appraised with this guidance

¹ Source: Welsh Transport Planning and Appraisal Guidance (WelTAG), June 2008

1 Introduction

This is a non-technical summary of the full Strategic Environmental Assessment (SEA) Environmental Report. Please read this document alongside the overarching M4 Corridor around Newport draft Plan Consultation Document².

A draft Plan has been developed taking into account the extensive work undertaken as part of the M4 Corridor Enhancement Measures (CEM) Programme. The M4 CEM Programme was set up to explore and resolve issues of capacity, safety and resilience along the M4 Corridor around Newport, in South East Wales. It was based upon the ability to deliver and identify measures in phases to improve affordability.

As a result of on-going discussions with the UK Government there has been a significant change in the assessment of the affordability of a major enhancement of the M4. On 26 June 2013, Edwina Hart AM CStJ MBE, Minister for Economy, Science and Transport, published the following written statement:

“Addressing the capacity and resilience issues on the M4 around Newport is the top transport challenge that we face in ensuring that Wales has an effective economic infrastructure which improves our competitiveness and access to jobs and services.

As a result of ongoing discussions with the UK Government there has been a significant change in the assessment of the affordability of a major enhancement of the M4.

Building on the extensive development and consultation work undertaken on M4 Corridor Enhancement Measures (CEM), we will be consulting formally over the summer with Natural Resources Wales in order to go out to public consultation this September with a finalised draft Plan and Strategic Environmental Assessment (SEA) Report.

If implemented, the draft Plan would lead to a motorway being built south of Newport.”

The M4 Corridor around Newport draft Plan Consultation seeks comments on:

1. The **Welsh Government’s draft Plan** (its preferred strategy): A new motorway between Junctions 23 and 29, along the TR111 protected corridor on the South side of Newport which has been protected for this purpose – **The Black Route and its Complementary Measures**;
2. A reasonable alternative to the draft Plan: A dual carriageway to the South of Newport, delivered in a phased programme – **The Red Route and its Complementary Measures**;

² The full Strategic Environmental Assessment (SEA) Environmental Report and the draft Plan Consultation Document are available online at www.m4newport.com

3. A reasonable alternative to the draft Plan: A motorway along an alternative alignment to the South of Newport – **The Purple Route and its Complementary Measures**; and
4. The **Do Minimum** scenario (doing nothing above what is already planned or committed). This includes a number of highway schemes and development proposals.

The draft Plan and reasonable alternatives, including their complementary measures, are described in more detail in Appendix A and illustrated in Figure 1, on page 7.

The draft Plan does not include public transport measures because the Welsh Government has commissioned a separate study and report on proposals to develop a metro system for South East Wales. That report will focus on how a metro system could support economic growth and regeneration at key locations across South East Wales.

A number of assessments are being undertaken which consider the potential environmental, health and equality impacts of the draft Plan, its reasonable alternatives and the Do Minimum scenario. These assessments are listed below:

- Strategic Environmental Assessment (SEA);
- Habitats Regulations Assessment (HRA);
- Health Impact Assessment (HIA); and
- Equality Impact Assessment (EqIA).

These are separate documents but are referred to in the draft Plan Consultation. As such, they will be reviewed and finalised to take into account and address any comments arising from the consultation.

Using the feedback received from the consultation, the Welsh Government will decide whether to adopt the draft Plan, with or without amendments, taking into account the responses to the associated assessments.

1.1 Purpose of this Document

This document forms a non-technical summary of the Strategic Environmental Assessment (SEA) Environmental Report, which is included in the draft Plan Consultation.

SEA is a process that provides for the high level protection of the environment, by ensuring the integration of environmental considerations in the preparation of strategies and plans and by contributing to the promotion of sustainable development and environmental protection.

Under the SEA Directive (2001/42/EC)³, SEA is a legal requirement for certain plans and programmes. In Wales, this is implemented through the Environmental Assessment of Plans and Programmes (Wales) Regulations 2004⁴ (referred to as the SEA Regulations in this report). Welsh Transport Planning and Appraisal Guidance (WelTAG)⁵ Appendix E.2 also outlines how the appraisal of transport strategies, plans or programmes should take into account the SEA Regulations.

1.2 Problems on the M4 Corridor around Newport (Current and Predicted)

Transport related problems which have been identified on the M4 Corridor Magor to Castleton relate to its design and insufficient capacity. Problems are wide ranging, falling into capacity, resilience, safety and sustainable development categories. The situation is predicted to further deteriorate if nothing is done, having serious implications for the local and Welsh economy, quality of life of those using the M4 or living in the area, and the environment (locally and further afield).

Congestion on the M4, particularly around Cardiff and Newport, is cited by the business community in South Wales as a barrier to economic growth. Where congestion increases, the cost of transport for businesses, commuters, consumers and economic performance can be affected. Increased congestion will also result in longer journey times for commuters, reducing the effective travel to work area.

In terms of the environment, higher traffic volumes along the M4 are likely to contribute not only to poor air quality, but also noise pollution, compromising the amenity of neighbouring residential communities. Assuming limited improvements to vehicle emissions technology, the increased flows and stop start conditions would give rise to more vehicle emissions along these routes. It is important to note that stop-start congested traffic can result in higher CO₂ emissions than free-flowing traffic.

³ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

⁴ Environmental Assessment of Plans and Programmes (Wales) 2004 SI 1633

⁵ Welsh Transport Planning and Appraisal Guidance, June 2008

1.3 Aims of the M4 Corridor around Newport

The aims of the Welsh Government for the M4 Corridor around Newport are to:

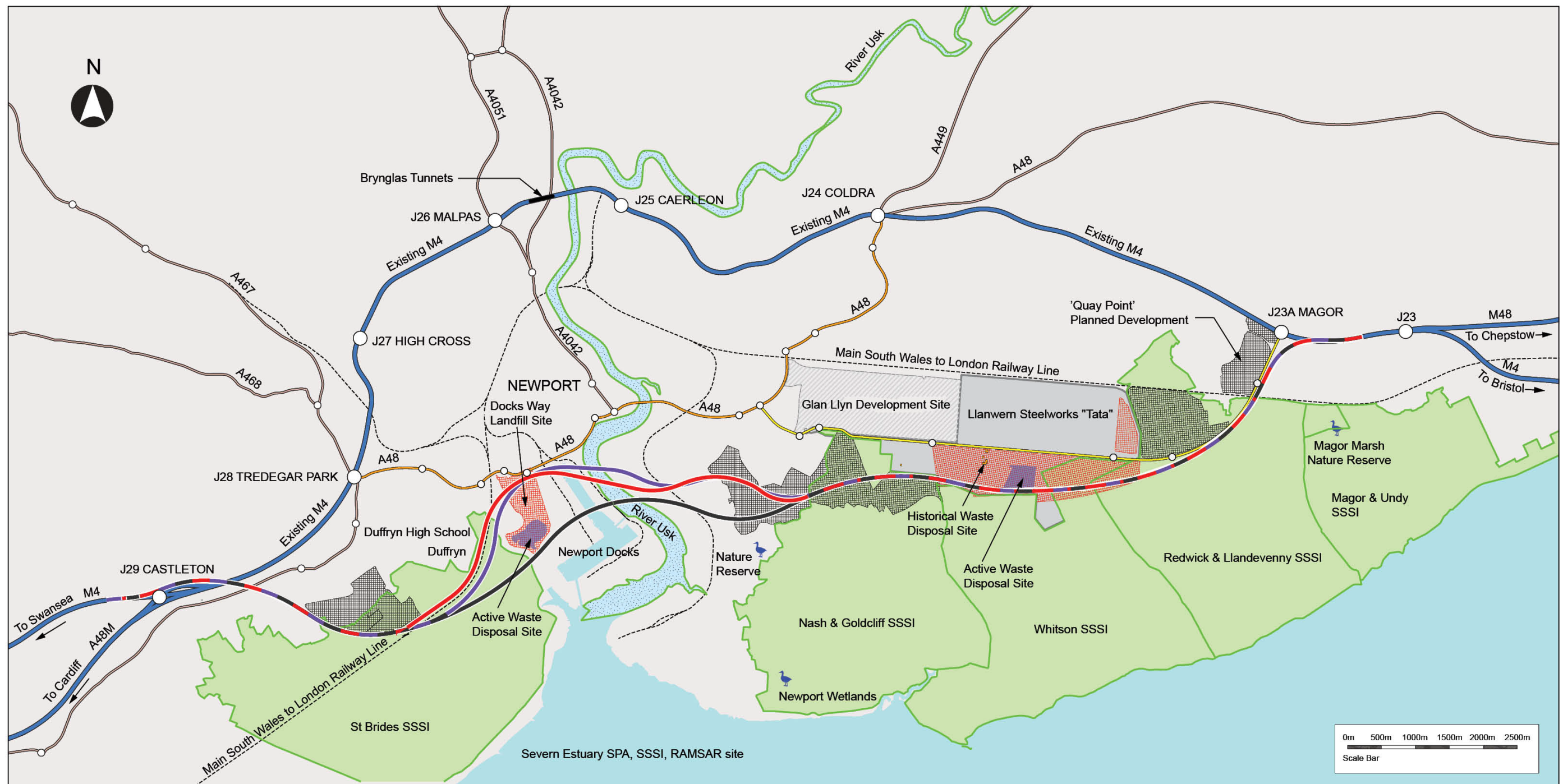
1. Make it easier and safer for people to access their homes, workplaces and services by walking, cycling, public transport or road.
2. Deliver a more efficient and sustainable transport network supporting and encouraging long-term prosperity in the region, across Wales, and enabling access to international markets.
3. To produce positive effects overall on people and the environment, making a positive contribution to the overarching Welsh Government goals to reduce greenhouse gas emissions and to making Wales more resilient to the effects of climate change.

The draft Plan aims to help to achieve or facilitate these aims as part of a wider transport strategy for South East Wales, as outlined within the Prioritised National Transport Plan⁶.

The Welsh Government has identified a set of the goals that the draft Plan should aim to help to achieve, in order to address the transport related problems of the M4 Corridor around Newport. These goals have been developed between the Welsh Government, members of the public and organisations during the M4 Corridor Enhancement Measures Programme (M4 CEM) and have been used for the appraisal of the draft Plan and its reasonable alternatives⁷.

⁶ National Transport Plan (2010) & Prioritised National Transport Plan (2011) Welsh Government

⁷ Details of the appraisal can be found in the draft Plan Consultation Document available online at www.m4newport.com



Legend

- Black Route (the main element of the draft Plan)
- Red Route (the main element to the 'reasonable alternative' to the draft Plan)
- Purple Route (the main element to the 'reasonable alternative' to the draft Plan)
- Employment Land Allocation from Newport Unitary Development Plan
- Newport Southern Distributor Road
- Steelworks Access Road
- ⋯ Existing Railway Lines
- Sites of Special Scientific Interest (SSSI)
- River Usk SAC and SSSI

Figure 1 Black, Purple and Red Routes shown within the local study area and main constraints around Newport

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2 Methodology

2.1 Overview

The SEA process comprises of five main stages:

- Stage A: Setting the context and objectives of the plan, establishing the baseline (current situation against which to assess any effects) and deciding on the scope;
- Stage B: Developing and refining alternatives and assessing effects including:
 - Identification of likely environmental effects;
 - Assessment of significance of effects;
 - Identification of possible mitigation measures;
 - Limitations and uncertainties in the process;
- Stage C: Preparing an Environmental Report on the likely significant effects of the plan;
- Stage D: Consulting on the draft Plan, the reasonable alternatives, and the Environmental Report; and
- Stage E: Monitoring the significant effects of implementing the plan on the environment.

The Welsh Government has also assessed the Do Minimum scenario.

The SEA considers wide ranging environmental topics. Issues are considered locally, around Newport, and further afield for Cardiff and South Wales, as well as Wales-England cross-border issues. Temporal issues are also assessed with short-, medium- and long-term categories.

Table 1 overleaf shows the scale used to determine the significance of any potential effects.

Further details of the methodology undertaken can be found in the full SEA Environmental Report⁸.

⁸ The full Strategic Environmental Assessment (SEA) Environmental Report is available online at www.m4newport.com

Table 1 Significance Criteria

Significance of Effect		Description of Effect
2	Major Positive	Likely to benefit a large part of the M4 Corridor around Newport or a large number of people and receptors. Option would have a major positive effect on the environment in its current form as it would resolve an existing issue or maximise opportunities. This type of effect may be considered SIGNIFICANT .
1	Minor Positive	The extent of predicted beneficial effects is likely to be limited to small areas within the M4 Corridor around Newport or small groups of people and receptors. Option would have a minor positive effect on the environment but is not considered to be significant.
0	Neutral	Option would have a neutral effect on the environment.
-1	Minor Negative	Minor negative effects are likely to be limited to small areas within the M4 Corridor around Newport, or limited to small groups of people and receptors. Option would have a minor adverse effect on the environment but is not considered to be significant.
- 2	Major Negative	Likely to affect the whole, or large part of the M4 Corridor area. Also applies to significant effects on nationally or internationally important assets. The option would have a major adverse effect on the environment as it would substantially exacerbate existing problems. This type of effect may be considered to be SIGNIFICANT .
?	Uncertain	Effect of option on the environment is uncertain. This significance criterion is applied to effects where there is insufficient information to make a robust assessment. It is also applied to the assessment of options that can have both positive and negative effects and it is not clear whether the positive or negative effects outweigh each other.
N/A	Not Applicable	This is applied to objectives that are clearly not affected by the option being assessed.

3 Environmental Objectives

The environmental objectives for the M4 Corridor around Newport are based on the National Transport Plan (NTP) SEA objectives⁹ but adapted to provide a more local focus. These were evaluated against the relevant policies, plans and programmes⁸ and the environmental baseline data that has been collated. The Environmental Objectives are listed below:

1. **Air Quality:** Improved air quality in areas next to the existing M4 around Newport.
2. **Climatic Factors:**
 - o **Greenhouse Gas Emissions** - Reduce greenhouse gas emissions per vehicle and/or person kilometre.
 - o **Climate Change** - Ensure that effective adaptation measures to climate change are in place.
3. **Noise and Vibration:** Reduce disturbance to people from high noise levels, from all transport modes and traffic within the existing M4 Corridor.
4. **Biodiversity:** Ensure that biodiversity is protected, valued and enhanced.
5. **Population:** Improved access to all services and facilities and reduce severance.
6. **Human Health:** Protect and promote everyone's physical and mental wellbeing and safety
7. **Soil and Geology:** Reduce transport related contamination and safeguard soil function, quality and quantity.
8. **Water:** Minimise transport related effects on surface and groundwater quality, flood plains and areas of flood risk.
9. **Material Assets:** Ensure the prudent and sustainable use of natural resources and energy.
10. **Cultural Heritage:** Ensure that diversity, local distinctiveness and cultural heritage are valued, protected, celebrated and enhanced.
11. **Landscape and Townscape:** Ensure that landscape and townscape is properly valued, conserved and enhanced.

A review of the aims and goals of the M4 Corridor around Newport and the Environmental Objectives for the programme have been compared to test for potential conflicts or tensions. The majority are considered to be either compatible or bear no relationship, which means that they can be achieved simultaneously without conflict.

⁹ National Transport Plan Strategic Environmental Assessment Scoping Report, February 2009

4 Mitigation

Mitigation measures have been explored during the assessment of potential likely significant environmental effects of the draft Plan, or a reasonable alternative. This forms an important aspect of the assessment and can greatly impact the severity of environmental effects.

The environmental effects of the draft Plan, or a reasonable alternative, could be mitigated through interventions at various scales and decision points, and can be strategic or practical. For example, some national/international issues, such as reducing greenhouse gas emissions, require concerted policy interventions across Wales and the UK and cannot be addressed by the draft Plan, or a reasonable alternative, alone. Conversely, some of the localised environmental effects may be avoided or reduced by taking actions at the design and construction stage of individual transport measures (at a project level).

It is likely that some of the mitigation measures may be delivered by parties other than the Welsh Government. Indeed, several levels of administrative jurisdictions and stakeholders may be involved, particularly through links to planning activities associated with the Wales Spatial Plan. The co-operation of these other interests is needed to ensure that the mitigation and enhancement measures are successfully implemented. Monitoring will play a key role in determining whether mitigation measures have been implemented and how successful they have been at addressing any potential adverse effects.

Mitigation measures and recommendations explored for the draft Plan, or a reasonable alternative, have been identified through this assessment and full details are available in the technical SEA Environmental Report. These are largely based on the SEA Environmental Report for the National Transport Plan¹⁰ but have been modified where necessary. Much of the mitigation would be delivered at project level. It should be noted that additional mitigation and refinement of the options would likely be undertaken at the detailed project level.

¹⁰ Welsh Government (July 20109), National Transport Plan SEA Environmental Report, available at: <http://wales.gov.uk/consultations/transport/ntp/?lang=en&status=closed>

5 Assessment of Significant Effects

5.1 Assessment of Significant Effects

Table 2 below shows the scores allocated to each indicator for the draft Plan, reasonable alternatives and Do Minimum options. An appraisal summary of each indicator is then provided, explaining what the likely effects would be for each option. The full assessment can be found in the full SEA Environmental Report¹¹.

Broadly, the assessment includes:

- Identifying the environmental effects of the M4 Corridor around Newport; and
- Assessing the effects for their significance.

Table 2 Comparative Summary of Significant Effects

SEA Indicator	Appraisal of draft Plan, Reasonable Alternatives and the Do Minimum Scenario			
	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Air Quality	2	1	2	-1
Greenhouse Gas Reduction	0	0	0	-1
Adaption Measures	1	1	1	-1
Noise	1	0	1	-1
Biodiversity	-1	-1	-1	0
Population	1	1	1	-1
Human Health	1	1	1	-1
Soil	-1	-1	-1	0
Water	-1	-1	-1	-1
Material Assets	-1	-1	-1	0

¹¹ The full Strategic Environmental Assessment (SEA) Environmental Report is available online at www.m4newport.com

SEA Indicator	Appraisal of draft Plan, Reasonable Alternatives and the Do Minimum Scenario			
	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Cultural Heritage	-2	-2	-2	0
Landscape and Townscape	-2	-2	-2	0

Air Quality

Environmental Objective: Improved Air Quality in Areas Next to the Existing M4 around Newport

Heavy goods vehicles (HGVs) do not operate efficiently on the existing M4 due to the undulating topography and congestion problems. This causes increased emissions of pollutants, with HGVs largely responsible for the current air pollution problems around Newport. Congestion peaks on the existing M4 are forecast to increase in duration and frequency. Consequently, air quality on the existing M4 around Newport is forecast to decrease. A minor negative effect is therefore predicted.

A new motorway or dual carriageway would significantly relieve congestion on the existing M4. This would encourage free-flow conditions, resulting in efficient use of vehicle engines, thus helping to reduce air pollution and increase air quality for residents adjacent to the existing M4. Local air quality would decline around the new route, although air quality standards would not be exceeded.

In the longer term, an increase in overall traffic is forecast, leading to increasing emissions and decreasing air quality. Technological improvements would be unlikely to counter the overall traffic increase unless there was a large scale shift to low or zero emission vehicles.

Complementary measures are predicted to help reduce air pollution by encouraging alternative modes of transport.

The effects of air and dust pollution during construction are likely to affect those living near to the route. The degree of any effect would be relative to the proximity of any new route; the Black Route would be the furthest from residential development and the Red Route would be the closest. Best practice techniques would minimise, if not avoid, effects during construction.

The Black, Red and Purple Routes perform better than the Do Minimum scenario by enabling free flow conditions and more efficient vehicle use, subsequently reducing pollution. The Red Route performs less well than the Black and Purple routes since the dual carriageway option would reach peak congestion levels sooner than the motorway options.

Table 3 Comparative Summary of Significant Effects on Air Quality

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Air Quality	2	1	2	-1

Greenhouse Gas Emissions

Environmental Objective: Reduce Greenhouse Gas Emissions per Vehicle and/or Person Kilometre

Heavy goods vehicles (HGVs) do not operate efficiently on the existing M4 due to the undulating topography and congestion problems. This causes increased emissions of pollutants with HGVs largely responsible for increased greenhouse gas emissions. Congestion peaks on the existing M4 are forecast to increase in duration and frequency. Consequently, greenhouse gas emissions on the existing M4 around Newport are forecast to increase.

A new motorway or dual carriageway would significantly relieve congestion on the existing M4. This would encourage free-flow conditions resulting in more efficient combustion in vehicle engines helping reduce greenhouse gas emissions.

In the longer term, net traffic is predicted to increase thereby resulting in increased emissions of greenhouse gases. Technological improvements would be unlikely to counter net traffic increase unless there was a large scale shift to electric vehicles.

Complementary measures are predicted to help reduce emissions of greenhouse gases by encouraging alternative modes of transport.

The Black, Red and Purple Routes are assessed as having an overall neutral effect on greenhouse gas emissions since the gains from decreased congestion are expected to be countered by increases in net traffic volume in the long term. Whereas the increases in net traffic volume under the Do Minimum scenario are not balanced by any gains and as such are considered to have a minor negative effect.

Table 4 Comparative Summary of Significant Effects on Greenhouse Gas Emissions

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Greenhouse Gas Reduction	0	0	0	-1

Climate Change Adaptation

Environmental Objective: Ensure that Effective Adaptation Measures to Climate Change are in Place

Climate change is predicted to result in hot dry summers, wet warm winters and more intense rainfall events. These changes need to be considered in the development of any new highway.

A new motorway or dual carriageway would be designed to include effective measures to avoid risks associated with climate change. Such measures would include sustainable drainage systems and water treatment areas. Sustainable drainage systems are designed to collect, store and treat surface water runoff and encourage infiltration where appropriate. Water treatment areas would be integrated along the route to provide sufficient water storage capacity. Before releasing any runoff into local watercourses, treatment would be undertaken via a reedbed filtration system so that any released water would comply with relevant standards.

The existing M4 does not include climate change adaptation measures and no such measures are proposed. It would be difficult and costly to retrofit climate change adaptation measures to the existing motorway infrastructure.

Since the Black, Red and Purple Routes can integrate climate change adaptation measures into their design they are considered to have a minor positive effect; whereas, it would be difficult and costly to retrofit such measures to the existing M4 around Newport.

Table 5 Comparative Summary of Significant Effects on Climate Change Adaptation

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Adaption Measures	1	1	1	-1

Noise and Vibration

Environmental Objective: Reduce Disturbance to People from High Noise Levels, from All Transport Modes and Traffic Within the Existing M4 Corridor

Road traffic is one of the main causes of background noise. Action plans exist to address above average noise levels along the existing M4 around Newport. The volume of traffic using the existing M4 around Newport is forecast to increase resulting in further noise nuisance effects on local residents. As a result of increased volumes of traffic, maintenance works are also predicted to increase in frequency and duration. Additional noise effects would be associated with such maintenance works.

A new motorway or dual carriageway would significantly reduce the volume of traffic on the existing M4. A new motorway would provide benefits over the long term whereas a new dual carriageway would likely provide benefits over the medium term.

Complementary measures are predicted to help reduce noise effects by encouraging alternative modes of transport. However, significant reduction in traffic volume on the existing M4 combined with benefits of the complementary measures are unlikely to significantly lower noise effects experienced by local residents of the existing M4 due to their proximity to the existing motorway.

A new highway would introduce additional noise along its route, although there would be fewer residents and they would be located at a greater distance from the road, compared to the existing M4 around Newport. Best practice techniques would minimise effects during construction. The Black Route would be the furthest from residential development and the Red Route would be the closest.

The Black, Red and Purple Routes would divert traffic further from residential development whilst introducing new noise effects to a fewer number of more distant residents. Consequently, the Black and Purple Routes are assessed as having a minor positive effect whilst the Red Route, due to its closer proximity to residential development, is assessed as neutral.

Since the current noise nuisance under the Do Minimum scenario would be exacerbated by the forecast increasing overall traffic volume it is considered to have a minor negative effect.

Table 6 Comparative Summary of Significant Effects on Noise and Vibration

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Noise	1	0	1	-1

Biodiversity, Flora and Fauna

Environmental Objective: Ensure that Biodiversity is Protected, Valued and Enhanced

Traffic emissions contribute to the deterioration of certain habitats and their associated species. Increased congestion results in the production of more pollutants capable of affecting susceptible habitats through acidification. Congestion is forecast to increase on the existing M4, exacerbating pollution effects into the long term, further contributing to habitat degradation.

Since acidification from air pollution is a national issue and considering the Do Minimum scenario would not lead to any additional land take, the Do Minimum scenario has been assessed as neutral.

The alignment of a new motorway or dual carriageway would cross the River Usk Special Area of Conservation (SAC), an internationally protected site with links to

the internationally protected Severn Estuary, and crosses the Gwent Levels Sites of Special Scientific Interest (SSSI) which are nationally important.

The *Consideration of the Options for the M4 Corridor around Newport with Regard to the Requirements of the Habitats Regulations* report, considers the effects of the existing M4 situation and the Black, Red and Purple Routes in relation to European Sites. The report concludes no significant adverse effect on the integrity of European Sites.

Where practicable, the alignments of the Black, Red and Purple Routes have been chosen to limit the impact on the 'greenfield' SSSI areas of the Gwent Levels and to cross the 'brownfield' areas that are either currently developed (e.g. as landfill or business parks) or SSSI areas that are proposed for development. This would minimise land take of sensitive areas and potential severance of the overall SSSI area.

The Gwent Levels SSSIs are primarily designated for their networks of drainage ditches, called 'reens', which support nationally important invertebrates and plants. Compared to the length of reens throughout the Gwent Levels SSSIs, construction of any highway, inclusive of the area required for necessary mitigation, would incur a negligible loss of reen. To offset the length of reens lost to development and to provide enhancement, construction of a new reen is proposed, which would be longer than that lost to development.

Water treatment areas could be integrated along the route to avoid any water quality effects on reens which support SSSI features. Before releasing any runoff into local watercourses, treatment could be undertaken via a reedbed filtration system so that any released water would comply with relevant standards and avoid effects on the associated species. The water treatment areas could be designed to provide additional biodiversity enhancements.

Wider management of the Gwent Levels could be considered to aid improvements in the overall quality of habitats throughout the Gwent Levels with subsequent benefit to SSSI species.

Any scheme would be required to integrate mitigation measures to avoid, reduce and offset any effects, in addition to delivering enhancements. Measures to maintain connectivity, facilitate animal movements, avoid fragmentation, avoid and reduce light pollution and provide new areas of nature conservation interest would be integrated at the detailed design stage.

Following mitigation and enhancement, the net benefit for biodiversity is considered to be positive in the long-term. However, considering the importance of the sites and features that may be affected the significance of effect has been determined as minor negative to account for any short to medium term effects.

Table 7 Comparative Summary of Significant Effects on Biodiversity, Flora and Fauna

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Biodiversity	-1	-1	-1	0

Population

Environmental Objective: Improved Access to All Services and Facilities and Reduce Severance

Overall, a new motorway or dual carriageway to the South of Newport would have a positive effect on population due to benefits in accessibility and reduced divisions between communities. Benefits would be long term and would be felt across South East Wales.

It would improve journey times and journey time reliability to benefit access to healthcare, training and education facilities and services. Reduced traffic congestion along the existing M4 around Newport would also help to improve local journeys to key services and facilities. However, this may mostly benefit those with access to a private vehicle.

Improvements to walking and cycling would improve access to local services, facilities and employment, as well as improve access to public transport services.

A new motorway or dual carriageway may create division between communities located to the north and south of the new road, although there are few properties south of Newport. However, for the draft Plan and Purple Route motorway options, reduced congestion and re-classification of the existing motorway to a trunk road might reduce issues of division for communities located around the existing M4.

During any construction works, access to any property, facilities or services would be maintained. Any required route diversions would aim to maintain good access and connections.

All three options would benefit the economy by improving access to employment centres and improving the movement of people and freight. This would benefit people across South Wales.

Table 8 Comparative Summary of Significant Effects on Population

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Population	1	1	1	-1

Human Health

Environmental Objective: Protect and Promote Everyone's Physical and Mental Wellbeing and Safety

A new motorway or dual carriageway to the South of Newport would have a positive overall effect on human health due to benefits to accessibility to healthcare, training and education facilities and services. Improvements would also be made to noise and air pollution along the route of the existing M4. Benefits would be long term and would be felt across South East Wales.

A new motorway or dual carriageway would improve journey times and journey time reliability to benefit access to healthcare, training and education facilities and services. However this may mostly benefit those with access to a private vehicle.

Improved and additional cycling and walking measures would also help to encourage healthy lifestyle choices, particularly for local journeys. New linkages to public transport services would also be likely to encourage local trips and benefit health and well-being.

The new motorway or dual carriageway would improve safety through reducing traffic congestion and associated accidents and incidents. It is predicted that the total number of accidents on major roads in Newport would fall.

Noise and air pollution would reduce along the route of the existing M4, where there are air quality problems and higher than average noise levels. However, noise and air quality would worsen in the area around the new road, although the surrounding area has less people living in or around it than the urban areas of Newport. The impacts of air, noise and dust pollution during construction works are likely to affect those who live near to the new motorway. Modern construction methods would aim to limit any negative impacts.

All three proposed routes would cross the River Usk and the Gwent Levels, which are environmentally protected areas; care would be required during construction to avoid or minimise any effects. The route could run through industrial areas, where there is likely to be contaminated soils and waters, which may pose risks to health and the environment. Measures would be taken to help ensure that any problems are addressed.

Poor health is often linked to poverty. The new motorway would benefit the economy of South East Wales, by improving accessibility to employment centres and improvements in the movement of people and freight.

Although there is no direct link between journey time saving and health, a new motorway would improve the driver experience and reduce driver stress.

During any construction works, access to any property, facilities or services would be maintained. Any required route diversions would aim to maintain good access and connections.

Table 9 Comparative Summary of Significant Effects on Human Health

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Human Health	1	1	1	-1

Soil and Geology

Environmental Objective: Reduce Transport related Contamination and Safeguard Soil Function, Quality and Quantity

No land take would be required under the Do Minimum scenario and forecast increases in maintenance are likely to be within the existing M4 boundary.

Traffic emissions contribute to the deterioration of soils. Increased congestion results in the production of more pollutants capable of affecting susceptible soils through acidification. Congestion is forecast to increase on the existing M4 exacerbating pollution effects into the long term, further contributing to soil degradation.

However, acidification from air pollution is a national issue and considering the Do Minimum scenario would not lead to any additional land take, the Do Minimum scenario has been assessed as neutral.

Prior to mitigation, construction of a motorway, or dual carriageway, would contribute to adverse effects on soil including: erosion, contamination, degradation, compaction, sealing and loss.

A new motorway or dual carriageway would significantly relieve congestion, and associated emissions, on the existing M4. This would reduce any effects of localised soil acidification in the short to medium term.

The alignments of the Red and Purple Routes pass through the Docks Way historic landfill site and would require substantial remediation. The Black Route avoids the Docks Way landfill site. All three routes pass through the Llanwern Waste Disposal site so that they avoid the 'greenfield' SSSI. In addition, historic contamination may be encountered throughout Newport's industrial areas. The location of such areas would be determined at project level. Any contaminated land along the route would require remediation. Post-development, this would result in a major enhancement against the existing situation with potentially large areas of land being cleared of contamination.

The Black, Red and Purple Routes have been assessed as minor negative to account for the area lost to development. This is despite the large potential gains following remediation of contaminated land. The Black Route avoids the Docks Way landfill site and therefore performs more favourably than the Red and Purple Routes. However, on balance, a minor negative effect is considered appropriate.

Table 10 Comparative Summary of Significant Effects on Soil and Geology

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Soil	-1	-1	-1	0

Water

Environmental Objective: Minimise Transport related Effects on Surface and Groundwater Quality, Flood Plains and Areas of Flood Risk

In the short to medium term, no significant change would occur under the Do Minimum scenario. In the longer term, water quality is predicted to deteriorate as increasing levels of congestion lead to increased deposition of pollutants from air pollution. Additionally, flood risk is predicted to increase in response to more intense and prolonged rainfall under climate change. This scenario would generate increased runoff for which there are currently no proposed adaptation measures; integration of any such measures would be difficult and costly. The Do Minimum scenario is therefore assessed to have a minor negative effect.

A new motorway or dual carriageway would be designed to include effective measures to comply with the relevant water legislation. Such measures would include: sustainable drainage systems and water treatment areas. Sustainable drainage systems are designed to collect, store and treat surface water runoff and encourage infiltration where appropriate. Water treatment areas would be integrated along the route to provide sufficient water storage capacity. Before releasing any runoff into local watercourses, treatment would be undertaken via a reedbed filtration system so that any released water would comply with relevant standards.

During construction best practice techniques would be employed to avoid detrimental effects on local water bodies.

Any effects of the main crossing over the River Usk would be assessed in detail at the project stage. Any effects would be designed to provide an acceptable and limited upstream water level rise during periods of flood.

The Black, Red and Purple Routes are all predominantly within Flood Risk Zone C1: served by significant infrastructure, including flood defences. There is no alternative Zone A or Zone B route within the proposed Corridor around Newport. A Flood Consequences Assessment would be undertaken at the project stage.

The Gwent Levels are protected for their networks of drainage ditches, called 'reens'; all water bodies receive protection under national and European legislation. Compared to the length of reens throughout the Gwent Levels, construction of any highway, inclusive of the area required for necessary mitigation, would incur a negligible loss of reen. To offset the length of reens lost to development and to provide enhancement, construction of a new reen is proposed, which would be longer than that lost to development.

Wider management of the Gwent Levels would be considered to aid improvements in the overall quality of water bodies.

Following mitigation and enhancement, the net benefits for water resources are considered to be positive in the long-term. However, considering the importance of the sites and features that may be affected, the significance of effect has been determined as minor negative to account for any short term effects.

Table 11 Comparative Summary of Significant Effects on Water

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Water	-1	-1	-1	-1

Material Assets

Environmental Objective: Ensure the Prudent and Sustainable Use of Natural Resources and Energy

The consumption of natural resources and energy is not predicted to change in the short term for the existing M4 around Newport; although, the predicted increase in maintenance is likely to lead to an increase in natural resource use in the medium to long term. However, this is not considered sufficient to raise the assessment of effect from neutral for the Do Minimum scenario.

In the short term, a new motorway or dual carriageway would lead to the consumption of natural resources and energy, as well as generate waste during construction. Once constructed, a new highway would reduce congestion on the existing M4 resulting in better fuel efficiency of vehicles using the roads.

This is especially prudent for heavy goods vehicles (HGVs) that could avoid the steep gradients of the existing M4, thereby reducing fuel consumption rates and reduce actual fuel used. This would result in a more sustainable use of energy.

The infrastructure of a new road would consume energy. Where practicable, energy consuming elements would be avoided and microrenewable sources considered where feasible, e.g. solar or wind power. Where this is not possible, energy efficient components would be considered and consumption monitored.

Consideration would be given to how materials are sourced and how the generation of waste is managed. The waste hierarchy would be applied and the use of secondary, recycled and/or locally sourced materials would be considered.

Despite the predicted benefits of reduced congestion, and consequent reduction in fuel consumption, the use of natural resources and the energy consumption requirements of a new highway are considered to result in a minor negative effect.

Table 12 Comparative Summary of Significant Effects on Material Assets

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Material Assets	-1	-1	-1	0

Cultural Heritage

Environmental Objective: Ensure that Diversity, Local Distinctiveness and Cultural Heritage are Valued, Protected, Celebrated and Enhanced

The Do Minimum scenario would not result in any changes to cultural heritage and is therefore assessed as neutral.

The Black, Red or Purple Route would cross the Gwent Levels Historic Landscape and affect archaeologically sensitive land. At the respective crossing points over the River Usk the routes could have an effect on the historic Newport Transporter Bridge. The Black Route would be furthest from the Transporter Bridge and the Red Route the closest. The Grade II listed Magor Vicarage could be affected by the proposed routes.

A cultural heritage assessment would be undertaken at a project level to more accurately determine any effects.

Since detailed assessment is not possible at the strategic stage and the ability to propose mitigation measures is limited without such detail, the strategic assessment of a new highway is considered to be major negative. This is likely to reduce following mitigation introduced at the project stage.

Table 13 Comparative Summary of Significant Effects on Cultural Heritage

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Cultural Heritage	-2	-2	-2	0

Landscape and Townscape

Environmental Objective: Ensure that Landscape and Townscape is Properly Valued, Conserved and Enhanced

The Do Minimum scenario would not result in any changes to existing landscape and townscape values and is therefore assessed as neutral.

A new motorway or dual carriageway would introduce significant new infrastructure into the landscape. The landscape of the route corridor is sensitive to change; particularly due to the relatively flat topography. A new road would likely contribute to loss of tranquillity in the Gwent Levels.

Landscape design would reduce landscape effects, although this is likely to be more successful in areas with more fluctuating topography. At the project stage, existing landscape features, such as hedgerows, would be built in to the design to screen the road and create interest for road users. A full landscape strategy would be produced at the detailed design stage.

Since detailed assessment is not possible at the strategic stage and the ability to propose mitigation measures is limited without such detail, the strategic assessment of a new highway is considered to be major negative. This is likely to reduce following mitigation introduced at the project stage.

Table 14 Comparative Summary of Significant Effects on Landscape and Townscape

SEA Indicator	Draft Plan – Black Route and its Complementary Measures	Reasonable Alternative – Red Route and its Complementary Measures	Reasonable Alternative – Purple Route and its Complementary Measures	Do Minimum Scenario
Landscape and Townscape	-2	-2	-2	0

5.2 Cumulative Assessment with other Policies, Plans and Programmes

The SEA Regulations require the consideration of cumulative effects of a plan or programme with other policies, plans and programmes. For this SEA, cumulative effects of the draft Plan have been considered with the following plans and programmes:

- The National Transport Plan (NTP);
- The South East Wales Regional Transport Plan (RTP); and
- The Wales Spatial Plan (WSP).

Overall, the draft Plan and reasonable alternatives were found to either have no significant impact or a slight positive effect on possible effects resulting from the three Plans.

5.3 Limitations and Uncertainties

Limitations and uncertainties have been considered; however, at this stage there is insufficient information to undertake a full evaluation. This will be conducted at project level.

6 Summary and Next Steps

The SEA Environmental Report, for which this is a non-technical summary, provided a strategic environmental assessment of the M4 Corridor around Newport draft Plan, two reasonable alternatives and the Do Minimum scenario.

The draft Plan can be seen to have performed in a complex way against the Environmental Objectives assessed in the SEA, with some potentially positive and some potentially negative impacts identified.

The comments received on the SEA Environmental Report will be given consideration and taken into account in an SEA Statement. If the draft Plan is adopted, an SEA Statement will be published in accordance with the SEA Regulations. The purpose of the SEA Statement is to outline how the environmental assessment and associated consultation on the draft Plan influence the decision making process.

The SEA Statement will include a monitoring strategy to allow the effects of any of the options progressed from the draft Plan, should it be adopted (with or without amendments) to be tested against the predicted effects, enabling significant problems to be identified and addressed. Monitoring of certain effects might be more appropriate at a scheme (project) level.

Should the draft Plan progress to project level, an Environmental Impact Assessment would be prepared to assess possible effects on the environment against a more informed baseline and greater scheme detail.

7 How to Respond and Further Information

Please respond to this Consultation by using the Consultation Response Form that accompanies this document. This can be completed and sent to the address shown below:

‘FREEPOST M4 CONSULTATION’

Alternatively, you can respond electronically via the following website links:

- ***www.wales.gov.uk/consultations*** under Transport; or
- ***www.m4newport.com***.

At www.m4newport.com you can also find further information about the draft Plan and its development.

This Consultation runs for 12 weeks, commencing on 23 September 2013 and closes on 16 December 2013.

The draft Plan Consultation Document, all draft Plan assessments, and the Response Form are available to download online at www.m4newport.com and are available to view or to take away as paper copies at the following deposit points during the consultation period, as well as at public drop-in exhibitions:

- Caldicot One Stop Shop, NP26 5DB;
- Castleton Village Hall, CF3 2UW;
- Liswerry Post Office, NP19 0JX;
- Magor Post Office, NP26 3EP;
- Newport Central Library, NP20 1PA;
- Newport Information Station, NP20 4AX; and
- Welsh Government, Cathays Park CF10 3NQ.

Documents are also available at public drop-in exhibitions (see the draft Plan Consultation Document or www.m4newport.com for details):

Sufficient quantities of the consultation documents will be made available at each of the public drop-in exhibitions, where additional copies may also be requested for delivery.

Large print versions of this document are available on request.

For further information please contact Allan Pitt (Communications Manager) via:

- ***Email: m4newport@arup.com***;
- ***Telephone: 029 20473727; or***
- ***Mail: Allan Pitt, Arup, 4 Pierhead Street, Cardiff CF10 4QP.***

Appendix A

The draft Plan and Reasonable Alternatives

Appendix A: The draft Plan and Reasonable Alternatives

In recognising the range of the goals for the M4 Corridor around Newport, the draft Plan combines both highway infrastructure and other demand management solutions in identifying a preferred strategy.

The draft Plan for the M4 Corridor around Newport (the preferred strategy) consists of:

- **A new section of 3-lane motorway between Magor and Castleton to the south of Newport along the TR111 protected corridor of the Black Route; and**
- **Complementary Measures.**

The reasonable alternatives to the draft Plan include:

- **A dual 2-lane all-purpose road (Red Route); or**
- **A motorway solution along a similar alignment (Purple Route); in addition to**
- **Complementary Measures.**

The draft Plan and the reasonable alternatives have been assessed against the ‘Do Minimum’ scenario. The Do Minimum scenario means doing nothing above what is already planned or committed.

The draft Plan and reasonable alternatives are described in more detail below and illustrated in Figure 1, on page 7.

A1 The draft Plan (Preferred Strategy)

A1.1 Motorway following TR111 Protected Route – The Black Route and Complementary Measures

This draft Plan comprises the construction of a new 3-lane motorway mainly following the protected TR111 ‘Black Route’, between Junctions 23 and 29, including a new crossing of the River Usk south of Newport. The River Usk is designated as a Special Area of Conservation (SAC).

The TR111 route to the south of Newport has remained protected for planning purposes since April 2006. The alignment of this proposed new section of motorway has been developed following extensive consultation, investigation and analysis. The aim is to minimise the impact on the environment, whilst fully meeting current motorway design and safety standards. Minor changes to the alignment of the TR111 protected route could still be made, subject to further investigation, if this option is taken forward. This motorway solution would be delivered as one scheme.

The junction strategy will be further investigated if this option is taken forward for further appraisal.

The alignment of the Black Route is shown in the context of local constraints in Figure 1, on page 7.

In addition to the new highway infrastructure, there are additional complementary measures that could assist in alleviating travel related problems within the M4 Corridor around Newport. The draft Plan's complementary measures are as follows:

Table 15 Complementary Measures for the Black Route (draft Plan - Preferred Strategy)

Complementary Measure	Description
Re-classify existing M4 between Magor and Castleton	Re-classify the existing motorway as a trunk road, which could enable traffic management, safety and revised access measures. These could include modifications to interchanges at Magor and Castleton. Only certain classes of motorised vehicles can use motorways and they should have no traffic signals, intersections or property access. They are free of any ground level crossings with other roads, railways, or pedestrian paths, which are instead carried by overpasses and underpasses across the highway.
M48 – B4245 Link	New single carriageway link between the M48 and B4245. This would potentially provide relief to Junction 23A and to the local road network. It may also facilitate the introduction of a park and ride facility at Severn Tunnel Junction in the future.
Provide cycle friendly infrastructure	Promoting the use of cycling as an alternative to the car for journeys of up to three miles by providing new infrastructure or improving existing infrastructure.
Provide walking friendly infrastructure	Promoting the use of walking as an alternative to the car for journeys of up to three miles by providing new infrastructure or improving existing infrastructure.

A2 Reasonable Alternatives to the draft Plan

A2.1 Dual 2-lane All-Purpose Road – The Red Route and Complementary Measures

This option involves the construction of an additional high quality road to the south of Newport, as a dual carriageway solution. The route aims to minimise negative impacts on local communities and the environment. As a dual carriageway on this corridor alignment, the road could be delivered in phases by tying into the existing road network in Newport. Delivery could thus be phased

with availability of funding. However, the main benefits would only be realised when the route is complete.

This road will require a new crossing of the River Usk, which is designated as a Special Area of Conservation (SAC).

The alignment of the Red Route is further north compared to that of the Black Route and the impact on the Port of Newport operations may be less. However, the alignment would pass through and have significant impact upon the Newport Council's Docks Way landfill site. The route runs close to the residential area, Duffryn. There are also on-going and potential further development sites along this route.

The junction strategy will be further investigated if this option is taken forward for further appraisal.

The alignment of the road is shown in the context of local constraints in Figure 1, on page 7.

In addition, the following complementary measures could assist the Red Route in alleviating travel related problems within the M4 Corridor around Newport:

Table 16 Complementary Measures for the Red Route (Reasonable Alternative)

Complementary Measure	Description
M48 – B4245 Link	New single carriageway link between the M48 and B4245. This would potentially provide relief to Junction 23A and to the local road network. It may also facilitate the introduction of a park and ride facility at Severn Tunnel Junction in the future.
Provide cycle friendly infrastructure	Promoting the use of cycling as an alternative to the car for journeys of up to three miles by providing new infrastructure or improving existing infrastructure.
Provide walking friendly infrastructure	Promoting the use of walking as an alternative to the car for journeys of up to three miles by providing new infrastructure or improving existing infrastructure.

A2.2 Motorway along Alternative Alignment to the South of Newport – The Purple Route and Complementary Measures

In order to fully represent the highway options to the south of Newport, this option comprises a 3-lane motorway along a similar route to that which is proposed for the Red Route (dual 2-lane all-purpose road). A difference between the two routes being the purple route has a more northerly alignment to cross the northern end of the North Dock at the Port of Newport.

This new motorway will require a new crossing of the River Usk, which is designated as a Special Area of Conservation (SAC).

The alignment of the Purple Route is such that the impact on the Port of Newport is minimised. However, there could be significant impact upon the Newport Council's Docks Way landfill site. The route runs close to the residential area, Duffryn. There are also on-going and potential further development sites along this route.

The junction strategy will be further investigated if this option is taken forward for further appraisal.

The alignment of this route is shown in the context of local constraints in Figure 1, on page 7.

In addition, the following complementary measures could assist the Purple Route in alleviating travel related problems within the M4 Corridor around Newport.

Table 17 Complementary Measures for the Purple Route (Reasonable Alternative)

Complementary Measure	Description
Re-classify existing M4 between Magor and Castleton	Re-classify the existing motorway as a trunk road, which could enable traffic management, safety and revised access measures. These could include modifications to interchanges at Magor and Castleton. Only certain classes of motorised vehicles can use motorways and they should have no traffic signals, intersections or property access. They are free of any ground level crossings with other roads, railways, or pedestrian paths, which are instead carried by overpasses and underpasses across the highway.
M48 – B4245 Link	New single carriageway link between the M48 and B4245. This would potentially provide relief to Junction 23A and to the local road network. It may also facilitate the introduction of a park and ride facility at Severn Tunnel Junction in the future.
Provide cycle friendly infrastructure	Promoting the use of cycling as an alternative to the car for journeys of up to three miles by providing new infrastructure or improving existing infrastructure.
Provide walking friendly infrastructure	Promoting the use of walking as an alternative to the car for journeys of up to three miles by providing new infrastructure or improving existing infrastructure.

A3 Do Minimum Scenario

The Welsh Government is committed to continuing to improve transport in South Wales. Practical measures to make travel safer and easier on the M4 motorway around Newport include replacing sections of steel central barriers with concrete

barriers, the introduction of Variable Speed Limit systems and improvements to the roundabout at Junction 24 at Coldra.

The Do Minimum scenario means doing nothing above what is already planned or committed. This scenario therefore comprises minimum intervention but in this case does include a number of highway schemes, which are currently committed to be completed between 2020 and 2035 as follows:

Welsh Government Schemes:

- The recently opened Newport Steelworks Access Road Phases 1 and 2 (the former Llanwern Steelworks access road);
- Junction 28 roundabout, enlarged signalled gyratory scheme including associated improvements to the A467 Bassaleg roundabout and A48 Pont Ebbw; and
- A465 Heads of the Valleys Dualling (Gilwern to Hirwaun).

Newport City Council Scheme:

- Link through Newport Eastern Expansion Areas between Steelworks Access Road and A48 SDR (Cot Hill junction, signalised with full movements).

Alongside these schemes, the Do Minimum scenario also consists of a number of development proposals throughout South East Wales, which are committed through the planning process and are due to be completed at various stages to 2035.