

Appendices

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A1 Easing the Flow – Newsletter 1



Llywodraeth Cymru
Welsh Government

www.cymru.gov.uk

M4 Corridor Enhancement Measures Programme

Newsletter

1

Easing the flow

M4 Corridor, Magor to Castleton – the problem

The Welsh Government acknowledges that congestion and unreliable journey times have been a fact of life on the M4 around Newport for many years. Associated problems affect other roads and residents within the corridor area too. So the M4 Corridor Enhancement Measures Programme was set up to solve travel-related problems caused by growing use and outdated design of the M4 here.

What has been done so far

Practical measures to make travel safer and easier on the M4 between junctions 23a and 29 began in 2008. This work includes replacing sections of steel central barriers with concrete ones, the introduction of Variable Speed Limit systems and the deployment of traffic officers. To ease congestion, improvements have been made to the

roundabout at Junction 24 at Coldra and there are plans to create a link through Llanwern steel works between Junction 23a and the Newport Southern Distributor Road.

The Welsh Government talked to people at the beginning of the year – organisations representing the interests of the general public, businesses, the voluntary sector, as well as ordinary people and residents of the area – and the feedback has established broad agreement about what the travel-related problems are in the M4 Corridor, between Magor and Castleton.

Who's going to fix it?

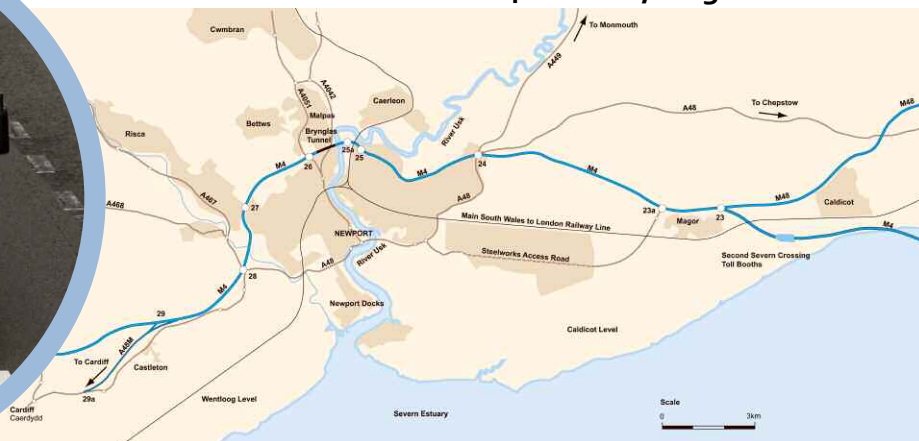
The Welsh Government understands that travel-related problems are complex and affect a wide range of people, so as a next step the Welsh Government is creating a Stakeholder Forum. This is a group bringing together representatives from the Welsh

Further copies of this leaflet can be downloaded at www.m4cem.com
This leaflet is also available in large print from Rob Booth, Welsh Government,
Tel 029 2082 6458

ARUP



M4 Corridor, Magor to Castleton



Government and local authorities, statutory consultees such as the Environment Agency and the Countryside Council for Wales, non-governmental and voluntary organisations, transport bodies and business groups that represent the wide range of people interested in and affected by travel related problems in this area. The Forum will help the Welsh Government to explore possible solutions.

Possible solutions

Having listened to the feedback given by the public and other bodies, the Welsh Government are appraising a wide range of possible solutions. These fall into four categories:

- **Highways infrastructure** This is about building and improving highways networks so that they work more efficiently for travellers and cause less problems for people living near them.
- **Road network management** This is about managing our existing roads better, and includes ideas about how to minimise peak-time congestion, traffic associated with popular events and improve the response to accidents or bad weather so that there is less disruption for everyone.
- **Alternative travel modes** This is about getting more people to travel and access services, homes, work and leisure without driving a car.
- **Smarter Sustainable Choices and Promoting Well-being** This means thinking of ways of organising our lives so that we can prevent

further travel-related problems. This might be achieved through:

- government policy (better strategic land-use planning, linking travel and access plans to health, economy and environment agendas);
- action by businesses or individuals (flexible working hours, reducing travel by working from home, car sharing).

What happens next?

The Stakeholder Forum is going to explore and possibly expand this list. It will consider the potential benefits or disadvantages of each of the possible solutions. The Welsh Government's technical team will then develop a series of Options for solving travel-related issues within the M4 Corridor, again working with the Stakeholder Forum to ensure the best possible alternatives are explored rigorously. Each Option is likely to include several different types of measures from the four categories described above.

Where you fit in

A second newsletter will be published this autumn to keep you informed of the progress. Towards the end of the year, you'll be invited to give your opinions on the Options. Your views will help the Welsh Government come to a decision about which Option to follow.

For more information visit www.wales.gov.uk/transport or a new dedicated website www.m4cem.com



Llywodraeth Cymru
Welsh Government

www.cymru.gov.uk

Rhaglen Mesurau Gwella Coridor yr M4

Cylchlythyr

1

Lleddfu'r Ilif

Coridor yr M4, Magwyr i Gas-bach – y problem

Mae Llywodraeth Cymru yn cydnabod bod tagfeydd ac amserau siwrneiau annibynadwy wedi bod yn ffaith bywyd ar yr M4 o amgylch Casnewydd ers blyneddau lawer. Mae problemau cysylltiedig yn effeithio ar ffyrdd eraill a thrigolion o fewn ardal y coridor hefyd. Felly sefydlwyd Rhaglen Mesurau Gwella Coridor yr M4 i ddatrys problemau'n gysylltiedig â theithio yn cael eu hachosi gan ddefnydd cynyddol o'r M4, a hen ddyluniad yr M4 yma.

Beth sydd wedi'i wneud hyd yma

Cychwynnwyd yn 2008 ar fesurau ymarferol i wneud teithio'n fwy diogel ac yn haws ar yr M4 rhwng cyffyrdd 23a a 29. Mae'r gwaith hwn yn cynnwys gosod rhwystrau canolog concrit yn lle rhai dur mewn manau, cyflwyno Systemau Amrywio Cyflymder a defnyddio swyddogion traffig. Er mwyn lleddfu

tagfeydd traffig, gwnaethpwyd gwelliannau i'r gylchfan yng Nghyffordd 24 yng Ngholdra, ac mae cynlluniau i greu cyswllt sy'n mynd drwy waith dur Llanwern rhwng Cyffordd 23a a Ffordd Ddosbarthu De Casnewydd.

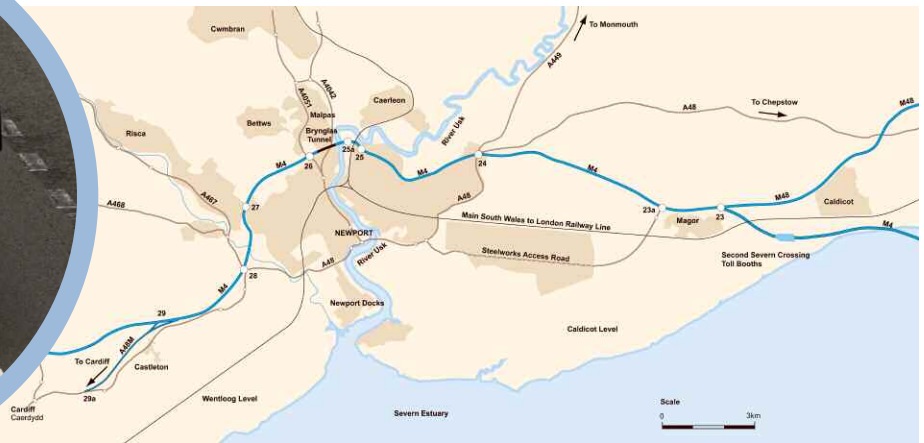
Bu Llywodraeth Cymru'n siarad â phobl ar ddechrau'r flwyddyn – sefydliadau yn cynrychioli buddiannau'r cyhoedd, busnesau, y sector gwirfoddol, yn ogystal â phobl gyffredin a thrigolion yr ardal – ac mae'r adborth wedi sefydlu cytundeb bras ynghylch beth yw'r problemau sy'n gysylltiedig â theithio ar Goridor yr M4, rhwng Magwyr a Chas-bach.

Pwy sy'n mynd i ddatrys hyn?

Mae Llywodraeth Cymru'n deall bod problemau'n gysylltiedig â theithio yn gymhleth ac yn effeithio ar ystod eang o bobl, felly fel cam nesaf mae Llywodraeth Cymru'n creu Fforwm Rhanddeiliaid. Grŵp yw hwn i ddod â chynrychiolwyr at ei gilydd o Lywodraeth Cymru ac awdurdodau lleol, ymgynghoreion

Gellir lawrlwytho rhagor o gopi au o'r daflen hon o www.m4cem.com
Mae'r daflen hon ar gael mewn print bras hefyd o Rob Booth, Llywodraeth Cymru, Ffon 029 2082 6458

ARUP



statudol fel Asiantaeth yr Amgylchedd a Chyngor Cefn Gwlad Cymru, sefydliadau anllywodraethol a sefydliadau gwirfoddol, cyrff trafniadaeth a grwpiau busnes sy'n cynrychioli'r ystod eang o bobl sydd â diddordeb mewn problemau'n gysylltiedig â theithio yn yr ardal hon, a phobl yr effeithir arnynt gan y problemau hynny. Bydd y Fforwm yn helpu Llywodraeth Cymru i archwilio atebion posibl.

Atebion posibl

Ar ôl gwrando ar yr adborth gan y cyhoedd a chyrrff eraill, mae Llywodraeth Cymru'n arfarnu ystod eang o atebion posibl. Mae'r rhain yn rhannu yn bedwar categori:

- **Seilwaith priffyrdd** Mae hyn yn ymwneud ag adeiladu a gwella'r rhwydweithiau priffyrdd fel eu bod yn gweithio'n fwy effeithlon i deithwyr, ac yn achosi llai o broblemau i bobl sy'n byw gerllaw.
- **Rheoli'r rhwydwaith ffyrdd** Mae hyn yn ymwneud â rheoli ein ffyrdd presennol yn well, ac mae'n cynnwys syniadau am sut i leihau tagfeydd ar adegau prysur, traffig sy'n gysylltiedig â digwyddiadau poblogaidd a gwella'r ymateb i ddamweiniau neu dywydd gwael fel bod llai o darfu yn digwydd i bawb.
- **Dulliau teithio amgen** Mae hyn yn golygu cael mwy o bobl i deithio a chyrraedd gwasanaethau, cartrefi, mannau gweithio a chyfleusterau hamdden heb yrru car.
- **Dewisiadau Cynaliadwy Doethach a Hybu Lles** Mae hyn yn golygu meddwl am ffyrdd o

drefnu ein bywydau fel y gallwn atal mwy o broblemau'n gysylltiedig â theithio. Gellid cyflawni hyn drwy:

- polisi'r llywodraeth (cynllunio strategol gwell o ddefnydd tir, cysylltu cynlluniau teithio a mynediad â'r agendâu iechyd, yr economi a'r amgylchedd);
- gweithredu gan sefydliadau ac unigolion (oriau gweithio hyblyg, lleihau teithio drwy weithio o gartref, rhannu ceir).

Beth sy'n digwydd nesaf?

Mae'r Fforwm Rhanddeiliaid yn mynd i archwilio ac o bosibl ehangu'r ystod o atebion posibl. Bydd yn ystyried buddion neu anfanteision posibl pob un o'r atebion posibl. Bydd tîm technegol Llywodraeth Cymru yn datblygu cyfres o Opsiynau wedyn ar gyfer datrys materion yn gysylltiedig â theithio o fewn Coridor yr M4, eto gan weithio â'r Fforwm Rhanddeiliaid er mwyn sicrhau bod yr opsiynau amgen gorau posibl yn cael eu harchwilio'n drylwyr. Mae pob Opsiwn yn debygol o gynnwys nifer o fathau gwahanol o fesurau o'r pedwar categori a ddisgrifiwyd uchod.

Eich rhan chi

A Bydd ail gylchlythyr yn cael ei gyhoeddi yn yr hydref er mwyn rhoi gwybodaeth i chi am gynnydd. Tuag at ddiwedd y flwyddyn, cewch eich gwahodd i roi eich barn am yr Opsiynau. Bydd eich barnau yn helpu Llywodraeth Cymru i wneud penderfyniad am ba Opsiwn i'w ddilyn.

I gael mwy o wybodaeth ewch i www.cymru.gov.uk/trafnidiaeth neu i wefan bwrpasol newydd www.m4cem.com

A2 Easing the Flow – Newsletter 2

**M4 Corridor Enhancement
Measures Magor to Castleton
Easing the Flow**



Llywodraeth Cymru
Welsh Government

www.cymru.gov.uk

**M4 Corridor
Enhancement
Measures
Programme
(M4CEM)**

Newsletter

2

Easing the flow

We need *your* help to shape a strategy to reduce traffic congestion on the M4, Magor to Castleton

What's the problem?

Nearly all of us use them: motor vehicles are the predominant travel mode in Wales, as in the UK as a whole. And growing congestion is one of the most serious transport problems we face, as it can reduce efficiency and productivity, which in turn makes us less competitive. It also causes access problems and local pollution.

The Welsh Government is committed to improving access (e.g. to schools, hospitals, workplaces, leisure facilities) and to developing safe, affordable and sustainable transport for all, including those who walk, cycle and use public transport – and to improve road and rail networks.

A key priority is to improve east-west transport – connecting us all to opportunities across Wales and beyond. Easing the flow on the M4 between Magor and Castleton and addressing some related problems affecting the wider highways network in this corridor area is a key element of this.

How you can help

We need to know what **problems** you experience, understand what your **priorities** are and ask you to help us choose the **best strategy** to solve these problems.

Last year a group representing a wide range of people who use and manage the transport network and/or access services in the M4

For more
information visit
[www.wales.gov.uk/
consultations](http://www.wales.gov.uk/consultations) or
www.m4cem.com

Corridor between
Magor and Castleton
started to build on what
people have told us
about the problems they
experience and the goals
they would like to see

accomplished by this Programme. They
explored a range of options to solve the
problems. Now we want to hear your views on
the proposed solutions.

A consultation, open to all, begins on March 6,
and continues until June 6, 2012. There will be
many different opportunities – at exhibitions
and workshops, online and through
questionnaires – for you to tell us what you
think and by doing so help us determine a
robust strategy to ease the flow on the M4
between Magor and Castleton and make the
transport system work better into
the future.

If you would like to know more:

- Visit our website:
[www.wales.gov.uk/
consultations](http://www.wales.gov.uk/consultations)
- Visit www.m4cem.com
for lots more background
information, including
technical reports.
- Visit one of our **exhibitions**
or **workshops**, where we
will be describing a range
of different approaches to
achieving the goals.
These measures all
address our wider priorities
of making the transport
system work better to help
tackle poverty, increase
well-being, assist
economic growth and
reduce the carbon
emissions associated
with travel.

If you would like to tell us what you think:

You can feed your views in online –
follow follow the links on either of the
websites listed here, or on paper, using a
response form, available in many public
buildings in and Newport, or download one
from www.wales.gov.uk/consultations or
www.m4cem.com

Who takes the final decision and when will we see improvements on the M4?

Taking the feedback received during the
forthcoming consultation into account,
the Welsh Government will decide on the most

effective strategy to ease
the flow on the M4 and
relieve pressure on the
highways network
between Magor and
Castleton over the next
few years and into the
future.

This announcement will
be made towards the
end of 2012. An
implementation plan will
be prepared by the project
team once the Minister
has made a decision.

Thank you
to everyone who
has already been
involved in helping
to improve our
understanding of
transport issues in
the M4 Corridor,
between Magor and
Castleton. We hope
many more people
will help shape the
strategy!

WORKSHOPS (10am-3pm)

(Advance booking required)

Tuesday 13 March:

Newport – Tredegar House
NP10 8YW

Thursday 15 March

Cardiff – The Urdd Hall
CF10 5AL

Tuesday 20 March

Swansea – Lord Mayor's
Reception Room, Guildhall
SA1 4PE

DROP-IN EXHIBITIONS

(Noon-7pm)

Wednesday 28 March

Liswerry – Coleg Gwent
Newport City Campus
NP19 4TS

Thursday 29 March

Magor – Ebenezer Baptist
Church NP26 3HY

Friday 13 April

Brynglas – Brynglas House
NP20 5QU

Tuesday 17 April

Newport – The Newport
Centre NP20 1UH



75% wedi'i ailgylchu
recycled

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For further information, please contact
m4cem@arup.com or call 029 2047 3727



Lleddfu'r Ilif

Mae angen eich help *chi* arnom i lunio strategaeth i leihau tagfeydd traffig ar yr M4, Magwyr i Gas-bach

Beth yw'r problem?

Mae pawb ohonom bron yn eu defnyddio: cerbydau modur yw'r prif ddull teithio yng Nghymru, fel yn y DU gyfan. A thagfeydd cynyddol yw un o'r problemau trafnidiaeth mwyaf difrifol a wynebwn, gan y gall leihau effeithlonrwydd a chynhyrchiant, ac mae hynny yn ei dro yn ein gwneud ni'n llai cystadleuol. Mae hefyd yn achosi problemau mynediad a llygredd yn lleol.

Mae Llywodraeth Cymru yn benderfynol o wella mynediad (e.e. i ysgolion, ysbytai, gweithleoedd, cyfleusterau hamdden) ac i ddatblygu trafnidiaeth ddiogel, fforddiadwy a chynaliadwy i bawb, gan gynnwys y rheiny sy'n cerdded, yn beicio ac yn defnyddio trafnidiaeth gyhoeddus – ac i wella rhwydweithiau ffyrdd a rheilffyrdd.

Un flaenoriaeth allweddol yw gwella trafnidiaeth o'r dwyrain i'r gorllewin – sy'n ein cysylltu ni oll â chyfleoedd ledled Cymru a thu hwnt. Mae lleddfu'r Ilif ar yr M4 rhwng Magwyr a Chas-bach, a mynd i'r afael â phroblemau cysylltiedig sy'n effeithio ar y rhwydwaith priffyrdd ehangach yn ardal y coridor hwn, yn elfen allweddol o'r ymrwymiad hwn.

Sut gallwch chi helpu

Mae angen i ni wybod pa **broblemau** rydych yn eu hwynebu, deall beth yw eich **blaenoriaethau** chi, a gofynnwn i chi ein helpu i ddewis **strategaeth orau** i ddatrys y problemau hynny.

Y llynedd, aeth grŵp yn cynrychioli ystod eang o bobl sy'n defnyddio ac yn rheoli'r rhwydwaith

I gael mwy o
wybodaeth ewch i
www.cymru.gov.uk/ymgyngghoriadau neu
www.m4cem.com

trafnidiaeth a/neu
wasanaethau mynediad ar
Goridor yr M4 rhwng
Magwyr a Chas-bach ati i
ddechrau adeiladu ar yr
hyn y mae pobl wedi
dweud wrthym am y
problemau maent yn eu

hwynebu, a'r nodau yr hoffent eu gweld
yn cael eu cyflawni gan y Rhaglen hon. Aethant
ati i archwilio amrywiaeth o opsiynau er mwyn
datrys y problemau. Nawr, rydym am glywed
beth yw eich barn chi ar yr atebion a gynigiwyd.

Mae ymgynghoriad, sydd ar agor i bawb, yn
dechrau ar 6 Mawrth, ac mae'n parhau hyd
6 Mehefin 2012. Bydd llawer o gyfleoedd
gwahanol – mewn arddangosfeydd a gweithdai,
ar-lein a thrwy holiaduron – i chi ddweud eich
barn wrthym, a thrwy wneud hynny byddwch yn
ein helpu ni i bennu strategaeth gadarn i
hwyluso'r llif ar yr M4 rhwng Magwyr a Chas-
bach, a gwneud i'r system
drafnidiaeth weithio'n well i'r
dyfodol.

Os hoffech wybod mwy:

- Ewch i'n gwefan:
www.cymru.gov.uk/ymgyngghoriadau
- Trowch at www.m4cem.com i
gael llawer mwy o wybodaeth
gefndir, gan gynnwys
adroddiadau technegol.
- Ewch i un o'n
harddangosfeydd neu
weithdai, lle byddwn yn
disgrifio ystod o ddulliau
gwahanol o gyflawni'r nodau.
Mae pob un o'r mesurau hyn
yn rhoi sylw i'n blaenoriaethau
ehangach, sef gwneud i'r
system drafnidiaeth weithio'n
well er mwyn helpu mynd i'r
afael â thlodi, cynyddu lles,
cynorthwyo twf economaidd a
lleihau'r allyriadau carbon sy'n
gysylltiedig â theithio.

Os hoffech ddweud eich barn wrthym:

Gallwch gofnodi'ch barn ar-lein - dilynwch
ydolenni ar unrhyw un o'r gwefannau a
restrir yma, neu ar bapur, gan ddefnyddio
ffurflen sydd ar gael mewn llawer o
adeiladau cyhoeddus o amgylch
Casnewydd, neu gallwch lawrlwytho un o
www.cymru.gov.uk/ymgyngghoriadau neu
www.m4cem.com

Pwy sy'n gwneud y penderfyniad terfynol a pha bryd fyddwn ni'n gweld gwelliannau ar yr M4?

Gan ystyried yr adborth a geir yn ystod yr
ymgyngghoriad, bydd Llywodraeth
Cymru'n penderfynu ar y strategaeth fwyaf
effeithiol i leddfu'r llif ar yr M4, a lleihau pwysau
ar y rhwydwaith priffyrdd
rhwng Magwyr a Chas-
bach dros yr ychydig
flynyddoedd nesaf ac i'r
dyfodol.

Caiff y strategaeth ei
chyhoeddi tua diwedd
2012 a bydd cynllun ar
gyfer y prosiect yn cael
ei lunio gan y tî m yn
dilyn penderfyniad y
Gweinidog.

Diolch

i bawb sydd eisoes
wedi bod yn
gysylltiedig â helpu
gwella ein
dealltwriaeth o
faterion trafndiaeth ar
Goridor yr M4, rhwng
Magwyr a Chas-bach.
Gobeithiwn y bydd
llawer mwy o bobl yn
helpu llunio'r
strategaeth!

GWEITHDY (10yb-3yp) (Rhaid neilltuo ymlaen llaw)

Dydd Mawrth 13 Mawrth
Casnewydd – Tŷ Tredegar
NP10 8YW

Dydd Iau 15 Mawrth
Caerdydd – Neuadd yr Urdd
CF10 5AL

Dydd Mawrth 20 Mawrth
Abertawe – Ystafell Dderbyn yr
Arglwydd Faer, Neuadd y Ddinas
SA1 4PE

ARDDANGOSFA (12yp-7yp)

Dydd Mercher 28 Mawrth
Llysperi – Coleg Gwent Campws
Dinas Casnewydd NP19 4TS

Dydd Iau 29 Mawrth
Magwyr – Eglwys y Bedyddwyr
Ebenezer NP26 3HY

Dydd Gwener 13 Ebrill
Brynglas – Tŷ Brynglas NP20 5QU

Dydd Mawrth 17 Ebrill
Casnewydd – Canolfan
Casnewydd NP20 1UH

A3 Engagement Strategy

M4 CEM Programme: Engagement¹ Strategy

CONTENTS

1. *Engagement Context for the programme*
2. *Role of this Engagement Strategy*
3. *Guiding principles for engagement*
4. *High level engagement aims*
5. *Proposed phases for the engagement process*

Appendix: Definition of different levels (and types) of engagement

1. Engagement context for the M4 CEM programme

Problems with congestion and unreliable journey times have been a fact of life on the M4 around Newport for many years. Transport policy, and therefore approaches to the problems and solutions have also varied over the years. The exploration of the idea of a relief motorway and subsequent decision that this was not an affordable option, is the latest development in a story of strongly held and opposing views that goes back many years.

The M4 Magor to Castleton: Corridor Enhancement Measures Programme (M4 CEM) has the goal of fully engaging with stakeholders of all kinds, as a key aspect of its remit. This is because such engagement is seen as not only accepted 'good practice', but because only by wide engagement can the full range of ideas, information and potentially innovative solutions, be brought into the process.

2. Role of this Engagement Strategy

This document sets out a high level strategic approach to the engagement work within the M4 CEM Programme. It sets out guiding principles to which those involved in planning and delivering the engagement must adhere, the aims of engagement activity in the programme, and sets out a cycle of engagement phases that should form the framework for more detailed work.

3. Guiding principles for engagement

The approach to engagement will be based on accepted good practice, across Wales and the UK as a whole. We shall comply with Welsh Assembly Government's Governance principles for implementing public engagement, and the engagement values² set out in Engage Wales. This means adhering to the following guiding principles:

- a. Take a planned approach, which:
 - i. ensures that any engagement work is properly related, in terms of timing and decision making, to the technical process of the M4 CEM programme as a whole, and that it is joined up, linking relevant departments within WAG and with key stakeholders

¹ 'Engagement' here means *all* forms of work with stakeholders – communication, telling, consulting, involving etc. 'Stakeholder' here means 'any individual or group with an actual or potential stake in the M4 CEM programme' ie members of the public, third sector, public and private sectors.

² Engage Wales describes good engagement as engagement that is joined up, fair and inclusive, there is clarity regarding the outcomes desired from engaging, and the process is open and responsive.

- ii. sets out a clear plan of who will be engaged, how, by what means
 - iii. maintains flexibility, (within the planned approach), adapting the engagement work if necessary, in the light of unfolding events.
- b. Be clear, internally (within WAG and its contractors) and externally (to all stakeholders), on:
 - i. The policy aims for the M4 CEM programme as a whole
 - ii. The purpose of any engagement – from the perspective of both WAG and the stakeholders themselves, i.e. what it is we are trying to achieve from the engagement activity
 - iii. The detail of what is, and isn't, up for influence.
 - iv. Clarity and transparency about who is making decisions about what, when and how; and about how any contributions, participation or responses from people with whom we engage will shape the work.
- c. Ask for people's opinions only where there is a meaningful opportunity to influence final outcomes, and be transparent about the extent and nature of the opportunity to influence. In the absence of any such opportunity, communicate what is happening and why, as clearly as possible
- d. Give stakeholders as much choice as possible regarding how they want to engage with the process
- e. Tailor engagement approaches to suit the different types of stakeholder:
 - i. Use existing engagement channels as much as possible, i.e. taking engagement to people through existing channels, rather than only expecting them to make the effort to engage
 - ii. Use a variety of methods of engaging
- f. Ensure engagement respects existing legislation and overarching principles of human rights and equalities and a commitment to a bi-lingual Wales and seek, in commitments, methods and techniques, to ensure equality in its widest sense
- g. Provide regular, clear updates on the process, and a final round of feedback to those who participated, as to how their input has been used

4. High level engagement aims

The detailed engagement action plan will set out engagement aims for specific stakeholders, as they will vary considerably, but at a strategic level the broad engagement aims for this process are set out below.

The purpose of engaging with stakeholders on the M4 CEM programme is to:

- a. Maintain **regular communication** with stakeholders, so that they are aware of what is going on within the programme.

and to gather views and information that will shape:

- b. Agreement on what the **key problems and objectives** are on the Magor to Castleton stretch of the M4 corridor
- c. **what measures go forward** to technical appraisal and possible implementation by 2014. This includes measures already proposed and new ideas put forward by participants in the engagement process
- d. the detail of **how some measures**, already agreed as going forward, will be **implemented**.
- e. which transport proposals relating to the M4 Magor to Castleton corridor go into the **next National Transport Plan for Wales 2015-19 and beyond**.

Under these high level engagement aims, **other goals for engagement** are to:

- extract as much relevant local knowledge as possible
- help identify and secure any outcomes that will be of mutual benefit to WAG and its strategic goals, and to other stakeholders.
- help identify innovative potential solutions, including ones not currently in the potential basket of measures
- build shared understanding, across all sectors and stakeholders, on both problems and potential solutions

5. Proposed phased approach for the engagement process

These phases must be tied in to the technical process.

Possible phased approach to be adopted by M4 CEM engagement
Phase 1. Get understanding of M4 corridor issues and the need for an engagement process - Alert key stakeholders to the M4 CEM programme and the opportunity to be engaged. - Start to build understanding of the issues i.e. that there is a problem to be solved and many ways to approach solving it - Acknowledge that some people may be frustrated about plans that have not come to fruition, but also point to some of the improvements that have happened already and where work is ongoing (e.g. central concrete barriers) which contribute to the aims of this project (to enhance resilience and capacity, and improve safety standards). This is about communicating how this new M4 CEM builds on WAG's [previous /ongoing] programme of works - Gather in early reactions and act on them as needed as well as feeding them into the planning process - Gather in suggestions for who else needs to be engaged and possible engagement avenues. - Set up meeting dates/workshops for the main engagement work of phase 3 <i>NB Phase 1 is already live as some works are underway.</i>
Phase 2. Collate results/reactions from phase 1, publicise further and engage as necessary. For example, - More detailed information on how stakeholders can link into the next part of the engagement process - Clarifying any misconceptions and allaying concerns - Reassuring stakeholders that they will have their opportunity to participate
Phase 3. Informing, questioning and listening: take views on problems, objectives; generate and explore possible solutions/options the main engagement work – via a two-way flow of information and opinion exchange
Phase 4. Reduce any uncertainties or fill gaps in information <i>This phase only applies if there is some genuinely collaborative scoping of solutions, i.e. beyond phase3 outlined above, into more participative engagement</i> Work with specific stakeholders on specific issues that require more in-depth consideration i.e. exploring realities of possible options, and seeking to gain consensus
Phase 5. Evaluate options and decide what goes ahead in preferred package of CEM for final discussions, including formal consultation

WAG take all of the results of the engagement work to date and make decisions regarding which package of measures can deliver desired outcomes, and present these for comment in last round of dialogue and formal consultation
Phase 6. Evaluate options and decide what goes ahead WAG take all of the results of the engagement work to date and make decisions
Phase 7. Explain the choice against feedback you've had, and how you have or haven't taken comments into account; evaluation of process Request feedback from stakeholders on how they've found the whole engagement process. End of M4 CEM engagement phase.
Phase 8. Implementation Start new phase of engagement, relating to implementation of measures

APPENDIX – Definitions of different levels of engagement

The M4 CEM engagement programme will not necessarily engage stakeholders at all the levels described here – this is simply to provide an overview of what is possible and an agreed understanding of what, in this programme, we mean by these terms.

Information giving

Providing information (e.g. about activities, news, results of a decision) or giving feedback. This may or may not be with the intention of altering their perceptions (PR) or behaviour (education). Can also mean allowing views to be shared and enabling others to listen to different points of view

Education – As with information-giving, but more effort put into explaining or raising awareness of something - often in order to change attitudes/action.

Information Gathering (Targeted) – You need to find out specific information from **specific people** to inform a decision, e.g. asking disabled users about access

Information Gathering (Broad) – You will make the decision, but you want to inform that decision by gathering views as widely as possible from stakeholders first. Often one off engagement.

Two-way dialogue: informing, questioning, listening Asking opinions, collecting views, e.g. questionnaires, surveys, hearings, meetings, voting, market research, focus groups and debate. There can be two-way communication (e.g. if participants are informed of the results) but final decisions are made by those who are doing the questioning. Participants have a passive role as providers of facts, opinions or ideas.

Formal consultation – a process in which anyone has the opportunity to offer a view on proposals set out in a published document, within a defined time period .

Involvement - where more than just opinions are sought. Participants may be part of the solution though taking action, endorsing something, e.g. participatory planning meeting, advisory or working group. Communication must be two-way, but responsibilities are not necessarily formally set out and relationships between participants may remain unclear.

You will make the decision(s), but you want stakeholders and participants to have a more active role as shapers of opinions, ideas and outcomes, often on an **ongoing** basis. This results in longer term and more influential relationships in which final decisions are made by the responsible body (e.g. WAG), but based on the working relationship with those engaged.

A4 Stage 1 Problems and Goals

Infrastructure Group
Welsh Assembly Government

M4 Corridor Enhancement Measures

Stage 1 Review of Problems and Goals

8140

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1 Executive Summary

This report has been prepared at the completion of the first stage of engagement with the public and strategic stakeholders in which the people were requested to comment on a proposed set of problems, goals and aims for the M4 Corridor Enhancement Measures (M4 CEM) programme.

The report sets out a modified vision for the M4 CEM programme derived from the Deputy First Minister and Minister for the Economy and Transport's statement on the National Transport Plan in July 2009. It then proposes a set of aims derived from strategic objectives which were outlined for the public in a brochure distributed in April 2006, and reworded into plain English. These have been further modified to take on board comments raised in the engagement process.

A current understanding of the transport problems on the M4 corridor is then considered, originating with the problems established in a WelTAG planning Stage workshop held in October 2007, which were also reworded into a plain English version and presented for comment in the engagement process. The latest problems have been modified, with additional problems included, to reflect comments made during the engagement. The problems have also been grouped under four categories:

- Capacity
- Resilience
- Safety
- Sustainable development.

The revised transport planning objectives that aimed to provide a level of service compatible with the framework set out in the National Transport Plan for transport provision in South East Wales have then been considered, described here as goals and, reworded in plain English. These goals have also been modified, with additional goals included, to reflect comments made during the engagement.

The proposed vision, aims, problems and goals from this first stage of the engagement are:

VISION

The overarching purpose of the M4 Corridor Enhancement Measures programme is to resolve issues of capacity, safety and resilience along the M4 corridor in south-east Wales.

AIMS

- 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 Assembly Government goals to reduce greenhouse gas emissions and to making Wales more resilient to the effects of climate change.

PROBLEMS

Capacity

1. A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times over extended periods.
2. The M4 around Newport is used as a convenient cross town connection for local traffic, with insufficient local road capacity.
3. HGVs do not operate efficiently on the motorway around Newport.
4. There is insufficient capacity through some of the junctions (eg 3 lane capacity drops to 2 lane capacity).
5. The 2-lane Brynglas tunnels are a major capacity constraint.
6. The M4 cannot cope with increased traffic from new developments.

Resilience

7. Difficulties maintaining adequate traffic flows on the M4 and alternative highway routes at times of temporary disruption; alternative routes are not able to cope with M4 traffic.
8. The road and rail transport system in and around the M4 corridor is at increasing risk of disruption due to extreme weather events.
9. When there are problems on the M4, there is severe disruption and congestion on the local and regional highway network.
10. The M4 requires essential major maintenance within the next 5-10 years; this will involve prolonged lane and speed restrictions, thus increasing congestion problems.
11. There is insufficient advance information to inform travel decisions when there is a problem on the M4.

Safety

12. The current accident rates on the M4 between Magor and Castleton are higher than average for UK motorways.
13. The existing M4 is an inadequate standard compared to modern design standards.
14. Some people's driving behaviour leads to increased accidents (eg speeding, lane hogging, unlicensed drivers).

Sustainable Development

15. There is a lack of adequate sustainable integrated transport alternatives for existing road users.
16. Traffic noise from the motorway is a problem for local residents in certain areas.
17. The existing transport network acts as a constraint to economic growth and adversely impacts the current economy.
18. Traffic levels are forecast to continue to increase therefore capacity and resilience issues will worsen over time.
19. The high volumes of congested, slow moving traffic on the motorway around Newport add to air pollution problems and greenhouse gas emissions.
20. The existing transportation system does not meet the aspirations of national and local government planning policies.

GOALS

When the M4 CEM programme is concluded we will benefit from:

1. Safer, easier and more reliable travel East-West in South Wales.
2. Improved transport connections within Wales and to England, the Republic of Ireland and the rest of Europe on all modes on the international transport network.
3. More effective and integrated use of alternatives to the M4, including other parts of the transport network and other modes of transport for local and longer distance journeys around Newport.
4. Best possible use of the existing M4, local road network and other transport networks.
5. More reliable journey times along the M4 corridor.
6. Increased level of choice for all people making journeys within the transport corridor by all modes between Magor and Castleton, commensurate with demand for alternatives.
7. Improved safety on the M4 Corridor between Magor and Castleton.
8. Improved air quality in areas next to the M4 around Newport.

9. Reduced disturbance to people from high noise levels, from all transport modes and traffic within the M4 corridor.
10. Reduced greenhouse gas emissions per vehicle and/or person kilometre.
11. Improved travel experience into South Wales along the M4 Corridor.
12. An M4 attractive for longer distance journeys that discourages local traffic use.
13. Improved traffic management in and around Newport on the M4 Corridor.
14. Easier access to local key services and residential and commercial centres.
15. A cultural shift in travel behaviour towards more sustainable choices.

2 Introduction

This report presents the development of the vision, aims, problems and goals for the M4 Corridor Enhancement programme following on from the New M4 Project, incorporating the vision from the National Transport Plan and taking account of comments received from the stage 1 Engagement. This engagement included a series of drop-in exhibitions in the M4 Corridor area and workshops for local councils and strategic stakeholders.

3 Vision

As part of the New M4 Project the following vision had been articulated for the transport system in South East Wales:

VISION

To provide as part of a wider integrated transport strategy for South East Wales, enhanced capacity and resilience on the transport corridor between Magor and Castleton.

This was the vision that led to the development of the New M4 Project and the M4 Corridor Enhancement Measures (M4 CEM) programme (called the Corridor Efficiency Improvements at that time). Then, on 15 July 2009, the Deputy First Minister and Minister for the Economy and Transport delivered a statement on the National Transport Plan. From this statement the following vision has been articulated for the M4 CEM programme:

VISION

The overarching purpose of the M4 Corridor Enhancement Measures programme is to resolve issues of capacity, safety and resilience along the M4 corridor in south-east Wales.

4 Strategic Objectives (Aims)

The following Strategic Objectives were outlined for the public in a brochure distributed in April 2006, prior to public information exhibitions:

STRATEGIC OBJECTIVES

- Social: to deliver enhanced accessibility to services and employment opportunities for people, whilst retaining a choice for road users.
- Economic: to deliver a more efficient transport capability for road traffic on the primary economic gateway to South Wales, to facilitate growth in regional and national prosperity.
- Environmental: to prevent, reduce and where practicable offset any significant adverse effects on environmental receptors.

The Strategic Objectives were rephrased in plain English by the Engagement team and presented as Aims at the exhibitions and workshops, as follows:

AIMS

- 1) Make it easier for people to reach services such as shops, hospitals, leisure service and places of work, by road, public transport, walking or cycling.
- 2) To support and encourage prosperity in the region and across Wales by delivering a more efficient transport network on this important economic gateway to South Wales.
- 3) To prevent and reduce negative effects of the M4 CEM programme on people and the environment and, where practicable, provide improvements to balance against them.

The comments received from the drop-in exhibitions, the local councils' workshop and the strategic stakeholders' workshop have been reviewed and the following amendments to the Aims are proposed:

AIMS

- 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 Assembly Government goals to reduce greenhouse gas emissions and to making Wales more resilient to the effects of climate change.

5 Wel TAG Planning Stage Problems

As part of the New M4 Project, a WelTAG Planning Stage Workshop, held on 24 October 2007, reached a common understanding of problems with transport in South East Wales. The problems identified at the Workshop were:

PROBLEMS

1. There is a lack of resilience* in the road network around Newport.
2. There is a mismatch between demand and available capacity on the motorway around Newport.
3. Problem 1 and 2 will worsen over time.
4. The existing transport system acts as a constraint to economic growth.
5. There will be capacity restrictions during essential major maintenance on the existing M4 within the next 5-10 years.
6. HGVs do not operate efficiently on the motorway around Newport.
7. There is an air pollution problem associated with the motorway around Newport.
8. Traffic congestion on the M4 around Newport contributes to emission of greenhouse gases.
9. The transport system is at increasing risk from extreme weather events.
10. There is an environmental noise problem associated with the motorway around Newport.
11. The existing transportation system does not meet the Wales Spatial Plan aspirations as a gateway to Wales.
12. The existing transportation system does not meet the aspirations of the local development plans.
13. The current accident rate on the existing M4 is higher than average.
14. The existing M4 is a barrier to intra-regional travel.

** Resilience is the ability of a network to cope with sudden changes in demand or operation, eg traffic throughput could be maintained during periods of temporary disruption.*

6 Problems expressed in plain English

The WelTAG Planning Stage problems were reviewed by the Engagement team and expressed in plain English as follows:

PROBLEMS

1. Difficulties maintaining adequate traffic flows on the M4 at times of temporary disruption (for example, following accidents, problems caused by severe weather, or during major events).
2. A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times.
3. Traffic levels are forecast to continue to increase, therefore problems 1 and 2 will worsen over time.
4. The existing transport network acts as a constraint to economic growth (for example, as freight companies see increasing delays in deliveries, they may decide not to invest in South Wales).
5. The M4 requires essential major maintenance within the next 5-10 years; this will involve prolonged lane and speed restrictions, thus increasing congestion problems.
6. HGVs cope badly with congestion as they take longer to get going again once they've stopped, thus adding to the congestion.
7. The congested, slow moving traffic on the motorway around Newport adds to air pollution problems.
8. Stop-start traffic movement on the M4 results in greater greenhouse gas emissions than free-flowing traffic.
9. The road and rail transport system in and around the M4 corridor is at increasing risk of disruption due to extreme weather events (for example flooding).
10. Traffic noise from the motorway is a problem for local residents.
11. WAG's aim for an improved gateway into Wales is not currently met by the M4 corridor.
12. The existing transport system limits what local Councils can do to develop their areas.
13. The current accident rates on the M4 between Magor and Castleton are higher than average for UK motorways.
14. The current problems on the M4 between Magor and Castleton at times have a significant knock-on effect, severely disrupting travel within South Wales.

These problems were presented for comment at the Drop-in Exhibitions and workshops.

7 Proposed changes to problems following Stage 1 Engagement

The comments received from the drop-in exhibitions, the local councils' workshop and the strategic stakeholders' workshop have been reviewed and the following amendments and additions to the Problems are proposed under four themes:

PROBLEMS

Capacity

1. A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times over extended periods.
2. The M4 around Newport is used as a convenient cross town connection for local traffic, with insufficient local road capacity.
3. HGVs do not operate efficiently on the motorway around Newport.
4. There is insufficient capacity through some of the junctions (eg 3 lane capacity drops to 2 lane capacity).
5. The 2-lane Brynglas tunnels are a major capacity constraint.
6. The M4 cannot cope with increased traffic from new developments.

Resilience

7. Difficulties maintaining adequate traffic flows on the M4 and alternative highway routes at times of temporary disruption; alternative routes are not able to cope with M4 traffic.
8. The road and rail transport system in and around the M4 corridor is at increasing risk of disruption due to extreme weather events.
9. When there are problems on the M4, there is severe disruption and congestion on the local and regional highway network.
10. The M4 requires essential major maintenance within the next 5-10 years; this will involve prolonged lane and speed restrictions, thus increasing congestion problems.
11. There is insufficient advance information to inform travel decisions when there is a problem on the M4.

Safety

12. The current accident rates on the M4 between Magor and Castleton are higher than average for UK motorways.
13. The existing M4 is an inadequate standard compared to modern design standards.
14. Some people's driving behaviour leads to increased accidents (eg speeding, lane hogging, unlicensed drivers).

Sustainable Development

15. There is a lack of adequate sustainable integrated transport alternatives for existing road users.
16. Traffic noise from the motorway is a problem for local residents in certain areas.
17. The existing transport network acts as a constraint to economic growth and adversely impacts the current economy.
18. Traffic levels are forecast to continue to increase therefore capacity and resilience issues will worsen over time.
19. The high volumes of congested, slow moving traffic on the motorway around Newport add to air pollution problems and greenhouse gas emissions.
20. The existing transportation system does not meet the aspirations of national and local government planning policies.

8 Transport Planning Objectives for the Corridor Enhancement Measures

Funding to cover the cost of providing the New M4 motorway is not likely to be available in the immediate future within current and projected Welsh Assembly expenditure budgets, particularly in the context of the current economic climate. Revised Transport Planning Objectives (TPOs) have thus been considered that aim to provide a level of service that is compatible with the framework set out in the National Transport Plan for transport provision in South East Wales.

These were the original transport planning objectives from which the Goals described in section 6 were derived:

TRANSPORT PLANNING OBJECTIVES

1. To improve connectivity within Wales and Internationally along the east-west strategic corridor in South Wales.
2. To discourage the use of the motorway around Newport as a local distributor road.
3. To make better use of the existing highway asset.
4. To increase journey time reliability.
5. To increase travel choice for all.
6. To improve accessibility to key centres and services.
7. To improve the transport network management around Newport.
8. To improve travel safety on the transport network around Newport.
9. To improve air quality around Newport.
10. To reduce the number of people subjected to high noise levels.
11. To reduce greenhouse gas emissions per vehicle and/or person kilometre.
12. To enhance the traveller experience through the gateway to South Wales.

9 Goals (Objectives in plain English)

The WelTAG Planning Stage TPOs were reviewed by the Engagement team and expressed in plain English as follows:

GOALS

1. Make it easier and quicker to travel East-West in South Wales.
2. Improve transport connections to England, the Republic of Ireland and the rest of Europe on the international transport network.
3. Promote more effective use of alternatives to the M4, including other parts of the transport network and other modes of transport for local journeys around Newport.
4. Make best possible use of the existing M4 and local road network.
5. Make journey times along the M4 corridor more reliable.
6. Increase the level of choice for all people making journeys within the transport corridor between Magor and Castleton.
7. Make it easier for people to access key services as well as residential and commercial centres.
8. Improve safety on the M4 between Magor and Castleton.
9. Improve air quality in areas next to the M4 around Newport.
10. Reduce the disturbance to people of high noise levels, from M4 traffic between Magor and Castleton.
11. Reduce greenhouse gas emissions per vehicle and/or person kilometre.
12. Improve the travel experience into S. Wales along the M4 Corridor.

These goals were presented for comment at the Drop-in Exhibitions and workshops.

10 Proposed Changes to Goals following Stage 1 Engagement

The comments received from the drop-in exhibitions, the local councils' workshop and the strategic stakeholders' workshop have been reviewed and the following amendments and additions to the Goals are proposed.

GOALS

When the M4 CEM programme is concluded we will benefit from:

1. Safer, easier and more reliable travel East-West in South Wales.
2. Improved transport connections within Wales and to England, the Republic of Ireland and the rest of Europe on all modes on the international transport network.
3. More effective and integrated use of alternatives to the M4, including other parts of the transport network and other modes of transport for local and longer distance journeys around Newport.
4. best possible use of the existing M4, local road network and other transport networks.
5. More reliable journey times along the M4 corridor.
6. Increased level of choice for all people making journeys within the transport corridor by all modes between Magor and Castleton, commensurate with demand for alternatives.
7. Improved safety on the M4 Corridor between Magor and Castleton.
8. Improved air quality in areas next to the M4 around Newport.
9. Reduced disturbance to people from high noise levels, from all transport modes and traffic within the M4 corridor.
10. Reduced greenhouse gas emissions per vehicle and/or person kilometre.
11. Improved travel experience into South Wales along the M4 Corridor.
12. An M4 attractive for longer distance journeys that discourages local traffic use.
13. Improved traffic management in and around Newport on the M4 Corridor.
14. Easier access to local key services and residential and commercial centres.
15. A cultural shift in travel behaviour towards more sustainable choices.

11 Suggested Solutions

In the feedback gathered from the drop-in exhibitions and the workshops there were many comments that were proposed solutions, rather than suggested problems or goals. These suggestions are listed below:

New Road Building

Alternative diversion to the Brynglas tunnels.

Southern relief road/New M4 motorway/ new route around Newport/ off the coast.

New junction on M48 to access Caldicot/Magor/Rogiet.

More improvements to the A465 Heads of the Valleys road.

Create road between Celtic Springs and Rogerstone roundabout so traffic from Cardiff can avoid J28 and access Rhymney Valley, Sirhowy Valley and Ebbw Vale.

Combine new M4 with a lagoon barrage.

Enhancements to Existing Roads

Remove some of the motorway junctions, or restrict access/egress.

Remove some roundabouts on the SDR/Improve flow on SDR.

Increase number of lanes on M4 (online widening).

Improve existing roads.

Controlled motorway.

Improve J28 roundabout – too small for amount of traffic.

Upgrade steelworks road to 3 lane dual carriageway.

Provide hard shoulders throughout.

Implement hard shoulder running.

Ramp metering at junctions.

Reinstate motorway access westbound at J25.

Network Management

Road works at night only.

Improve traffic management for diversion routes.

Better winter planning (gritting/snow removal). Clear alternative routes before closing tunnels.

Incident management by use of central reserve crossovers and contraflows.

Freight Alternatives

Freight interchange terminal (train and shipping) – particularly at Newport docks.

Give HGVs priority on motorway.

Restrict HGVs to certain times or lane restrictions.

Public Transport

Park and Ride hubs (Severn Tunnel junction, Coldra)

Improve and subsidise public transport (bus, train and coach) – quality, extend evening/night service, increase frequency.

Magor railway halt/station.

Improve resilience on rail network.

More fast buses between Bristol/Newport/Cardiff.

Ebbw Vale rail link to Newport.

Regulate commercial bus services.

Run late night public transport services when there are major evening events at the Millennium Stadium.

A tram/light rail service between Severn Tunnel Junction and Cardiff.

Include English buses on the free passes for elderly.

Integrated rail/bus passes.

Integrated road/rail connections.

Provide bus routes between junctions on M4, integrated with regular bus routes/times.

Environmental

Noise barriers along existing M4.

Improved glazing for affected people.

Plant more daffodils! Increase visual biodiversity adjacent to the corridor.

Provide low noise surfacing throughout M4.

Promote use of electric vehicles.

Provide art along the motorway.

Incentivise fuel efficient cars.

Planning

Locate key services in town centres (not out of town).

Information, Education and Travel Behaviour

Following an incident motorway variable message signs should give prior warning of delays and alternatives at or before Severn Bridge crossing going west and prior to junctions.

Provide advance information to inform travel choice decisions.

School travel plans.

Prioritise use of A465, A449, A470 as alternative routes to reduce M4 demand.

Provide park and share facilities at key junctions.

Encourage local employers to offer more flexible working arrangements so people can avoid the peak travel times. Schools could be more flexible too.

Increase driver understanding of safer and more economical driving techniques.

Invest in broadband to reduce need for travel.

Strict enforcement of traffic regulations on the M4.

Economy

Reverse/Reduce/remove bridge tolls.

Seek EU funding for Pan-European route improvement.

Major civil engineering project to provide a large number of new jobs.

A5 M4 CEM Full Briefing Document

Internal Team Full Briefing Document

M4 Magor to Castleton: Corridor Enhancement Measures Programme

Planning for safer, more reliable and more environmentally responsible travel options on and around the M4 between Magor and Castleton, SE Wales.

Note about this document

This document is for use by WAG, Arup, CEA, Engagement Working Group and any other relevant officers involved in M4 CEM. The purpose of the document, which is a 'rolling document', added to on a regular basis, is to:

- 1. Act as an internal **agreed working document**, for use as a source document, from which material can be extracted and used for a range of communications activities and materials.*
- 2. Provide a **shared reference point** which ensures that WAG/ARUP/CEA/EWG are all using the same basic material / have the same, clear understanding of what the M4 CEM Programme and associated engagement is and is not, in relation to:*
 - The M4 CEM programme, and what it is, and why the programme was and is deemed necessary*
 - The engagement strategy and programme*
 - WAG's role and the governance arrangements for the Programme*

- 1. Geographical scope of M4 CEM*
- 2. Why the M4 CEM Programme?*
- 3. How have we reached these conclusions?*
 - a) The process for developing transport policy and measures*
 - b) Description of the evidence base*
- 4. The main problems surrounding the M4 corridor: Magor to Castleton*
- 5. From a new M4 to the M4 Corridor Enhancement Measures Programme*
- 6. Strategic Objectives of the M4 CEM programme*
- 7. The Transport Planning Objectives for the next 10 years*
- 8. What strategic and practical steps have been taken already towards achieving some of these objectives?*
- 9. What transport measures are definitely happening by 2014?*
- 10. What else is included in the M4 CEM Programme?*
- 11. What further transport measures are currently being considered from work done so far?*
- 12. Other strategic transport measures being considered in the area*

13. *Engaging with People on the M4 CEM programme*
14. *Governance of the M4 CEM Programme*
 - a) *Technical work*
 - b) *Engagement Work*
15. *The overall 'shape' for the Engagement Process*

1. Geographical scope of M4 CEM Programme



M4 Corridor – Magor to Castleton

2. Why the M4 CEM Programme?

This section of the M4 motorway falls well short of modern motorway design standards, in relation to capacity and safety. Problems with congestion and unreliable journey times have also been a fact of life on the M4 around Newport for many years.

The problems obvious to local and longer-range (including freight and international) users of this section of the M4 are journey time unreliability due to increased congestion and an inability to cope with sudden changes in demand or operation. These issues are worse at times of peak travel and, as the number of users of the network increase, are set to worsen.

A detailed study of the problems of the transport system in SE Wales undertaken using the WeITAG (see section 3a below) appraisal framework measured these and other significant failings.

3. How have we reached these conclusions?

a) The process for developing transport policy and measures

Any major transport initiative in Wales that seeks government funding must go through an appraisal process – the Welsh Transport Planning and Appraisal Guidance, (WelTAG). This appraisal process is applied at the planning stage. The aim of the process is to ensure:

- Appraisal on a consistent basis to allow decision-makers to make informed choices on a comparable basis
- Proposals are focused on achieving identified needs or aspirations – an objective-led approach;
- Openness on the impacts of a proposal;
- An audit trail of decision-making
- Aid the scheme development.

WelTAG enables practitioners to set transport objectives, plan, evaluate and monitor initiatives in accordance with the Wales Transport Strategy. Appraisal is centred around three main impact areas:

- Economy
- Environment
- Society.

The results of taking an initiative through the WelTAG process are then used by the Minister to inform final decisions. For the M4 CEM programme, this means deciding which possible measures should go through to the next stage of consideration by WAG.

For more detail about WelTAG, go to

<http://wales.gov.uk/topics/transport/publications/weltag/?lang=en>

The M4 CEM programme has been through the WelTAG process, producing the following reports:

- WelTAG planning stage report. Document reference 08/7442. March 2009.
- WelTAG planning stage report. Addendum to planning stage report, Draft 1 Working Document. May 2009
- Corridor Efficiency Improvements Report. WelTAG Stage 1. Approved working document. October 2009

b) Description of the evidence base

High Traffic Demand

The current traffic flows on the M4 indicate that traffic growth in the past has been higher than expected. In 2001, traffic forecasts were made for the M4 around Newport for 2007.

Comparison of the observed 2006 daily flows against the forecast 2007 daily flows shows that traffic growth in the intervening years has been higher than predicted.

Traffic Flows on M4 around Newport

SECTION OF M4	OBSERVED DAILY TRAFFIC FLOW IN 2006 (Vehicles/day)	2001 TRAFFIC FORECASTS* FOR 2007 (Vehicles/day)
J24 – J25	102,000	94,000
J25 – J26	78,000	70,000

** Prepared as part of the M4 Relief Road Studies*

The observed peak hour traffic flows (Automatic Traffic Count (ATC) data from March 2007) have been compared against the theoretical capacity of an urban motorway. This has shown that, during peak periods, existing traffic flows reach up to 98% of theoretical capacity.

It is generally recognised that traffic conditions deteriorate when traffic flows reach around 80% of theoretical capacity with delays occurring during some peak periods. Peak period traffic flows on the M4 around Newport regularly exceed 80% of theoretical capacity and peak period congestion on the M4 around Newport occurs regularly on weekdays throughout the year, but especially during school term time.

Observed Patterns

Staff at the South Wales Traffic Control Centre were interviewed with a view to ascertaining what might be considered 'typical' (without incidents) traffic conditions on the M4 between junctions 23 and 29. Their observations are reported fully elsewhere and illustrated in the following photographs.

Morning Peak Hour: Queues on westbound approach from Junction 25 to Brynglas Tunnels



Morning Peak Hour: Queues eastbound on Malpas Straight extending to Junction 27

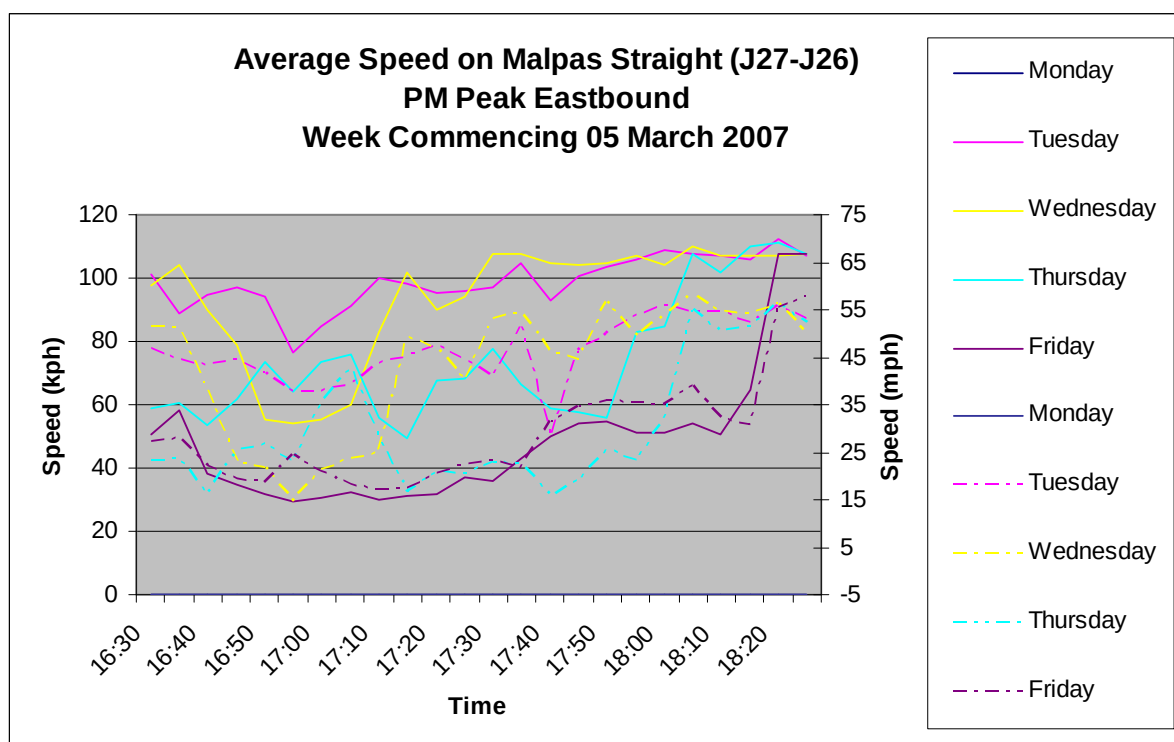


Evening Peak Hour: Eastbound queues on approach to Junction 26



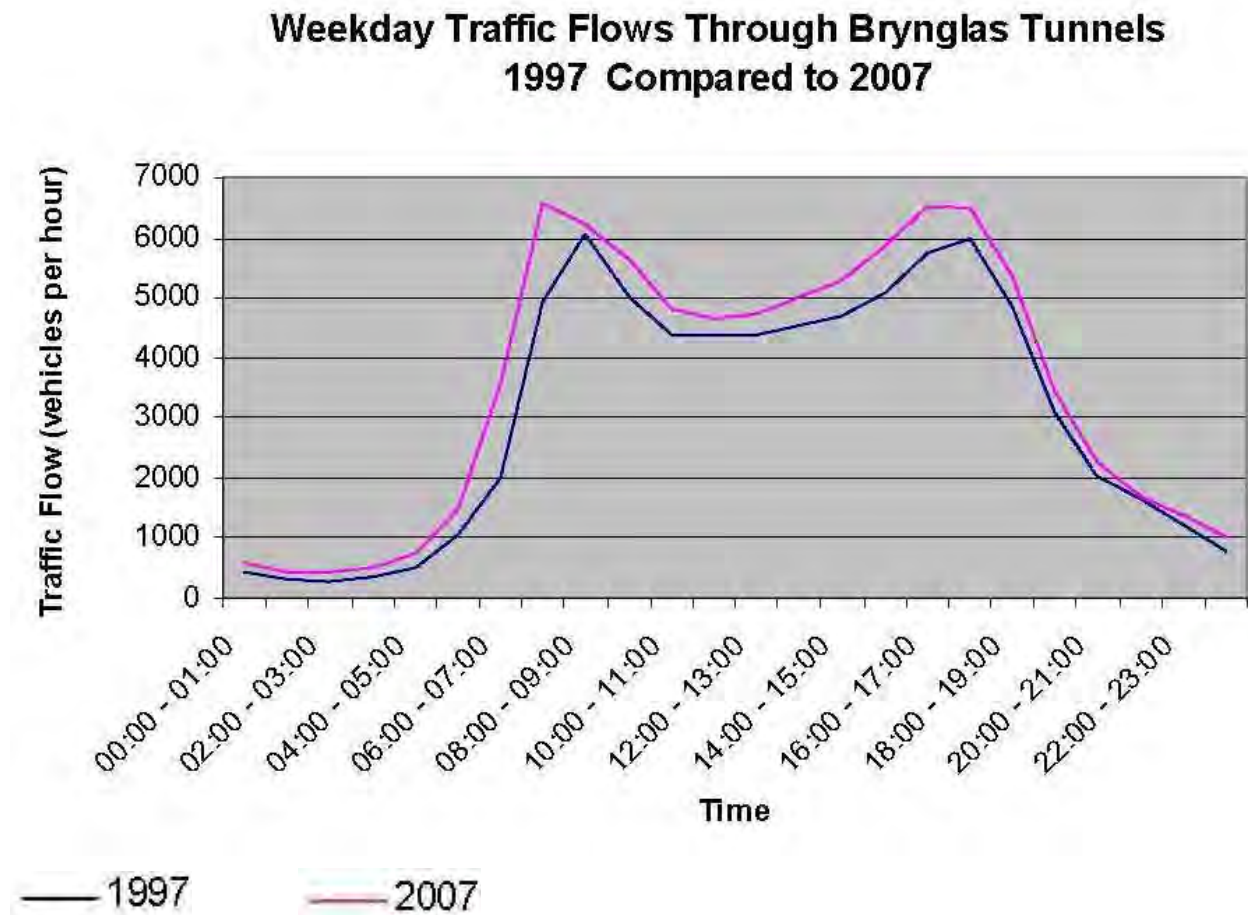
Traffic Speeds

The graph illustrates the average recorded speed of traffic on Malpas Straight, between junctions 27 and 26 in the eastbound direction during the evening peak for a randomly selected week in March 2007. It indicates that traffic speeds vary quite dramatically, with speeds dropping significantly at times, especially on a Friday where the speeds dropped to below 40kph (25mph) – in comparison with the interpeak average of about 100 to 110kph (63 to 70mph).



Peak Spread

In addition to higher traffic volumes, examination of the peaks indicates that the am peak starts earlier and that the pm peak lasts longer in 2007 compared to 1997.



Accidents

Accident data for the period 2002 to 2007 indicates that the M4 section J24 to J28 has an accident rate which is high compared with average values for a road of its type. The substandard alignments, high concentration of junctions, absence of continuous hard shoulder and everyday congestion contribute to this higher than average occurrence of accidents. When an accident occurs queues and delays build up quickly and can take a long time to dissipate.

Congestion due to Accident between Junctions 29 and 28 Eastbound



Two separate fatal accidents occurred in August and September 2007. Both resulted in closure of the motorway for approximately ten hours. The ensuing congestion from the closures saw some road users stranded on the motorway for several hours and the cost to the economy is estimated at several million pounds.

Freight Operators

Surveys on the M4 indicate that Heavy Goods Vehicles (HGVs) account for 12-15% of traffic. A selection of freight representatives, hauliers and transport managers for retail organisations were interviewed about their use of the M4. The majority of views were negative, characterising the M4 around Newport as congested, unreliable and unsafe, affecting just-in-time delivery and driver working hour restrictions.

Air Quality

The M4 passes through built up areas on the north side of Newport, being most constrained in the areas of St Julians, around the Brynglas Tunnels and at High Cross where housing areas lie adjacent to and/or above the road.

That the presence of the M4 has adverse impacts on air quality is evidenced by the fact that 4 out of Newport's 7 Air Quality Management Areas¹ (AQMAs), listed below, are associated with the M4:

- Glasllwch AQMA - located south of the Junction 27 off Basseleg Road, extending either side of the M4.
- Shaftesbury/Crindau AQMA - located around Junction 26 of the M4 including part of Malpas Road.
- St Julians AQMA – located at the north end of Denbigh Street immediately adjacent to the slip road at Junction 25 of the M4.
- Royal Oak Hill AQMA - located adjacent to the M4 motorway just west of where Royal Oak Hill crosses the motorway.

¹ An AQMA is declared where it is predicted that National Air Quality Standards will be exceeded – in these cases it is due to the NOx level of vehicle emissions.

Major Maintenance

To date, maintenance has been carried out at night and at other off-peak times to minimise the traffic impact. However, significant investment will be needed in the near future to ensure the continued safe and effective operation of the route. This will include maintenance and refurbishment works as part of the natural lifecycle of the route such as carriageway in-lays and reconstruction, together with re-waterproofing and joint replacement to the structures.

Specifically, the tunnels at Brynglas require substantial maintenance and improvement work to maintain safe operations and to comply with the current EU Directive for the minimum safety standards in tunnels. A number of other structures are nearing the end of their serviceable life and will need replacement or substantive improvements.

These works have yet to be programmed but it is anticipated that they will take some 3-4 years to complete, if undertaken sequentially. Given the network availability and budgetary constraints currently imposed on Transport Wales, it is considered that the work is likely to be programmed over a period of 8-10 years.

The nature of the works, together with layout constraints, will inevitably necessitate daytime restrictions for both carriageways over a prolonged period, ranging from lane and slip road closures to full carriageway closures, diversions and contraflow arrangements. The critical length is the two lane section between junctions 25 and 26; it includes the Brynglas tunnels, Malpas Viaduct and the bridges across the River Usk.

Design Standards

The design standard of the existing M4 between Magor (J23A) and Castleton (J29) has been assessed by comparison of the existing highway with the motorway standards as defined in the Design Manual for Roads and Bridges (DMRB). In considering these standards, a design speed of 120kph has been assumed as appropriate for the motorway. Locations where the standards fall below the desirable minimum level as defined in the DMRB are considered to be cases where the full motorway standards are not met.

The key substandard features on the existing M4 are:

- **Horizontal alignment** - analysis of the horizontal alignment shows that various sections between junctions 24 and 28 are below the desirable minimum horizontal standards, with substandard radii and superelevation.
- **Vertical alignment** - there are vertical curves at various locations along the motorway where, due to the sub-standard crest curve, the forward stopping sight distance is less than the standard required for 120kph design speed.
- **Hard shoulder width** - on the existing M4 over 70% of its length between Junction 24 and 28 has a hard shoulder width less than required in the DMRB and can be considered as sub-standard. In addition the verge provision does not meet current standards and at many locations there is no verge.
- **Junction standards** - the weaving length between two consecutive junctions is defined as the distance between the end of the merge taper of the first junction slip road and the start of the diverge taper of the second junction. The weaving lengths between Junctions 24 and 28 vary and at various places are sub-standard.

4. The main problems surrounding the M4 Corridor: Magor to Castleton

This material is taken from the report: 'Addendum to WelTAG Planning Stage Report, Draft 1 Working Document May 2009'. It has been turned into plain English.

The WelTAG process identified key problems as:

1. Difficulties maintaining adequate traffic flows on the M4 at times of temporary disruption (for example, following accidents, problems caused by severe weather, or during major events).
2. A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times.
3. Traffic levels are forecast to continue to increase, therefore problems 1 and 2 will worsen over time.
4. The existing transport network acts as a constraint to economic growth (for example, as freight companies see increasing delays in deliveries, they may decide not to invest in South Wales).
5. The M4 requires essential major maintenance within the next 5-10 years; this will involve prolonged lane and speed restrictions, thus increasing congestion problems.
6. HGVs cope badly with congestion as they take longer to get going again once they've stopped, thus adding to the congestion.
7. The congested, slow moving traffic on the motorway around Newport adds to air pollution problems.
8. Stop-start traffic movement on the M4 results in greater greenhouse gas emissions than free-flowing traffic.
9. The road and rail transport system in and around the M4 corridor is at increasing risk of disruption due to extreme weather events (for example flooding).
10. Traffic noise from the motorway is a problem for local residents.
11. WAG's aim for an improved gateway into Wales is not currently met by the M4 corridor.
12. The existing transport system limits what local Councils can do to develop their areas.
13. The current accident rates on the M4 between Magor and Castleton are higher than average for UK motorways.
14. The current problems on the M4 between Magor and Castleton at times have a significant knock-on effect, severely disrupting travel within South Wales.

5. From a new M4, to the M4 Corridor Enhancement Measures Programme

To address some of these issues, the idea of a second relief motorway was explored, but in July 2009, Welsh Assembly Government announced that this option was no longer on the table, due to the unaffordable costs involved.

However, Welsh Assembly Government recognised then that important improvements could be made to the existing transport network. The M4 Magor to Castleton: Corridor Enhancement Measures Programme (M4 CEM) was set up to explore ways of making such improvements.

6. Strategic Objectives of the M4 CEM programme

The M4 CEM programme is exploring how to provide, as part of a wider integrated transport strategy for South East Wales, **enhanced capacity and resilience** on the transport corridor between Magor and Castleton.

The strategic objectives for the programme are:

- **Social:** to deliver enhanced accessibility to services and employment opportunities for people, whilst retaining a choice for road users.
- **Economic:** to deliver a more efficient transport capability for road traffic on the primary economic gateway to South Wales, to facilitate growth in regional and national prosperity
- **Environmental:** to prevent, reduce and where practicable offset any significant adverse effects on environmental receptors.

7. The Transport Planning Objectives

This material is taken from the report: 'Magor to Castleton. Addendum to WeITAG Planning Stage Report, Draft 1 Working Document May 2009'. It has been turned into plain English.

1. Make it easier and quicker to travel East-West in South Wales,
2. Improve transport connections to England, the Republic of Ireland and the rest of Europe on the international transport network.
3. Promote more effective use of alternatives to the M4, including other parts of the transport network and other modes of transport for local journeys around Newport.
4. Make best possible use of the existing M4 and local road network.
5. Make journey times along the M4 corridor more reliable.
6. Increase the level of choice for all people making journeys within the transport corridor between Magor and Castleton.
7. Make it easier for people to access key services as well as residential and commercial centres.
8. Improve safety on the M4 between Magor and Castleton.
9. Improve air quality in areas next to the M4 around Newport.

10. Reduce the disturbance to people of high noise levels, from M4 traffic between Magor and Castleton.
11. Reduce greenhouse gas emissions per vehicle and/or person kilometre.
12. Improve the travel experience into S. Wales along the M4 Corridor.

8. What strategic and practical steps have been taken already towards achieving some of these objectives?

Since 2008, in order to make the M4 safer for users, steel central barriers have been replaced by concrete central barriers. To ease congestion, improvements have also been made to the roundabout at Junction 24 at Coldra. In addition, WAG has purchased the road through the Llanwern steel works in order to create a link between Junction 23a and the Southern Distributor Road.

To regulate traffic on the M4, the use of Variable Speed control systems is being implemented, and a trial has been in operation since the beginning of 2010, deploying Traffic Officers to reinforce these safety and efficiency measures.

9. What transport measures are proposed to happen by 2014?

WAG is already committed to delivering some measures that will lead to greater safety and more reliable and environmentally responsible travel options in the area on and around the M4 Corridor: Magor to Castleton. These are:

- **Steelworks Access Road Improvement (Magor to Queensway Meadows)** - Phase 1 starts January 2011 ; Phase 2 starts June 2011.
An existing private road, Queensway, currently runs east-west through the Llanwern Steelworks site. The project is to upgrade Queensway to a public highway standard running from Junction 23A through to the Southern Distributor Road (SDR) at Queensway Meadows.
- **Improve Junction 29A (St Mellons)** starts early 2011
Improve layout of the junction in accordance with current design standards for a single-lane slip road realigned to an appropriate angle and with a motorway standard acceleration splay.
- **Improve the B4245 junction west of Magor (as part of the Phase 2 Steelworks Access Road Improvement)**
This will involve the signalisation of the B4245/Steelworks Access Road junction to the west of Magor. The junction currently comprises a roundabout and a staggered priority arrangement. Each potential turning movement conflict will be signal controlled.

- **Update to Controlled Motorway between Junctions 28 (Tredegar Park) and 24 (Coldra)**

Intelligent Transport Systems (ITS) support for:

- *Upgraded controlled motorway*
- *Improved incident/queue detection*
- *Traffic monitoring/incident management*
- *Lane restriction with enforcement*
- *Improved driver information.*

- **Improve Junction 28 (Tredegar Park)** (subject to being granted planning permission, so there is no start date for implementation).

This measure provides improved traffic flows around a modified gyratory.

- **Modify Junction 26 (Malpas)**

The east facing slip roads at Junction 26 are relatively lightly trafficked, but their presence encourages local traffic to use the motorway to pass through the Brynglas Tunnels. This measure removes the east facing slip roads at Junction 26. This will reduce turning movements/conflicts and will enable bus priority measures to be introduced.

10. What else is included in the M4 CEM Programme?

WAG is adopting a step-wise approach to seeking and using feedback from people to shape the programme. In stage 1, it will ask stakeholders about the problems that need to be addressed, and the desired transport objectives to deliver the strategic transport planning objectives.

WAG is preparing proposals on further transport measures (see section 11 below) which will make better use of the existing motorway, enhance the surrounding transport network and improve public transport and opportunities for transfer between transport modes. It will use the feedback received in stage 1 of the engagement process to refine this package of measures. When this analysis and refining process is complete, WAG will present an updated set of proposed measures to stakeholders in a second stage of engagement, seeking views on these possible future measures, and also gathering in new ideas for transport solutions. Following this second stage of engagement, which will include formal consultation on the refined proposed measures, WAG will inform people of the outcome of the engagement process, and how it plans to move ahead with corridor enhancement measures.

11. What further transport measures are currently being considered from work done so far?

WAG are investigating other improvements to the existing M4 motorway and the adjacent road network and measures to encourage the shift from car use to other forms of transport. These include:

- **Steelworks Access Road Phase 3 (dualling) – Upgrade to SAR Magor to North Row**
Upgrade of the Steelworks Access Road from Magor to North Row to dual carriageway.
- **At-grade Improvements to the A48 Southern Distributor Road (SDR)**
- **Widening between M4 Junctions 29 (Castleton) and 28 (Tredegar Park)**
Introducing an additional lane on the eastbound carriageway, although some sections of retaining wall may be required due to the steep topography to the north. The hard shoulders through this section are continuous, making the introduction of hard shoulder running possible as a means of providing additional capacity.
- **Hard shoulder running/widening between M4 Junctions 28 (Tredegar Park) and 27 (High Cross)**
Targeted online widening to provide additional capacity, by providing a continuous hard shoulder and introducing hard shoulder running.
- **Widening between M4 Junctions 27 (High Cross) and 26 (Malpas)**
Based on slip road restrictions at Junction 27, widening the motorway to four lanes either by hard shoulder running or with an additional lane.
- **Modification to M4 Junction 25 (Caerleon)**
Junction 25A to the west of Junction 25 also provides east facing slip roads onto the motorway. This measure removes the east facing slip roads at Junction 25.
- **Deploy ITS (intelligent transport systems) including ramp metering at Junction 28 eastbound on slip road**
- **Park & Ride/Share Option East of Cardiff**
Cardiff East Park and Ride is situated approximately 10 km to the east of Cardiff and 15-17 km west of Newport. The current facility consists of a 340 space car park and a dedicated Park and Ride bus operating at a 15 minute frequency to Cardiff City Centre. The potential of the site to serve as a strategic Park and Ride would be improved if bus priority measures were provided on the A48/A48(M)/M4.

- **Park & Ride/Share Option at Llanwern**

Provision of car parking within the East Newport Expansion Area such that may be accessed by road from Queensway or from a proposed new Llanwern railway station. It is proposed to operate a rail based Park and Ride facility at the site.

- **Park & Ride/Share Option at Severn Tunnel Junction**

Provision of car parking adjacent to Severn Tunnel Junction Railway Station. It is proposed to operate a rail based Park and Ride facility at the site.

- **Park & Ride/Share Option at Llantarnum**

There is potential to locate a Park and Ride facility on several areas of land around the junction of the A4042 and Llanfrechfa Way (Crown Roundabout). It is proposed to operate a Park and Ride facility at the site making use of the passing express bus service.

12. Other strategic transport measures being considered in the area

There are various transport planning proposals at a national, regional and local level that impact on the M4 Corridor between Magor and Castleton. A review of these proposals has identified active and planned investment associated with highway works, public transport and integrated transport infrastructure, in order to address the problems experienced on the M4 corridor. These measures include:

Rail schemes

- Newport and Cardiff area signalling renewal schemes
- Newport – Cardiff Relief Line
- Cardiff area station improvements
- Improvement to Gaer Junction
- Improved train service frequencies – Abergavenny, Chepstow and Gloucester to Cardiff - *Additional services to provide at least half hourly frequencies and encourage modal transfer.*
- Second hourly service on Ebbw Valley Line
- New stations on existing lines – *five new stations are recommended to improve access to the rail network.*
- Electrification of the main line between Swansea and London.

Bus schemes

- Reworking of traffic movements at J28 of M4 – *consider the reintroduction of 12-hour bus lanes.*
- Decriminalised parking enforcement and Red Route enforcement in Cardiff and Newport – *addressing illegal parking and loading will assist in removing constraints on the network.*
- Bus priority schemes: Pontypool, Abertillery and Cardiff to Newport

Highway Schemes

- Variable speed limit systems to sections on the M4 – *this will manage congestion and improve safety.*
- Cycle routes in SE Wales (Malpas to Bettws, Cleppa Park to Bassaleg)
- Dualling of Usk Way, Newport
- Improvements to Emlyn St , Granville St and associated junctions
- Construction of the Duffryn Link, W Newport
- Boulevarding and traffic calming of Uskway, Kingsway and Queensway

13. Engaging with People on the M4 CEM programme

Hearing from and working with local organisations, businesses and communities, as well as with strategic national and regional stakeholders is a key aspect of the M4 CEM programme. As part of the engagement programme, planned to run from January 2010 – Summer 2012, we want to maintain **regular communication with stakeholders**, so that they are aware of what is going on within the programme.

We will want to gather views and information that will shape:

- a. Agreement on what the **key problems and objectives** are on the Magor to Castleton stretch of the M4 corridor
- b. **what measures go forward** to technical appraisal and possible implementation by 2014. This includes measures already proposed and new ideas put forward by participants in the engagement process
- c. the detail of **how some measures**, already agreed as going forward, will be **implemented**.
- d. which transport proposals relating to the M4 Magor to Castleton corridor, go into the next **National Transport Plan for Wales 2015-19 and beyond**.

14. Governance of the M4 CEM Programme

a) Technical work

PROJECT BOARD James Price, Tim James, Jeff Collins, WAG Transport, Housing and Regeneration		STAKEHOLDER GROUP Newport CC, Cardiff City, Monmouth CC
PROGRAMME DIRECTOR Russell Bennett Head of Infrastructure Projects, WAG		STEERING GROUP Ian Davies, Martin Bates, Corinna Green, Colin Eaketts, Dave Thomas, Paul Witham, Toria Thomas (WAG) Brian Kemp (Newport CC) Gilly Otlet (Newport Unlimited) Nigel Burgess, Paul Keeble (Monmouthshire CC) Paul Carter (Cardiff CC) Martin Buckle (SEWTA) Dan Saville, Richard Sanders, Jonathon Kinghorn (Arup)
PROGRAMME MANAGER Martin Bates Project Director, Infrastructure Projects, WAG		<u>Quality Assurance & Governance</u> Corinna Green, Gareth Morgan WAG – Transport, Housing & Regeneration

Technical consultants Arup, reporting to Programme Director

b) Engagement Work

An **internal working group**, comprising WAG, Arup and CEA Associates is project managing the engagement work.

An **Engagement Working Group**, comprising representatives from WAG and its consultants Arup and CEA Associates, Newport CC, Newport Unlimited, Monmouth CC and Cardiff CC, is designing an engagement strategy and plan for the M4 CEM Programme.

Engagement Working Group members

Name	Position, Organisation	Contact details
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Richard Sanders	Associate Director Arup	029 2026 6674 richard.sanders@arup.com

Graham Evans	Public Liaison Officer Arup	029 2026 6606 lrs.cascade@hotmail.co.uk
Other Input will come from:		
Independent facilitation team and engagement consultants		
Catrin Ellis Jones	Catrin Ellis Associates	catrinellis@yahoo.com m 07725721519 / t 01873 830523
Helena Poldervaart		helena@poldervaart.co.uk
Lynn Wetenhall		Lynn@wetenhallassociates.co.uk
Not a member, but can participate when guidance and higher level input is required and/ or to maintain direct contact with Engagement Process		
Russell Bennett	M4 CEMs Programme Director, Head of Infrastructure Projects Unit, WAG	029 20826565 Russell.Bennett@Wales.GSI.Gov.UK

15. The overall 'shape' for the Engagement Process

Stage 1: January – June, 2011

January – April: Engagement on problems and goals

The focus is strategic engagement with **specific and key stakeholder groups**. The aim is to explore issues in detail and depth with expert and very involved people (via deliberative workshops).

Wider public engagement aimed at gathering the breadth of views will largely happen through participative drop-in sessions.

Interviews with a number of key stakeholders will be carried out to supplement the drops in and workshops. These will be with a sample number of stakeholders who are highly impacted by travel within the corridor, but who were not present at the drop-ins or workshops.

April – May: Analysis

Analyse results of consultation on problems and goals (or Transport Planning Objectives). Analyses of the results of the engagement on problems and goals will feed into the technical study and revision of the possible corridor enhancement measures which are proposed to

deliver the goals identified. A new list of possible measures, including any completely new measures, will be drawn up.

End May – June

WAG sign off of revised problems and goals, plus the overarching strategy underpinning the revised list of possible corridor enhancement measures. The next iteration of work on possible CEM will also be signed off by WAG during this phase, and the resulting material will be used as a basis for Stage 2 consultation on measures.

Stage 2: June 2011 - January 2012

June – October: Engagement on possible corridor enhancement measures

Inform people about the possible CEM: what they are, how they were derived (how stage 1 engagement helped shape this package of possible measures). Ask for views and invite suggestions for additional measures. Engagement in the early part of this stage will help to revise these possible CEM further, and produce the next iteration of possible measures. Towards the second half of this period, engagement will include but not be limited to formal consultation on the latest possible CEM.

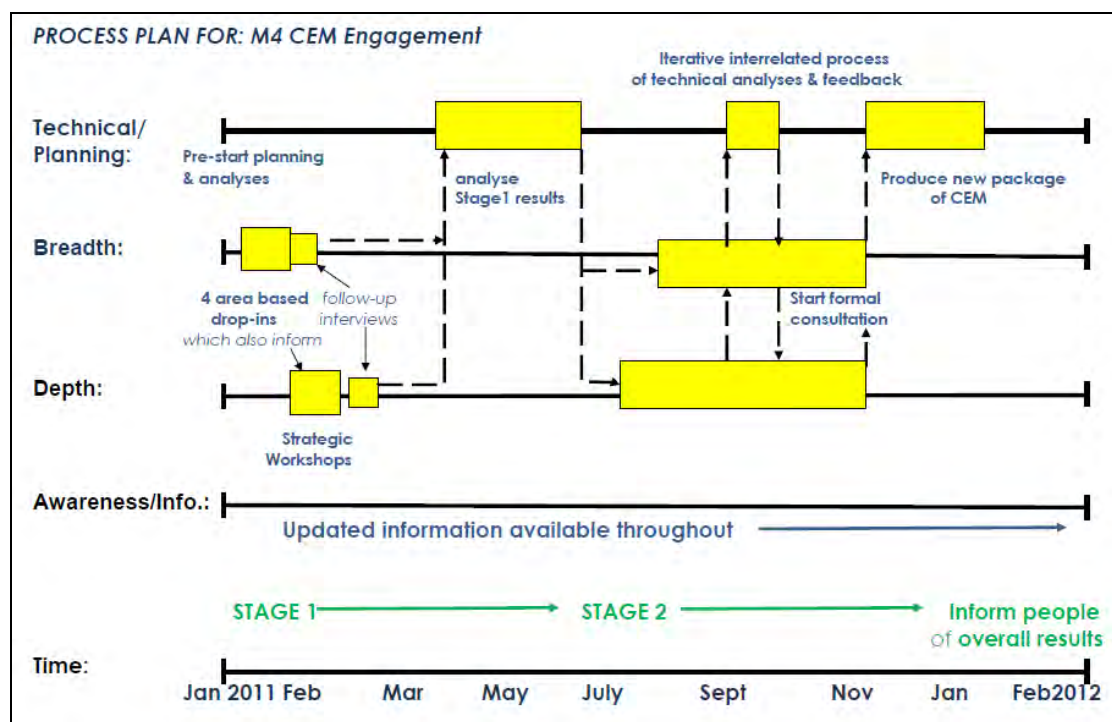
November 2011 – January 2012: Analysis

Analyse results of Stage 2. Resulting possible new measures go to WAG for sign off.

The result will be a list of CEM including [if any] new quick wins and measures to take forward into the next National Transport Plan and beyond.

After January 2012

Inform stakeholders of the results. Decide if there are any “quick wins” whether there is need / scope for consultation on any detail on these.



A6 Stakeholder categories

Stakeholder Categories

To support the engagement process, a stakeholder database was created at project inception to help identify relevant organisations and individuals with a potential interest in transport in South East Wales. An internal project team workshop identified 14 categories of stakeholders within which organisations and individuals were grouped. These include:

1. National stakeholders (Welsh Government etc);
2. Regional transport consortia (ten constituent local authorities);
3. Assembly members, MPs;
4. Councils (Members);
5. Community Councils;
6. Local Authority officers (transport, regeneration, etc);
7. Environment – Statutory / NGOs;
8. Business:
 - o Key developers;
 - o By area;
 - o By groupings;
 - o By type, size;
9. Providers of transport services (i.e. private sector companies including bus, rail, freight, ferry);
10. Utilities companies;
11. Emergency services;
12. Other NGOs and Local interest groups;
13. Landowners and land occupiers (e.g. farmers);
14. People (the general public), by:
 - o modes of transport used e.g. car, public transport, walkers, cyclists etc;
 - o impacted by M4 congestion issues e.g. people living in or around Newport;
 - o impacted temporarily by proposed or definite works;
 - o impacted permanently by proposed or definite works.

A7 Public Exhibition Panels

M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM) LLEDDFU'R LLIF YMGYNHORIAD



Llywodraeth Cymru
Welsh Government

www.cymru.gov.uk

WELCOME

We need your help to shape a strategy to reduce traffic congestion on the M4, Magor to Castleton

CROESO

Mae angen eich help chi arnom i lunio strategaeth i leihau tagfeydd traffig ar yr M4, Magwyr i Gas-bach

M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM) LLEDDFU'R LLIF YMGYNHORIAD



Llywodraeth Cymru
Welsh Government

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The Aims of the M4 CEM Programme are to:

- Make it easier and safer for people to access their homes, workplaces and services by walking, cycling, public transport or road.
- 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.
- 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.

Nodau'r Rhaglen M4 CEM yw:

- Ei gwneud hi'n haws ac yn fwy diogel i bobl gyrraedd eu cartrefi, mannau gweithio a gwasanaethau drwy gerdded, beicio, ar drafnidiaeth gyhoeddus neu ar y ffordd.
- Cyflawni rhwydwaith trafnidiaeth fwy effeithlon a chynaliadwy sy'n cefnogi ac yn annog ffyniant hirdymor yn y rhanbarth a ledled Cymru, ac sy'n galluogi cyrraedd marchnadoedd rhyngwladol.
- Creu effeithiau cadarnhaol yn gyffredinol ar bobl a'r amgylchedd, gan wneud cyfraniad cadarnhaol at nodau cyffredinol Llywodraeth Cymru i leihau allyriadau nwyon tŷ gwydr a gwneud Cymru'n fwy cadarn i allu gwrthsefyll effeithiau'r newid yn yr hinsawdd.

M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

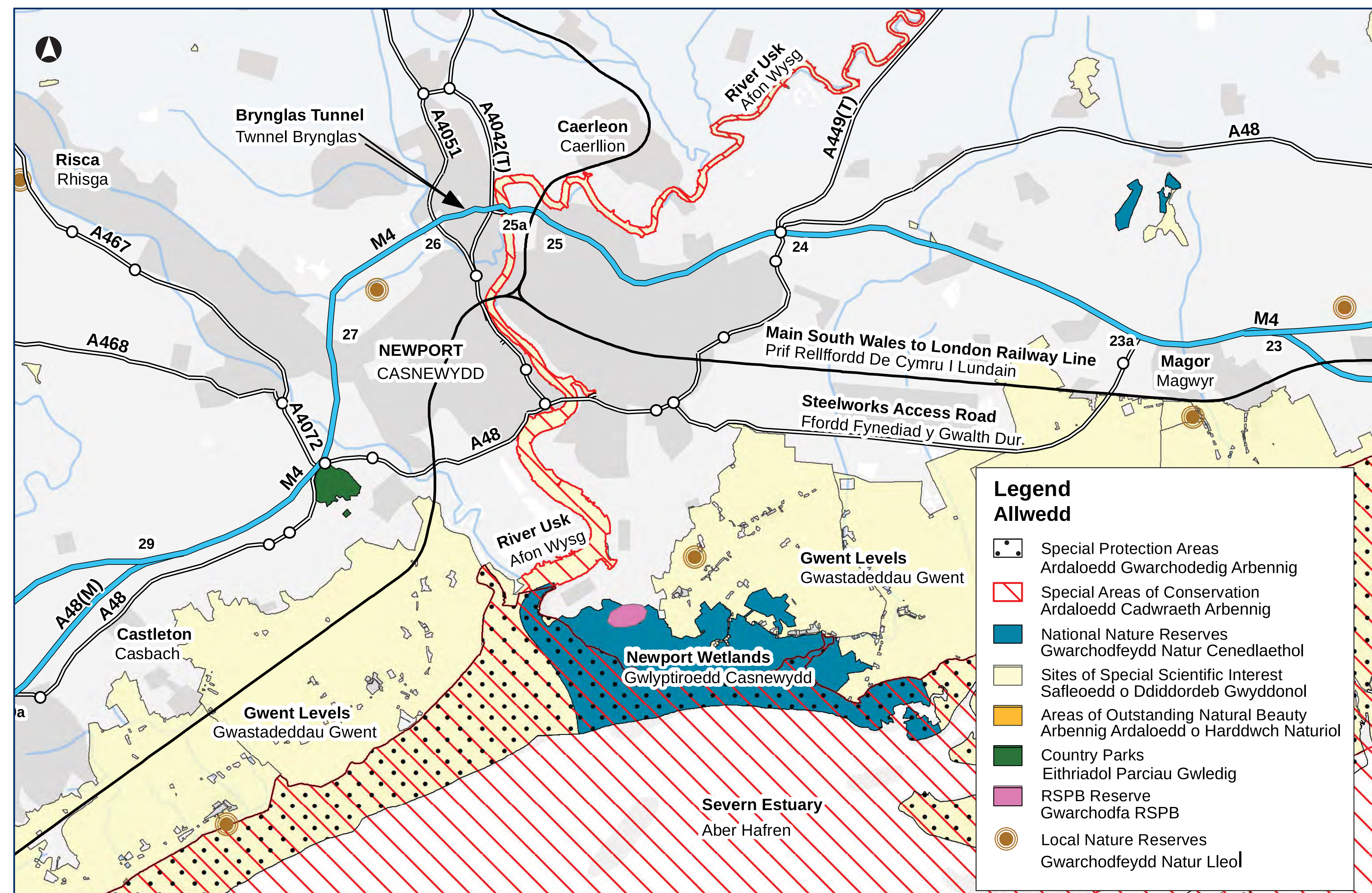
MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM) LLEDDFU'R LLIF YMGYNHORIAD



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MAIN ENVIRONMENTAL CONSTRAINTS IN THE NEWPORT AREA PRIF GYFYNGIADAU AMGYLCHEDDOL YN ARDAL CASNEWYDD



M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM) LLEDDFU'R LLIF YMGYNHORIAD



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TRANSPORT RELATED PROBLEMS

The Welsh Government looked in detail at what travel related problems exist on the M4 Corridor Magor to Castleton, and asked people, including those involved in managing transport in and around Newport what they thought the problems amount to. This is what they said:

Capacity

1. A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times over extended periods.
2. The M4 around Newport is used as a convenient cross town connection for local traffic, with insufficient local road capacity.
3. HGVs do not operate efficiently on the motorway around Newport.
4. There is insufficient capacity through some of the Junctions (e.g. 3 lane capacity drops to 2 lane capacity).
5. The 2-lane Brynglas tunnels are a major capacity constraint.
6. The M4 cannot cope with increased traffic from new developments.

Resilience

7. Difficulties maintaining adequate traffic flows on the M4 and alternative highway routes at times of temporary disruption; alternative routes are not able to cope with M4 traffic.
8. The road and rail transport system in and around the M4 Corridor is at increasing risk of disruption due to extreme weather events.

9. When there are problems on the M4, there is severe disruption and congestion on the local and regional highway network.
10. The M4 requires essential major maintenance within the next 5-10 years; this will involve prolonged lane and speed restrictions, thus increasing congestion problems.
11. There is insufficient advance information to inform travel decisions when there is a problem on the M4.

Safety

12. The current accident rates on the M4 between Magor and Castleton are higher than average for UK motorways.
13. The existing M4 is an inadequate standard compared to modern design standards.
14. Some people's driving behaviour leads to increased accidents (e.g. speeding, lane hogging, unlicensed drivers).

Sustainable Development

15. There is a lack of adequate sustainable integrated transport alternatives for existing road users.
16. Traffic noise from the motorway and air quality is a problem for local residents in certain areas.
17. The existing transport network acts as a constraint to economic growth and adversely impacts the current economy.

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PROBLEMAU'N GYSYLLTIEDIG Â THRAFNIDIAETH

Edrychodd Llywodraeth Cymru'n fanwl ar ba broblemau'n gysylltiedig â thrafnidiaeth sy'n bodoli ar Goridor yr M4 rhwng Magwyr a Chas-bach, a gofynnodd i bobl, gan gynnwys y rheiny sy'n ymwneud â rheoli trafndiaeth yng Nghasnewydd a'r cylch, beth yn eu barn nhw oedd y problemau. Dyma a ddywedont:

Capasiti

1. Mae mwy o draffig yn defnyddio'r M4 o amgylch Casnewydd nag y dyluniwyd y ffordd i ymdopi ag ef, ac mae hynny'n arwain at dagfeydd rheolaidd ar adegau prysur dros gyfnodau hir.
2. Mae'r M4 o amgylch Casnewydd yn cael ei defnyddio fel cysylltiad cyfleus ar draws y dref i draffig lleol, am fod capasiti annigonol ar ffyrdd lleol.
3. Nid yw cerbydau nwyddau trwm yn gweithredu'n effeithlon ar y draffordd o amgylch Casnewydd.
4. Mae capasiti annigonol drwy rai o'r Cyffyrdd (e.e. mae capasiti 3 lôn yn lleihau i gapasiti 2 lôn).
5. Mae twneli 2 lôn Brynglas yn rhwystr mawr i gapasiti.
6. Ni all yr M4 ymdopi â thraffig cynyddol o ddatblygiadau newydd.

Cadernid

7. Anawsterau yn cynnal llifoedd traffig digonol ar yr M4 a llwybrau priffyrdd amgen ar adegau pan fo tarfu dros dro; nid yw llwybrau amgen yn gallu ymdopi â thraffig yr M4.
8. Mae'r system trafndiaeth ffordd a rheilffordd yng Nghoridor yr M4 a'r cylch dan risg gynyddol o darfu yn sgil digwyddiadau tywydd garw.

9. Pan fo problemau ar yr M4, mae tarfu a thagfeydd difrifol ar y rhwydwaith priffyrdd lleol a rhanbarthol.
10. Mae angen gwaith cynnal a chadw mawr ar yr M4 o fewn y 5-10 mlynedd nesaf; bydd hyn yn golygu cyfyngiadau hir ar lonydd a chyflymder, a bydd hynny'n cynyddu problemau tagfeydd.
11. Nid oes digon o wybodaeth ymlaen llaw i lywio penderfyniadau teithio pan fydd problem ar yr M4.

Diogelwch

12. Mae'r cyfraddau damweiniau ffordd ar yr M4 rhwng Magwyr a Chas-bach yn uwch na'r cyfartaledd ar gyfer traffyrdd y DU.
13. Mae'r M4 presennol o safon annigonol o gymharu â safonau dylunio modern.
14. Mae ymddygiad gyrru rhai pobl yn arwain at fwy o ddamweiniau (e.e. goryrru, meddiannu lonydd, gyrwyr heb drwydded).

Datblygu Cynaliadwy

15. Mae diffyg dewisiadau trafndiaeth integredig cynaliadwy ar gyfer defnyddwyr ffordd presennol.
16. Mae sŵn traffig o'r draffordd ac ansawdd yr aer yn broblem i drigolion lleol mewn rhai ardaloedd.
17. Mae'r rhwydwaith trafndiaeth presennol yn rhwystr i dwf economaidd, ac mae'n effeithio'n niweidiol ar yr economi bresennol.

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GOALS OF THE M4 CEM PROGRAMME

In response to identifying the problems listed above, Welsh Government with the help of others identifies the following Goals, which the M4 Corridor Enhancement Measures Programme should aim to achieve in order to ease the flow in the M4 Corridor between Magor and Castleton:

When the M4 CEM Programme is concluded we will benefit from:

1. Safer, easier and more reliable travel east-west in South Wales.
2. Improved transport connections within Wales and to England, the Republic of Ireland and the rest of Europe on all modes on the international transport network.
3. More effective and integrated use of alternatives to the M4, including other parts of the transport network and other modes of transport for local and strategic journeys around Newport.
4. Best possible use of the existing M4, local road network and other transport networks.
5. More reliable journey times along the M4 Corridor.
6. Increased level of choice for all people making journeys within the transport Corridor by all modes between Magor and Castleton, commensurate with demand for alternatives.
7. Improved safety on the M4 Corridor between Magor and Castleton.
8. Improved air quality in areas next to the M4 around Newport.
9. Reduced disturbance to people from high noise levels, from all transport modes and traffic within the M4 Corridor.
10. Reduced greenhouse gas emissions per vehicle and/or person kilometre.
11. Improved travel experience into South Wales along the M4 Corridor.
12. An M4 attractive for strategic journeys that discourages local traffic use.
13. Improved traffic management in and around Newport on the M4 Corridor.
14. Easier access to local key services and residential and commercial centres.
15. A cultural shift in travel behaviour towards more sustainable choices.

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NODAU'R RHAGLEN M4 CEM

Mewn ymateb i nodi'r problemau a restrwyd uchod, mae Llywodraeth Cymru, gyda chymorth eraill, yn enwi'r Nodau canlynol y dylai Rhaglen Mesurau Gwella Coridor yr M4 geisio'u cyflawni er mwyn lleddfu'r llif ar Goridor yr M4 rhwng Magwyr a Chas-bach:

Pan fydd y Rhaglen M4 CEM ar ben, byddwn yn elwa o:

1. Deithio mwy diogel, haws a mwy dibynadwy o'r dwyrain i'r gorllewin yn Ne Cymru.
2. Gwell cysylltiadau trafnidiaeth yng Nghymru ac i Loegr, Gweriniaeth Iwerddon a gweddill Ewrop ar bob dull ar y rhwydwaith trafnidiaeth rhyngwladol.
3. Defnydd mwy effeithiol ac integredig o ddewisiadau amgen i'r M4, gan gynnwys rhannau eraill o'r rhwydwaith trafnidiaeth a dulliau teithio eraill ar gyfer siwrneiau lleol a strategol o amgylch Casnewydd.
4. Gwneud y defnydd gorau posibl o'r M4 bresennol, y rhwydwaith ffyrdd lleol a rhwydweithiau trafnidiaeth eraill.
5. Amserau siwrneiau mwy dibynadwy ar hyd Coridor yr M4.
6. Cynyddu lefel y dewis i bawb sy'n teithio ar hyd y Coridor trafnidiaeth gan ddefnyddio pob dull rhwng Magwyr a Chas-bach, yn gymesur â'r galw am ddewisiadau amgen.
7. Gwell diogelwch ar Goridor yr M4 rhwng Magwyr a Chas-bach.
8. Gwell ansawdd aer mewn ardaloedd nesaf at yr M4 o amgylch Casnewydd.
9. Llai o aflonyddu ar bobl yn sgil lefelau sŵn uchel, o'r holl ddulliau teithio a thraffig ar Goridor yr M4.
10. Llai o allyriadau nwyon tŷ gwydr fesul cilometrau cerbyd a/neu bobl.
11. Profiad teithio gwell i mewn i Dde Cymru ar hyd Coridor yr M4.
12. M4 sy'n ddeniadol ar gyfer siwrneiau strategol sy'n annog peidio â'i defnyddio gan draffig lleol.
13. Gwell rheolaeth ar draffig yng Nghasnewydd a'r cylch ar Goridor yr M4.
14. Mynediad haws at wasanaethau allweddol lleol a chanolfannau preswyl a masnachol.
15. Newid diwylliannol mewn ymddygiad teithio tuag at ddewisiadau mwy cynaliadwy.

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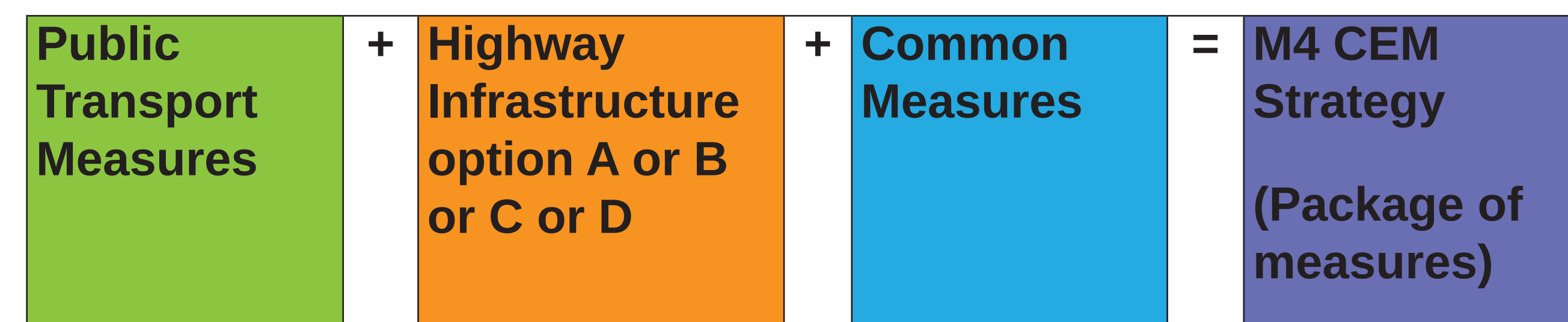
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DEVELOPING STRATEGIC APPROACHES TO ACHIEVING THE M4 CEM GOALS

Having established the problems and the need to tackle them, the Welsh Government has involved others in exploring a very wide range of possible ways of solving these problems and of delivering the goals of the M4 CEM Strategy. A long list of possible solutions has been explored.

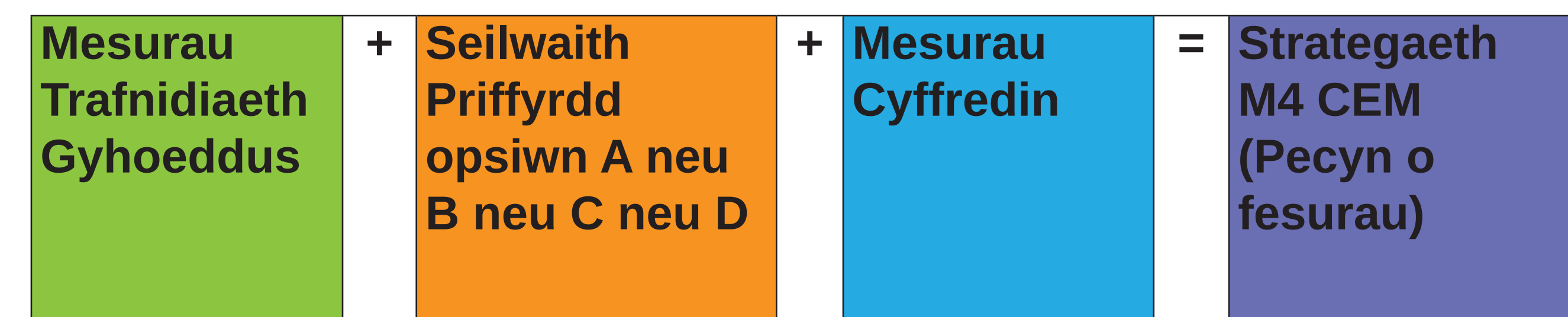
No single solution delivers all the Goals, but through this methodology, measures that contribute towards a combination of compatible options, or 'Packages', have been identified. The Packages combine public transport, highway and other travel solutions. The approach the Welsh Government may take is summarised below:



DATBLYGU DULLIAU STRATEGOL O GYFLAWNI NODAU M4 CEM

Ar ôl pennu'r problemau a'r angen i fynd i'r afael â hwy, mae Llywodraeth Cymru wedi cynnwys pobl eraill wrth fynd ati i archwilio ystod eang iawn o ffyrdd posibl o ddatrys y problemau hyn o gyflawni nodau'r Strategaeth M4 CEM. Mae rhestr hir o atebion posibl wedi'u harchwilio.

Nid yw'r un ateb unigol yn cyflawni pob un o'r Nodau, ond drwy'r fethodoleg hon, mae mesurau wedi'u nodi sy'n cyfrannu at gyfuniad o ddewisiadau cydnaws, neu 'Becynnau'. Mae'r Pecynnau yn cyfuno trafnidiaeth gyhoeddus, priffyrdd ac atebion teithio eraill. Mae'r ymagwedd y gall Llywodraeth Cymru ei mabwysiadu wedi'i chrynhai isod:



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PUBLIC TRANSPORT MEASURES

Studies show that new or improved public transport services are likely to have only minimal impact with respect to reducing traffic on the M4. Generally, investment in public transport measures is more likely to be aimed at achieving wider benefits than relieving motorway traffic. These should encourage modal shift and reduce the reliance on the private vehicle in the Newport area, by increasing choice. They could specifically target journeys in the M4 corridor between Magor and Castleton.

For the purpose of this Consultation, an indicative programme of additional investment in improved public transport measures around Cardiff/Newport is considered. It is important to note that this indicative programme is outside current commitments and planned developments. It includes bus, rail and modal interchange improvements, such as new stations and park and ride facilities. To deliver these, the estimated capital cost is approximately £300m and ongoing subsidy costs totalling some £200m - £300m over a sixty year period.

These include:

- Additional mainline train services between Swansea, Cardiff, Newport and Bristol
- Additional train services on local routes;
- More stations with park and ride facilities;
- More bus/train connecting services;
- Additional express bus/coach services between Cardiff, Newport and Bristol;
- Additional local bus services around and across Newport

A review of this indicative public transport investment package suggests that it could reduce traffic on the M4 around Newport by less than 3%. However, for the Newport area, it could also produce a significant mode share increase in use of public transport from 7% to approximately 11%. This level of modal shift, while significant, means that the investment in public transport considered here could not alone achieve the goals of the M4 CEM Programme.

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MESURAU TRAFNIDIAETH GYHOEDDUS

Mae astudiaethau'n dangos ei bod yn debygol mai ychydig o effaith y byddai gwelliannau i wasanaethau trafndiaeth gyhoeddus yn eu cael ar leihau traffig ar yr M4. Yn gyffredinol, mae buddsoddi mewn mesurau trafndiaeth gyhoeddus yn fwy tebygol o anelu at gyflawni buddion ehangach na lleddfu traffig ar y draffordd. Dylai'r rhain geisio annog newid moddol a lleihau'r ddibyniaeth ar gerbydau preifat yn ardal Casnewydd trwy gynnig mwy o ddewis. Gallent dargedu siwrneiau yng nghoridor yr M4 rhwng Magwyr a Chas-bach yn benodol.

At ddiben yr Ymgynghoriad hwn, mae rhaglen ddangosol o fuddsoddi ychwanegol mewn mesurau i wella trafndiaeth gyhoeddus o amgylch Caerdydd/Casnewydd yn cael ei hystyried. Mae'n bwysig nodi bod y rhaglen ddangosol hon y tu allan i ymrwymadau presennol a datblygiadau sydd wedi'u cynllunio. Mae'n cynnwys gwelliannau i wasanaethau bws, trên a chyfnewidfa aml-foddol, fel gorsafoedd newydd a chyfleusterau parcio a theithio. Amcamgyfrifir fod y gost cyfalaf o gwmpas £300m gyda chostau cymhorthdal o £200m - £300m dros gyfnod o drigain mlynedd.

Mae'r rhain yn cynnwys:

- Gwasanaethau trên prif linell ychwanegol rhwng Abertawe, Caerdydd, Casnewydd a Bryste;
- Gwasanaethau trên ychwanegol ar lwybrau lleol;
- Mwy o orsafoedd gyda chyfleusterau parcio a theithio;
- Mwy o wasanaethau yn cysylltu bysys/trenau;
- Gwasanaethau bysys/coetsys cyflym ychwanegol rhwng Caerdydd, Casnewydd a Bryste;
- Gwasanaethau bws lleol ychwanegol o amgylch ac ar draws Casnewydd.

Mae adolygiad o'r pecyn buddsoddi dangosol hwn ar gyfer trafndiaeth gyhoeddus yn awgrymu y gallai arwain at ostyngiad o lai na 3% yn y traffig ar yr M4 o amgylch Casnewydd. Fodd bynnag, ar gyfer ardal Casnewydd, gallai gynyddu'r defnydd o drafnidiaeth gyhoeddus o 7% i ryw 11%. Golyga'r lefel hon mewn newid moddol, er ei fod yn sylweddol, na all y buddsodiad mewn trafndiaeth gyhoeddus a ystyrir yma gyflawni amcanion Rhaglen M4 CEM ar ei ben ei hun.

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HIGHWAY INFRASTRUCTURE MEASURES

Four highway infrastructure measures are considered here which aim to increase highway capacity and improve resilience and safety within the M4 Corridor between Magor and Castleton. It is important to note that these indicative Highway Options are outside current commitments included in the prioritised National Transport Plan.

Highway Option A: Additional high quality road to the south of Newport

Option A would involve the construction of an additional high quality road to the south of Newport, delivered alongside other traffic management and smarter choice measures (see Common Measures). The route the road would take is indicated in red on the diagram. The additional road would provide significant increased capacity in the highway network around Newport. It would also relieve traffic on the existing M4 motorway by offering an alternative route for longer distance journeys, especially those using the Severn Crossings, thereby improving the resilience of the highways network. The additional road, for the purposes of this consultation, has been appraised as a dual-carriageway, which could cost approximately £830m. A route has been planned to the south of Newport that aims to minimise negative impacts on local communities and the environment, whilst seeking to support economic development in South East Wales. Unlike the M4 relief road, this road could be delivered in phases, both to meet (and respond to) demand and improve affordability.

MESURAU SEILWAITH PRIFFYRDD

Mae pedwar o fesurau seilwaith priffyrdd yn cael eu hystyried yma, ac maent yn anelu i gynyddu capasiti priffyrdd a gwella cadernid a diogelwch ar Goridor yr M4 rhwng Magwyr a Chas-bach. Mae'n bwysig nodi fod y mesurau seilwaith priffyrdd yma y tu allan i'r ymrwymadau presennol sydd wedi eu cynnwys yn y Cynllun Trafnidiaeth Cenedlaethol.

Opsiwn Priffyrdd A: Ffordd ychwanegol o ansawdd uchel i'r de o Gasnewydd

Byddai Opsiwn A yn golygu adeiladu ffordd ychwanegol o ansawdd uchel i'r de o Gasnewydd, yn cael eu darparu ochr yn ochr â mesurau eraill i reoli traffig a mesurau dewisiadau doethach (gweler Mesurau Cyffredin). Mae'r llwybr y byddai'r ffordd yn ei ddilyn wedi'i ddangos yn goch ar y diagram. Byddai'r ffordd ychwanegol yn cynyddu capasiti'r rhwydwaith priffyrdd o amgylch Casnewydd yn sylweddol. Yn ogystal â hyn, byddai'n lleihau traffig ar draffordd bresennol yr M4 trwy gynnig llwybr amgen ar gyfer siwneiau teithio pellach, yn arbennig y rhai sy'n defnyddio Pontydd Hafren, ac o ganlyniad yn gwella cadernid y rhydwadwaith. Mae'r ffordd ychwanegol, at ddibenion yr ymgynghoriad hwn, wedi'i harfarnu fel ffordd ddeuol, a allai gostio oddeutu £830m. Mae llwybr wedi'i gynllunio i'r de o Gasnewydd sy'n ceisio lleihau'r effeithiau negyddol ar gymunedau lleol a'r amgylchedd, tra'n ceisio cefnogi datblygiad economaidd yn Ne Ddwyrain Cymru. Yn wahanol i ffordd liniaru'r M4, gellid cyflwyno'r ffordd hon mewn camau, er mwyn ateb y galw (ac ymateb i'r galw) a gwella fforddiadwyedd.

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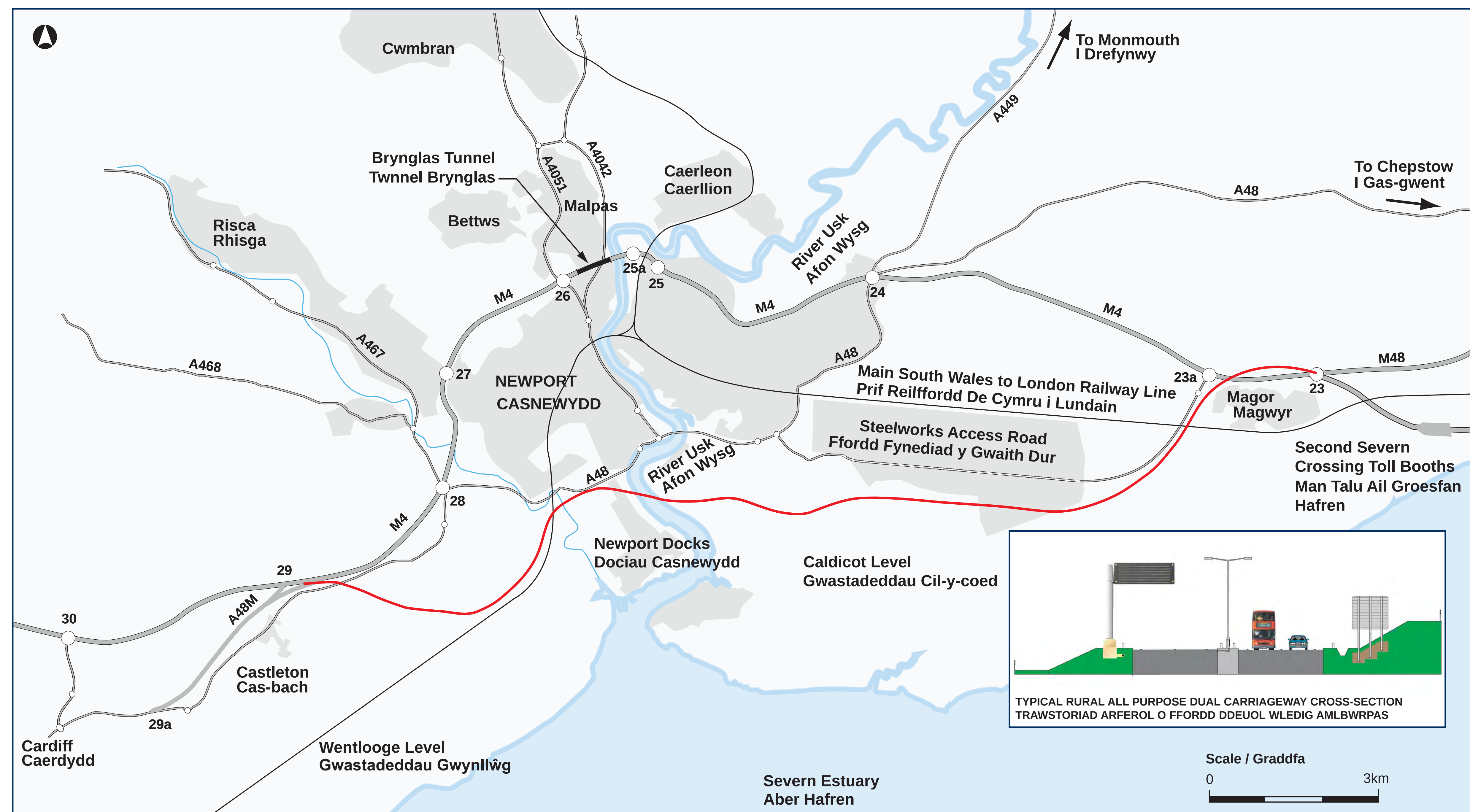
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HIGHWAY OPTION A OPSIWN PRIFFYRDD A



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HIGHWAY INFRASTRUCTURE MEASURES

Highway Option B: At grade junction improvements to the A48 Newport Southern Distributor Road (SDR)

Option B would involve a series of at-grade junction improvements to the Newport A48 Southern Distributor Road (SDR) in addition to other traffic management and smarter choice measures (see Common Measures). An “at-grade improvement” to a junction is made at the same level as the main road. For example, improvements to roundabouts are at grade; adding flyovers and underpasses are not at-grade improvements.

Traffic flows on the SDR are currently lower than were predicted prior to opening. In part, this is due to the number of roundabouts disrupting mainline flows. The roundabouts tend to disrupt main carriageway traffic flows by giving priority to circulating traffic. More efficient control of the entry of traffic from minor routes would reduce this disruption. The location of proposed junction improvements are shown in red on the diagram below. The SDR would be a more attractive alternative east-west traffic route if the main carriageway flows were given greater priority by signal control at all junctions. However, the prioritisation of east-west movements along the SDR could potentially cause delays on the local road network.

At-grade junction improvements would also aim to improve resilience along the highway network at times of incident or delay on the M4. Traffic light signal controls could help the through flow of traffic along the SDR, whilst other highway measures (see Common Measures) would aim to help the efficient movement of people and freight in South East Wales. At-grade junction improvements could be delivered in phases with a total cost estimated at approximately £45m.

MESURAU SEILWAITH PRIFFYRDD

Opsiwn Priffyrdd B: Gwelliannau cyffordd un-lefel i Ffordd Ddosbarthu Ddeheuol (SDR) yr A48 Casnewydd

OByddai Opsiwn B yn cynnwys cyfres o welliannau cyffordd un-lefel i Ffordd Ddosbarthu Ddeheuol (SDR) yr A48 Casnewydd yn ychwanegol at fesurau rheoli traffig a mesurau dewisiadau doethach eraill (gweler y Mesurau Cyffredin). Gwneir “gwelliant un-lefel” i gyffordd ar yr un lefel â'r brif ffordd. Er enghraifft, mae gwelliannau i gylchfannau ar yr un lefel; nid yw ychwanegu trosffyrdd a thanffyrdd yn welliannau un-lefel.

Ar hyn o bryd mae llifoedd traffig ar yr SDR yn is nag a ragwelwyd cyn ei hagog. Yn rhannol, y rheswm am hyn yw'r nifer o gylchfannau sy'n torri ar lifoedd y brif linell. Mae'r cylchfannau yn tueddu tarfu ar lifoedd traffig y brif ffordd drwy roi blaenoriaeth i draffig sy'n cylchdroi. Byddai rheoli mynediad traffig o is lwybrau yn fwy effeithlon yn lleihau'r tarfu hwn. Dangosir lleoliad gwelliannau cyffordd arfaethedig yn goch ar y diagram isod. Byddai'r SDR yn llwybr amgen mwy deniadol i draffig sy'n teithio o'r dwyrain i'r gorllewin pe bai llifoedd y brif ffordd yn cael mwy o flaenoriaeth drwy reoli signalau wrth bob cyffordd. Fodd bynnag, fe allai rhoi blaenoriaeth i symudiadau o'r dwyrain i'r gorllewin ar hyd yr SDR achosi oedi posibl ar y rhwydwaith ffyrdd lleol.

Byddai gwelliannau cyffordd un-lefel hefyd yn anelu i wella cadernid ar hyd y rhwydwaith priffyrdd ar adegau pan fo digwyddiadau neu oedi ar yr M4. Gallai rheolaethau signalau goleuadau traffig helpu traffig i lifo drwodd ar hyd yr SDR, a byddai mesurau priffyrdd eraill (gweler y Mesurau Cyffredin) hefyd yn anelu i helpu symud pobl a nwyddau'n effeithlon yn Ne Ddwyrain Cymru. Gellir gwneud gwelliannau cyffordd un-lefel mewn camau, ac amcangyfrifir mai cyfanswm y gost fyddai oddeutu £45m.

M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

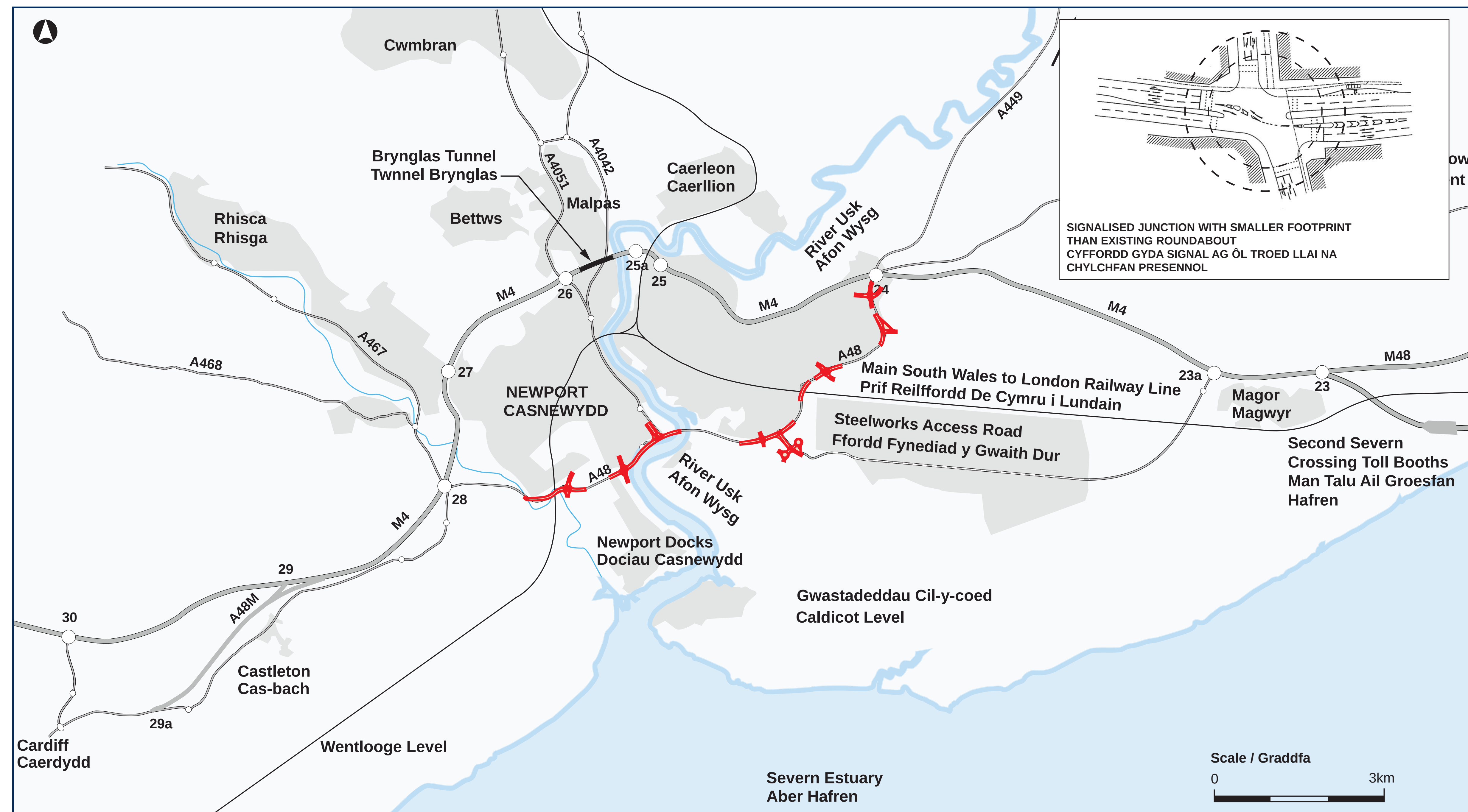
MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM) LLEDDFU'R LLIF YMGYNHORIAD

HIGHWAY OPTION B OPSIWN PRIFFYRDD B



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M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM) LLEDDFU'R LLIF YMGYNHORIAD



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HIGHWAY INFRASTRUCTURE MEASURES

Highway Option C: Grade separated junction improvements to the A48 SDR

Option C would involve the grade separation of some junctions and partial or full closure of other junctions on the Newport A48 Southern Distributor Road (SDR) in addition to other traffic management and smarter choice measures (see Common Measures). Grade separation of a junction involves aligning a junction at different heights (e.g. development of a flyover), so that a junction will not disrupt the traffic flow on routes when they cross. Some demolition of existing properties is likely to be necessary to accommodate grade separation at some junctions.

Grade separated junctions would aim to provide free flowing traffic movements allowing for the efficient movement of people and freight along the SDR, as an alternative route to the M4. See the proposed changes shown in red on the following diagram. Grade separation would also reduce delays for traffic wanting to cross the SDR. The delivery of grade separated junctions could be delivered in phases to assist affordability. This scheme is estimated to cost approximately £300m.

MESURAU SEILWAITH PRIFFYRDD

Opsiwn Priffyrdd C: Gwelliannau cyffordd aml-lefel i SDR yr A48 Casnewydd

Byddai Opsiwn C yn golygu gwneud rhai cyffyrdd yn rhai aml-lefel, a chau cyffyrdd eraill yn rhannol neu'n gyfan gwbl ar Ffordd Ddosbarthu Ddeheuol (SDR) yr A48 Casnewydd, yn ychwanegol at fesurau rheoli traffig a mesurau dewisiadau doethach eraill (gweler y Mesurau Cyffredin). Mae gwneud cyffordd yn un aml-lefel yn golygu alinio cyffordd ar uchderau gwahanol (e.e. datblygu trosffordd), fel na fydd cyffordd yn tarfu ar y llif traffig ar lwybrau pan fyddant yn croesi. Mae'n debygol y bydd angen dymchwel rhai eiddo presennol er mwyn galluogi gwneud rhai cyffyrdd yn rhai aml-lefel.

Byddai cyffyrdd aml-lefel yn ceisio darparu symudiadau traffig sy'n llifo'n hwylus, gan alluogi pobl a nwyddau symud yn effeithlon ar hyd yr SDR, fel dewis arall yn lle'r M4. Gweler y newidiadau arfaethedig yn goch ar y diagram canlynol. Byddai gwneud cyffyrdd yn rhai aml-lefel hefyd yn lleihau oedi i draffig sydd am groesi'r SDR. Gellid mynd ati mewn camau i wneud y cyffyrdd yn rhai aml-lefel er mwyn cynorthwyo fforddiadwyedd. Amcangyfrifir bydd cost y cynllun hwn o gwmpas £300m.

M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

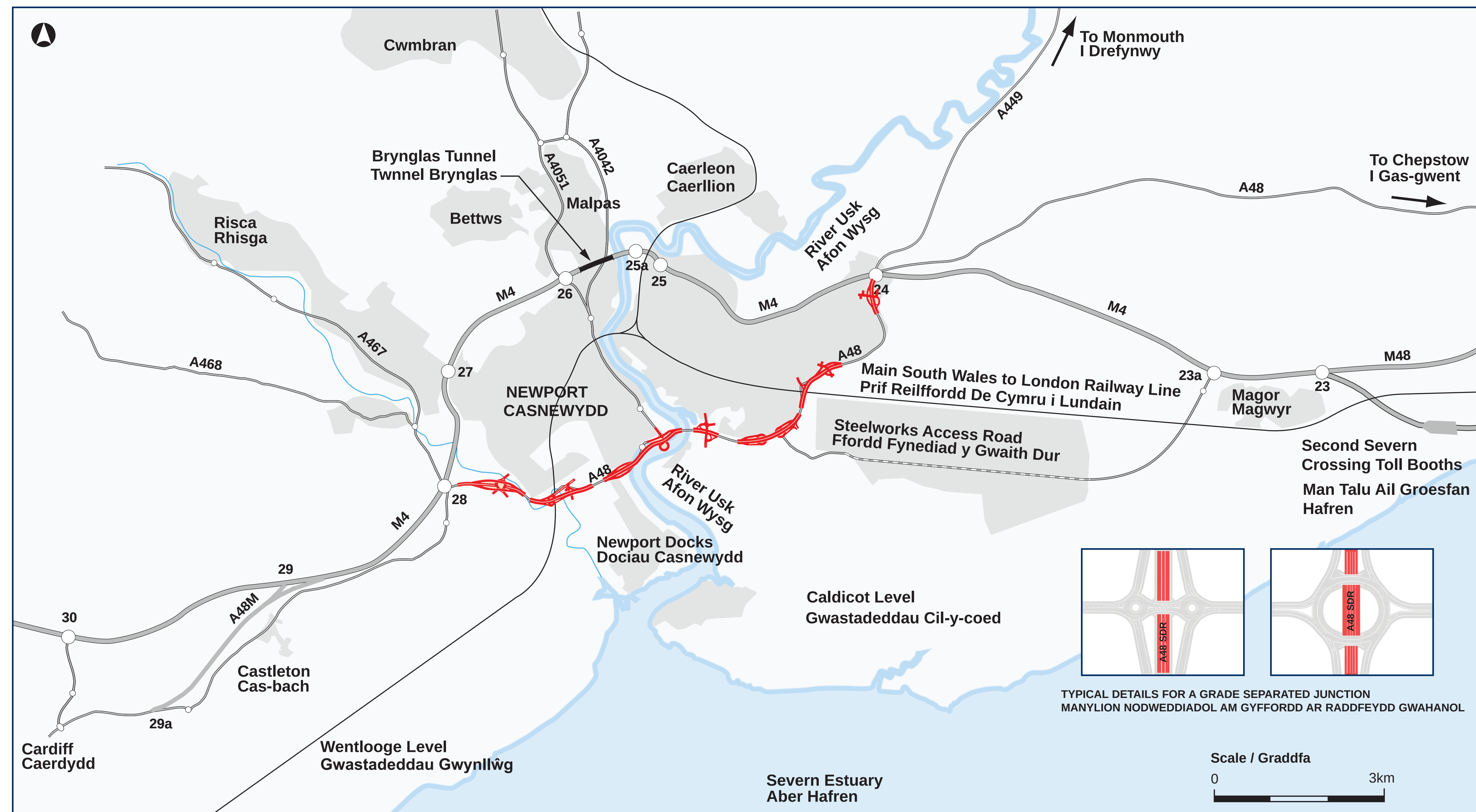
MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM) LLEDDFU'R LLIF YMGYNHORIAD

HIGHWAY OPTION C OPSIWN PRIFFYRDD C



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M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM) LLEDDFU'R LLIF YMGYNHORIAD



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HIGHWAY INFRASTRUCTURE MEASURES

Highway Option D: Online Widening of the M4 between Junctions 24 and 29, including an additional tunnel at Brynglas

Option D would involve a programme of major on-line widening of the existing M4 Corridor between Junctions 24 and 29 to dual 4 lane motorway standard with hard shoulders, as shown in red on the following diagram. This would see four lanes of traffic in each direction along this section of the M4, including an additional tunnel at Brynglas. Some demolition of existing properties is likely to be necessary to accommodate the online widening and additional tunnel. As part of the works Junction 25 would be closed to motorway access whilst the east facing slips of Junction 26 would be removed in order to prioritise the M4 for long distance journeys. Online widening would also be supported by other traffic management and smarter choice measures. Works could be phased in order to improve affordability and is estimated to cost approximately £550m.

MESURAU SEILWAITH PRIFFYRDD

Opsiwn Priffyrdd D: Lledu ar-lein i 4 lôn ddeuol ar yr M4 rhwng Cyffyrdd 24 a 29, gan gynnwys twnnel ychwanegol ym Mrynglas

Byddai Opsiwn D yn cynnwys rhaglen o brif waith lledu ar-lein ar Goridor yr M4 presennol rhwng Cyffyrdd 24 a 29 i safon traffordd 4 lôn ddeuol gyda lleiniau caled, fel a ddangosir yn goch ar y diagram canlynol. Byddai hyn yn gweld pedair lôn o draffig i bob cyfeiriad ar hyd y rhan hon o'r M4, gan gynnwys twnnel ychwanegol ym Mrynglas. Mae'n debygol y bydd angen dymchwel rhai eiddo presennol er mwyn galluogi lledu ar-lein a thwnnel ychwanegol. Fel rhan o'r gwaith, byddai Cyffordd 25 yn cael ei chau i fynediad i'r briffordd tra byddai slipffyrdd sy'n wynebu i'r dwyrain o Gyffordd 26 yn cael eu diddymu er mwyn blaenoriaethu'r M4 ar gyfer siwrneiau teithio pell. Byddai lledu ar-lein hefyd yn cael ei gefnogi gan fesurau rheoli traffig a mesurau dewisiadau doethach eraill. Gellid gwneud y gwaith fesul cam er mwyn gwella fforddiadwyedd, ac amcangyfrifir y bydd y gost oddeutu £550m.

M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

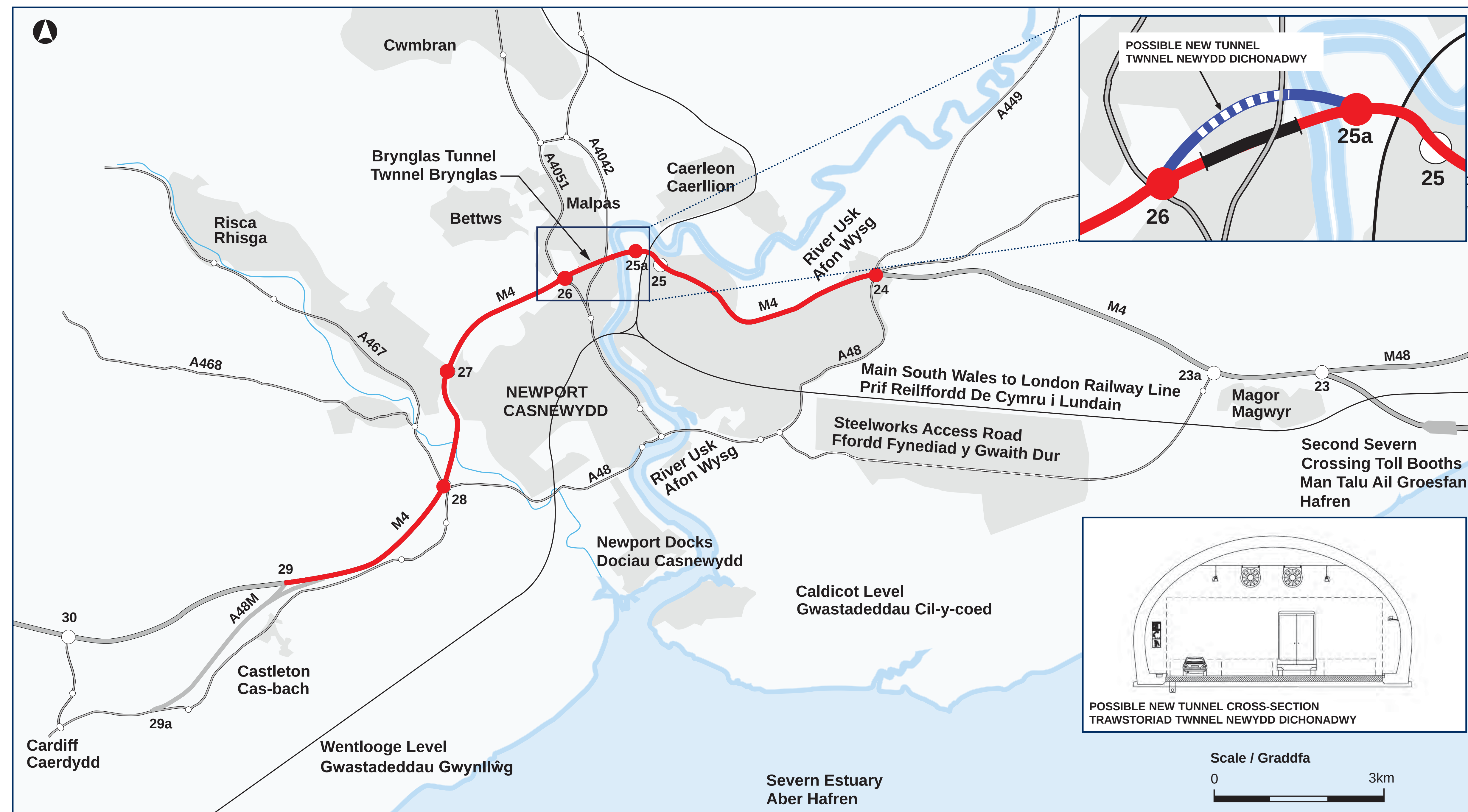
MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM) LLEDDFU'R LLIF YMGYNHORIAD

HIGHWAY OPTION D OPSIWN PRIFFYRDD D



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M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM)
EASING THE FLOW CONSULTATION

MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM)
LLEDDFU'R LLIF YMGYNHORIAD

COMMON MEASURES

These are additional measures being considered to support the strategic public transport and highway capacity measures in addressing travel related problems within the M4 Corridor between Magor and Castleton. They comprise a mix of highway infrastructure, demand management, alternative modes and smarter sustainable choices.

Common measure	Description
Promote A465 Heads of the Valleys road as alternative route	Promoting the A465 Heads of Valleys road as an alternative route to the M4 for long distance east-west travel.
J23a improvements	Adding capacity to J23a by widening roundabout entry and possibly introducing traffic signals.
Widening of west facing slip roads at J26	Adding an additional lane to the west facing slips at J26.
J27 safety improvements	Reconfigure slip roads into a conventional diamond shape.
J28 improvements (in addition to baseline)	A connection dedicated to providing free-flow eastbound traffic from the M4 to Forge Road.
Manage speed of traffic	The development of a revised speed management strategy for the study area.
Improve traffic monitoring	Introducing and improving intelligent transport systems to assist traffic monitoring and incident management.
Promote use of electric vehicles	Long term phased introduction of Electric Vehicle Infrastructure in Wales.
Improve aesthetics along the M4 Corridor	Natural and physical environment enhancements along M4.
Noise pollution reduction process	Introducing noise reducing technology.

Common measure	Description
Improve incident management	Utilising new technologies to tackle traffic congestion.
Better event management	Preparation and implementation of event management plans.
Encourage use of alternative routes to M4	Actively promoting use of alternative east-west routes to M4.
Improve road management during times of poor weather	Preparation and implementation of revised weather management plans.
Manage HGV traffic	Preparation and implementation of a HGV management plan.
Use of ramp metering	Controlling access to M4 through use of traffic signals on slip roads.
Provide better transport mode integration	Taking steps to improve the integration between different sustainable transport modes.
Provide cycle friendly infrastructure	Promoting the use of cycling as an alternative to the car for journeys of up to three miles.
Provide walking friendly infrastructure	Promote the use of walking as a primary modal choice for car users undertaking journeys of up to two miles.

M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM)
EASING THE FLOW CONSULTATION

MESURAU GWELLA CORIDOR YR M4 MAGWYR I GAS-BACH (M4 CEM)
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MESURAU CYFFREDIN

Mesurau ychwanegol yw'r rhain sy'n cael eu hystyried i gefnogi mesurau trafnidiaeth gyhoeddus strategol a chapasiti priffyrdd i fynd i'r afael â phroblemau'n gysylltiedig â theithio ar Goridor yr M4 rhwng Magwyr a Chas-bach. Maent yn cynnwys cymysgedd o seilwaith priffyrdd, rheoli'r galw, moddau amgen a dewisiadau cynaliadwy doethach.

Mesur cyffredin	Disgrifiad
Hyrwyddo'r A465 Ffordd Blaenau'r Cymoedd fel llwybr amgen yn lle'r M4 ar gyfer teithio pell o'r dwyrain i'r gorllewin.	
Gwelliannau i Gyffordd 23a	Ychwanegu capasiti i Gyffordd J23a drwy ledw mynedfa'r gylchfan a chyflwyno signalau traffig o bosibl.
Lledu slipffyrdd sy'n wynebu'r gorllewin wrth Gyffordd 26	Ychwanegu lôn ychwanegol i'r slipffyrdd sy'n wynebu'r gorllewin wrth Gyffordd 26
Gwelliannau diogelwch wrth Gyffordd 27	Aildrefnu slipffyrdd yn siâp diemwnt confensiynol.
Gwelliannau i Gyffordd 28 (yn ychwanegol at y rhai sylfaenol)	Cysylltiad pwrpasol i ddarparu traffig yn llifo'n hwylus tua'r dwyrain o'r M4 i Forge Road.
Rheoli cyflymder traffig	Datblygu strategaeth ddiwygiedig i reoli cyflymder ar gyfer ardal yr astudiaeth
Gwella'r broses o fonitro traffig	Cyflwyno a gwella systemau trafnidiaeth deallus i gynorthwyo â monitro traffig a rheoli digwyddiadau.
Hyrwyddo'r defnydd o gerbydau trydan	Cyflwyno Seilwaith Cerbydau Trydan yng Nghymru fesul cam dros yr hirdymor.
Gwella estheteg ar hyd Coridor yr M4	Gwelliannau i'r amgylchedd naturiol a ffisegol ar hyd yr M4.
Proses lleihau llygredd sŵn	Cyflwyno technoleg i leihau sŵn.

Mesur cyffredin	Disgrifiad
Gwella rheolaeth digwyddiadau	Defnyddio technoleg newydd er mwyn lleihau tagfeydd traffig
Gwella rheolaeth digwyddiadau	Paratoi a gweithredu cynlluniau ar gyfer rheoli digwyddiadau
Annog teithwyr i ddefnyddio llwybrau eraill yn hytrach na'r M4	Hyrwyddo'r defnydd o lwybrau eraill yn hytrach na'r M4 ar gyfer teithio o'r dwyrain i'r gorllewin
Gwella rheolaeth y ffordd pan fo'r tywydd yn wael	Paratoi a gweithredu cynlluniau diwygiedig ar gyfer rheolaeth y ffordd pan fo'r tywydd yn wael
Rheoli cerbydau nwyddau trwm	Paratoi a gweithredu cynllun ar gyfer rheolaeth cerbydau nwyddau trwm
Mesurau ramp	Rheoli'r traffig sy'n ymuno â'r M4 trwy ddefnyddio signalau ar y slipffordd
Gwella integreiddiad rhwng gwahanol ddulliau o drafndiaieth	Cymryd camau i wella'r integreiddiad rhwng gwahanol ddulliau o drafndiaieth gynaliadwy
Darparu seilwaith sy'n addas ar gyfer beicwyr	Hyrwyddo'r defnydd o feicio yn hytrach na defnyddio'r car ar gyfer teithiau hyd at dair milltir
Darparu seilwaith sy'n addas ar gyfer cerddwyr	Hyrwyddo'r defnydd o gerdded yn hytrach na defnyddio'r car ar gyfer teithiau hyd at ddwy filltir

M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

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HOW TO RESPOND AND FURTHER INFORMATION

Please respond to this Consultation by using the Response Form included in this document. This can be completed by hard copy to the address shown below.

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

- www.wales.gov.uk/Consultations under Transport; or
- www.m4cem.com where you can also find further information about this consultation and the M4 Corridor Enhancement Measures (M4 CEM) Programme.

This Consultation closes on 6 June 2012

Large print versions of this document can be made available on request to m4cem@arup.com.

Contact details

For further information please contact:

m4cem@arup.com or write to:

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NEXT STEPS

Once the formal Consultation period has ended, the Minister will decide which measures should be pursued as the best strategy aimed at addressing problems of capacity, resilience, and safety, and sustainable development on the M4 Corridor between Magor and Castleton in light of all the responses to the Consultation.

All participants in this Consultation process, for whom we have contact details, will be informed of the decision made by the Minister.

An implementation plan will be prepared by the project team once the Minister has made a decision, setting out a programme for delivery of the approved measures. We shall be engaging with local people and other interested parties on specific and detailed elements of this plan in due course. These measures will require further work as they are developed for delivery. As part of the delivery process, measures progressed will be monitored and evaluated so that we can gauge their success.

Thank you for your interest and input in this Consultation.

M4 CORRIDOR ENHANCEMENT MEASURES MAGOR TO CASTLETON (M4 CEM) EASING THE FLOW CONSULTATION

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SUT I YMATEB A MWY O WYBODAETH

Ewch ati i ymateb i'r Ymgynghoriad hwn drwy ddefnyddio'r Ffurflen Ymateb sydd wedi'i chynnwys yn y ddogfen hon. Gellir llenwi hon ar ffurf copi caled i'r cyfeiriad a ddangosir isod.

Fel arall, gallwch ymateb yn electronig drwy'r dolenni hyn ar y wefan:

- www.wales.gov.uk/Consultations o dan Trafnidiaeth; neu
- www.m4cem.com lle gallwch gael mwy o wybodaeth hefyd am yr ymgynghoriad hwn, a Rhaglen Mesurau Gwella Coridor yr M4 (M4 CEM).

Mae'r Ymgynghoriad hwn yn cau ar 16 Mehefin 2012

Gellir trefnu bod fersiynau print bras o'r ddogfen hon ar gael o wneud cais i m4cem@arup.com.

Manylion cyswllt

I gael mwy o wybodaeth, cysylltwch â:

m4cem@arup.com neu ysgrifennwch i:

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CAMAU NESAF

Pan fydd y cyfnod ymgynghori ffurfiol wedi dod i ben, bydd y Gweinidog yn penderfynu pa fesurau a ddylid mynd ar eu trywydd fel y strategaeth orau i geisio mynd i'r afael â phroblemau capasiti, cadernid, a diogelwch, a datblygu cynaliadwy ar Goridor yr M4 rhwng Magwyr a Chas-bach yng ngolau'r holl ymatebion i'r Ymgynghoriad.

Bydd yr holl gyfranogwyr yn y broses ymgynghori hon, y mae gennym fanylion cyswllt ar eu cyfer, yn cael gwybod am y penderfyniad a wneir gan y Gweinidog.

Bydd cynllun gweithredu'n cael ei baratoi gan dîm y prosiect pan fydd y Gweinidog wedi gwneud penderfyniad, yn amlinellu rhaglen ar gyfer cyflawni'r mesurau cymeradwy. Byddwn yn ymgysylltu â phobl leol a phartïon eraill â buddiant ynglŷn ag elfennau penodol ac elfennau manwl y cynllun hwn maes o law. Bydd y mesurau hyn yn gofyn am waith pellach wrth iddynt gael eu datblygu ar gyfer cyflawni. Fel rhan o'r broses gyflawni, bydd mesurau a ddatblygir yn cael eu monitro a'u gwerthuso fel y gallwn fesur eu llwyddiant.

Diolch i chi eto am eich diddordeb a'ch cyfraniad yn yr Ymgynghoriad hwn.

A8 Participation activities

M4 CEM Participation Activities

Stage	Timescale	Activity
Stage 1 <i>This stage centred on engagement to identify travel related problems on the M4 Corridor around Newport</i>	September 2010	Establishment of an Engagement Strategy, Working Group and Steering Group <i>Project team and expert steering group established to develop M4 CEM Programme, Engagement (participation) Strategy and help steer progress</i>
	October 2010	Development of stakeholder database <i>Contact database of relevant organisations and individuals developed. The database is updated to add further contacts declaring an interest in the programme. As of 6 July 2012, there were 1,285 contacts included</i>
	November 2010 – April 2011	Strategic Stakeholder Workshop, Councils Workshop, and four public drop-in exhibitions around Newport <i>Councillors (26 attended event), stakeholders (39 attended event) and public (88 attended event) were asked about the problems, aims and goals of the M4 CEM at a series of exhibitions and workshops. Letters were sent to councils and member services in South Wales to inform them of the engagement process and events. Invites were sent to contacts on the engagement database and a publicity campaign included use of the Welsh Government website, free ads, flyers delivered to community facilities and display of posters around Newport. All views and comments were noted and published in reports including:</i> <i>Stage 1 Engagement Report</i> <i>Strategic Stakeholder Workshop Summary Report</i> <i>Councils Workshop Summary Report</i> <i>Strategic Stakeholder Workshop Transcript Report</i> <i>Councils Workshop Transcript Report</i> <i>Drop-in Exhibitions Report</i>

Stage	Timescale	Activity
Stage 2 <i>This stage focused on looking at possible solutions to transport related problems on the M4 Corridor around Newport</i>	May 2011	Redefining the problems, aims and goals of the M4 CEM <i>Informed by feedback from Stage 1 engagement, the problems, aims and goals of the programme were redefined and fixed</i>
	June 2011	Stakeholder Forum Group established <i>A group of specially selected group of stakeholders representing a breadth of interests from the public, private and third sectors in SE Wales was established to help test ideas and shape the programme leading up to a public consultation on a strategy for improving travel on the M4 Corridor around Newport</i> <i>As of 6 July 2012, there were 122 forum members</i>
		Development of possible solutions to travel related problems associated with travel on and around the M4 between Magor and Castleton <i>Over 100 possible solutions that could be implemented to achieve one or more of the M4 CEM goals were explored, including highway infrastructure, road network management, alternative travel modes and smarter sustainable choice measures. These possible measures were developed, appraised and summarised in an Appraisal Summary Workbook</i>
	July 2011	M4 CEM dedicated website and email <i>The dedicated M4 CEM Consultation website was launched, to provide information, materials and news. The email address m4cem@arup.com was also launched to provide online users with method to send queries and request materials to project staff</i> <i>The website received 6,701 visitors, March to June 2012</i>
		First M4 CEM Newsletter issued <i>Approximately 5,000 copies of the newsletter, setting out the context and early progress of the programme, were emailed/mailed to the contact database, in addition to community facilities, libraries, council offices and post offices around South Wales. The newsletter provided details of the programme website and indicated where people could get more information</i>

Stage	Timescale	Activity
		South Wales Chamber of Commerce event <i>The M4 CEM project team attended the 10th Annual Chamber Exhibition at Cardiff City Stadium, enabling the local business community to find out about the programme and how to get involved in shaping a strategy to improve travel on the M4 Corridor around Newport</i> <i>It hosted 82 exhibitors and an estimated 700 visitors</i>
		First Stakeholder Forum Group Workshop <i>A workshop was held for forum members to examine more than 100 potential schemes that may be part of the strategy for addressing travel related problems on the M4 Corridor, Magor to Castleton. The results of the workshop were published in a First Stakeholder Meeting Report</i> <i>37 forum members attended the first forum workshop</i>
	July – September 2011	Option development and sifting <i>The results of the first stakeholder meeting led to further appraisal and sifting of the possible solutions to begin to identify combinations of measures that could best achieve the goals of the M4 CEM. The options were refined and packaged into groups of measures, with four option ‘Packages’, plus a ‘Do-minimum’ scenario. Each ‘Package’ offered a core scheme, comprising one or more measures, supported by a number of supplementary traffic management, public transport and sustainable travel measures. Each were summarised within dedicated workbooks, including:</i> <i>• Appraisal Handbook</i> <i>• Alternatives Considered Workbook</i> <i>• Do Minimum Workbook</i> <i>• Package 1 Workbook</i> <i>• Package 2 Workbook</i> <i>• Package 3 Workbook</i> <i>• Package 4 Workbook</i> <i>• Traffic Modelling Background Information</i>

Stage	Timescale	Activity
	October 2011	Integrated Impact Assessment Scoping Report <i>A draft Integrated Impact Assessment (IIA) scoping report was prepared, to be issued to the SEA consultation bodies. There would be a need to produce an Environmental Report on the effects of the draft strategy</i>
	November 2011	Second Stakeholder Forum Group Workshop <i>The possible packages of measures were explored and discussed by the stakeholder forum members who provided feedback. The results of the workshop were published in the Second Stakeholder Meeting Report</i> <i>41 forum members attended the second forum workshop</i>
	December 2011	Option development <i>Informed by the results of the second stakeholder forum meeting, further refining of the options was undertaken, with particular attention paid to developing a new approach centred on a series of public transport, highway infrastructure and other 'common' measures (including highway, traffic management, alternative modes and sustainable choice solutions) to form a potential package of measures (strategy)</i>
	January 2011 – March 2012	Public Transport Review <i>In order to respond to universal feedback calling for more information on the potential role of public transport in helping achieve the goals of the M4 CEM, a Public Transport Overview was undertaken and published to support the evidence and options presented within the Consultation Document</i>

Stage	Timescale	Activity
Stage 3 Consultation, open to all, asking participants to comment on a range of options contributing towards a strategy to reduce traffic congestion on the M4 around Newport.	March 2012	Consultation Publicity Strategy <i>A ‘menu’ of promotion options were decided on in terms of options to implement, to include:</i> • Welsh Government press release (March 2012); • Emails to all South Wales councillors and contact database (March-June 2012) • Distribution of a ‘Newsletter 2’ (March-June 2012) • Service station poster campaign, all services between Magor and Swansea (April-May 2012) • Display posters at key locations around Newport (April 2012) • Adverts in Newport Matters, Capital Times, Cardiff and South West Advertiser (March 2012 editions) • Big Screen advertising (Queen St, Cardiff) (March-April 2012) • Bus rear adverts in Newport (March-April 2012) • Undertaking of 3 workshops and 4 exhibition events (March-April 2012) <i>Communications managers within Welsh Government were also involved in agreeing the publicity strategy, and in the best use of making the most of its internal channels of communication</i>
		Second M4 CEM Newsletter <i>Approximately 7,000 copies of ‘Newsletter 2’, encouraging people to respond to the Consultation, were emailed/mailed to a contact database, in addition to community facilities, libraries, council offices and post offices around South Wales. The newsletter provided details of the Consultation and advertised Consultation events</i>
		Consultation launch <i>The Consultation, open to all, launched on 6 March 2012</i> <i>The Consultation Document and Response Form was published in paper copy distributed to Newport libraries and online at www.m4cem.com, www.m4cemconsultation.com and www.wales.gov.uk/consultations</i>

Stage	Timescale	Activity
		<i>Welsh Government wrote to every elected AM and MP within the SWWITCH and SEWTA areas, whilst emails were sent to the contact database and South Wales councillors, also informing them of the Consultation period and providing them with Newsletter 2, which included information about the Consultation and giving dates of Consultation events</i>
		Workshops <i>The M4 CEM project staff presented information, provided consultation materials and facilitated deliberation between participants at the workshop events, held at:</i> • <i>Tredegar House, Newport (13 March 2012)</i> <i>(17 attended)</i> • <i>The Urdd Hall, Cardiff (15 March 2012)</i> <i>(8 attended)</i> • <i>County Hall, Swansea (20 March 2012)</i> <i>(9 attended)</i>
	March – April 2012	Drop-in exhibitions <i>The M4 CEM project staff displayed information boards, offered guidance and provided consultation materials at the following drop-in events around Newport:</i> • <i>J28 Business Group (ONS) (27 March 2012)</i> <i>(approx 400 attended)</i> • <i>Coleg Gwent (28 March 2012)</i> <i>(22 attended)</i> • <i>Ebenezer Baptist Church (29 March 2012)</i> <i>(111 attended)</i> • <i>Brynglas House (13 April 2012)</i> <i>(78 attended)</i> • <i>Newport Centre (17 April 2012)</i> <i>(106 attended)</i>

Stage	Timescale	Activity
	April 2012	Service station flying <i>The M4 CEM project staff provided consultation materials to visitors of the J30 Cardiff Gate service station on 18 April 2012. The aim was to target and encourage people making strategic, long distance journeys, to respond to the Consultation. Copies of Newsletter 2 were left at public seating areas and handed out directly to visitors. Project staff also spoke directly with visitors who were interested in the Consultation, to help explain the purpose of the Consultation and where they could find out more information and respond</i> <i>Approximately 400 visitors were made aware of the Consultation, in varying levels of detail</i>
	May – July 2012	Extended Consultation and Revised Publicity Strategy <i>Feedback received from the Consultation events and responses up to end of April 2012 led Welsh Government to decide to extend the Consultation period by one month, from 6 June to 6 July and revise the publicity strategy accordingly, to include:</i> <i>• Distribution of a flyer advertising Consultation, extended Consultation period and additional Consultation events to 80,000 properties in Newport and suburbs</i> <i>• Radio advertising on Capital Gold (May 2012)</i> <i>• Radio advertising on Real Radio (May-July 2012)</i> <i>• Display of A1 posters at Newport Centre (May 2012)</i> Additional drop-in exhibitions <i>In light of the extended Consultation period, the M4 CEM project staff displayed information boards, offered guidance and provided consultation materials at the following additional drop-in events around Newport:</i> <i>• Brynglas House (11 May 2012) (315 attended)</i> <i>• Ebenezer Baptist Church (15 May 2012) (236 attended)</i> <i>• Newport Centre (17 May 2012) (274 attended)</i>

Stage	Timescale	Activity
	March – June 2012	Presentations <i>M4 CEM project staff have provided presentations to groups that have requested presentations:</i> • <i>South West Wales Integrated Transport Consortium (SWITCH) (23 March 2012)</i> <i>(approx 20 attended)</i> • <i>Campaign for the Protection of Rural Wales (14 April 2012)</i> <i>(approx 30 attended)</i> • <i>Newport Councillors (1 June 2012)</i> <i>(approx 25 attended)</i> • <i>SEWTA (22 June 2012)</i> <i>(35 attended)</i>
	April – May 2012	Public meetings <i>On request, M4 CEM project staff has attended public meetings associated with the M4 CEM Consultation, in order to provide opportunity for Q&A. These have included:</i> • <i>Campaign against additional tunnel, Brynglas House (27 April 2012)</i> <i>(approx 150 attended)</i> • <i>St Julian's community (30 May 2012)</i> <i>(approx 75 attended)</i>
	March – July 2012	Respond to queries <i>Over 200 emails or letters of correspondence relevant to the M4 CEM Consultation were received by the Welsh Government, Arup or Dialogue by Design between March and July 2012. Those requiring response were responded to by the project team within 5 working days when possible. The majority of emails received to m4cem@arup.com included requests for consultation documents, response forms or attached consultation responses.</i>

A9 M4 CEM in the Media

M4 CEM in the Media

Introduction

The M4 CEM Consultation and its possible transport options have attracted media attention throughout the consultation period March to July 2012. Over the consultation period, the M4 CEM and transport in South Wales has featured in local, regional and national media by a range of sources. This section summarises the M4 CEM in the media, including the following sources:

- News articles;
- Web activity;
- Radio;
- Television; and
- Social media, blogs and online forum activity.

News Articles

Throughout the M4 CEM consultation period, a number of news articles have been published both in paper and online, associated with the consultation and travel along the M4 corridor. The predominant media sources for news articles published, include: Wales Online; the South Wales Argus; BBC Cymru Wales and ITV Wales. Many articles have been reposted or linked on other websites and forum areas. The project team has monitored news articles for informal information purposes. Copies of all identified articles have been recorded and are available on request.

Articles have generally addressed the launch of the M4 CEM Consultation and represented views on some of the possible transport options presented within the Consultation Document. In summary, common subjects in the news have included:

- The launch of the M4 CEM Consultation;
- A proposal for additional tunnel(s) at Brynglas;
- Need for the 'M4 relief road';
- Promoting events, workshops and public exhibitions;
- The potential environmental, economic and social impacts of possible options;
- The (un)reliability of data used presented in the Consultation Document;
- Debate surrounding traffic and congestion forecasts;
- Preferences for one or more of the possible options.

Web Activity

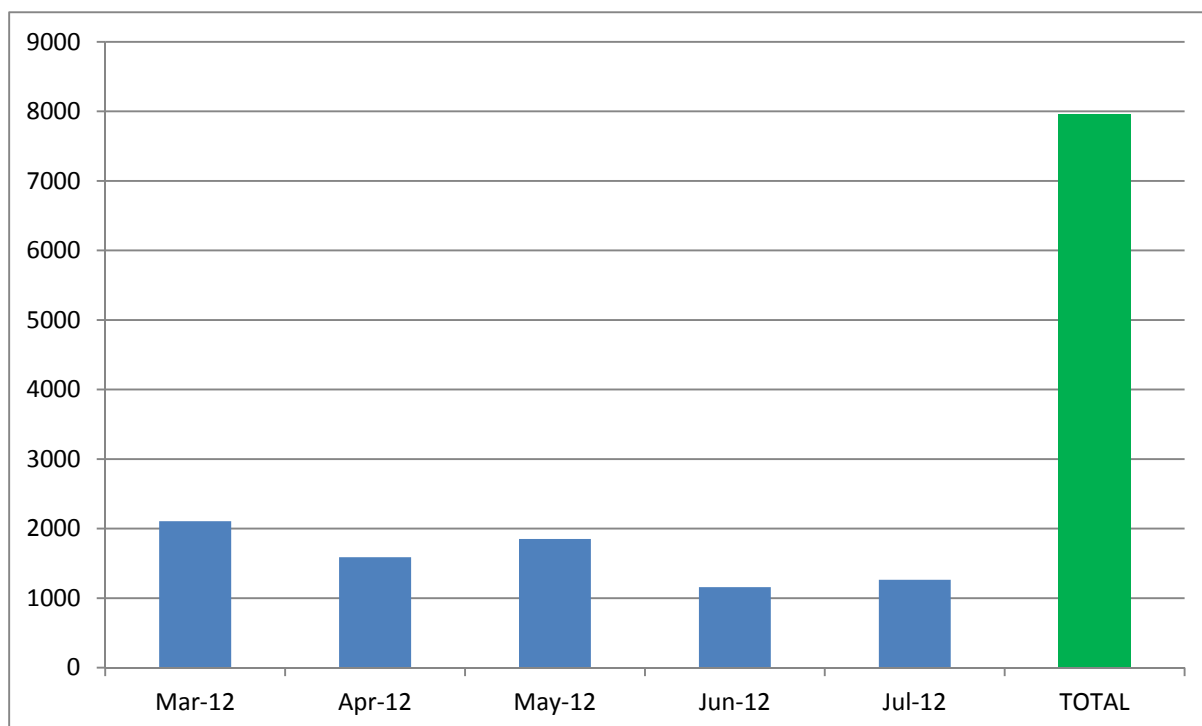
A dedicated engagement website www.m4cem.com was launched in July 2011 to provide an online facility to support the M4 CEM engagement process public consultation, open to all. The website provided a link to the online consultation website www.m4cemconsultation.com and also allowed visitors to view and download all published reports and materials relevant to the engagement and consultation process. The website also posted news articles and advertised associated events.

This www.m4cem.com website is managed by Arup on behalf of the Welsh Government. A separate consultation website www.m4cemconsultation.com facilitated online consultation responses and is managed by Dialogue by Design on behalf of Arup and the Welsh Government.

The m4cem.com website received nearly 8,000 visits during the consultation period.

Figure A below illustrates that visits peaked in March, following the launch of the M4 CEM Consultation, with over 2,100 visits. The number of visits fluctuated in months up to July 2012, averaging around over 1,500 per month.

Figure A – Visits to m4cem.com website



Radio

As part of an M4 CEM Consultation advertising campaign, Real Radio and Gold Radio ran a series of adverts across South Wales between May and July 2012. Gold Radio advertised public exhibitions, whilst Real Radio ran three sets of adverts:

- the first phase advertised exhibitions,
- the second phase advertised the M4 CEM Consultation,
- the third and final phase in the final week of the consultation advertised the end of the consultation period and encouraged the public to respond before the deadline.

Real Radio's advertising package included a 'text mechanic' where listeners were invited to text 'consultation' to an advertised number in order to receive a response with a link to the www.m4cem.com webpage. The text mechanic received 51 texts. Real Radio also operated a 'mini site' on their website www.realradio.co.uk, which provided a brief overview of the M4 CEM Consultation and provided details of how visitors could participate in the consultation.

Television

The M4 CEM Consultation and travel in South East Wales attracted national and regional television coverage at different stages during the consultation period.

BBC Cymru Wales and ITV Wales televised news reports advertising the launch of the M4 CEM Consultation on 6th March, presenting all the options within the Consultation Document and included interviews with Carl Sargeant, Welsh Government Minister for Local Government and Communities; and Graham Morgan from South Wales Chamber of Commerce.

A further televised news report by BBC Cymru Wales on 11th May focussed on the Brynglas Tunnels (relevant to Highway Infrastructure Option D within the Consultation Document). An interview was shown with Newport Cllr Paul Cockerham and a number of residents in the Newport area of Malpas.

Social media, blogs and online forum activity

Facebook

Whilst the Welsh Government does not operate a Facebook page, the project team monitored www.facebook.com for any activity associated with the M4 CEM Consultation or engagement process.

A Brynglas based campaign group 'The Campaign Against Additional Tunnel' (CAAT) operated an active site with over 1,000 users, who expressed a range of opinions in opposition to highway infrastructure Option D. The Facebook group entitled 'Newport oppose £550m plans of new Brynglas Tunnel and demolition of homes' was set up on 18th April and was used by CAAT to promote public meetings, drop in sessions to complete consultation forms and for individuals to share their opinions on transport related issues. The Facebook group also promoted an online petition 'Newport opposes the £550m plans of new Brynglas Tunnel and demolition of homes.' This petition was set up on 14th April and received 164 signatures up to July 2012.

The comments posted on the Facebook site have been recorded for informal information purposes.

Twitter

The Welsh Government, members of the project team and third parties have posted comments on their twitter accounts to promote the launch of the M4 CEM Consultation and its events throughout the consultation period.

Comments on online articles

A large number of comments have been observed by the project team, attributed to a range of online articles. These comments have been monitored and recorded for informal information purposes. Whilst comments cannot be considered as responses to the consultation, they do illustrate a wide range of social, economic and environmental interests.

A10 Full Factual Consultation Report

M4 Corridor Enhancement Measures Magor to Castleton (M4 CEM)

Easing the Flow

Consultation Summary Report

Report to: Welsh Government

October 2012

Prepared by Dialogue by Design

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List of Abbreviations

Consultation terms

M4 CEM M4 Corridor Enhancement Measures

Consulting organisations

CEA Catrin Ellis Associates

DbyD Dialogue by Design

Stakeholder organisations

ABP Association of British Ports

CALM Campaign Against the Levels Motorway

CPRW Campaign for the Protection of Rural Wales

Sewta South East Wales Transport Alliance

SWWITCH South West Wales Integrated Transport Consortium

FSB Federation of Small Businesses

FTA Freight Transport Association

RSPB Royal Society for the Protection of Birds

1 Introduction

This report is produced by Dialogue by Design (DbyD) in order to support the Welsh Government in their objective of preparing their approach to solving transport related problems affecting the M4 Corridor around Newport in South Wales.

1.1 Purpose of this report

The M4 Corridor Enhancement Measures (CEM) Programme is a strategic project to create a package of measures to deal with resilience, safety and reliability issues on the M4 around Newport.

The Welsh Government and their consultants Arup commissioned Catrin Ellis Associates (CEA) to design a public engagement programme on the M4 CEM Programme. Dialogue by Design, a specialist independent consultation practice, has been commissioned to manage and report on an open public consultation held between March and July 2012.

Dialogue by Design assisted Catrin Ellis Associates to advise the Welsh Government on the design of the consultation questions and develop and host a consultation website that invited interested parties to submit their consultation responses online. Alongside these responses, Dialogue by Design gathered and digitised responses submitted on M4 CEM response forms, otherwise by post, or by email. All responses have been analysed, and the factual results are summarised in this report.

Whilst this document provides a factual report of the M4 CEM consultation, a full Participation Report presents a complete overview of the engagement and consultation process associated with the M4 CEM Programme.

2 About the consultation

2.1 Background

In August 2010 the Welsh Assembly Government appointed Catrin Ellis Associates as sub-contractors to Arup, to lead the development and delivery of the M4 CEM engagement process. A project team was set up comprising Welsh Government officers, CEA and Arup. It met for the first time in September 2010 and until July 2012, met at least once every month to review progress and plan next steps for engagement. The role of the group was to understand the context in which engagement took place, and to enable effective engagement to optimise the development of the M4 Corridor Enhancement Measures Programme.

During the engagement process, Welsh Government and the project team has conducted dialogue and deliberative sessions both with internal and external specialists and expert stakeholders, encompassing a diverse range of views and interests relating to transport in South East Wales, as well as with people likely to be interested in and affected by any transport measures potentially adopted and implemented by Welsh Government. An engagement (participation) strategy was allocated two principal stages, including:

Stage 1 (August 2010 to February 2012):

- A - centred on engagement to identify travel related problems on the M4 Corridor around Newport;
- B - focused on looking at possible solutions to transport related problems on the M4 Corridor around Newport; and

Stage 2 (March to July 2012):

- Consultation, open to all, asking participants to comment on a range of options contributing towards a strategy to reduce traffic congestion on the M4 around Newport.

This factual report presents the results of the M4 CEM consultation.

2.2 How the consultation process was managed

The Welsh Government began a process of (formal) consultation with the public on 6 March 2012. This was scheduled to run until 6 June 2012, but was later extended to 6 July to respond to public and stakeholder concerns regarding the initial success of the promotion of the consultation process. Welsh Government organised additional publicity in and around Newport, and extended the consultation period to allow more time for interested parties to submit responses. Technical problems affected the consultation website on the final day of the consultation (6 July), leading the deadline for responding to be extended again until midnight on 11 July 2012 in order to allow those potentially affected extra time to respond. Consultation responses in all formats were accepted up until this extended deadline.

The Welsh Government's Consultation Document, number WG14775, went through two revisions during the consultation period, the first relating to minor corrections to some figures in the Background section, the second relating to the extension of the consultation period. Associated response forms asked respondents a series of questions about transport related problems, the goals they would like the M4 CEM Programme to achieve, public transport measures, and their opinion on four proposed highway infrastructure measures. A final open question allowed respondents to make any further comment they considered relevant to the M4 Corridor Enhancement Measures Programme.

As well as asking a number of questions to the respondents, the online and paper response form also collected data about the travel habits of respondents. This data is discussed in 2.3.2 of this report.

Consultation documents and response forms were made available to the public at public events, Newport libraries, at the M4 CEM website¹, and to registered users through the consultation website². A number of local groups also requested further information / exhibitions / meetings and consultation materials were also distributed at these events. Any persons or organisations were able to request an electronic or paper copy of the Consultation Document and response form by telephone, email or writing³. Any requested copies were mailed by Arup to participants either by courier or Royal Mail, immediately.

To encourage participation from as many people as possible, a variety of mechanisms were set up to receive representations. These included:

- Response forms which were made available at the public exhibitions (with freepost envelopes);
- Online response forms;
- Letters submitted via freepost address;
- Dedicated email address;
- Letters to Assembly Members which were forwarded to the Minister for Local Government and Communities, Carl Sargeant AM.

During the consultation information was made available to members of the public and stakeholders via a number of different means, including direct mailings to over 80,000 properties in the Newport Area. People who had registered on the consultation website but not submitted a response were sent a reminder email towards the end of the consultation period to encourage them to respond. Project information was also made available to the public via a number of other means: publication of notices in local newspapers; outdoor publicity campaigns (e.g. adverts on Newport Bus Fleet, Big Screen in Queen Street, Cardiff, Motorway services) and Capital / Gold radio; information deposited in libraries and public buildings; a dedicated project website; an information hotline and email address; 3 workshops; and 8 public exhibitions in locations across South Wales. Full details of publicity and events are available within the M4 CEM Participation Report.

2.3 Participation report

After processing, a total of 674 responses were analysed. Table 2.1 below shows the number of responses received in the various response types.

54 proforma responses organised by the Campaign Against the Levels Motorway (CALM) were received from individuals, sometimes identifying themselves with this organisation, although usually not doing so. Eight of these displayed some substantial variation on the template response, and so were analysed slightly differently.

¹ www.m4cem.com

² www.m4cemsonconsultation.com

³ Contact details were provided on the Consultation Document, response forms, websites and publicity materials

Table 2.1 – responses received 6th March to 11th July 2012⁴

Response type	Count
Online response	356
Response form	184
Response form with attachment	12
Email	100
Letter	22
<i>Of which: identical or largely identical responses from a campaign group</i>	54
Total	674

Table 2.2 - Responses by question⁵

Question	Count
1a. In your opinion, which of the transport related problems listed are the most important for the Welsh Government to address with the M4 CEM programme?	544
1b. Would you like to make any other comments on the traffic related problems which should be addressed by the M4 CEM Programme?	557
2a. In your opinion, which of the goals listed above are the most important for the Welsh Government to achieve with the M4 CEM Programme?	463
2b. Would you like to make any other comments on the goals of the M4 CEM Programme?	468
3a. Which of the public transport measures listed do you think would make the best contribution to relieving traffic on the M4?	379
3b. To what extent do you think the public transport measure(s) you have selected will address the problems and achieve the goals you have chosen?	453
4a. To what extent do you think Highway Infrastructure Option A will address the problems and achieve the goals you have chosen?	436
4b. To what extent do you think Highway Infrastructure Option B will address the problems and achieve the goals you have chosen?	417

⁴ & ⁵ * For data processing purposes, where respondents submitted a response that did not correspond to the structure of the consultation questions, or included a further response or an attachment alongside their answers to the questions, this was processed with Question 5.

4c. To what extent do you think Highway Infrastructure Option C will address the problems and achieve the goals you have chosen?	381
4d. To what extent do you think Highway Infrastructure Option D will address the problems and achieve the goals you have chosen?	397
5.* Have you any additional comments to make regarding how to address the travel related problems occurring in the M4 Corridor, Magor to Castleton?	444

2.3.1 Key stakeholders

In order to help the project team monitor responses received, the Welsh Government identified a number of potential respondents as key stakeholders. When processing responses, those that were identified as key stakeholders were tagged accordingly. The responses of key stakeholders were processed and analysed in exactly the same way as all other consultation responses. As a result, their responses are covered in this report and are referred to as key stakeholder responses at instances throughout. This is simply to help the reader. Responses from all respondents, including key stakeholders, are treated equally within the report.

Table 2.3 – List of key stakeholders (designated by the Welsh Government)

Organisation	Responded to consultation	Specific respondent
Aneurin Bevan Local Health Board		
Arriva Trains Wales		
Associated British Ports	✓	
Town and Community Councils (all)	✓	Bishton Community Council Magor with Undy Community Council Redwick Community Council
City Councils (all)	✓	Cardiff Council Newport City Council Newport City Council - Environmental Health City & County of Swansea
County Councils (all)	✓	Monmouthshire County Council Rhondda Cynon Taf County Borough Council Torfaen County Borough Council
CADW	✓	Inspector of Ancient Monuments, Historic Environment, Welsh Government
Campaign Against Levels Motorway	✓	
Campaign for the Protection of Rural Wales	✓	

Countryside Council for Wales	✓	
Cynnal Cymru - Sustain Wales		
Environment Agency Wales		
Federation of Small Businesses	✓	
Freight Transport Association	✓	
Friends of the Earth Cymru	✓	
Gwent Police	✓	
Newport Harbour Commissioners	✓	
Network Rail	✓	
Newport Unlimited	✓	
Public Transport Users Committee for Wales	✓	
Road Haulage Association		
RSPB Cymru	✓	
South East Wales Transport Alliance	✓	
South Wales Chamber of Commerce	✓	
South Wales Fire & Rescue Service		
South Wales Police		
South Wales Trunk Road Agency	✓	
Sustrans	✓	
South West Wales Integrated Transport Consortium (SWWITCH)	✓	
Tata Steel	✓	
Traffic Wales		
TravelWise	✓	
Wales Tourist Board (Visit Wales)		
Wales Wildlife Trust	✓	Gwent Wildlife Trust The Wildlife Trust of South and West Wales Wildlife Trust Wales
Welsh Ambulance Services NHS Trust		
Welsh Freight Council		
Welsh Government and departments (all)		

2.3.2 Travel data

Respondents completing a consultation response form or registering to use the consultation website were asked two supplementary questions regarding their travel habits:

Your travel habits

Which of the following best describes how often you use the M4 motorway around Newport?
(please select one answer only)

- Daily
- Weekly
- Occasionally
- Never

Generally, how would you describe the purpose of these journeys?
(please select one answer only)

- Mostly commuting to and from work
- Mostly business
- Mostly leisure
- Mostly accessing services, e.g. schools, colleges, health care, etc.?

The answers selected by respondents who submitted paper response forms were manually entered into the consultation database alongside their responses to the consultation questions. Answers submitted by website users were stored and redisplayed as part of their editable website Profile.

Table 2.4 – Frequency – responses counts

<i>Which of the following best describes how often you use the M4 motorway around Newport? (please select one answer only)</i>	
Answer	Count
Daily	274
Weekly	185
Occasionally	134
Never	2
No answer	79
Total	674

Table 2.5 – Purpose – response counts

<i>Generally, how would you describe the purpose of these journeys? (please select one answer only)</i>	
Answer	Count
Mostly accessing services, e.g. schools,	77
Mostly business	90
Mostly commuting to and from work	169
Mostly leisure	254
No answer	84
Total	674

3 Analysis and reporting methodology

This section sets how the representations received from the public were analysed, to ensure every relevant point, issue and concern was identified and captured to enable the findings to be reported.

3.1 Data processing

All paper and electronic responses were either received directly by Dialogue by Design or securely delivered to Dialogue by Design via Arup or the Welsh Government. They were then transferred to a secure electronic analysis system managed by Dialogue by Design.

For reporting purposes, all responses were analysed against each question asked on the consultation response forms which were available on the M4 CEM website and at the public exhibitions and workshops.

Where respondents used a response form, each response was typed into the analysis database verbatim against the specific consultation question.

Representations received in letters, emails or through other mechanisms that did not respond to the questions specifically were entered verbatim as a submission to Question 5 („Have you any additional comments to make regarding how to address the travel related problems occurring in the M4 Corridor, Magor to Castleton?“) to facilitate analysis and to ensure consistency when interpreting issues.

To demonstrate a consistent approach to document handling, before coding and analysis:

- where exact copies of responses had been received in which the participant's personal details and response were a perfect match, these were subsequently removed to avoid duplication;
- where it was detected in the course of processing data that an individual or organisation submitted more than one response, where appropriate the various parts were combined into a single record.

3.2 Data capturing and coding

Working closely with the other members of the M4 CEM Engagement Team (comprising representatives of Welsh Government, Arup and Catrin Ellis Associates), the analysts prepared an initial list of anticipated themes and sub-themes arising from the consultation responses. Codes were allocated to each theme and sub-theme and as the analysts reviewed the responses, with every point, issue or concern being identified, recorded and coded accordingly.

During analysis, the list of codes was updated several times to ensure every significant emerging issue was captured. Location-specific issues were also identified.

In total 16 themes were identified, which were sometimes further split into sub themes, which helped the team of analysts better understand the broader context. More information about the themes can be found in section 3.6, below.

The use of a two-tier coding framework (themes and sub-themes) assisted the efficient analysis of the representations and assisted further in-depth interrogation of the findings and data reporting.

3.3 Quality Assurance

As the analysis and coding exercises are carried out manually, the risk of human error is identified and the ambiguous nature of some representations means that they can be open to interpretation.

To address this issue, a number of quality assurance procedures were adopted. These included:

- Discussion between Dialogue by Design and M4 CEM Engagement Team regarding emerging themes and to ensure that their approach to specific issues was accurate and consistent;
- Cross-checking and double coding of the analysts' work by senior colleagues;
- A secure connection to the analysis database through which the Welsh Government and Arup project teams could view the progress of analysis in real time and identify any concerns at an early stage in the analysis process.

3.4 Analysis and reporting process

After the coding exercise had been completed, a raw data report was produced which included all the responses in full and the coding allocated to each issue or concern raised.

The analysts were able to explore the main themes and sub-themes and to develop quantitative and qualitative analysis of the key issues raised by respondents.

There are indications of how many respondents made specific comments throughout the summary report, which usefully illustrates which preferences and concerns have been expressed by many respondents and which by few. However, it is important to note that a public consultation differs from a representative survey and that numbers only apply to those who chose to respond. Numbers used in this report therefore indicate only the relative weight of responses to this consultation, and are not statistically representative of wider views held in Wales or any part of the population.

Throughout the narrative in Chapters 4 to 8 there are approximate indications of how many respondents hold certain views. The focus of the narrative is to provide a deeper understanding of respondents' reasons and reservations for comments made. It is possible that an issue mentioned by only a few respondents is covered in the narrative, particularly when such an issue adds a consideration that is different from other views. By its nature, the summary report cannot reflect all points made by all respondents in its narrative. Having said this, the narrative includes explicit mentions of many of the sub-themes created to reflect respondents' views, with the exception of sub-themes created for the purpose of tracking references to localities, and parties or stakeholders to the consultation.

The tables provided in Appendix A3 contain specific information about how many respondents expressed specific views.

3.5 Structure of the report

This report discusses the responses to each of the consultation questions, numbered 1 to 5, separately in Chapters 4 to 8. These chapters are followed by a thematic synthesis (Chapter 9) which draws together views and trends emerging from across the consultation questions.

The analysis of responses in each chapter begins with an overview of direct responses to the question asked, and, where relevant, a count of comments including an expression of support or opposition to the element of the M4 CEM programme under discussion.

Each chapter then discusses specific comments following the thematic structure of the Welsh Government's analysis of transport related problems in the M4 Corridor:

- Capacity
- Resilience
- Safety
- Sustainable Development
 - Economic
 - Social
 - Environmental

3.5.1 Support and Opposition to the Highway Infrastructure Options

In Chapter 7, which deals with Questions 4a to 4d on the four Highway Infrastructure Options, the report covers comments expressing support or opposition.

Along with respondents' specific views on the M4 CEM programme and the measures under consideration, this report provides a summary of support for each of the four Highway Infrastructure Options. This is measured by grouping responses expressing clear support, some measure of qualified support, or a challenge or opposition to each of the options in answers to the corresponding Question 4a, 4b, 4c, or 4d. It has been compiled by counting the codes listed in Appendix A3 as they were applied to answers to each of the four questions. In some cases, more than one code counted in each of the categories of support below was applied to a single respondent's answer: the figures presented in table 3.1 have been adjusted to account for this double counting.

As respondents were not asked to indicate their support or opposition to the options, and since the count does not include other pertinent statements made in responses or answers to other consultation questions, these figures cannot be taken as an exact measure of opinion. Rather, they aim to give a sense of the balance of supportive and negative views given for each option. They are further discussed in Chapter 7 on Question 4.

Table 3.1 Respondents expressing degrees of support or opposition to each of the Highway Infrastructure Options

	<i>Total responses received to question</i>	Preferred or supported option	Qualified support or support with caveat	Challenge or opposition to option
Option A (Question 4a)	437	128	32	44
Option B (Question 4b)	424	8	86	89
Option C (Question 4c)	387	17	71	50
Option D (Question 4d)	403	42	48	92

3.5.2 Quotations and references

Throughout the report, quotations are given to illustrate or clarify the description of respondents' comments. The use of a quotation does not connote any other weight or significance of the views it expresses than is indicated in the accompanying text of the report.

Where quotations are taken from the responses of key stakeholders identified in Table 2.3, above, they have been identified in the attribution line beneath the quotation. All other quotations may come from private individuals, public office holders, or organisations that have not been designated key stakeholders.

All quotations are included verbatim, and spelling, grammar and punctuation have not been corrected, precluding errors of correction arising from misinterpretation.

References are also made throughout the report to particular elements of the M4 CEM Programme corresponding to sections of the Consultation Document, such as „transport related problems“ and „highway infrastructure options“. These have not been capitalised, but consistently take the formulations used in the Consultation Document. Where relevant, page or appendix references are given.

3.6 Glossary of themes

The overview below explains the meaning of the 16 overarching themes used to analyse the consultation responses. The codes categorised among these themes are listed at length in Appendix A3.

Table 3.2 Glossary of themes

Theme	Description
Environment	Comments about environmental issues
Existing Situation	Comments referring to transport issues around Newport relating to existing infrastructure
General Alternatives	Comments discussing alternative ideas to tackle the problems identified by the Welsh Government
Goals	Comments relating to the goals for the M4 CEM Programme identified by the Welsh Government
Locations	Used to capture references made to specific location in responses
Option A	Comments relating to the Option A proposal
Option B	Comments relating to the Option B proposal
Option C	Comments relating to the Option C proposal
Option D	Comments relating to the Option D proposal
Problems	Comments relating to the problems identified by the Welsh Government
Public Transport Measures	Comments related to the proposed public transport measures, and comments about public transport in general
References	Used to capture references to documents,

	organisations, other projects and experiences etc.
Road Alternatives	Comments discussing alternative road-based strategies
Social and Economic	Comments relating to social and economic issues
Other	Comments not captured by other themes

4 Transport Related Problems

4.1 Introduction

This chapter provides a summary of those responses to the consultation addressing issues relating to Question 1 in the Consultation Document, which focuses on the transport related problems identified in the M4 Corridor. A list of 17 problems was provided for respondents to prioritise and comment on (see Appendix A1).

Two questions were posed in Question 1:

Question 1a. In your opinion, which of the transport related problems listed are the most important to be addressed by the M4 CEM programme?

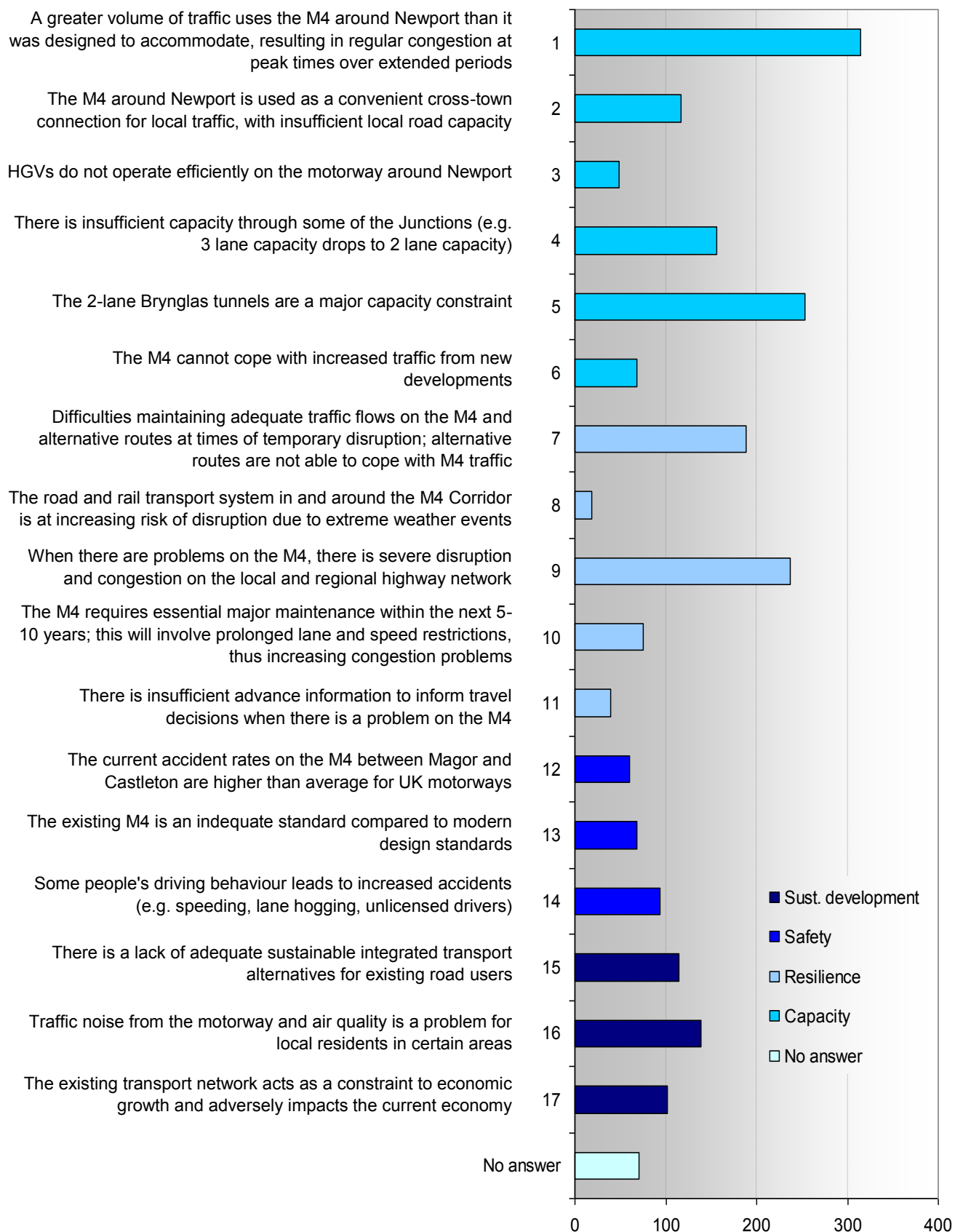
Question 1b. Would you like to make any other comments on the traffic related problems which should be addressed by the M4 CEM Programme?

A total of 544 respondents answered Question 1a and a total of 557 respondents answered Question 1b. A summary of the findings is included below.

4.2 Question 1a

Question 1a asked respondents to prioritise up to four problems out of a list of 17 (see Consultation Document, page 18). These are grouped into themes of capacity, resilience, safety and sustainable development. A total of 544 respondents selected at least one of the problems in their answer to Question 1a. Figure 4.1 depicts how many times each problem was selected.

Figure 4.1 – Problems selected by respondents to Question 1a



4.3 Question 1b

4.3.1 Problems

Some respondents comment directly on the list of transport related problems in the Consultation Document and on the consultation response form. Their views on the list and its individual items are described in this section.

Views on individual problems

Nine respondents state that many, if not all, of the listed problems are important or valid in some measure, or stress their interconnectedness and the need for the Programme to address them all.

However, another nine respondents strongly agree specifically with Problem 5 (*The 2-lane Brynglas tunnels are a major capacity constraint*), or identify it as their priority for the Programme's attention.

A further four respondents say they strongly agree with Problem 1 (*A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times over extended periods*), or that it is their priority.

Some respondents directly reference Problem 17 (*The existing transport network acts as a constraint to economic growth and adversely impacts the current economy*), often in support of the statement and sometimes offering observations that are elaborated on in section 4.3.5 on sustainable development, below.

As many respondents refer explicitly to Problem 3 (*HGVs do not operate efficiently on the motorway around Newport*) in the course of describing their observations on the impact of HGVs on the M4, described in depth in section 4.3.2. below. Other problems receive fewer direct references.

In addition to these references, some respondents challenge the list of transport related problems, mostly commenting that they focus too narrowly on traffic problems on the motorway. Some argue more specifically that car dependency, excessive total traffic on the roads, or a lack of travel choice and alternatives are omitted from the list of problems.

"The description of the 'Transport Related Problems' focused too narrowly on the issue of motorway traffic.

It fails to take account of end to end journey planning for both people and goods..."

- Key Stakeholder: ACT Travelwise

Specific observations

Throughout answers to Question 1b, around a tenth of respondents make explicit reference to their own experiences of driving or travelling along the M4 Corridor, and this gives rise to a number of common specific location references. More than 50 respondents cite transport related problems around the Brynglas Tunnels or Malpas Road in their answers, for instance, and still more indirectly discuss the Brynglas area. Many respondents mention particular stretches of the M4, and many observations are made about specific junctions, with Junction 28 cited most often. Where these specific references combine to suggest significant common views among respondents to this question, the locations are often identified.

4.3.2 Capacity

The list of transport related problems includes six relating to capacity. More than 20 respondents directly commented on the theme of capacity among the listed problems, with six identifying this set of problems as the priority to be addressed by the M4 CEM Programme, but another five challenging its importance. Several of the other comments stress capacity on the M4 motorway in particular as a main point of concern, often noting that it lies behind other problems.

“Capacity should be the priority area as this impacts the rest...”

- Respondent

Among problems relating to capacity, congestion is the overwhelming concern, explicitly cited by more than 70 respondents in their discussion of the problems. More than 30 mention capacity problems at peak times in particular, several arguing that it is only at these times that congestion is a problem. Another 20 respondents associate the capacity problems with congestion at M4 junctions as the particular problem; most of these suggest that too many junctions around Newport are the cause of particular problems on this stretch, and sometimes suggest that possible solutions should include some junction closures.

“Problems with congestion at J28.”

- Respondent

More than 30 respondents identify driver behaviour as a major transport related problem; often arguing that it makes other problems significantly worse, or that they might be alleviated if driver behaviour were to improve. About half of these connect driver behaviour to the problem of congestion. A few suggest that the number of individuals travelling in private vehicles should be a concern of the Programme. But among the more specific problems of driver behaviour discussed, lane changing or lane „hogging“ receive a number of comments. The location of the problem is pinpointed at various places: eastbound of Junction 27, westbound of Junction 25a and generally around Junction 28. Several different causes or aggravating conditions are identified with this problem; information and signage are seen to be significant, as is the use of variable speed limits, which is also said to contribute to problematic behaviour.

Seventeen respondents make observations on problems connected to the speed of traffic on the M4. These views are divided, however, between those who say slow traffic adds to congestion on the motorway or that higher speeds should be encouraged to improve traffic flow, and the smaller number who complain about the disruption and inconvenience caused by speeding drivers.

“...Some people who use this stretch of motorway are just too impatient to travel at a speed which would keep volume moving. Everyday I witness cars jumping all three lanes approaching the tunnels...”

- Respondent

Over 20 respondents identify problems connected to the behaviour or impact of HGVs and other large vehicles on conditions on the M4. Their perceived lane changing, difficulty in overtaking and inability to manage difficult inclines and bends on the existing motorway are all cited as problems aggravating congestion and traffic flow. Most connect these comments to calls for solutions involving restrictions on HGV traffic or their use of alternative routes, and many make detailed observations on HGV behaviour along specific stretches of the M4.

"[Problem] 3. HGVs can't cope with the hills and bends especially at St Julian's and between Junctions 26 and 27 and between Junctions 28 and 27. Also they move into the middle lane going up-hill to High Cross (Junction 27) far too early for the approach to the tunnels and thus hold-up traffic causing a 'wave effect' back to Junction 28."

- Respondent

The physical infrastructure of the current M4 is mentioned in connection with capacity problems by some respondents. Over ten respondents identify pinch-points or bottlenecks along the route in connection with capacity problems: half of these identify the Brynglas tunnels in particular, but other spots identified include Junctions 23 and 24 eastbound, as well as the section near Belmont Hill and the Coldra area more generally, and Junction 32 and beyond, which is mentioned by a few as a possible future pinch-point. Several also worry that new developments might only worsen such pinch-points, or identify aggravating factors connected with resilience.

"The hill up from junction 25 to 24 causes problems for HGVs and can cause bottlenecks. Also concerned about the section from junction 27 to 26 where land configuration causes frequent accidents especially at peak hours and during inclement weather."

- Respondent

As this quotation illustrates, there is some overlap between identification of pinch-points and of other problem physical features of the current M4 around Newport. Twenty-four respondents state that the design and current standards of the M4 are inadequate, often with particular reference to the Brynglas Tunnels, including for instance the lighting, the lack of a hard shoulder and the adjacent slip roads. Hills, cambers, bends and lane alterations are all mentioned as problems. These comments are sometimes combined with reference to the road's original design as an urban bypass, not a motorway.

Problems with local roads in the surrounding area of the M4 around Newport are a matter of concern too, with some respondents mentioning capacity problems along these routes. However, such comments are split between those arguing that congestion around the M4 worsens that on the motorway itself, and others that say it is lack of motorway capacity that has caused congestion on local roads. Some respondents also discuss the impact of the M4's major junctions on travel within Newport, noting accessibility problems at M4 junctions as the product or cause of capacity concerns, or else discussing the effects of junction closures during specific past incidents, or in general as regards future developments.

Nine respondents mention roundabouts located on or near to M4 junctions or nearby, though they do not always precisely identify those they regard as problematic. The detail of their concerns varies, but includes the use of traffic lights, the behaviour of HGVs, and the way they affect traffic flow onto and off the M4 itself. Six respondents mention traffic lights as a problem affecting congestion and capacity, usually suggesting their number and sequencing affects traffic flow at M4 junctions and so also alters driver decisions and travel habits. Half of these specify the Ebbw Bridge roundabout of the SDR and Cardiff Road, though the Coldra roundabout is also mentioned.

"One of the things that slows traffic down on the SDR and other roads around Newport is the excessive number of traffic lights, especially traffic lights on roundabouts. I imagine that most motorists find them extremely frustrating and may be inclined to use the M4 rather than have to go through a lengthy stop-start process. The roundabouts at either end of the SDR - the Coldra

intersection at one end and the Patent Office at the other - are particularly annoying one and might discourage people from using the SDR - which itself has a huge number of roundabouts and traffic lights.”

- Respondent

Speed control mechanisms receive more than 40 comments. More than half of these criticise the variable speed limits introduced along stretches of the M4 near Newport – often in particular the 50 mph limit on the westbound carriageway before the Brynglas Tunnels – some questioning the necessity of such measures and others arguing that they have a negative effect on congestion, sometimes through their influence on driver behaviour. Some offer specific comments on the time and manner in which Variable Message Signs are used to control speed, while five respondents note improvements they have noticed to traffic flow or safety since their introduction. A few respondents suggest that too many speed cameras on the M4 at Newport slow traffic unnecessarily and are an inconvenience – though a smaller number call for more surveillance to deter dangerous drivers.

“Speed controls, e.g. 50 mph entering tunnels west bound causes more congestion than before.”

- Respondent

Focusing on particular alternative roads used by traffic in Newport, nearly 20 respondents argue that the SDR has proved inadequate to relieve capacity problems on the M4 as a route for traffic moving around Newport. Several of these also point out that, because of its design as a road accessible to local traffic around south Newport, it also fails to relieve the M4 as a bypass for through traffic. A few respondents criticise the number of roundabouts on the SDR as a limit on its effectiveness, and sometimes identify the Tredegar Park and Coldra roundabouts at either end as particularly difficult. A few others say that the Brynglas Tunnel relief road at Malpas has also failed to improve the situation as an alternative route.

“Under investment in the road infrastructure has left Newport as a blackspot in many minds. Afternoons between junction 24 and 26 resemble the M25 - a big parking lot!

The two 'improvements' (Brynglas tunnels relief road and the Southern Distributor (A48) undertaken so far have made little impact on the overall traffic flows on the motorway.”

- Respondent

More than 20 respondents agree with the Consultation Document by mentioning or stressing the adverse impact that local journeys have on capacity on the M4 at Newport, and often go on to discuss the competing needs of through traffic with longer distance traffic. Several respondents justify or support the original use of the M4 for cross-Newport and/or local traffic.

“A new road would reduce peak time congestion by providing an alternative route for traffic not coming into Newport. This puts the current M4 back to its original design usage of being a cross town connection...”

- Respondent

Some respondents also identify particular uses of the M4 as the source of capacity problems, and suggest that capacity problems are caused by the strain of travellers to Cardiff, Swansea and other destinations west of Newport. In several cases, these comments are linked to resilience-related concerns about the lack of alternative routes with capacity for these

journeys. A couple of respondents also note that M4 congestion is often worse during major events in Cardiff. Overlap between discussion of capacity problems and issues of resilience – particularly related to alternative routes and users of the motorway – is discussed in the next section of this chapter.

4.3.3 Resilience

Five of the transport related problems refer to resilience issues. Nine respondents directly mention the theme of resilience and stress its significance among the listed problems. Many more respondents discuss matters of resilience indirectly in their discussion of transport related problems.

The prevailing resilience concern is the impact of accidents on travel in the M4 Corridor, which more than 40 respondents mention in their answers, generally to note the disruption caused by incidents on the motorway and surrounding roads. Many stress that even minor incidents have significant effects on traffic flow and congestion. Others identify the Brynglas Tunnels as an area of particularly low resilience in such events, and more than a dozen refer explicitly or implicitly to the Brynglas Tunnel fire of July 2011, as well as to other specific incidents elsewhere on the motorway.

More than 30 respondents stress the extent of the disruption caused by incidents on the M4, which is said to disrupt traffic into Newport City Centre and around the local road network. Many of these argue that resilience is undermined by the road infrastructure in and around Newport, stressing either its impact on traffic flow on the M4, or its inadequacy to relieve and absorb motorway traffic during an incident or event. A dozen emphasise the significant impact of occasions when the M4 has been completely closed to all travel in Newport, often describing conditions as gridlocked, with traffic at a standstill both on the M4 and local road network.

“Resilience - FTA would support all statements in this section, adding that there is currently no realistic alternative to the M4, when problems occur southeast Wales comes to a standstill as demonstrated during the Brynglas fire...”

- Key Stakeholder: Freight Transport Association

In line with this response, more than a dozen respondents say that the disruption caused by M4 incidents is far-reaching, affecting travel across South Wales. Some, including other key stakeholders Sewta and Monmouthshire County Council, stress the impact of M4 congestion and closure on particular strategic A-roads and feeder roads serving traffic across South East Wales. Some respondents focus on connections with England and argue that resilience is necessarily compromised by the M4's role as the dominant route into and out of South Wales. Some of these respondents are among more than 20 people who identify a lack of alternative routes across Newport, South Wales, or more broadly east-west in the region. More again call for new and alternative roads to be provided, with several suggesting the Heads of the Valleys road (A465), the A48, and a new road to the south or north of Newport.

“The M4 between Magor and Castleton is trying to do 2 jobs. It is acting as A) A through route and B) A junction hub for the 4/5 major north/south roads. With no other e/w road to the north of the M4 it is clearly overloaded at peak time and is overwhelmed when accidents occur...”

- Respondent

Other forms of alternative travel are raised by respondents too, in relation to resilience problems. More than 10 respondents mention in general terms an excess of traffic or a

dominance of private vehicles in South East Wales and go on to mention the need for a modal shift in transport to more sustainable modes. Some of these are among a further 10 who comment on public transport in the region, all seeking to encourage improvements in the bus or rail networks as a way of improving resilience on the road network. Some note a lack of park and ride facilities, reflecting the views of several others who stress the inadequacy of public transport as a barrier to potential modal shift. These views and concerns are described at length elsewhere in this report, in Chapter 6 on Questions 3a and 3b.

Among the concerns expressed about the resilience of the road network are some more detailed and specific observations. Several mention the adverse impact that incidents or congestion on the M4 have during emergencies, particularly on the ability of the emergency services to reach their destinations. On the other hand, a few criticise inadequate policing for contributing to the poor resilience of the network. A small number of respondents mention inadequate signage and diversions for drivers in the event of incidents. Only a couple of respondents note that bad weather can have knock-on effects similar to accidents. Many of these particular anxieties are discussed in greater detail in section 4.3.4, below, on responses relating to safety.

More than 20 respondents identify problems with the resilience of the network during maintenance work. Several respondents raise the issue of the disruption to local residents caused by maintenance work on the M4, and often relate this to concerns about the Programme's options for Highway Infrastructure Option D in particular. However, many comments on maintenance relate more to its impact on capacity and congestion issues. Some note the worsening of congestion and related problems as an immediate impact of work such as the widening of the M4 at Cardiff. Others suggest that improvement work such as that conducted at Junction 28 has not in fact improved conditions, or has actually worsened problems by introducing extra traffic without adequate adjustments elsewhere on the surrounding road network. Again, these concerns are sometimes linked to concerns about the Programme's Highway Infrastructure Options.

"The M4 through Newport is clearly unable to satisfy demands. Alternative routes are similarly unable to cope with the traffic volumes hence frequent, severe disruption whenever incidents occur on the M4. Key elements of this infrastructure are in urgent need of major rehabilitation work which will exacerbate traffic problems when they are addressed."

- Respondent

4.3.4 Safety

The list of transport related problems contains three that relate to safety. Seven respondents directly mention the theme of safety in the answer to Question 2b, and in all cases connect it to problems of capacity as well as, in some, maintenance. Several of these respondents argue that safety issues can be resolved with attention to these broader prevailing problems.

"Again, safety is a significant concern, particularly on those sections where accident rates are above the national average. However, this issue is partly seen as a consequence of the congestion caused by the capacity problems arising from problem 1 and the sub-standard frequency of junctions associated with problem 2."

- Key Stakeholder: Rhondda Cynon Taf County Borough Council

In addition to the resilience implications of accidents on the M4, many respondents make more general comments about their causes and impact. More than a dozen respondents

comment on the management of incidents on the M4, many of them criticising the recovery services for the speed of their response or for overreaction. Some respondents specifically call for the replacement of the protocols governing incident management, which they regard as out-of-date or too disruptive. A few emphasise the need for an improvement of emergency access in the area as a priority for the Programme's consideration.

"Much more emphasis should be placed on more speedy responses to incidents when they occur. A team of dedicated emergency personnel on permanent stand by on the stretch of M4 under debate will be more cost effective and less intrusive than any of the proposed options."

- Respondent

Accident prevention and mitigation measures are also cited as safety problems. Nine respondents mention the inadequacy of information or notification systems in the event of accidents preventing drivers from responding effectively, and perhaps, as suggested by one respondent, in turn contributing to dangerous and unpredictable driving. A couple mention bilingual signage as an unsafe cause of confusion. Another two mention the inadequacy of crash barriers, and one the danger posed by poor water drainage during wet weather.

Respondents differ in their views on the causes of accidents on the M4. More than 10 respondents identify congestion as a cause of accidents, mentioning particularly high volumes of traffic around at pinch-points such as the Brynglas Tunnels. Many of these observations are combined with safety criticisms of particular aspects of the M4's physical infrastructure, echoing those detailed in section 4.3.2. on capacity. Steep gradients, bends and the location of sliproads are all noted as contributing factors in accidents. A couple of respondents cite the relatively new variable message signs and variable speed limits as unsafe due to the unpredictable driver reactions they prompt. In a few other instances respondents blame the age of this section of the M4 and its outdated design standards for safety problems.

"Although improved recently there does seem to be an excessive number of accidents on the stretch of road running east towards the tunnels. My observations and experience would suggest this is linked to the reduction of lanes and the general volume of traffic."

- Respondent

A number of respondents instead emphasise the role of driver behaviour in causing accidents. Some again note contributory factors in the physical infrastructure of the M4, a few citing too many variations in the width and number of lanes as a cause of unsafe driving. Others though give speeding, bad habits, or failure to observe safe distances and consequent unpredictable breaking or lane changing as examples of dangerous driving contributing to high accident rates.

The safety of pedestrians, especially at M4 junction roundabouts and around feeder roads, is mentioned as a concern by a small number of respondents. In some cases though, these concerns stop short of questioning the safety of the M4, and are more concerned with its impact on Newport and the communities around the motorway.

4.3.5 Sustainable development

The list of transport related problems includes three concerning sustainable development. These received less direct comment when compared to the level of comments received about the three other themes in the list of problems.

Several respondents discuss the problems of the M4 Corridor with some reference to sustainability in general terms, arguing that they hinder Wales's sustainability, or else that the broad un-sustainability of current road conditions is a problem. These respondents range widely in their other points of focus and prescriptions for resolution.

"The motorway in its present state is clearly unsustainable but it seems to me that the only way forward is a relief road separate to the present system."

- Respondent

Economic

Two respondents explicitly stressed sustainable development of the economy in their analysis of problems and the importance of a resolution in this area for Wales.

Eighteen respondents raise the impact of road problems in the M4 Corridor on the Welsh economy in more general terms, in some cases comparing Welsh road infrastructure unfavourably with areas seen to be economic competitors, or stressing the conditionality of economic growth on the resolution of problems. In a few cases, respondents concerned about economic development identify specific perceived constraints to economic activity in Wales including the Brynglas Tunnels or the Severn Bridge tolls.

Ten respondents talk about the impact of road conditions on businesses in particular, most stressing the reliance of local businesses and investors on the M4 as a transport artery. They often therefore identify the inconvenience of congestion and the lack of resilience or alternative routes as constraints to economic growth.

"The current congestion problems and the bridge toll are, enormously, affecting the business development and the safety in the South Wales. I cannot stress enough how important is to act rather soon than later."

- Respondent

Discussing current problems, 16 respondents emphasise the dependence of the whole of South Wales – and sometimes South West Wales in particular – on effective east-west travel through the M4 Corridor, and a few more suggest the whole region could benefit from the resolution of transport related problems. Almost a dozen others focus instead on the importance of the M4 itself as the main connecting route for travel from Wales into England and internationally. In a few of these instances, respondents connect this concern to the original design of the Newport stretch of the M4 as a mainly local rather than international artery.

"The M4 between the Coldra and Tredegar Park was built as the Newport Bypass.

It now provides the primary route linking much of South Wales with the Midlands, South of England and Europe...

The requirements of these two uses cause conflict..."

- Respondent

Social

Eight respondents complain about the impact of the current situation or of the Programme's broad agenda on the city of Newport in terms of its impact on residents and communities. Both the current M4 and M4 CEM Options are accused of serving the rest of Wales to the detriment of Newport or its residents' wishes, while a few respondents are concerned about

the potential loss of use of the M4 to Newport residents as a result of the Programme. Several respondents relate this criticism to some element of Highway Infrastructure Option A or D; these views are discussed in further depth in the chapters of this report relating to questions 4a and 4d.

“The motorway is essential for local users and junctions should not be closed. The closing of the Caerleon Junction has caused great problems for Caerleon and made traffic worse. Local concerns have been railroaded for the benefit of others.”

- Respondent

Some respondents discuss the social impact of the current road conditions in more detail. Some respondents mention the disruption caused to local residents by traffic and congestion on the M4 Corridor, or by other highway developments. A few respondents say the proximity of the M4 to the city of Newport and particularly its residential areas is a particular problem: three respondents mention the impact of the road on public health, for instance.

Environmental

Public health concerns are commonly and explicitly linked to discussions of pollution, and in particular air pollution. Air pollution is mentioned by 40 respondents in Question 1b, some referring to current conditions in the M4 Corridor, and many others concerned about potential worsening conditions as a result of possible future road developments.

Noise pollution is discussed as a problem by 30 respondents. Many of these comments come from residents living in the areas of Newport immediately adjacent to the M4 motorway. As in the discussion of air pollution, some respondents identify existing problems while others anticipate more in the future. Several of the respondents who mention noise also criticise existing mitigation measures or request them in the event of further developments.

“...the noise and air pollution around the Brynglas/Malpas area of Newport is already far above other areas of Newport. Why should the residents of this area have the threat of further pollution and the risk of being homeless thrust upon them...”

- Respondent

Connected to pollution, a few respondents express concerns about climate change or carbon emissions in discussing traffic problems, and a handful note that congestion and slow traffic lead to fuel inefficiency. Several more respondents talk very generally about the environmental impact of current road problems or future developments. A few respondents express concerns about harm to wildlife, biodiversity or protected areas, but several others connect these concerns to particular highway infrastructure options discussed later in this report.

5 Goals of the M4 CEM Programme

5.1 Introduction

This chapter provides a summary of those responses to the consultation which address issues relating to Question 2 in the Consultation Document, which focuses on the goals of the M4 Corridor Enhancement Measures (CEM) Programme. A list of 15 goals was provided for respondents to prioritise and comment on (see Appendix A2).

Two questions were posed in Question 2:

Question 2a. In your opinion, which of the goals listed are the most important for the Welsh Government to achieve with the M4 CEM Programme?

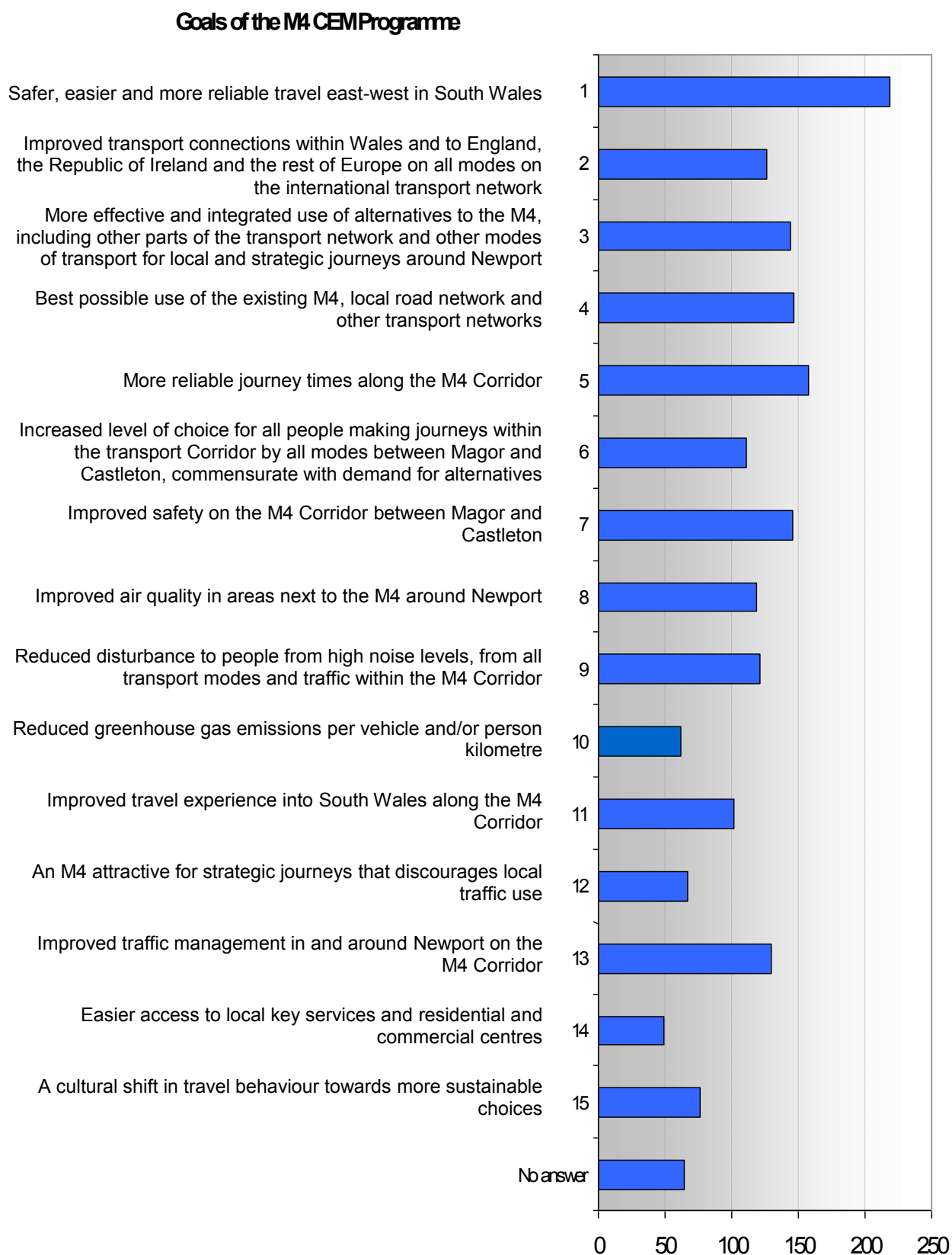
Question 2b. Would you like to make any other comments on the goals of the M4 CEM Programme?

A total of 463 respondents answered Question 2a and a total of 468 respondents answered Question 2b. A summary of the findings is included below.

5.2 Question 2a

Question 2a asked respondents to prioritise up to four goals out of a list of 15 (see Consultation Document, page 20). A total of 463 respondents selected at least one of the goals in their answer to Question 2a. The number of times each goal was selected is summarised in figure 5.1.

Figure 5.1 – Goals selected by respondents to Question 2a



5.3 Question 2b

5.3.1 Goals

Views on individual goals

More than 50 respondents refer explicitly to one or more of the listed goals in their response to Question 2b, with none of the goals attracting a particularly high volume of comments. For example, Goal 1 (*Safer, easier and more reliable travel east-west in South Wales*) is selected most in answers to Question 2a, yet fewer than 10 respondents refer to it explicitly in their comments.

Seven respondents mention their support for Goal 15 (*A cultural shift in travel behaviour towards more sustainable choices*) in response to Question 2b, some emphasising the opportunity afforded by the M4 CEM Programme.

“This is a major opportunity for Welsh Government to actively promote a cultural shift in travel behaviour towards more sustainable choices, particularly if aligned with strategic investment in the beginnings of an integrated transport metro system across S Wales.”

- Respondent

Two respondents worry that the appearance of this goal at the end of the list might indicate its low priority.

A few comments are made linking Goal 3 (*More effective and integrated use of alternatives to the M4, including other parts of the transport network and other modes of transport for local and strategic journeys around Newport*) and Goal 12 (*An M4 attractive for strategic journeys that discourages local traffic use*) and discuss ways that both can be achieved.

“In respect of goal 12, there is a concern that the local highway network already experiences significant congestion. Accordingly, the removal of 'local' movements from the M4 would be detrimental to the local highway network without appropriate mitigation measures and effective alternatives.”

- Key stakeholder: Sewta

General views on goals

While six respondents simply state that all the goals are important, a few others question if they can all be achieved and suggest that some are in conflict. At least 20 respondents suggest alternative goals, with three broad alternative objectives mentioned more than once:

- encouraging economic growth and inward investment;
- ensuring environmental conservation and reduction of pollution;
- realising a clear route for through travel (though in context these latter suggestions appear split over the solution required).

Several respondents explicitly challenge the goals. Some of these comments are unexplained; others express a belief that the sequence of the goals is flawed, that the goals are too vague or that they cannot be achieved. Five responses express concern that the goals contradict the three aims described in the Consultation Document (page 6).

“Firstly, there are inconsistencies between the overarching aims of the 4 CEM Programme and the goals outlined in the consultation document. Most

notably, the placement of Goal 15 at the end of the list infers it has lower status than other goals identified, despite it being central to the achievement of all three overarching aims of the M4 CEM Programme.”

- Respondent

Some respondents compare the goals to wider Welsh Government policy, with a few stressing environmental or economic sustainability and related initiatives such as the Active Travel Bill. A key stakeholder organisation, Sewta, calls for the goals to be more explicitly compared with those of relevant Wales-wide strategies. A number of respondents argue that particular highway options or Programme approaches cannot achieve the goals, or simply that none will. Several respondents say that no approach that creates new roads or accommodates increased traffic could achieve the M4 CEM goals.

5.3.2 Strategies

Lots of comments are made about the way the goals are to be pursued, combined or realised as actions. This includes comments made by some 11 respondents stating conditional support for the goals. A similar number of respondents emphasise their belief that the goals must be achieved quickly. Others stress that they must be converted into actions that are achievable.

“I think the goals and the studies are good, but the longer we wait before making a decision the more it will cost and the worse the problems will be.”

- Respondent

Nine respondents call for an integrated approach, often stating that road, non-road and low-carbon alternative modes of transport must be combined and connected to achieve the goals. Others use “integrated” with reference to geographical integration of transport improvements around and beyond South East Wales. Key stakeholders, including the Freight Transport Association and the Federation of Small Businesses, stress the strategic importance of the route along the M4 as a section of European TEN-T road route E30.

“FTA would urge the Welsh Government to remember that although the consultation focuses on the M4 around Newport the strategic importance of the route should not be forgotten. No longer is this part of the network a Newport bypass but an integral part of the European TEN-T route providing links to Ireland, England and Europe, therefore the Association believes that priority should be given to long distance traffic and management measures introduced to mitigate the impact from peak time traffic which tends to be localised and short distance.”

- Key stakeholder: Freight Transport Association

Strategic concerns voiced by respondents include political decision-making or judicial processes hampering the achievement of the goals, and that congestion and costs will continue to rise. More than ten respondents feel that the M4 CEM Programme must make long-term improvements. A few of these worry that the programme’s options will only move traffic around the network, or provide only short-term fixes. In several responses, concern for long-term resilience is combined with a concern that cost should not preclude choosing the best solution, or a fear that it will do.

Others argue that cheaper alternative measures – in place of either specific highway options or road developments in general – could achieve the results desired at lower cost, sometimes mentioning the current economic circumstances as a reason for a rethink. Finally,

several respondents say that pursuing the Programme's goals should cause minimal disruption to communities and residents in Newport and surrounding areas.

5.3.3 Sustainable development

Many of the more specific comments on the M4 CEM goals relate to themes of sustainable development, citing the sustainability of the programme as a key objective.

Economic

Some respondents frame their concern for sustainability in economic terms, arguing that transport developments must encourage employment in the area or local and regional economic growth – suggested by some as an alternative goal. A few stress connectivity beyond the region, and in particular roads servicing the Severn crossings, as being more important for encouraging economic growth or sustainability. Others emphasise connectivity across Newport and access to the M4 itself as linked to the success of businesses in South East Wales. Some respondents note the existing negative impact on businesses of road travel delays.

Environment

Concerning environmental sustainability, a few respondents suggest the goals omit environmental protection or reduction of the impact of road travel on the environment, with some specifically mentioning the SSSI status of part of the Gwent Levels. A few others identify a still more specific goal that they feel has been overlooked (such as biodiversity in plants and wildlife).

Many respondents mention their concerns about noise and air pollution in discussing their view of the goals, stressing the importance of reducing these. In some cases, respondents link this priority to the perceived impacts of some of the highway infrastructure measures. Most of these comments relate to Highway Options A and D, with a number of respondents feeling one or the other would lead to either an increase or a reduction in noise and air pollution. A few respondents link this priority to the public health impact of traffic and congestion, some suggesting the Programme should aim to improve quality of life.

“The outcome must fix the problem this time and be a solution for 100 years and not a tactical solution. WAG solution must also balance the long term needs of Newport by minimising pollution and local congestion.”

- Respondent

Social

Some respondents also suggest social strategies for the Programme. Four comments encourage flexible working arrangements or staggered work schedules and one suggests better journey planning.

5.3.4 Highway Infrastructure Options

Some direct references are made to the Highway Infrastructure Options in response to Question 2. As this is out of the scope of this question, general points are summarised here but discussed in more detail in Chapter 7 on Question 4.

More than 30 respondents state support for Option A, or some variation on a new road south of Newport. A few respondents have reservations about the cost of Option A, or its impact on residents, particularly those living around Magor and Castleton. However, 15 respondents

link the option to improving resilience by providing an alternative route, a few arguing it is the only long-term way of achieving the goals.

“Any major alteration to the existing M4 will cause major disruption to traffic. A new road will not only be strategically better in the long term, but will not create major disruption to traffic flows in the short term...”

- Respondent

A few direct references are made to the Highway Infrastructure Options B and C. Six respondents express preference at a general level for measures encouraging greater use of the SDR as a solution to congestion on the M4, in some cases indicating their support for Highway Options B or C.

Option D receives fewer comments than Option A, with both supportive views and general objections given by respondents. Some raise particular problems with the option, including disruption likely to be caused to residents and traffic, doubt about its long-term success, and its possible implications for emergency access. Many respondents who comment on Option D compare it on a strategic level to Option A, often with reference to the content of the goals.

“Option A is the only real solution. Option D goes someway to resolve the issues but will be disruptive during construction. The other Options amount to fiddling with the road network and continue to mix local traffic with through traffic i.e. no solution.”

- Respondent

5.3.5 Problems

When commenting on the goals, many respondents revisit criticisms of the M4 and the wider road network made in response to Question 1b. As this is out of the scope of this question, general points are summarised here but discussed in more detail in Chapter 3 on Questions 1a and 1b.

Many respondents do not clearly relate their criticisms to the list of goals. Congestion on the M4 and the local network is often cited as a problem that needs solving. Likewise, a small number of respondents reiterate that driver behaviour is a concern that should be tackled. Six respondents focus on problems caused by HGVs on the M4, some making observations on considerations that might need to be made for them in developing the M4 CEM options.

“...Longer distance HGV traffic should be encouraged to use the M4.”

- Respondent

“...Also this route [the Steelworks Access Road] will probably carry a large number of additional heavy goods vehicles to south Newport as opposed to going to Newport and travelling via the SDR.”

- Respondent

Many respondents comment on the inconvenience the M4 currently causes local residents in terms of a perceived conflict between local and long distance traffic. Where M4 problems are recited in Question 2b, an often-suggested amendment to the list of goals is the need to cater sufficiently, and perhaps separately, for long-distance travellers and local road users. Also, six respondents ask the Programme to provide alternative or better road infrastructure for local travellers and so to discourage their use of the M4, with a few others arguing that current congestion on Newport’s roads must influence the eventual choice of solution.

5.3.6 Road alternatives

As well as those who suggest their own specific additional goals, many respondents suggest their own alternative highway measures for consideration. As this is out of the scope of this question, general points are summarised here but discussed in more detail in Chapter 8 on Question 5.

More than 20 respondents suggest approaches to transport improvements that fall outside the highway infrastructure measures proposed in the Consultation Document (although some are included within the „Alternatives Considered“ workbook, available to download at www.m4cem.com). Three respondents propose car-sharing as part of a solution and a further three suggest that tougher policing could help. Others make reference to the beneficial possibilities of speed limits and related measures. Tolling is part of several respondents' suggestions, with a couple arguing that the Severn Bridge tolls should be removed and a few others favouring the introduction of new tolling measures.

“- From above No 11 remove the bridge toll/tax on entering Wales.

- Give those forced to work in England (due to lack of jobs in Wales) free bridge crossings with proof of employer base of course.”

- Respondent

A number of respondents offer views that challenge or modify the Programme's strategy for travelling through or around Newport. Three respondents call for other major roads in the area to be better used as a means of reducing problems, while four respondents would like the Llanwern Steelworks Access Road in particular to be incorporated into a solution – some acknowledge the current upgrading of the road for public use, while others comment on its use or integration. Sometimes these alternative approaches are combined with specific combinations of variations on the highway options, elaborated in later chapters of this report.

A few respondents offer their support for the broad objective of improving east-west travel in South Wales; just one suggests the investment should be made in north-south road travel within Wales. Two respondents make a more specific suggestion to enhance east-west routes from England by building on the recent upgrade of the A465 Heads of the Valleys road. Some respondents stress the importance of an alternative through route for east-west road travel in the area (though more than 20 state the same in their answers to Question 1b, as described in the preceding chapter).

Three respondents refer explicitly to the New M4/M4 Relief Road proposal, regretting that it has not been progressed.

5.3.7 Public transport and modal shift

A few direct references are made to public transport and modal shift in response to Question 2. General points are summarised here, but views expressed are discussed in more detail in the chapter on Question 3 which explicitly explores views on public transport measures.

Several respondents state that the Programme should aim to provide better local transport options beyond private vehicles, and usually cite alternative, environmentally-friendly modes such as cycling as their specific priority. Some respondents go further and stress that the Programme should take steps to encourage the public to use these alternatives and lead a change in behaviour, with some specific measures suggested.

More than 50 comments are made on public transport as part of the goals, foreshadowing more detailed responses to Question 3. Convenient bus, train and park & ride services and alternatives to private vehicles feature in many comments. More than 10 respondents call for

or point out the importance of an integrated outlook for improving public transport, and in some cases the need to connect it to road travel too. In contrast, a few respondents suggest the effects of public transport measures will be limited.

“To help regenerate the city centre as an attractive alternative to the retail parks. This will naturally encourage more use of the SDR and public transport; both of which will reduce traffic on the M4.

To incentivise the use of public transport by means of attractive pricing and a wider choice of routes and destinations.”

- Respondent

6 Public Transport Measures

6.1 Introduction

This chapter provides a summary of those responses to the consultation which address issues relating to Question 3 in the Consultation Document, which focuses on public transport measures.

Two questions were posed in Question 3:

Question 3a. Which of the public transport measures listed has/have the potential to reduce your use of the M4? (please tick all that apply)

Question 3b. To what extent do you think the public transport measure(s) you have selected will address the problems and achieve the goals you have chosen?

A list of six public transport measures was included in the Consultation Document for respondents to select from (Question 3a) and discuss (Question 3b):

- Additional mainline train services between Swansea, Cardiff, Newport and Bristol;
- Additional train services on local routes;
- More stations with park and ride facilities;
- More bus/train connecting services;
- Additional express bus/coach services between Cardiff, Newport and Bristol;
- Additional local bus services around and across Newport.

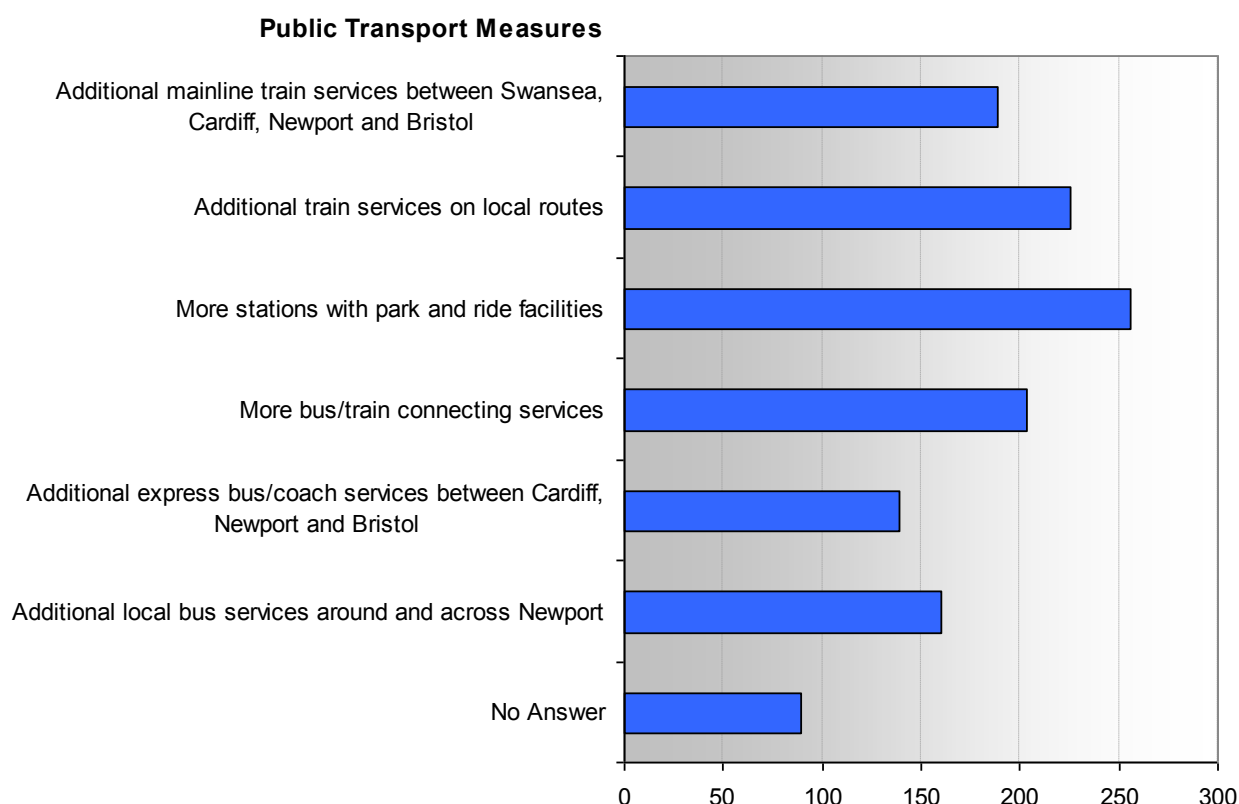
In total, 379 respondents answered Question 3a and 453 respondents answered Question 3b.

6.2 Question 3a

Question 3a asked respondents to choose from a list of six public transport measures all those that would make the best contribution to relieving traffic on the M4 between Magor and Castleton (see Consultation Document, page 24). A total of 379 respondents selected one or more of the public transport measures. Respondents were asked to select as many measures as they wanted, therefore the total number of boxes ticked does not add up to 379.

The number of times each public transport measure was selected is quantified in the chart below.

Figure 6.1 – Public transport measures selected by respondents to Question 3a



6.3 Question 3b

A total of 453 respondents commented on Question 3b. The views expressed are summarised below.

6.3.1 Positive and negative views on the public transport measures

As in responses to Questions 1b and 2b, few respondents answering Question explicitly link their comments to the specific problems or the goals they chose in earlier answers. In total, somewhat more than twenty made some clear reference of this sort to the M4 CEM goals, and fewer than this clearly discussed the transport related problems. More often, respondents discuss how the public transport measures will address problems or achieve goals in general terms, alongside their more detailed comments on the measures themselves.

Discussion of the public transport measures relates more to respondents' personal travel experience and their needs and habits as users or non-users of public transport. Around 40 respondents clearly identify personal experiences of public transport habits in responses to this question, and many more than this comment on past, existing or planned public transport in the M4 CEM Programme area.

In response to Question 3b, 60 respondents think the public transport measures listed in the Consultation Document will be helpful to some extent. Many believe the measures will help to reduce road congestion by reducing the total number of cars travelling on the M4. Respondents also suggest that additional services could also result in a modal shift from cars

to public transport. A few comment that the measures could result in improved air quality around the M4.

Some argue that public transport measures should be treated as a priority. A few comment that they should be introduced before highway infrastructure measures, or argue that they will provide greater benefits than the highway measures.

“Public transport measures are an essential part of the response to the problem and should be the first step. If road improvements happen first, there will be less incentive to use public transport.”

- Respondent

A further 65 respondents think the public transport measures will help to address the problems to a limited extent, or express support for public transport measures with caveats, normally involving improvements to services respondents believe are needed for the measures to be effective, with affordability, frequency, accessibility, safety and reliability all frequently mentioned. In some instances, often elaborated in the detailed comments reviewed in the rest of this chapter, these improvements are explained as conditions of the eventual success of the measures.

“Provided that prices on trains and buses do not increase to high levels, I am sure that more people would take advantage of this type of transport, instead of using their cars, thus reducing motorway traffic.”

- Respondent

In response to Question 3b, a total of 106 respondents argue that none of the public transport measures listed in the Consultation Document will help to address transport related problems or meet their travel needs.

Many comment that the car is a much more convenient form of travel than public transport. Respondents suggest that they prefer to use the car because it enables them to travel from door-to-door at any time. Some suggest that they cannot see an alternative to using the M4 for their common journeys and consider the car to be an essential part of modern life. Others comment that public transport is not flexible enough for work-related travel.

“Public transport cannot meet my needs. A car is essential for many people who have to work long distances away from home. Places of work are increasingly out-of-town, on industrial estates etc.”

- Respondent

Another reason for preferring to travel by car relates to perceived problems with public transport. Issues raised relate to the frequency, reliability, speed, accessibility, reach, capacity and cost of public transport. A few respondents comment that the inaccessibility of stations makes public transport unappealing. Some comment that public transport, especially rail travel, is prohibitively expensive.

“It is unlikely that any public transport service can match the convenience or cost of using my car. Train and bus prices are much too high, and even if buses left every 10 minutes they would still be nowhere near as convenient as a car. Fix the road, open new roads and alternate routes. Public transport has no place in the strategy.”

- Respondent

Some respondents suggest that the public transport measures proposed would have a minimal impact on problems previously identified, for instance at addressing capacity constraints at the Brynglas Tunnels. They do not think that investment in public transport would result in any significant reduction in traffic on the M4 between Magor and Castleton.

6.3.2 Train services

Over 140 respondents comment on train services in their response to Question 3b. However, comments are often made without referring explicitly to one of the two public transport measures that focus on rail services (*Additional mainline train services between Swansea, Cardiff, Newport and Bristol; Additional train services on local routes*). For this reason, all views relating to train services are discussed together in this section.

Mainline train services

A few respondents express their support for improvements to mainline train services (*Additional mainline train services between Swansea, Cardiff, Newport and Bristol*). One respondent comments that the frequency and capacity of trains from Swansea, Bristol and London needs to be improved.

“With additional more affordable mainline train services between Swansea, Cardiff, Newport and Bristol many more people would travel. Their journey would be quicker, less stressful and more comfortable.”

- Respondent

However, some respondents argue for additional local stations along the mainline route, or complain that not enough InterCity trains stop at Severn Tunnel Junction.

A number of respondents are in favour of electrification of the Great Western Mainline (GWML) from London to Swansea as a means of improving journey times. A few also support electrification of other lines in South Wales, such as the Valleys.

“Electrification of the railways in South Wales will be a major catalyst in moving traffic from road to rail. It is essential that South Wales main line is electrified at least as far as Swansea and that all the other South Wales passenger lines are electrified including Ebbw Vale, Maesteg and Vale of Glamorgan lines with consideration also given to electrification to Abergavenny and Chepstow.”

- Respondent

Railway connections and services

Over 40 respondents comment on local and regional railway connections and services that they would like to see improved in order to encourage modal shift. Some respondents comment that the frequency of rail services in particular need to be improved. Areas and routes that are mentioned include east of Cardiff, Bristol, around Newport and the Valleys, from Newport to Abergavenny, Chepstow and the Newport-Chepstow-Cardiff link.

More specifically, some respondents argue that the Ebbw Vale link service to Newport needs to be treated as a priority.

“It is very unfortunate that a rail connection was not started between Ebbw Vale and Newport at the same time as the trains to Cardiff. The businesses in this city centre suffer very badly as a result - their customers take the train

straight to Cardiff, whereas traditionally they would have come here for their shopping and business.”

- Respondent

Additional railway stations

A total of 29 respondents argue for additional suburban railway stations. A number of locations are mentioned. Many of these respondents are keen for Magor Station to be reopened. Other locations mentioned include Caerleon, the Tredegar Park end of Newport, west of Newport, within suburban Newport, Llanwern, Maesglas/Duffryn area, St Mellons, St Brides and Marshfield.

Respondents want more local stations because it would result in a reduction in car usage and it would be more convenient for local people. A few respondents comment that local stations are needed to service local housing developments.

“[The measures are] Not sufficient without construction of additional local stations along the main line from Severn Tunnel Jnc to Cardiff – there's a gap in coverage of rail services for the housing developments between Newport and Cardiff (notably, St Mellons, Trowbridge, Castleton, Tredegar and the outskirts of Newport)”

- Respondent

Car parking facilities and pricing

A few respondents raise issues relating to car parking facilities at railway stations without referring explicitly to park and ride facilities. Some are concerned about car parking charges, and call for them to be free or reasonably priced. Others are keen to see improved parking facilities, including more parking spaces and new car parks.

Another concern relates to the cost of rail travel. Some comment that driving is currently a cheaper mode of transport than travelling by rail. Others indicate that they will not travel by train unless rail fares become more affordable.

“The public transport network could be improved and more parking spaces at railway stations would be an asset. However, expensive train fares coupled with high parking charges in the private sector who run railway car parks currently make train travel a more expensive way of travel than driving.”

- Respondent

6.3.3 Bus/coach services

When responding to Question 3b, over 90 respondents comment on bus and/or coach services. Most of the views expressed either relate to local bus services (*Additional local bus services around and across Newport*) or express bus/coach services (*Additional express bus/coach services between Cardiff, Newport and Bristol*).

Those in favour of improved local bus services, and additional express bus/coach services, argue that these measures would encourage a modal shift away from cars.

A few respondents comment that the existing local bus and/or express bus/coach services are already satisfactory.

Some respondents make general points about where bus and/or coach services need to connect. Suggested locations include at rail stations, areas of work, business parks, areas of leisure and residential areas.

Local bus services

Some respondents express general support under Question 3b for additional improved local bus services in and around Newport, reflecting one of the public transport measures listed in the Consultation Document (*Additional local bus services around and across Newport*).

Many respondents also criticise existing bus services. Some specifically comment on the inadequacies of bus services in and around Newport. Issues mentioned include difficulties in travelling from one side of Newport to the other by bus, and travelling in/out of Newport by bus, for example to the railway station.

“At the moment the local bus service into Newport from my area is utterly useless, (I think there might be one or two buses a day) meaning that if I want to catch a train I still have to drive into Newport.”

- Respondent

The frequency and reliability of local bus services is raised in a number of responses. A few are concerned about services not running as timetabled and having to wait at bus stops. Some comment that more frequent bus services are needed, for example from Brynglas to the city centre, or across Newport. A few complain that local services have been reduced, for example the Caerleon and St Julian’s services. Other suggestions include improving bus services in the evenings and at weekends.

Some feel there is a lack of convenient bus stops or bus routes, which results in people being reliant on cars for example when travelling to Newport Station.

A few respondents make further suggestions in addition to those presented in the Consultation Document, on how local bus services could be improved. Suggestions include an orbital bus route around Newport, to meet the needs of business parks on the outskirts of the town. Another idea is introducing more bus priority lanes. Another is using minibuses/shared taxi cars which would charge minimum fares and have the flexibility of being able to pick up/set down passengers on demand. A few argue that Newport bus station needs improving.

“Consideration should also be given to the provision of rail link bus services from communities to the railway stations in Gwent including the provision of a bus station adjacent to Newport railway station.”

- Respondent

Bus/coach services between Cardiff, Newport and Bristol

Some respondents express support for more frequent bus and coach services between Cardiff, Newport and Bristol, which is one of the public transport measures listed in the Consultation Document (*Additional express bus/coach services between Cardiff, Newport and Bristol*). Respondents comment that this service needs to be reliable, convenient and appropriately priced. A few indicate where it needs to connect e.g. linking motorway junctions and Magor.

Reasons for supporting additional express bus/coach services include that it would result in a reduction of vehicles on the motorway network, particularly at peak times, and it would reduce commuters’ journey times.

However, in contrast to this, a few respondents argue an additional express bus/coach service to Bristol would not offer significant benefits. These respondents think the service would be slower than the train, delayed when roads are congested, and not effectively connected to peoples' work places or homes.

For bus/coach services to operate efficiently, a few respondents comment on the need for traffic management measures to be introduced. Suggestions include giving buses priority at junctions, introducing mechanisms which would reduce peak time traffic congestion at key M4 junctions, and other improvements to the M4.

"The provision of some bus priority measures at the junctions, and possibly along the M4 itself will be of some benefit to bus services and we would urge that any junction improvements and the other highways improvements do consider the potential for bus priority improvements to be introduced."

- Respondent

6.3.4 Park and ride facilities

Over 50 comments in response to Question 3b mention park and ride facilities, which is one of the public transport measures listed in the Consultation Document (*More stations with park and ride facilities*).

Many respondents are enthusiastic about more stations with park and ride facilities. Some express general support, others comment on whether there should be more of these facilities at rail stations, or more bus stations with facilities.

"Along with Sewta, Monmouthshire County Council envisages an increasing role for Park and Ride journeys, particularly rail based although bus can and perhaps should be expanded to play a role given that bus can better access some areas of employment and leisure not on the current rail network."

- Key stakeholder: Monmouthshire County Council

Reasons for supporting more park and ride facilities include reducing the number of cars on the M4 at peak times, reducing congestion and improving air quality. A few comment on their importance to commuters and to people travelling from rural areas.

Some respondents are concerned about park and ride charges and argue they need to be reasonably priced or free of charge. Some are particularly concerned about car park charges at railway stations. Other respondents comment that park and ride facilities need to be more effectively marketed if they are to encourage modal shift.

Other respondents emphasise the importance of flexible park and ride opening hours. For example, one respondent thinks they should be operational 24 hours a day, 7 days a week. Others simply say they should be open early in the morning.

Respondents suggest specific locations for new park and ride facilities. Locations mentioned include Magor, Llanwern, near Junction 23A, Cwmbran and Maesglas. A few explicitly mention where rail park and ride facilities are needed at existing railway stations, including Severn Tunnel Junction, Abergavenny, Chepstow and Pontypool.

A few respondents are less enthusiastic about new park and ride facilities. Issues include that they are expensive and they are unlikely to have much impact.

6.3.5 Bus/train connecting services

A total of 11 respondents discuss their support for improved bus/train connecting services, which is one of the public transport measures listed in the Consultation Document (*More bus/train connecting services*).

A few respondents elaborate on their position. For example, some feel the distance between the railway and bus stations discourages the use of public transport. Another suggests introducing a shuttle bus between the rail and bus stations.

“The buses need to be fully integrated with rail transport, for example, by building the bus station next to the train station, as well as buses running to link up communities in Newport, not just running radially in /out of the city centre as most services do.”

- Respondent

6.3.6 Integrated transport

Forty respondents discuss the need for more integrated transport planning. Rather than considering individual public transport measures in isolation, they argue for them to be viewed as part of an integrated transport policy. Some respondents call for more co-ordinated local public transport services, for example with co-ordinated timetables, stations in close proximity to each other, and Oyster-style smartcards which enable passengers to pay for more complex journeys in one go.

Other issues are raised with regards to integrated transport. Some comment that cycling should be considered during planning, suggesting for instance cycle parking spaces on trains and buses. Car share schemes are another mode of transport used and encouraged by some respondents.

Key stakeholder Network Rail also calls for the M4 CEM options to be integrated with major rail network improvement plans in South East Wales.

“Network Rail is keen to ensure that the CEM proposals take due cognisance of the rail industry's plans for major enhancements to the rail network in south east Wales. Network Rail believes that the significant growth of rail travel in south east Wales should be recognised with the CEM Programme and be clearly defined policy and strategy elements within the CEM Programme deliverables.”

- Key stakeholder: Network Rail

7 Highway Infrastructure Options

7.1 Introduction

This chapter provides a summary of those responses to the consultation addressing issues relating to Question 4 in the Consultation Document. This question asked for comments on four highway infrastructure options, A – D):

- Option A: Additional high quality road to the south of Newport
- Option B: At-grade improvements to the A48 Southern Distributor Road (SDR)
- Option C: Grade separated junction improvements to the A48 Southern Distributor Road (SDR)
- Option D: On-line widening of the M4 J24 – 29, including an additional tunnel at Brynglas

Four sub-questions were posed in Question 4:

Question 4a. To what extent do you think Highway Infrastructure Option A will address the problems and achieve the goals you have chosen?

Question 4b. To what extent do you think Highway Infrastructure Option B will address the problems and achieve the goals you have chosen?

Question 4c. To what extent do you think Highway Infrastructure Option C will address the problems and achieve the goals you have chosen?

Question 4d. To what extent do you think Highway Infrastructure Option D will address the problems and achieve the goals you have chosen?

A total of 436 respondents answered Question 4a, a total of 417 respondents answered Question 4b, a total of 381 respondents answered Question 4c and a total of 397 respondents answered Question 4d. A summary of the findings is included below.

7.2 Question 4a

In total, 436 respondents answered this question. The views they express are summarised below.

7.2.1 Support and opposition to Option A

Table 7.1 Respondents expressing degrees of support or opposition to Option A

	<i>Total responses received to question</i>	Preferred or supported option	Qualified support or support with caveat	Challenge or opposition to option
Option A (Question 4a)	437	128	32	44

Among respondents, 128 state that Option A is their preferred option or express support for the option without any reservations. A further 32 express more reserved or conditional support. These range from three who provide support with a caveat (they support the option

as long as certain conditions are met), to 14 who support a variation on the option (broadly supporting Option A in principle, but stating specific changes in design or route that they would like to see made). Without necessarily expressing a preference for this or any other option, at least ten respondents comment on aspects of Option A that make it worthy of consideration.

A total of 27 respondents state that they oppose Option A. A further 17 challenge the impact that they believe it will have on achieving the goals of the M4 CEM Programme. Meanwhile eight respondents explicitly state that they prefer Option D to Option A.

In total, 56 respondents think that Option A would solve the problems they identified from the list provided in the Consultation Document. These largely comprised capacity and resilience problems. Several additional respondents either agree and provide a caveat, or are more cautious in stating that Option A could achieve the goals they chose. In contrast, 24 respondents state that Option A will not achieve the goals they have identified.

Some 24 respondents suggest that Option A would achieve the goals they chose in their answer to Question 1a, with a further five agreeing, with a caveat. On the other hand, 26 respondents believe that Option A would not achieve their chosen goals.

7.2.2 Capacity

Of the respondents who discuss issues of capacity, the majority consider that Option A would have a positive impact.

Key benefits indicated by respondents include a reduction in traffic and or congestion, and a reduction in journey times.

More than 70 respondents think that through traffic would benefit. Not only would a new road provide additional capacity within the road network but it would also allow traffic travelling past Newport to avoid having to pass through the city. This would enable through traffic to avoid bottlenecks such as the Brynglas tunnels and also separate it from local traffic which uses the existing M4 for short journeys across Newport. By having fewer junctions, the new road would enable traffic to flow better and provide a faster, more direct route.

“This option would provide an effective alternative route bypassing Newport and would cut a large amount of through traffic from the M4.”

- Respondent

Around 40 respondents also consider that local traffic would benefit. A high proportion of these respondents suggest that by separating out local and through traffic, and channelling through traffic around Newport via the new road, a significant level of capacity would be freed-up on the existing M4, and also the SDR, for the use of local drivers. This would result in quicker and easier movement around Newport for local people. Several remark that this would return the M4 to its intended use – as a by-pass for local traffic.

“This would allow increasing traffic levels heading past Newport to avoid the city, SDR and existing M4, and thus freeing up existing capacity on the cities roads.”

- Respondent

“We note the factual and anecdotal evidence provided that one of the key factors affecting the flow of traffic on the M4 and the Southern Distributer Road is the large number of junctions. Our Board therefore supports the principle of a new strategic road route to the south of Newport with limited local road access.”

- Key stakeholder: Newport Unlimited

Some respondents alternatively view the new road as a way to remove local traffic from the existing M4 and to provide additional route options for local drivers. Several respondents refer to an indirect benefit to local traffic. By providing an alternative to the M4 during periods of closure or peak congestion, the new road will stop through traffic being pushed onto the local road network in Newport. This will improve the journeys of those using these roads.

“...commuters on the surrounding road network would not have to suffer increased traffic diverted off the M4.”

- Respondent

A few respondents do not agree that the new road would provide sufficient additional capacity. A number of respondents raise concerns relating to the proposed road not being a motorway, and as such not providing the necessary capacity to meet projected long-term growth demand, so that drivers might not be sufficiently attracted by an A-road to leave the M4 temporarily while travelling around Newport, and that it might attract some local usage.

“I do not think Option A will give the necessary relief that the M4 requires. There is already an existing dual carriageway (A48) around Newport. I do not think adding another dual carriageway will ease the volume of traffic.”

- Respondent

While having doubts about the specifics of the option, respondents expressing these concerns are broadly supportive of the options in general.

“I believe Option A would be the preferred option, but was surprised, it was proposed as a dual carriageway only.”

- Respondent

A few respondents are concerned that a new road would spread problems found around the existing M4 route, such as noise, pollution and congestion, to new areas of Newport.

Around 15 respondents suggest that, while the new road might increase capacity and reduce congestion in the short-term, there is a likelihood that this would make using the road network around Newport more attractive, and simply lead to increased road use, which would fill the additional capacity created in the long-term.

“...there is a danger that Highways Option A will unlock latent demand that is likely to be suppressed by current capacity constraints on the M4...”

- Respondent

“It is my belief that creating more roads and lanes today will not solve long term traffic issues and that the problem will return again in another 10 - 20 years.”

- Respondent

A couple of respondents are also concerned that a new road would create new points of congestion, particularly at junctions at each end of the proposed road where it would join with the existing M4.

Eighteen respondents do not think that Option A will benefit local drivers, or help reduce their use of the M4, because they feel that the M4 will still be the most convenient route for travelling across the city. Similarly, some respondents do not believe the new road will benefit through traffic. Reasons provided include the belief that drivers’ habits or instincts will

lead them to assume that their quickest route will be to stay on the motorway, and that through traffic that does stay on the M4 will still have to share road space with local traffic.

“It is unlikely to encourage use for through journeys as the existing M4 will still be seen as more direct no matter how slow...”

- Respondent

7.2.3 Resilience

Many respondents regard Option A as being beneficial to the resilience of the transport network. Around 20 respondents make a general statement to this effect, while in contrast only a couple express the opinion that the resilience provided would be inadequate.

Of those who provide more detail as to how they think Option A would increase resilience, the dominant benefit respondents mention is in the ability of the new road to provide an alternative to the existing M4, particularly when the M4 is heavily congested due to an accident which causes partial or complete closure. A number of respondents refer to the „gridlock“ caused by M4 traffic being diverted through city centre and residential streets when such disruptions occur, and the negative impact this has on both local residents, and on the journey times of travellers.

“In the event of a major accident then the other route will lend itself as a diversion and would cope relatively well temporarily without impacting local roads.”

- Respondent

Some respondents point out that this would also provide an alternative route when planned lane closures need to take place on the M4, such as for maintenance.

Many feel that at present there is no genuine like-for-like alternative to the M4 available to travellers, but that the road proposed in Option A would be of sufficient quality to be able to attract traffic off the M4.

A number of respondents make reference to the Brynglas tunnels, and the 2011 fire in the tunnels that led to the motorway being closed. The fact that the new road proposed in Option A would be entirely separate from problems connected with the tunnels is regarded positively.

7.2.4 Safety

The vast majority of respondents who comment on the safety aspects and impacts of Option A feel that the option would be beneficial in this regard.

More than 20 respondents believe that Option A will improve road safety around Newport. The majority of these respondents do not offer any specific examples but just give a simple statement to the effect that Option A will be beneficial in terms of safety, that it is safer than the existing M4, or that it is the option that would improve safety the most among all four options. When respondents elaborate, some comment that by providing more road capacity, vehicle density on roads will decrease, and this is assumed to mean that there will be fewer accidents. Another is that the new road is expected to remove heavy goods vehicles from the existing road network (both the M4 and local roads) which will make these roads safer for other road users, including local people.

“...would lead to safer roads due to a volume of traffic spread amongst other routes.”

- Respondent

“Larger logistical vehicles would be taken out of the city and lessen the risk of accidents in the existing and proposed new Brynglas tunnels.”

- Respondent

Some respondents think that Option A will improve emergency access either to incidents on the road network itself or for day-to day-travel across the city and surrounding area. Some comment on the arrangements for enabling emergency services to access the new road with several saying that this should be the only form of traffic permitted to join the new road between its start and end points.

“This will allow emergency services to do what they have to do.”

- Respondent

Around five respondents do not expect improvements in safety from Option A. A few suggest that the proposed route would not deliver the same benefits, including for safety, that would occur if the new road was to be of motorway-standard, or that would be delivered by an improved, wider M4. One respondent argues that Option A will encourage more car use, and that this would lead to more accidents.

“30.5% of local households in Newport (2001 census) do not have a car, so they will buy a car to benefit from this £300m of private car subsidy.

Added cars, added journeys, added danger, added pollution and new points of congestion...”

- Respondent

7.2.5 Sustainable development

Economic

Over 80 respondents comment about the financial cost of constructing Option A. The majority of these comments are concerned about the level of expenditure required, which a number note is the most expensive of the four options. Concerns about the project cost are made both by respondents who state their opposition to the option as well as these who think it is the most effective. Some respondents believe that the high capital cost of the highway option could make it difficult for the Welsh Government to undertake the project, or that in so doing, funding for other projects, such as public transport measures, would be affected. Others express the opinion that the financial cost is not justified by the projected outcomes of the project.

“... the proposed additional road would be costly and the Welsh Government's current capital budget would not easily be able to facilitate such a development.”

- Key stakeholder: Federation of Small Businesses Wales

“Primarily, it has a HUGE cost, the biggest of all the options, almost three times the cost of Option C and nearly twice the cost of Option D”

- Respondent

A significant number of these respondents make a concise statement such as “very expensive”.

On the other hand, around 20 respondents state that, despite being the most expensive of the four options, they think that the benefits from implementing the scheme outweigh the cost.

“The advantages would out way the extra cost compared to the alternatives, and worth the extra money.”

- Respondent

One of the benefits suggested by respondents is the economic development of both Newport and the wider South Wales region in general. This includes the arrival of new investment from businesses attracted by the improved transport network, bringing with them new job opportunities as well as aiding the growth of existing businesses. Several state that Option A would be the option best placed to maximise these potential benefits. Respondents hope that a less congested transport network would encourage more people into Newport to undertake economic activity, for example, from nearby areas such as the Valleys. This would help regenerate Newport. Others suggest that the improvements will also give a generally improved impression of Wales to tourists and other visitors.

“Valley people (Eastern and Western) will use Newport more and hopefully this will help to regenerate Newport as it so badly needs.”

- Respondent

A few respondents, however, sound a note of caution. They are concerned that by diverting traffic away from Newport, the city itself may miss out on economic gains. A couple of respondents point out the need for a bridge over the mouth of the River Usk. One notes that this has the potential to restrict commercial use of the river, including the wharf.

Social

Many respondents discuss the impact that the construction phase of Option A would have. Over 60 state that the impacts in general would be slight. Option A is seen to have the least disruptive effect on residents and businesses in and around Newport, as well as causing the least traffic disruption during construction as it will be a completely new route.

“Obviate the need for long term construction disruption to Newport and loss of homes.”

- Respondent

A number of respondents disagree, and feel that the construction period will still see undesirable levels of disruption. They highlight particular communities such as Magor and Undy, as well as areas such as Monmouthshire, that they feel will be negatively affected. Others highlight the negative impact that the new road would have on the value of some homes in close proximity to it.

While several respondents express concern about the need for some property demolition, other respondents positively acknowledge that overall Option A will result in significantly less residential and commercial demolition than other options.

Several respondents express a concern that, were the new road to be built, Newport and the immediate communities would be enclosed by roads, and trapped between the M4 and the new road.

“Newport would then be an 'island' with a ring of fast roads all round it.”

- Respondent

Environmental

The primary environmental concern of respondents is the routing of the new road through the natural environment, most specifically the Gwent Levels, an area that many point out has protected SSSI status. Among these, the RSPB clearly state opposition to Option A on these grounds:

“We are particularly concerned about the "core" measure in Option A, which is the M4 Relief Road, a 23km dual carriage highway running through the Gwent Levels SSSI, and urge the Welsh Government to remove this measure from the programme.”

- Key stakeholder: RSPB

A number say that the impact that this would have on the SSSI is unacceptable, both for the damage to the landscape, and the wildlife that relies upon it. Also of concern is the proximity of the route to nature reserves and the Tredegar House National Trust property.

Some respondents state a belief that the option would have a negative impact on climate change, both from the carbon cost of the construction and from emissions produced by the vehicles that use the road.

More than ten respondents believe that the environmental impact of the option is reasonable, and many of these express a belief that wildlife will simply adapt to the situation, or return once construction is complete. Others state that the welfare of wildlife is not a priority.

“People come before birds and plants.”

- Respondent

Others acknowledge the environmental impacts of the scheme but express a hope, or a conviction, that those responsible for the scheme will be able to create sufficient mitigation measures to overcome the impacts.

Several respondents refer to the removal of traffic from the centre of Newport as a positive for residents. Almost 50 respondents suggest that Option A would result in lower levels of atmospheric and noise pollution for residents of Newport. Others dispute this, suggesting that a new road will only spread air and noise problems to more parts of the city and surrounding communities.

“...it is likely that new areas of poor air quality may be created.”

- Respondent

7.2.6 Other comments relating to Option A

The analysis above covers the issues and concerns raised in responses to Question 4a. However, a number of respondents comment on Option A outside of this question. In particular some respondents, including a number of key stakeholders, reply to the consultation in a format that did not follow the consultation questions or mentioned Option A among their Additional Comments in Question 5.

Comments relating to Option A broadly reflect the content and weighting of issues discussed in answers to Question 4a. Responses under Question 5 tend to be more general, and so less frequently express their explicit support for the various options. One concern that is somewhat more prominent in responses to Question 5 than 4a is that providing more roads will simply serve to stimulate demand, resulting in more traffic. Nonetheless, the general levels of support and opposition to Option A expressed generally reflect those given under

Question 4a. Several key stakeholders state support for Option A, and their discussion of the option often engages on a technical level with the specification or discuss its success as conditional on details such as junctions and local accessibility.

“We see this option as providing the required resilience that South Wales needs for the M4 corridor and for Newport and its residents that are so frequently impacted upon during times of incident. As part of these proposals we would insist that appropriate junctions are included as part of the design process that serve the southern communities of Newport, and contribute to their development.”

Key stakeholder: Newport City Council

Question 5 contains 54 responses following a format, which does not directly answer the Consultation questions, co-ordinated by a campaign group. In all but seven cases of these cases each response is identical, so they had a significant effect on the weighting of particular points. (The seven versions containing variations have minor additions, omissions or differences of phrasing: see Chapter 8 on Question 5 for more details.) The campaign opposes Option A on the grounds that it would have a detrimental impact upon the natural environment, including flora and fauna, particularly in designated areas such as the Gwent Levels SSSI. It states that the Gwent Levels are also a landscape of historic, cultural, and recreational importance. Campaign respondents allege that increased road capacity would stimulate a growth in road traffic which would increase greenhouse gas emissions, which they say runs contrary to Welsh Government commitments to tackle climate change. Finally, they argue that the Consultation was flawed because it considered no „do nothing“ option and because the options were based on out-dated data.

Several key stakeholder responses that oppose Option A echo the concerns expressed in the campaign responses. In many cases, though, the details of their objections differ, some focusing on the specific impact of the proposed road on the Gwent Levels SSSI and other protected areas, others stating broader concerns about the environmental and social impacts of the route or its sustainability.

“The proposed route is adjacent/parallel to the most important eco-system in Wales, if not in the UK - The Severn Estuary is a registered RAMSAR and SPA site, and much of the Gwent Levels is already registered with SSSI status. Both the Severn Estuary and Gwent levels are sites of Special Archaeological Interest with a phenomenally rich and varied archaeological landscape. Ecologically each area being dependant on the other.”

Key stakeholder: Magor with Undy Community Council

“...this must have the most detrimental effect on open countryside to the east, west and south of Newport, including a major new crossing of the River Usk. Given the new road's proximity to the coast, for flood risk considerations it would undoubtedly be constructed largely on embankment, with the bridge rising to a higher level to allow access for large container vessels to Newport docks. The impact would therefore be hugely visual, as well as bringing noise and traffic pollution into the area of the Gwent Levels, that is generally regarded in landscape, ecological and archeological terms as an iconic area demanding absolute conservation. Several statutory and non-statutory conservation areas would be adversely affected”

Key stakeholder: CPRW

7.3 Question 4b

In total, 417 respondents answered this question. The views they express are summarised below.

7.3.1 Support and opposition to Option B

Table 7.2 Respondents expressing degrees of support or opposition Option B

	<i>Total responses received to question</i>	Preferred or supported option	Qualified support or support with caveat	Challenge or opposition to option
Option B (Question 4b)	424	8	86	89

Eight respondents directly state that they support Option B, while 86 support some variation or element of the option. These latter include 76 who state that without necessarily coming to a conclusion about Option B in particular, or the various options in general, they do believe that Option B could achieve some, or all, of the M4 CEM Programme goals and so express support for its consideration. Some 16 also provide support with a caveat that Option B should be accompanied with modifications of other parts of the road network, or in conjunction with one of the other options.

Around 100 respondents support a variation (supporting Option B to some extent in principle, but suggesting specific changes in design or route that they would like to see made). Four respondents think that Option B would be a good interim measure to deal with the problems, or should be implemented first, as it is the cheapest option, and then people could see what impact it has before implementing more expensive options. Three respondents believe that Option B will achieve the goals of the M4 CEM Programme.

On the other hand, 89 respondents state that they oppose Option B. Over 50 challenge the impact that they believe it will have on achieving the M4 CEM Programme goals, and 27 think it will not solve the identified problems. In addition, some respondents state that they prefer, with or without a caveat, other options – 27 for Option A, 17 would rather have Option C, and five Option D.

7.3.2 Capacity

A minority of respondents are optimistic that Option B will increase network capacity and improve travel. Travel benefits expected by these respondents include improved traffic flow, reduced congestion, shorter journey times, and benefits for local traffic by providing a more attractive alternative to using the M4.

“Option B would assist in discouraging use of the M4 for local journeys, by improving priority of the east-west movements along the existing SDR, thus making this corridor a more attractive alternative.”

- Respondent

The majority of respondents, however, disagree, and challenge the impact that Option B could have. Almost 80 state it would not provide a significant enough an improvement upon

the existing SDR. On a related note, a number of respondents say that the route is already too congested, and do not see how encouraging more traffic onto it can help either the SDR route or its surrounding roads. Around 20 respondents think that Option B would worsen traffic flow on the SDR. Almost 40 believe it would worsen conditions on the local road network in Newport.

“The Southern Distributor Road has already caused misery to thousands of people by encouraging cars onto the roads. The last thing to consider is adding capacity.”

- Respondent

Specific criticisms of the Option B route are provided by respondents. Many do not think it will do enough to attract vehicles off the M4 and onto the SDR. A major reason for this is the traffic management measures included in this option, such as traffic lights and junctions along the route. Some believe these will contribute to a low quality layout and one which respondents suggest users will find too slow and indirect.

“...the use of traffic lights to replace roundabouts on the SDR to control flow will continue to make it an unattractive option to motorists.”

- Respondent

Respondents disagree as to which demographic of users will benefit from Option B. Fewer than 20 think that only local traffic would benefit, while a smaller number say that through traffic would mostly benefit to the disadvantage of local road users. Nearly 30 respondents state that the option would not benefit through traffic.

7.3.3 Resilience

Around 20 respondents think that Option B could have some benefit in increasing resilience. The degree to which they expect it will be effective varies, with some believing it will only be effective when an incident occurs on the M4 rather than with normal traffic flow, while others believe it could attract local traffic off the M4 as well.

“It’s a valuable idea and would do some good keeping some traffic off the M4 in SE Wales.”

- Respondent

However, over 25 respondents challenge the usefulness of Option B for improving resilience. They consider that the design of Option B, with multiple junctions, traffic lights and roundabouts, will not make it attractive enough to traffic to tempt it off the M4 in regular operating conditions, and while it would be used if the M4 was not available there are doubts about whether it would be sufficient to handle that volume of traffic.

“The proposals, in my view, will not provide sufficient improvement to the road system around Newport to give people incentive to use this route as opposed to the M4 junctions 24 - 28. Therefore they will not provide the relief sought to the M4.”

- Respondent

7.3.4 Sustainable development

Economic

Over 30 respondents comment on the cost of the Option B package. Many note that it is the cheapest out of the four options, and a number suggest that it could deliver some improvement for the Newport road system at a cost-effective price. For some respondents the lower price is not necessarily enough to support Option B as their preferred option, with a proportion indicating that while the option is the best financially, it isn't necessarily the best when all factors are considered together.

"Whilst improving the junction layouts on the SDR would provide some improvement to the traffic flows for a relatively low cost, the number of junctions on this route make it a less attractive alternative."

- Respondent

Around 15 respondents disagree, saying that because they think the option will not resolve the problems, any money spent would be a waste of resources.

"This will not solve the long-term problems and therefore will be a waste of money."

- Respondent

A couple of respondents suggest that Option B could benefit the Newport economy by reducing the negative impacts caused by congestion, and by not completely taking passing trade away from the city. On the contrary, others think this option would deliver benefits less substantial than those offered by other options.

Several respondents express concerns about the impact that construction disruption and increased traffic on the improved route would have on both businesses in the city generally, and those adjacent to, and/or with access directly from, the SDR route.

Social

More than 20 respondents are concerned about the impacts of the construction phase. The major concern of these respondents is that the construction work will cause traffic delays on the SDR. This could then push more traffic back onto the M4, causing increased disruption on that route and other parts of the road network too.

"This would cause tremendous problems around Newport during the alterations and improvements, thus congesting the M4 motorway further, and also causing havoc in Newport City."

- Respondent

Impacts on local properties, businesses and communities are mentioned, with it being noted that the SDR passes through a built-up area. Several references are made to a number of commercial, community and leisure facilities connected to the SDR, with the suggestion that their presence, and their ability to generate local traffic impinge on the ability of Option B to achieve the suggested goals.

Conversely, more than ten respondents are positive about the disruption caused by the construction of Option B and feel that it will be less than for other options. For example it will not impact on the Gwent Levels as Option A would, nor would it require as much property demolition as Option D. In comparison to Option C, which uses the same basic route, respondents note that the impacts will also be lesser as the enhancements are at-grade, so

will require less new land take or as much work. Others do not make so much of a distinction. One respondent states that Option B:

“...offers a suite of measures that enhance the existing transport network with minimum disruption to people, wildlife and biodiversity”

- Respondent

“Option B & C - Magor with Undy Community Council agree in principle that these options will have the least impact on residential areas adjacent to the existing SDR infrastructure and as such would be prepared to support either option”

- Key stakeholder: Magor with Undy Community Council

Several respondents note that the option will still take traffic through residential areas and this attracts a number of comments regarding the impact that this route would have on the quality of life and health of local residents.

Environmental

For respondents to this question, the major environmental issues raised are those of air and noise pollution. More than 20 refer to air pollution. Concerns result from the emissions released by traffic when the road is completed as well as the pollution created by cars stuck in traffic jams caused by the construction programme. Many worry about the effect this pollution would have on people living in close proximity to the SDR. On the other hand, some respondents consider that by spreading traffic between the M4 and an improved SDR the impact on air quality would be distributed more equitably across the city. A couple of respondents suggest that by increasing traffic flow, Option B will contribute to a reduction in emission levels.

“An alternate route through Newport would distribute noise and air pollution lessening the impact on any one area.”

- Respondent

Similar points are received in relation to noise. There is concern that bringing traffic through a residential area will increase the impact of noise, as more people will be exposed to it. However, others note that the impact on the areas around the M4 could be reduced as a result, spreading the impact more evenly.

Several respondents note that unlike Option A, Option B has a far lesser impact on green spaces, including protected areas. Five refer to impacts on heritage sites, with nearly all of these respondents referring directly to Tredegar House, a National Trust property.

A couple of others think that Option B will have a negative impact on more sustainable modes of travel, including public transport as well as walking and cycling. In particular, some comment that the route will cut across routes used by pedestrians and cyclists to traverse the city.

7.3.5 Other comments relating to Option A

The above analysis covers the issues and concerns raised in responses to Question 4b. However, a number of respondents comment on Option B outside of this question. In particular some respondents, including a number of key stakeholders, reply to the consultation in a format that does not follow the consultation questions or mention Option B among their Additional Comments in Question 5.

Relatively few comments relating to Option B are made in response to Question 5. The issues that arise most were general support for or opposition to Option B. As with answers to Question 4b itself, in answers to Question 5 more respondents oppose Option B than offer their support for it. Broadly, this is because respondents feel that the measures proposed in this option would be too insubstantial to provide an adequate improvement.

“This is likely to have the least impact on achieving the broader goals and aims of the project.”

- Key stakeholder: Sewta

Some respondents, including key stakeholders, detail their dissent from Option B with criticisms reflecting those raised in response to Question 4b itself. Friends of the Earth Cymru assess Option B negatively on a range of environmental criteria including air, noise and water pollution, emissions, biodiversity as well as anticipating a general traffic increase.

“The SDR road faces problems of its own at times and as we do not believe the upgrades contained within this consultation would address the capacity issues surrounding the road network in the area. The route is also not the optimal one and would lead to further pressure on Junction 28, which is already stretched at peak times.”

- Key stakeholder: South Wales Chamber of Commerce

Expressions of support for Option B are somewhat fewer in references elsewhere than in answers to Question 4b. Nonetheless there are some supportive comments, including from key stakeholders. Key stakeholder the Freight Transport Association argues that the Option B improvements should be implemented alongside Option D. Magor with Undy Community Council considers Option B a viable solution for consideration alongside Option C. Others, including key stakeholders offer some degree of support for Option B on grounds of its likely limited impacts.

“This proposal is almost entirely within the urban area of Newport, and although it would undoubtedly entail road widening on green areas alongside the existing SDR, no open countryside is likely to be involved. The effectiveness of this option appears uncertain.”

- Key stakeholder: CPRW

7.4 Question 4c

In total, 381 respondents answered this question. The views they express are summarised below.

7.4.1 Support and opposition to Option C

Table 7.3 Respondents expressing degrees of support or opposition to Option C

	<i>Total responses received to question</i>	Preferred or supported option	Qualified support or support with caveat	Challenge or opposition to option
Option C (Question 4c)	387	17	71	50

Only ten respondents state unambiguous support for Option C, while seven directly say it is their preferred option for the CEM Programme. However, 71 respondents offer various levels of qualified support for this option. These include 16 who express support with a caveat (they supported the option as long as other certain conditions were met), and 14 who support a variation (broadly support Option C in principle, but state specific changes in design or route that they would like to see made). Over 20 respondents would support the option if implemented in conjunction with other measures. Altogether, more than 30 respondents would support the consideration of all or part of Option C among the solutions to be pursued by the M4 CEM Programme.

Over 50 respondents to this question state that their views on Option C are the same or broadly similar to their views on Option B. On the other hand, almost as many say they consider Option C preferable to Option B – though these respondents do not necessarily support Option C without qualification either.

Though Option C attracts no outright statements of opposition, 50 respondents challenge it as a solution in their answers. In addition, 13 respondents state a preference for Option A over this option. In response to this question, only seven respondents say they prefer Option B and eight people explicitly state that they prefer Option D.

Fewer than ten respondents think that Option C will solve the problems they identified from the list provided in the Consultation Document. A few other respondents agree, but with some caveat or reservation. In contrast, more than a dozen respondents state that Option C will not address the problems they have identified.

Again, fewer than ten respondents think that Option C will achieve the goals they have chosen, with a handful more expressing a similar though more equivocal view. Only half a dozen state that Option C will not achieve the particular goals they have chosen. However, more than 30 respondents say clearly that they do not believe Option C will either address the problems or achieve the goals they have chosen.

Seven respondents criticise Option C as presented in the Consultation Document as difficult to understand, alleging that „above grade“ is jargon.

7.4.2 Capacity

Eighteen respondents state a clear view that Option C will be of benefit in addressing capacity issues in the M4 Corridor. Some of these state a strong preference for the option. However, several others comment that its impact will be limited to some benefit to capacity on the local network or to an improvement on the current SDR. A few of the 18 compare it favourably to Option B in particular.

“This would be my preferred solution as it could offer a real alternative route to the M4. The report states that the SDR attracts less traffic than its current design capacity (apart from when there are major incidents on the M4) so I

would think that this spare capacity plus some easing of flows around the current (many) junctions with the local road network could provide a solution at least for the foreseeable future...”

- Respondent

A further 25 respondents challenge Option C on the grounds that it will do little or nothing to address problems on the M4. Most of these say simply that it could not provide the capacity necessary to relieve congestion of motorway traffic. A few others suggest more specifically that the limits of the reach of any improvements to the SDR will be too localised to have much effect on M4 traffic; altogether more than a dozen make this point among the detail of their views on Option C.

More than a dozen respondents worry that improving the SDR will tend to increase traffic on the Newport road network, compromising any potential capacity benefits from Option C. In many cases these concerns are based on a view that the SDR is already too busy, suffering from its own capacity problems. Others say that it has demonstrated that it is inadequate as a relief road when past incidents have made it a diversion for M4 traffic.

“Also this would only improve traffic flow for existing users but not attract users of the M4 as an alternative route, (except if there was an emergency closure of the M4) but I doubt if the system would cope.”

- Respondent

Among specific capacity issues, traffic flow and congestion receive the most attention from respondents to Question 4c. Forty-six respondents believe the option will improve traffic flow generally, some specifying either traffic on the M4 or on the SDR itself as particular beneficiaries. A few of these also cite general benefits to the flow of local traffic around Newport or the south of the city.

Almost 20 respondents focus on the benefits of Option C for through traffic instead, among them the key stakeholder groups Sewta and the FSB, agreeing that it will offer an improved route for cross-Newport travel. A few suggest that it will speed up journey times, either generally, or on the SDR in particular. But more than a dozen of these respondents identifying a through-traffic benefit conversely question the benefits of Option C for local traffic, several suggesting that the option will in fact inconvenience short-distance drivers in prioritising through travellers on a route that is heavily used locally. Sewta, for example, expresses concern about the impact on the local transport network.

“Of the two, Option C is a better option in terms of providing resilience and capacity improvement for through traffic as the grade separation will provide a more attractive route for strategic traffic...”

A further concern regarding this option is the impact of the grade separation on the local environment and transport network. It has the potential for adverse implications for adjoining communities.”

- Key stakeholder: Sewta

Fifteen respondents do not expect any benefits from Option C for traffic flow, doubting in some cases the adequacy of the improved road to cope with demands on it. A few link limited traffic flow benefits to the continued mixing of through traffic and local traffic under this option.

More than half of the responses doubting the benefits of Option C for traffic flow mention the significance of junctions. A few of these suggest there will still be too many junctions to bring

significant benefits. Several more, though, are concerned about bottlenecks or congestion at the junctions at either end of the SDR, usually noting exits at Tredegar Park and Junction 28 of the M4 in particular. These respondents often say, nonetheless, that Option C would be better than Option B.

“...This proposal leaves us with two inadequate roads. One with a bottle neck at the tunnels and the other with a bottle neck over the river...”

- Respondent

7.4.3 Resilience

Although fewer than a dozen respondents state in general terms that Option C will have benefits for resilience issues, more than 30 think that it will relieve traffic pressure on other parts of the road network. The majority of these identify potential relief to the M4 in particular. Some respondents note that Option C developments could be carried out without disruption to the M4, though others worry about the effects of a major incident on the M4 during construction. A few respondents note this resilience benefit as an increase in choice and viable alternative routes for drivers on the road network, reducing the reliance of travellers in the area in general on the M4.

“In contrast to Option B, I consider that this would give sufficient incentive for people to see this as an alternative route, by making it much swifter and simpler. It will also open up parts of Newport to through traffic, allowing business development / opportunity.”

- Respondent

More than 50 respondents doubt the resilience benefits of Option C though. These include a variety of views, sometimes connected. More than 20 – often those noting the SDR’s capacity problems as described in section 7.4.2, above – question its practical ability to relieve M4 traffic in an emergency or during closure. A few of these again state concerns about capacity at the Tredegar end of the route. More than a dozen say that junctions, traffic lights, or in some instances speed restrictions, are currently a problem and will be obstacles to the success of Option C as a relief route. Half a dozen more go on to suggest that the SDR or its modified successor will not be direct, straight or efficient enough to serve strategic traffic, or else stress the importance of improved journey times, and doubt the potential of Option C in this respect.

Other respondents – altogether, more than 20 – state doubts about the possibility of Option C offering a viable alternative to the M4. Many do not consider it likely that the improved SDR will provide an obvious or attractive alternative to motorway users or through traffic, and some stress the challenge of changing driver perceptions and behaviour.

“...- To provide any benefit it would have to be a 60-70mph dual carriage-way all the way through which would mean completely rebuilding the SDR.

“- Even with this, changing the behaviour of people to use the SDR would be hard.”

- Respondent

7.4.4 Safety

Half a dozen respondents make explicit comments about the safety benefits of Option C. A couple attribute this to its capacity improvements over the M4 and the current SDR, while others identify improvements to the safety on and around the SDR itself. Some safety

concerns are implicit in comments about the impact of the option on local communities, but these are properly discussed in the next section on sustainable development, section 7.4.5.

“I welcome the proposed improvements in road safety, personal security and walking and cycling. This appears to be the 'least worst' option.”

- Respondent

7.4.5 Sustainable development

Economic

Almost 30 respondents say that Option C will be too expensive or, frequently, suggest it will be poor value for money. Around ten of these mainly suggest that it will not prove a significant or lasting solution, or that it will likely leave a need for other improvements in the future. On the other hand, the same number concede that the option will offer some or even many benefits, but do not consider that these justify its cost. Several comments also compare it unfavourably to Option B in terms of expense and value.

“As previous answer, Marginally better than 'B' but still a lot of work, disruption and money for no real gain.”

- Respondent

Including those mentioning cost-benefit concerns, altogether nearly 20 comments are made which suggest that Option C will not provide a lasting solution. A few warn of short-term approaches, or suggest this option will only postpone or disguise the need to resolve underlying problems.

More than half a dozen respondents make positive comments about the cost or value of Option C. These though are mostly made with some reservation or conditionality – often relating to the physical infrastructure of the route, as discussed in sections 7.4.2 and 7.4.3 above – or are mentioned only relative to the cost of other options. Almost as many positive comments are made about the provision for phasing which option D allows.

“Option C would provide the second best value scheme if combined with a package of Common Measures as detailed in introductory section to this response. However, there would seem to be little point in improving Newport SDR without major improvement to Tredegar Park Interchange (junction 28) with Bus Priority measures.”

- Key stakeholder: Sustrans

Around a dozen varied comments are made about Option C's implications for economic sustainability in Newport. A couple echo comments about phasing, above, to frame the option's cost-effectiveness as suited to current economic conditions. The key stakeholder group SWWITCH suggests the economic benefits of the option in the current situation are conditional on its timescale. A few respondents say development associated with the option could have a negative impact on business and commerce in the area, either through changed traffic movements once complete, or due to construction blight.

On the other hand, three respondents suggest investment in transport infrastructure will benefit business in the nearby area. On a wider scale, key stakeholders Cardiff Council, the City and County of Swansea and the FSB all state that Option C will be effective in relieving the economic constraints that result from transport related problems in the M4 Corridor or promoting economic sustainability. Both the local authorities mention the strategic travel benefits of the option in this context, though neither makes it their preference.

“...Option C would improve the strategic highway network around Newport, so would reduce the adverse impact the existing constrained network has on the economy.”

- Key stakeholder: Cardiff Council

Social

The majority of respondents discussing social sustainability do so with reference to the construction impacts of Option C. Of the nearly 30 comments relating to construction impacts, most anticipate property blight, community disruption or inconvenience to residents from Option C, which are discussed in non-specific terms. Half a dozen mention the possibility of demolitions along the route. Some discuss impacts on the local environment, further discussed in the passages on environmental sustainability, below. Several others mention temporary traffic management and the disruption caused to travellers in south Newport during construction.

“This would possibly encourage more through traffic to use the SDR at busy times. Disruption to residents would be higher than Option B both during and after construction due to the higher elevation of the road. This is a slight improvement on Option B.”

- Respondent

More detailed comments are made about the social impact of the option once constructed, often connecting to wider economic or environmental sustainability themes. These do not always imply opposition to the option. One respondent identifies the underpasses implied by grade-separated development as detrimental to local pedestrians, while a couple of others say local residents will be isolated between even busier roads. A small number contrast negative social impacts for Newport with the benefits to be expected for the rest of Wales. Half a dozen respondents express concern about the visual, environmental or accessibility impacts of the option on the National Trust property, Tredegar House, some noting its significance for tourism in the area. A small number mention the visual impact of the option on local residents, or in a few cases on the nearby built environment, its architecture and regeneration.

Environmental

Several dozen respondents make varied comments relating to the environmental sustainability of Option C, but most common among these are observations about its implications for pollution. Sixteen respondents say Option C will improve air and noise pollution levels in the M4 Corridor, in the majority of cases arguing that it will reduce them in particular areas by more evenly distributing traffic emissions, though some anticipate overall reductions from improved traffic flow.

“Better traffic flow from this solution would share the road usage in and around Newport during periods of congestion. An improvement to the SDR would distribute noise and air pollution thereby lowering the impact on any one area with improved traffic flow this would result in lower vehicle emissions.”

- Respondent

However, around 20 respondents do not expect Option C to have a positive impact on air and noise pollution. At least half a dozen of them think it will make pollution worse, stressing particularly that it will be increased along the heavily populated route of the SDR. Key

stakeholder, Newport City Council Environmental Health Department, requests associated mitigation measures to protect residents from pollution impacts.

A handful of respondents think Option C will have a low or relatively low general impact on the surrounding environment, in a couple of cases comparing it favourably in those terms to Option A in particular. However, around half a dozen respondents say Option C will have more negative environmental impacts. Some of these are those described in on the passage on social sustainability section above, mentioning the visual and landscape intrusion of the proposed grade-separated developments or the impact on local heritage and the built environment. The small number who mention the option's impact on local wildlife and habitats are divided. A couple of respondents, including key stakeholder the RSPB, suggest there will be displacement of local species, but a few others suggest its impact will be small in this regard, especially relative to other options.

“...Option C does not pose as significant a threat to the biodiversity of the area when compared to Option A...”

- Key stakeholder: FSB

Carbon emissions and transport modes are the subject of further comment. Noting the capacity increases associated with Option C, a few respondents say traffic will only increase, with negative environmental impacts, or call for a modal shift in travel. Key stakeholder SEWTA identify concerning impacts of Option C on the immediate environment, including its disruption of nearby low carbon transport networks, noting the negative implications of this for the option's emissions profile. Meanwhile, though one respondent expects eventual improvements to pedestrian and cycle routes in the area, another three respondents cite the disruption Option C will involve for the same networks as evidence of its poor environmental sustainability.

“Every opportunity should be taken in the design of Option C to improve the linkage of cycle routes within the M4 corridor. The new route severs some of the existing NCN especially alongside the river Usk. Alternative high quality replacement links are needed especially to connect with those provided either side of the Usk north of the PDR Bridge. Existing cumbersome and wide at grade cycle crossings of the PDR are likely to be perpetuated. Every effort is needed to explore opportunities for entirely segregated bridge or underpass crossing facilities for walkers and cyclists especially around the Usk riverside.”

- Respondent

7.4.6 Other comments relating to Option C

The above analysis covers the issues and concerns raised in responses to Question 4c. However, a number of respondents comment on Option C outside of this question. In particular some respondents, including a number of key stakeholders, reply to the consultation in a format that does not follow the consultation questions or mention Option C among their Additional Comments in Question 5. These comments and their main distinctions are summarised in this section.

The balance of support for and opposition to Option C differs in responses to Question 5 from those to Question 4c. Slightly more of these respondents support consideration of the option than oppose it, and the breakdown of numbers for and against is somewhat more even than in the option-specific question. Many of these though still make their observations

in comparison with Option B, including key stakeholders Friends of the Earth Cymru, who identify:

“All concerns raised by Highway Option B, but with greater proportional impact to the scale of increased traffic and construction impacts.”

- Key stakeholder: Friends of the Earth Cymru

Other key stakeholders disagree, including Magor with Undy Community Council – who consider Option C their preferred option alongside Option B due to its low land-take. Key stakeholders the CPRW note that it will have a low impact on the rural landscape and green areas compared to Options A or D, and in this comparative advantage find agreement with key stakeholders the Gwent Wildlife Trust – though the latter express particular concerns about Option C’s impact on waterways, and in particular the rivers Usk and Ebbw.

Some respondents have broadly positive views of the option, but express particular concern over certain aspects or impacts of the option – in several cases its longevity in particular, including key stakeholder SEWTA, which feels Option C:

“would perform better than Option B in terms of providing resilience and capacity improvement for through traffic. There is a concern, however, that these benefits will be constrained by the capacity of key interchanges at Junctions 28 and 24 without further investment in them.”

- Key stakeholder: SEWTA

7.5 Question 4d

In total, 397 respondents answered this question. The views they expressed are summarised below.

7.5.1 Support and opposition to Option D

Table 7.4 Respondents expressing degrees of support or opposition to Option D

	<i>Total responses received to question</i>	Preferred or supported option	Qualified support or support with caveat	Challenge or opposition to option
Option D (Question 4d)	403	42	48	92

Of those respondents who clearly state whether or not they support Option D, 42 express support and 92 state their opposition. As well as those who state support for the option, 31 give support with a caveat or condition. Some believe that other measures would need to be enacted alongside Option D in order for it to be effective and a small number of respondents suggest a variation. While not explicitly supportive or opposed, a small number of comments discuss the option as a possibility, in some cases acknowledging potential benefits or challenges.

Option D is sometimes compared to other Options, with some respondents stating an order of preference. Six respondents identify Option D as their preferred option, while 12 rate it as

their second preference. As apparent from the analysis below, this option is often compared to Option A.

In response to the specific question of how far the option would address the problems identified and achieve specific goals chosen in the previous section, 12 respondents feel Option D would be successful in addressing the problems identified in the consultation document, while 10 state that it would not solve these problems. Meanwhile 21 respondents believe Option D would achieve the goals they prioritised and 42 believe it would not. In at least 18 comments, it is clear that the respondent believes the option would achieve some but not all of the goals they have chosen. Indeed, the majority of comments do not refer to all problems and goals together but discuss particular problems or goals in more depth. The more specific issues raised are outlined in the analysis below.

7.5.2 Capacity

53 respondents believe this option will be effective in increasing capacity and therefore reducing congestion. The majority of these are supportive of the option, however a small number are highlighting that this increase would be achieved at the expense of environmental and social disruption. One respondent states that Option D:

“Would markedly increase capacity, but at the cost of huge disruption, delays to existing traffic, loss of houses, marked increase in pollution and noise and increase in accidents during construction”

- Respondent

In particular the additional tunnel at Brynglas proposed as part of Option B is praised as an effective way of tackling congestion problems. Of the 20 respondents who support this, many identify the tunnels as the crucial bottleneck on this part of the M4. For one respondent, Option D:

“Tackles the problem at the source. The main cause of the congestion is the 2 lane section through the tunnels - improving that section is an obvious answer.”

- Respondent

22 respondents dispute that the measures in Option D would be successful in increasing capacity or addressing congestion. This point is often made alongside comments about the cost of the option and the impacts associated with it, with respondents stating that these are not justifiable. A similar point is also made by those who believe a new route is necessary to address the problems identified:

“This would cause significant disruption and additional congestion along the M4 around Newport for a number of years throughout the project, and probably not resolve the problem then. The revenue would be better invested in a new 'M4 relief road' south of Newport”

- Respondent

Finally, 20 respondents are of the opinion that Option D would in fact worsen the problems affecting this stretch of the motorway. In some cases their comments address the short term impact of improvement work causing delays and congestion; other responses highlight that improving the existing motorway would encourage a greater volume of traffic to use this route. This could in turn result in further congestion and associated environmental problems. One respondent states:

“This is the least likely to achieve chosen goals and address problems, with a high likelihood of making matters worse for a considerable period, as well as increasing traffic long term”

- Respondent

Commenting specifically on the Brynglas tunnels, 19 respondents feel that widening the tunnels will not remove this bottleneck. Some respondents cite the fire that affected the tunnels in 2011 when discussing the problem of accidents and blockages within the tunnels. A perceived slowing of traffic before entering the tunnels is also mentioned by respondents who think that additional lanes would not address these issues.

Local roads

Insufficient local road capacity is one of the transport related problems identified in the consultation document. 49 respondents believe that Option D would not improve local traffic problems, with many of these suggesting the measures involved would actually worsen congestion on local roads. Some attribute this to the changes to junctions proposed in Option D, which would involve closure of motorway access at Junction 25 and removal of the east facing slips at Junction 26. They argue that preventing local traffic from accessing the motorway at these junctions would increase the amount on routes across the city. Indeed the impact on local traffic is mentioned by many of the 20 respondents who oppose these junction alterations. For others the concern is in the case of accidents a greater volume of motorway traffic would be diverted through the town, adding considerably to congestion on local roads. As one respondent puts it:

“The option as a whole will actually make worse what I believe to be the main problem - it is the local road network, rather than the motorway which struggles with the volume of M4 traffic.”

- Respondent

Of those respondents concerned about the impact on local traffic, a small number acknowledge that through traffic would be improved. However this is thought to be at the expense of the local network. However, three respondents believe that by allowing a better flow of traffic on the M4, Option D would relieve the pressure on local roads in Newport, thereby reducing congestion. In one case this is attributed to the additional tunnel at Brynglas proposed in this option:

“The result will certainly be safer than the M4 at present, and the second tunnel means that traffic could be diverted through one tunnel as contraflow if the other were blocked by accident or roadworks - thus possibly lessening disruption to traffic on local roads.”

- Respondent

Feasibility

Many responses question whether Option D represents a cost effective or even feasible way of increasing capacity. Indeed, the cost of the measures is one of the most frequently cited concerns in relation to Option D, with 72 respondents mentioning it. The estimated cost is often cited alongside other reasons for opposing this option, notably the disruption it would entail. For this respondent, the concern is about cost effectiveness:

“It will not solve the problem of congestion in the long term and cannot be considered as good value for money as it is not a 'final' solution to the problem”

- Respondent

The timescale of this option is also an issue cited in relation to feasibility. There are 15 comments referring to the timescale, with most suggesting that the time it would take to complete the works proposed in Option D would make it inappropriate as a means of addressing capacity. In many cases, this argument is made by respondents who question the long-term effectiveness of this option (see below in the section on Resilience).

Finally, 30 respondents point to the challenges of constructing another tunnel at Brynglas due to the geology of the area. Often referring to the difficulties faced in the construction of the original tunnels, they argue that the technical difficulties involved would make this too costly, risky or generally not viable.

“Building another tunnel causes huge disruption and around the area. The land has been sliding down around existing tunnel caused by its construction. We don't know what sort of problems occur if this option is chosen. a large number of houses have to be demolished and tunnel has to be drilled. It will probably cause further landslide around the tunnel”

- Respondent

7.5.3 Resilience

The resilience of Option D is discussed both in terms of the M4's ability to cope with accidents and congestion as well as its ability to cope with increased demand in the future. The most cited concern related to resilience is that the option does not provide for an alternative route should the M4 closed or heavily congested. This is often emphasised by respondents who feel only a new road would be sufficient to solve congestion problems. Forty-eight respondents highlight the lack of an alternative to the M4 in their response and at least 20 conclude the option does not represent a true solution for this reason. Option A is often referred to specifically in this context, and although Question 4d addresses Option D specifically, 18 respondents use it to express a preference for Option A. Among respondents whose preference is with Option D, there is also an acknowledgment that a lack of alternative routes affects the motorway's resilience. However, this point is also acknowledged by more supportive respondents as a key problem with the existing stretch of the motorway which Option D fails to address. Key stakeholder Associated British Ports recommends that particular consideration would need to be given to accidents within the Brynglas tunnels:

“...the tunnels remain as a significant risk to traffic flows in the event of incidents in the tunnels themselves. Resilience in terms of flexibility in the use of the tunnels and the additional tunnels should be an important consideration”

- Key stakeholder: ABP

Similar arguments are made by those 26 respondents who criticise the option on the grounds that it does not represent a long-term solution. Some suggest that failure to address this issue means that the motorway will be unable to cope with an increasing volume of traffic in the future. For example, one respondent states:

“This would provide additional capacity, but based on existing flows there would be a danger of simply alleviating an existing problem without

addressing the cause. If widened to remove lane drops and lane gains through junctions it could be sooner than people think that four lanes could be justified and then the 'bottle neck' would simply be moved further along the motorway”

- Respondent

In contrast, 11 respondents believe the option would provide a long-term and resilient solution. One stakeholder argues that the phasing proposed in this option would mean that capacity could be increased in stages in order to meet increases in demand, while another respondent states that Option D:

“...would remove a significant number of lane switching manoeuvres from the M4, thereby improving safety on the road network, and in turn reducing the number of instances where the motorway would require a full closure. The continuous hardshoulder would provide more resilience through space in which traffic management could be set out.”

- Respondent

7.5.4 Safety

Improving the safety of the M4 corridor between Magor and Castleton is one of the goals of the M4 CEM programme. Six respondents argue that Option D would successfully address this issue. Some of them associate this benefit with the provision of an additional tunnel at Brynglas, which is seen to address the crucial safety issue of three lanes merging into two at the tunnels.

However a similar number of respondents express concern that Option D would have a negative impact on safety. One aspect of this concern is that increased traffic in the Brynglas tunnels could lead to more accidents. Another safety issue highlighted is the increased complexity of motorway junctions, which respondents believe could confuse drivers and cause accidents. According to one respondent:

“...the already confusing network of roads and bridges, motorway exit closures, road filters, sudden roundabouts and inefficient access to parts of the Malpas Road would hardly be enhanced by the addition of yet more roads, tunnels and bridges. Adding to this vehicular mayhem could well have a severe detrimental effect on road safety and increase accident rates”

- Respondent

Some respondents relate their concerns about safety to those about the lack of an alternative to the M4 should the motorway be closed in case of an accident. One respondent worries that the changes proposed at Junctions 25 and 26 would exacerbate safety problems:

“With option „D“ it is envisaged that slip roads at J25 and 26 will be closed, which will increase the traffic flowing through Newport, and hence increase congestion. This could prevent emergency services from reaching their destination, that could make a difference to whether someone lives or dies”

- Respondent

7.5.5 Sustainable development

Economic

The potential impact of Option D on the local and regional economy is another aspect of sustainable development discussed in responses to this question. Some respondents fear that there will be negative impacts from construction works – this has been discussed in the Resilience section above. 20 respondents comment that the improvement works proposed in Option D and the resulting traffic flows will in the long term damage the economy of South Wales. Among other comments on the local economy, a few respondents voice concern that the measures in Option D are aimed at encouraging through traffic which could lead to Newport being cut off from any economic benefits, or becoming a „drive through town“ in the words of one respondent.

Increased access to regional markets is mentioned as a potential benefit and three respondents believe that increasing the capacity of the M4 as proposed in Option D would help to stimulate increased investment in the region. In one example, the respondent feels this would outweigh the initial cost of disruption:

“A 4 lane motorway is an excellent aim and would be worth the disruption caused during the build - I believe the current queues (which seem to be occurring earlier in the afternoons and ending later now) are a significant barrier to investment / productivity in the local economy”

- Respondent

Social

The most prominent concern expressed in relation to Option B is the disruption respondents believe will result from the widening of the M4 corridor . Concern about disruption is expressed generally in more than 100 responses, often referring to disruption of traffic flows on the M4 caused by construction work. However, in more than 70 comments this concern focuses on the impact of the widening and tunnel works on the local community. The specific impact of an additional tunnel on residents of Brynglas and Malpas is also highlighted, with at least 20 responses referring to the disruption these works will cause to the community. One comment relating to Brynglas states that:

“An additional tunnel will have a massive negative impact on the community we are building in our area. Noise levels are already high in this area, and an additional tunnel (not to mention the noise and disruption whilst the tunnel is constructed) will only serve to increase the problem”

- Respondent

A small number of responses counter that Option D would cause a relatively low, or at least acceptable amount of disruption. Referring to both impacts on traffic and local residents, these comments suggest disruption can be mitigated or that it is less than that associated with other options.

Among the specific impacts on local residents mentioned, the most significant is the demolition of properties that is likely to be necessary as part of Option D. Concern about demolition or compulsory purchase is mentioned in at least 61 responses, with many emphasising the destructive impact this would have on the community as well as the individuals affected. A smaller number of respondents also highlights the potential impact on property values and the difficulties faced by those trying to sell their homes. Respondents

also mention the related problem of structural damage to properties near the Brynglas tunnels, often with reference to the problems encountered in the initial construction of the tunnels:

“This is not an option, the houses that are currently over this area are already suffering structural problems, if you widen the tunnels more peoples homes will be demolished as some were when the tunnels were first built. Too many domestic properties are in this area for it to become viable”

- Respondent

Increased noise, both from construction work and traffic on the widened motorway is another concern to respondents, as is air pollution. Both these issues are mentioned by at least 39 respondents.

Another social impact of Option D highlighted in responses is the deterioration or loss of access to the M4 for residents of Newport. This concern relates to the closure of motorway access at Junction 25 and removal of the east facing slips at Junction 26 proposed as part of Option D. Of 20 respondents opposing the junction changes, many argue that these measures will disadvantage local residents by making the motorway less accessible and increasing local journey times. Some of these respondents also believe these measures will increase traffic and congestion on local roads:

“is this really likely to support locals, and the population living in and around newport? as you've said, access at junctions 25/26 will be even further restricted. making journeys for locals to get the motorway ridiculous. hampering local newport roads even more. this is about long commuters only”

Respondent

Environmental

A range of environmental issues are mentioned in responses to this question, the most prominent being noise and air pollution affecting those living near the stretch of the M4 under consideration. Both these impacts are referred to in 39 responses and generally attributed to an increased volume of traffic using this stretch of the motorway after widening has been completed, although the impact of construction work is also mentioned in this respect.

General concern about the environmental impact of Option D is expressed in 10 comments. These refer to both the short term environmental impact of construction work involved in widening and tunnelling, and the longer term impact on local environment; in some cases it is not specified. Other environmental concerns include impact on floodplain, biodiversity and wildlife and visual impact on the surrounding landscape.

By contrast, 11 respondents believe Option D would minimise environmental impact, with most of these respondents comparing it to the environmental impact of building a new road as proposed in Option A.

The need for sustainable travel alternatives to car use is another aspect of sustainable development mentioned in relation to the problems and goals. Five respondents express concern that motorway improvement encourages car use. One respondent suggests investment in alternative transport methods should be pursued in place of this option:

“This seems very expensive and is unlikely to solve the problems on the M4, since increased road capacity tends to encourage increased road usage... There needs to be investment in alternatives to road use, and these

investments can't take place if major expenditure is undertaken on this kind of scheme”

- Respondent

There are nine comments on the goal of reducing carbon emissions. Generally these suggest that Option D would reduce emissions, although this is often expressed with caveats by respondents who feel that this would be at the expense of other goals not being met.

7.5.6 Other comments relating to Option D

The analysis above covers the issues and concerns raised in responses to Question 4d. However, some respondents mention Option D under Question 5 (Additional Comments) and others, including a number of key stakeholders, reply to the consultation in a format that does not follow the question structure. While these responses are analysed fully in the Chapter relating to Question 5, some of the key points made in relation to Option D are summarised below.

Many comments relating to Option D express opposition. However, while few are clearly in favour, a small number identify merit in particular aspects of Option D or believe it could be effective if combined with other options. Indeed, one organisation concludes that there is no single solution to the problems facing this stretch of the M4:

“For that reason we believe that a phased implementation of Option D, combined with local improvements including elements of Options B or C offers the most adaptive solution with an implementation programme that can be adjusted in response to future developments and the achieved increases in growth.”

- Respondent

Key stakeholder the Freight Transport Association expresses support for a similar combination of measures from Options B and D, while another respondent who favours Option A believes that elements of Option D would need to be enacted alongside this, including the continuous hard shoulder.

Similar concerns are raised about Option D, mirroring those in responses to Question 4d. The cost-effectiveness of the proposed option in providing capacity and the disruption it would involve are questioned. The South Wales Chamber of Commerce, for example states that:

“The building of new tunnels or expanding the existing ones seems like a project that costs a significant amount for the amount of capacity it would bring. It would also create significant local opposition.”

- Key stakeholder: South Wales Chamber of Commerce

As in the quotation above, there is also scepticism among some respondents that the proposed option would create the capacity needed. Another key stakeholder, Sewta believes that a drawback of increased capacity on the motorway will be an increase in pressure on local routes leading to the motorway. By contrast another respondent expresses support for Option D on the grounds that widening the motorway would mean less traffic being diverted through the city.

Similarly, many of these respondents raise the issue of disruption, and more specifically the social impact on residents. Construction work affecting local communities and businesses is the prominent concern mentioned in relation to Option D, alongside a more specific concern about demolition of homes. A number of respondents also comment on the changes to

Junction 25 and 26, in a few cases arguing that these compound the inconvenience faced by residents. Newport City Council, among others, highlights the impact that displacement caused by compulsory purchase and demolition will have on the local community:

“This option also involves the compulsory purchase of properties along the corridor of the existing M4, which will displace residents and have a significant detrimental effect on many families in Newport. We strongly oppose this move.”

- Key stakeholder: Newport City Council

As in the responses discussed above, a small number of respondents acknowledge the disruption associated with Option D, both in terms of traffic and impacts on local communities, but maintain that the long term benefit justifies this.

Concern about the lack of an alternative route is again highlighted in these responses as an issue of resilience. Some respondents suggest that improvements to the existing motorway will be insufficient as a long-term solution and make the related argument that only a new road is necessary. As a counterpoint to these arguments, one respondent presents the opposite case that a truly long term solution would need to involve improvements to the motorway itself as proposed in Option D.

“The Motorway itself needs attention, anything else is just postponing the problem and I therefore believe that only by widening it (and the tunnel) will this problem be satisfactorily addressed. I realise that there will be further delays initially while the work is going ahead but anything else would be a compromise and I would therefore urge the Welsh Government to choose this option as I believe it to be the most cost effective, safe, environmentally friendly and long term solution.”

- Respondent

In relation to sustainable development, Newport City Council echo the concern mentioned above that increasing the capacity of the motorway will increase the volume and average speed of traffic, with a corresponding increase in noise pollution. This concern is echoed by Friends of the Earth Cymru, who add that this would increase carbon emissions in addition to having a number of other environmental impacts:

“Additional traffic being generated in total, leading to increased greenhouse gas emissions, negative impacts on water quality on waterbodies draining the modified highway (including the River Usk Special Area of Conservation) and worsened air quality along this stretch of motorway. All of these negative impacts run counter to Welsh Government environment commitments.”

- Key stakeholder: Friends of the Earth Cymru

8 Additional Comments

8.1 Introduction

This chapter provides a summary of those responses to the consultation addressing issues relating to Question 5 in the Consultation Document, which provides an opportunity to respondents to make additional comments..

The question asks:

Question 5. Have you any additional comments to make regarding how to address the travel related problems occurring in the M4 Corridor, Magor to Castleton?

In total, 444 respondents answered Question 5.

A total of 63 respondents answered the consultation without using the response form provided, using either their own response format or submitting a response/comment by email. General comments made in these responses are also discussed in this chapter. Where the views expressed relate explicitly and in detail to one of the consultation questions, the comments are discussed in the relevant chapter. If, for example, such a response includes comments specifically addressing Option A, these comments are covered in the chapter about Question 4a.

8.2 Question 5

8.2.1 General alternatives and public transport measures

A wide variety of suggestions are made regarding how else to address travel related problems occurring in the M4 Corridor, Magor to Castleton (as alternatives to the options presented within the Consultation Document).

Some respondents propose alternative solutions to the M4 CEM options, while others suggest additional measures that could be implemented alongside the M4 CEM options. Some argue that no one solution will fully address the problems occurring on the M4 and suggest investment is needed in a range of different modes.

Modal shift

Over 30 respondents encourage a modal shift away from car usage towards more environmentally friendly forms of transport, or to a reduction in travel altogether. A few respondents argue that car usage is contributing to climate change and believe greater emphasis should therefore be placed on more sustainable modes of transport.

A number of respondents argue that the consultation is too narrow in its remit, and should have allowed for greater consideration of modal shift and public transport.

“The whole remit of the M4 corridor consultation should be far wider and will only make any sense long term if the relative merits of a fundamental shift to public transport, (rail and bus, plus a local emphasis on walking and cycling,) are addressed now. We need to find far more refined and encompassing ways of planning.”

- Respondent

A few respondents think that greater emphasis should be placed on integrated planning with regard to local and regional transport measures. Suggestions include integrating regional transport plans, such as rail improvements, with the M4 CEM programmes. Another recommendation is for greater integration with local development plans:

“CCW believe that for sustainable alternative modes of transport to be taken up by public it is paramount that transport plans and policies are integrated across the Local Authorities/ Welsh Government (LDP’s included) ... As part of this approach it is essential that the M4 CEM is fully integrated into the Newport LDP.”

- Key stakeholder: Countryside Council for Wales

Public transport

Many respondents believe that public transport has an important role to play in addressing local transport problems. Some argue a lack of investment has resulted in inadequate services. A few respondents emphasise the importance of providing public transport services that are affordable, with some calling for them to be free.

Over 20 respondents to Question 5 support investment in or development of rail services. Some consider rail to be a more environmentally friendly mode of transport, which will encourage a modal shift away from roads. However, one stakeholder argues that the current rail system has a high carbon footprint, and investment is needed to bring it up-to-date.

Various ideas are put forward regarding public transport measures. The views expressed often reiterate points discussed under Question 3 (Chapter 6). Respondents' suggestions for public transport measures include: electrification of the regional rail network, more frequent rail services from Swansea to London, improved local rail services in Gwent, new stations, the introduction of services linking bus and rail, more park and ride schemes, and a South East Wales Metro.

Freight transport

A few respondents think more should be done to manage road freight traffic. Suggestions include shifting more freight to rail and incentivising transport companies to utilise the M4 at off peak times.

Walking and cycling

A few respondents emphasise the importance of providing infrastructure that supports cycling and walking. Suggestions include investing in more cycle paths and introducing active travel schemes which encourage people to walk or cycle to work.

“We also need improved provision for cyclists and pedestrians. Newport City Council is paying lip service to this and this could be included as part of the council's fitness programme.”

- Respondent

Smart choice measures and other suggestions

A few respondents comment that „smart choice measures” and incentives are needed to encourage modal shift away from car usage and reduce congestion.

A few comments are made on the impact of commuting and school runs on congestion. One suggestion is to focus on work (school) practices. Suggestions include staggering opening and closing times and flexible working.

A few respondents think more should be done to discourage single-occupancy car use, and encourage car sharing instead. One respondent thinks there needs to be a better understanding of average car occupancy to tackle this problem. Another request is for secure and convenient parking, including park and share sites.

A local authority department comments on the role they have to play in promoting and incentivising more sustainable modes of transport:

“Finally as much of the responsibility for promoting sustainable travel, creating travel alternatives and influencing behavioural change falls on local authorities an annual fund should be provided to help local authorities deliver sustainable travel objectives and those of the CEM strategy. This would provide an on-going commitment to promoting and achieving sustainable travel and reducing congestion and environmental impacts through the M4 corridor.”

- Key stakeholder: Newport City Council – Environmental Health

8.2.2 Alternative road suggestions

Respondents make various suggestions with regard to how the road network could be improved in addition to, or instead of, the M4 CEM options. Here are a few examples:

- Develop the Wales's north-south road infrastructure
- Develop a coastal road, elevated where required, which joins the M4
- Develop a new motorway across the Valleys from the First Severn Crossing
- Build a relief road to the north of the city, joining the M4 at J29/30
- Change the status of the M4 around Newport to a trunk road
- Relieve minor roads of traffic by providing quicker throughput of traffic at bottleneck junctions e.g. between the A467 and A48
- Improve the local road network e.g. the A40 from its junction with the M50, and through the city centre
- Improve the southern distributor road, so that it is better utilised and traffic flow is improved
- Phase in a number of smaller scale improvements e.g. a Duffryn link, junction improvements to the SDR, link between the SDR and the M4
- Construct bridges, including footbridges e.g. by a school, and elevated sections of the motorway

A few respondents express their disappointment that the M4 relief road proposal was announced as being unaffordable in 2009. Comments include that none of the options would be as effective as the proposed M4 relief road and a desire for it to be reinstated.

“The basic premise of our response is a simple one. Having reviewed the options available in the M4 CEM program we still believe that the best and only option that should be considered is the M4 relief road. All other options do not have the meet the long term capacity requirements that are needed for such a critical piece of the South Wales infrastructure.”

- Key stakeholder: South Wales Chamber of Commerce

A few respondents refer to forthcoming road improvements, such as upgrading of the Southern Distributor Route and dualling the A465. They argue that the impact of these improvements on M4 traffic volumes should be assessed before committing to the M4 CEM options.

A few respondents identify a need for a reduction in the number of motorway junctions within the corridor between Magor and Castleton, and how any changes that are made to slip roads would need to be managed.

“The Consultation document does highlight the high number of motorway junctions within the local area and the problems this causes to traffic congestion and traffic flow. A reduction in the number of slip-roads would require improved, alternative routes and the options put forward should be evaluated in this context.”

- Respondent

A number of respondents recommend introducing traffic management measures on local roads throughout Newport, on roads that join the M4, and on the M4 itself.

A few respondents recommend introducing further speed limits on the M4 to help reduce air pollution, improve safety and reduce congestion.

A couple of respondents comment that road access to Cardiff airport needs to be improved, for example with a motorway link.

A few respondents are also in favour of congestion charging or road pricing.

8.2.3 General comments on the Highway Infrastructure Options

Over 300 respondents who did not use the response form to respond to the consultation make general comments on the highway infrastructure options. Comments referring to specific options have been discussed under the relevant chapter. Comments addressing the options in a general manner are discussed below.

Some respondents express general support for the M4 CEM programme, without explicitly mentioning one of the highway infrastructure options.

There are also some suggestions that more than one of the options will need to be implemented:

“Given the urgent need to provide an alternative to the M4 around Newport, for a number of reasons, including safety & resilience, FTA would suggest that the Welsh Government moves ahead with a combination of options b & d.”

- Key stakeholder: FTA

There are also more than a dozen respondents who express opposition to all the highway infrastructure options outlined in the Consultation Document:

“Newport Friends of the Earth would like to express our opposition to all options, as outlined in the Magor to Castleton Corridor Enhancement Measures Programme (M4 CEM). These options would cause an adverse impact on the people of Newport, its unique wildlife and landscape of the Gwent Levels, add significantly to pollution levels and carbon dioxide emissions.”

- Respondent

Some argue that a “Do nothing” option should have been included in the Consultation Document, which one stakeholder says is standard in environmental impact assessments.

A number of respondents express general concerns and suggestions without explicitly commenting on one of the options outlined in the consultation document. These are discussed in the sections below.

Environmental impact

Over 100 respondents who did not use the response form discuss the environmental impact of the options. At least half state concerns about negative environmental impact, including the 54 responses organised by CALM. Many respondents explain that there would be a detrimental impact on wildlife and landscape, most frequently highlighting the effects of Option A on designated sites for nature conservation such as an SSSI and the Coastal and Floodplain Grazing marsh BAP Priority Habitat.

Some respondents argue that the options would generate extra traffic, which in turn would add to pollution levels and carbon dioxide emissions.

“New roads generate more traffic. This has been proven ever since the M25 was built. The proposed road will create higher flows of traffic and this in turn will lead to increased greenhouse gas emissions.”

- Respondent

A few stakeholders comment that the scheme runs counter to the Welsh Government's duty to promote sustainable development and their obligations under the Habitats Directive, Wildlife and Countryside Act.

A number of stakeholders also criticise the process that has been followed in developing the options. In particular, there is criticism that a Strategic Environmental Assessment has not yet been undertaken on the M4 CEM Programme. A couple of stakeholder organisations believe this leaves the process vulnerable to legal challenge.

Social and economic impacts

Concerns are also expressed about the potential negative social and economic impacts of the M4 CEM options.

“I think some local residents may doubt the need for any major infrastructure project, or at least we think the consequences of infrastructure works locally will be as bad as the cure.”

- Respondent

Over 50 respondents think the options will negatively impact recreational activities, for example in the Gwent Levels, and tourism. Some respondents believe the measures will adversely impact on local people's quality of life and are concerned about air or noise pollution. Others worry about the options' impact on property values and the possibility that some homes might be demolished as a result of the Highway Improvement Options.

However, a number of respondents believe that the options will bring benefits, for example to the economy:

“Like all large projects it seems daunting at the outset, but if we are trying to project Wales as a forward thinking and entrepreneurial economy we must grasp the bull by the horns and go for the only alternative that is going to give true long term benefits to the Welsh economy”

- Respondent

Another reason some respondents express reservation about the M4 CEM improvements relates to the level of funding required. One respondent thinks it is an inappropriate use of public funds. A stakeholder organisation argues that the Welsh Government needs to ensure the programme is value for money and that all funding options are explored.

Impact on road networks and public transport

A few respondents comment on the impact the construction works would have on the road network. One stakeholder believes the disruption during construction is likely to result in a shift from road usage to public transport, which needs to be planned for. They argue that additional rail services will be needed, as the express bus/coach service will also be affected by the road improvement works.

Another concern expressed in consultation responses is that the M4 CEM improvements would affect congestion on other road networks, for example the road network around Newport and on highway networks beyond the area of the M4 discussed in the Consultation.

“There is concern that the impacts of the enhanced traffic flows achieved by the proposed highway options, on highway networks beyond this length of the motorway, do not appear to have been modelled or evaluated. As well as the road network around Newport, there are also concerns at the impact on strategic junctions further west and east.”

- Key stakeholder: Sewta

A few respondents comment that delivering one of the proposed M4 CEM options will be a lengthy process, and argue that other investment will be needed in the short to medium term such as rail, bus and smarter choices programmes.

8.2.4 Comments on the Consultation

A number of respondents comment on the M4 CEM consultation process. The majority of those are critical of the process. However, a few do express support.

Consultation process

Fewer than ten respondents comment directly on the response form. They say they did not find the response form, or the website, user friendly. One respondent felt the response form was steering respondents towards accepting the overall premise that new roads are needed.

Other concerns include that not enough information about the consultation process has been provided to local people and users of the motorway.

“This process has been poor, as a resident living above the tunnels I only found out we were in a consultation period when there was a local election and candidates were canvassing.”

- Respondent

A few other respondents think that their responses will not have any influence over the decisions that are made:

“It's about time that some attention was paid to the M4 situation, so your CEM exercise is welcome. Unfortunately, popular experience shows that the CEM consultation outcome will have been already decided, that no views will be considered valid other than those which match those desired...”

- Respondent

A few respondents refer to stakeholder workshops. One makes a general criticism, stating there were deficiencies in the process. Another queries whether the views expressed at events had any influence on the options. In contrast, another stakeholder comments on how useful they found the stakeholder events.

Commenting on the public events, one respondent says they had hoped the events were more consultative rather than only providing information.

Consultation Documentation

A total of 90 respondents make comments about the data presented in the Consultation Documentation.

A number of respondents, including key stakeholders, are concerned that traffic data used in the Consultation was out of date. They think the data used is too old to take into account rising fuel costs and other recent developments such as the variable speed limit, which are likely to have impacted on traffic volumes.

“Furthermore, the Consultation Document should have presented the most up-to-date traffic data rather than the 2007 traffic flows used in this document, which are almost five years old. It would have also been of value if more detailed information had been provided in the consultation material, such as a further breakdown of trips under 20 miles.”

- Key stakeholder: Cardiff Council

Key stakeholder Friends of the Earth Cymru argues that the consultation should be reissued with revised data or abandoned.

Over 60 responses, including those organised by campaign group CALM, criticise the Consultation Document because they feel it gives an incorrect assumption of continuing traffic growth.

“The inherent assumption driving this consultation (and indeed the M4 CEM program) is that traffic levels and congestion on the existing M4 are rising and will continue to do so for the foreseeable future. It is unclear how this conclusion has been reached, given that Figure 3 shows a trend of decreasing traffic flow since 2004.”

- Key stakeholder: The Wildlife Trust of South and West Wales

A few other criticisms are made of the documentation. Some respondents argue that insufficient justification or evidence has been provided for the highway options. One respondent comments that there is a lack of information as to how potential impacts have been assessed. Another stakeholder criticises the scope of the modelling, saying there is a lack of information on the implications of the options on transport networks beyond the study area. Other respondents argue that the measures outlined in the Consultation Document are too narrow.

9 Thematic synthesis

A total of 674 respondents answered at least one of the Consultation questions, the vast majority answering most or all of them. In answering the questions, many respondents made comments that range widely across the scope of the Consultation and across the topics covered by the 16 analytical themes described in Table 3.1 of this report.

This chapter provides a synthesis of the main issues respondents identify in relation to each of these themes, offering a concise and comprehensive overview of the analysis findings. The Consultation Document asks respondents to consider the highway infrastructure options, public transport measures and common measures with reference to the transport related problems and the goals they identify as most important among the Programme's complete lists. This chapter summarises salient themes and explains relevant relations between respondents' views on goals and problems and their perception of the various measures and the M4 CEM programme more broadly.

9.1.1 Comments on the current situation

Views on transport related problems in the M4 corridor are examined in detail in Chapter 4.

A very large number of respondents refer in their responses to their own experiences of driving on the M4 and travelling around South East Wales by a range of modes of transport. Many identify problems they perceive on the road network, which they use to illustrate their response to the Consultation questions. A substantial number of respondents comment on the A48 Southern Distributor Road and other routes and junctions in the Newport area, but most comments address the M4 and its junctions specifically.

Comments on the capacity of the road network are widespread, and respondents often focus on congestion as the main problem limiting safe and reliable travel in the M4 Corridor. Respondents commonly cite peak time congestion and a conflict between local and long distance traffic on the M4 around Newport as the main causes of problems affecting capacity, resilience and safety. Many respondents identify particular pinch-points and problem spots, focusing most often on the Brynglas tunnels, but almost as often mentioning Junction 28 and the roads and roundabouts connected to it. Others refer to conditions on the Newport stretch of the motorway generally, with numerous comments about lane changing and driver behaviour in the context of road design and capacity. HGVs and large vehicles are also the subject of many observations, most suggesting their behaviour and limitations aggravate congestion.

Many respondents mention the extreme disruption caused by accidents and their aftermath, and so touch on the topic of resilience. Others discuss this topic with reference to past maintenance works on the motorway, commenting in particular that motorway maintenance can make drivers less safe and pose obstacles to accident management and recovery. Where respondents state that resilience is a concern, they often cite the lack of through-route alternatives to the M4, or the inadequacy of the road infrastructure around Newport for coping with these situations.

A number of respondents agree with the Consultation Document that the standard of the M4 is poor, particularly citing the Brynglas tunnels, short slip roads and intermittent hard shoulders, which are cited as safety concerns. Some feel that its original design as a bypass has left it inadequate for the demands made of it today as a motorway and strategic European corridor. Respondents make many comments on the variable message signage and speed limit measures; most but by no means all of these are negative. A number of

these comments include safety concerns about M4 information systems distracting drivers or encouraging sudden slowing or lane changing in response to warnings or instructions displayed.

Respondents often discuss the constraint or threat that problems of the local and regional road network pose to Wales's future. Some of the particular impacts connected to sustainable development are captured in more depth later in this chapter. Many respondents, however, discuss the constraint in more general terms, mentioning the salience of the M4 as Wales's major road artery, the impression given to visitors to Wales, and unflattering comparisons with the transport infrastructure of neighbour countries. A small number of respondents mention the Severn Bridges and tolling arrangements, particularly stating that they create a further hindrance and disincentive to road travel into Wales.

9.1.2 Problems and Goals

Views on transport related problems in the M4 corridor are examined in detail in Chapter 4, and views on the M4 CEM goals are covered in Chapter 5.

In answering Question 1a, selecting priority transport related problems from the list in the Consultation Document, respondents acknowledge the complexity of the current situation by selecting problems from different categories rather than focusing their priorities in one of the categories *capacity*, *resilience*, *safety*, or *sustainable development*. A very small number of respondents only select problems in the „capacity“ category.

Respondents are fairly consistent in connecting problems they select in answer to Question 1a with goals chosen in responding to Question 2a. The headings under which the problems in Question 1a are categorised - capacity, resilience, safety, and sustainable development - in some instances relate to specific goals listed in Question 2a, and response patterns confirm these relations. The clearest findings from comparing answers to both are discussed by problem heading below.

Capacity

Respondents prioritising this relatively large and often-selected problem have a strong tendency to choose goals connected to improving journeys and driving conditions, such as Goal 1 (*Safer, easier and more reliable travel east-west in South Wales*) and Goal 5 (*More reliable journey times along the M4 Corridor*).

Resilience

Where respondents have selected resilience-related problems there is no clear pattern suggesting a preference for specific goals.

Safety

Respondents who select problems under the theme of safety often prioritise Goal 7 (*Improved safety on the M4 Corridor between Magor and Castleton*) and to a slightly lesser extent Goal 13 (*Improved traffic management in and around Newport on the M4 Corridor*).

Sustainable development

Respondents prioritising sustainable development problems tend to select goals concerned with improving broad travel behaviours such as Goal 15 (*A cultural shift in travel behaviour towards more sustainable choices*), or reducing the social and environmental impact of travel, as with Goal 9 (*Reduced disturbance to people from high noise levels, from all transport modes and traffic within the M4 Corridor*).

In their written responses to Question 1b and 2b respondents rarely refer explicitly to the particular problems or goals listed in the Consultation Document. However, the problems and goals are often enough reflected as phrases and indirect references in responses to suggest that many respondents agreed broadly with the M4 CEM analysis and find the lists helpful in considering and formulating their responses. For instance, capacity, resilience, safety and sustainable development are quite often used as terms in responses, normally to affirm their significance as problems with the current situation. As such, capacity and resilience are the most frequently referred to.

Across the later consultation questions, respondents also seem to comment on the programme goals more in general terms than they do explicitly. Certain goals appear more helpful than others to respondents in explaining their priorities though. Those keen to see social and environmental goals connected to sustainable development pursued, for instance, often write in terms of “cultural shift” to “sustainable choices”, echoing Goal 15. Elements of a wider selection of goals, including the “use of alternatives” for “local and strategic journeys” of Goal 3, and the “increased level of choice” called for in Goal 6, recur in responses to many questions – often where respondents are most focused on economic and strategic transport objectives.

9.1.3 Highway Infrastructure Options, Common Measures and alternative strategies

Specific comments on the four highway infrastructure options (A-D) are summarised in Chapter 7 on Questions 4a-d. Comments on the range of common measures, which were not the subject of any particular question, feature throughout the chapters.

While respondents make connections between the M4 CEM problems and goals, their responses suggest that these are not the main considerations shaping their views on the highway infrastructure options. Analysis shows that neither the selection of problems or of goals is a clear predictor of opinion on any of the options.

Broadly, Option A gathers the most support but concerns are expressed by many over its environmental impact. Options B and C generally attract similar levels of support to each other but are less often favoured than Option A. Option D also receives less support overall than Option A, though more respondents strongly favour it than do Options B or C. Supporters favour the strategic long-term benefits of Option D on a level comparable with Option A, but a large number oppose Option D because of its potential impact on people and property. Rather than considering the options, a number of respondents express general opposition to the M4 CEM Programme and its solutions, while a smaller number offer general support.

The problems prioritised by respondents in their answers to Question 1a and the goals selected in their answers to Question 2a were reviewed (always comparing a sub-set to the full set of respondents) to test whether, for instance, respondents concentrating on capacity might perceive the highway infrastructure options differently to respondents prioritising safety concerns. Analysis found subtle variations in the strength of views about different options, but no strong connections to prioritised goals and problems.

Though respondents generally engage with strategic analysis of problems and goals, their comments on the options suggest that they most often base their views on immediate and local impacts of the highway infrastructure options. These are most apparent in the concerns respondents express about negative impacts of the options, and form a focus of the comments in opposition to each. Problems and goals respondents selected in response to earlier questions seem to be less significant. Two examples of this tendency are given below.

Example 1: Most of the respondents explicitly opposing Option A are concerned about its impact on the Gwent Levels, the associated SSSI area, and the landscape and ecology of the area scheduled for construction. Data was analysed to verify whether this could suggest a relation between prioritising sustainable development problems in Question 1 and negative views about Option A. The analysis did not find a clear pattern: the difference with views of all respondents is marginal.

Example 2: A clear majority of respondents opposing Option D are mainly concerned about the disruptive or destructive impact of the required road and tunnel construction on people, businesses and property in the area. Data was analysed to explore whether respondents prioritising specific goals or problems were more inclined to express opposition to Option D. Again no substantial variation was found.

Commenting on Options B and C, respondents place a relatively slightly greater emphasis on strategic considerations, as they seem to perceive their physical impacts to be less. Opposition to Option C concentrates on the impact on travel by car, by bicycle and on foot in the immediate area of the SDR – particularly for traffic at either end of the improved route, near Junctions 28 and 24 of the M4 – as well as on the visual and environmental impact of the developments. Opposition to Option B echoes many of these criticisms, but adds stronger suggestions that the option is strategically inadequate. Here, like with the other options, analysis shows no substantial variation in support or opposition connected with the problems and goals prioritised in earlier answers.

Where respondents are not plainly opposed to any particular highway infrastructure options, they most often comment on how the options will affect driving conditions or particular journeys and uses of the road network. For instance, respondents believe that Option A will benefit long distance traffic, Option C will improve traffic flow on the M4 or the SDR, and Option D will reduce congestion and increase capacity on the M4. Comments on Option B suggest it is not expected to improve conditions for local traffic, through-traffic or traffic flow on the SDR in general.

Among general comments on the Programme's approach to road solutions, the need for a new or different strategic route is often mentioned. Some respondents propose alternative local or regional roads for development; others press the need for a new road. Many alternative strategies for redevelopment of the M4 itself are discussed, including better information systems, at-grade improvements and changes to junctions and feeder roads, and different policing or traffic management strategies. Many of these suggestions echo elements of the common measures presented in the Consultation Document, though very few responses refer to the common measures explicitly.

Some respondents challenge the focus on improvements to road infrastructure and suggest an alternative focus should be placed on softer approaches. Suggestions include changing driving habits, discouraging single-occupant vehicles and encouraging car sharing. A number of respondents call to change people's travel habits or to reduce overall road traffic as the priority solution, and some argue that improving road capacity or building more roads will only increase levels of traffic. Fewer comments are offered on alternative approaches beyond the sphere of transport, but there are numerous calls to stagger working and shopping times and locations as a remedy to rush-hour traffic. A number of respondents also comment on measures needed to encourage walking and cycling. Respondents who prioritise sustainable development problems in their answers to Question 1 are somewhat more inclined than others to encourage measures such as these.

9.1.4 Public Transport Measures

Respondents' views on public transport measures are analysed in Chapter 6.

Respondents say improvements to train services – and in particular better park and ride facilities and connecting services – would be most likely to reduce their use of the M4. All the public transport measures proposed receive widespread support. Analysis suggests there is no clear relation between respondents' selection of problems and goals on the one hand and their opinion on public transport measures on the other.

In addition to the measures proposed in the Consultation Document, respondents suggest rail enhancements including more suburban stations, the electrification of main and local lines, and reducing the cost of parking at railway stations. They also support improved integration between modes of transport including park and ride facilities, and integrated road and rail planning. Another recommendation made by several respondents is for improvements to walking and cycling infrastructure.

Opinion is fairly evenly divided on whether public transport measures will help to address transport related problems and achieve the goals. Those respondents who support the measures as likely to bring improvements focus largely on the strategic travel benefits of public transport. Public transport is seen as a positive alternative to the car, and respondents argue that it can relieve congestion on the roads and encourages modal shift. This attention to reducing road traffic lies behind the greater support offered for the measures involving rail travel than involving bus travel. Some comments also commend local and immediate advantages of public transport in general, such as reducing air pollution, or particular measures such as the benefit expected for Caerleon businesses if the community's local rail station is reopened.

However, a similar number of respondents do not think that public transport measures will help address transport problems. Many respondents discuss the limited aptness of public transport to their needs, and criticise the higher cost, longer journey times and uncomfortable connections that would be involved in shifting their daily travel to public transport. Specific services that are criticised include local buses – for example, services in and around Newport which are frequently said to be inadequate and insufficiently reliable to meet public needs. Some respondents argue that public transport is not a realistic alternative to the car, which they consider a more convenient mode of transport. Others say that public transport simply cannot serve the geographically diffuse settlements around Newport.

9.1.5 Environment

Most comments on environmental matters are concerned with pollution. Air pollution is most often mentioned by respondents, but noise pollution is also a significant concern. These comments normally relate to the impact of the roads under discussion on the communities sited closest to them, though sometimes broader connected problems such as their public health effects are also discussed.

Respondents make many comments about the impact of road developments on the biodiversity and wildlife of the area. Similarly, they discuss the impact on the landscape or townscape surrounding the roads. Most agree that Option A will have a significant impact on the landscape and ecology of the Gwent Levels for instance, mention the SSSI status of the Gwent Levels or other nearby protected areas. Most also agree that Option D will profoundly affect the urban environment around communities in northern Newport. On Options B and C, concerns about the natural and built environment are combined. Some respondents are particularly concerned about the impact of these latter options on historic Tredegar House,

and some comments on all the options mention the broader cultural and built heritage status of areas of Newport expected to be affected.

Across all questions, almost a hundred respondents mention climate change or contributory carbon emissions. Among them there is strong consensus that road improvements will tend to lead to increasing numbers of cars on the roads and so also increased carbon emissions; Option A is widely thought likely to generate the greatest capacity and road traffic increases, and is often criticised in those terms by respondents concerned with climate change and carbon emissions. Often, when exploring alternative approaches or discussing priorities, respondents call for a modal shift, specifically to more environmentally-friendly modes of transport than the private car.

9.1.6 Economy

As described in section 9.1.2 above, respondents give a great deal of consideration to sustainable development issues, particularly connecting transport related problems and solutions to Wales' prosperity and future growth. Respondents focus on the general constraint to business posed by poor transport connections, the implications for recreation and tourism as significant economic sectors, and then on the potential of infrastructure investments such as the Programme's proposals as an economic stimulus. Many respondents comment on the cost of the Programme's measures, with reference to particular options or in general, most often stating concern at the expense of Option D and somewhat less often Option A. While some relate such comments to the context of the current weakness of the economy, others say cost should not be allowed to preclude a satisfactory solution.

Other common references include the more domestic economic impact of the Programme, with many respondents citing the demolition requirements of particular proposals and their impact on house values now and in the future – overwhelmingly linking such concerns with Option D, though also occasionally with Option A or Option C. Respondents also comment on rising fuel prices, usually suggesting that they will act as a constraint on road traffic growth. There are more respondents stating that they expect road use and demand to fall than there are predicting it to rise.

9.1.7 Society

A lot of comments on social aspects of the M4 CEM Programme deal in general terms with quality of life matters. Respondents frequently mention the disruption to residents and the impact on public health of particular measures – most often connected to air pollution expected from Option D. They also refer to current driving conditions and congestion around the road network. Furthermore, respondents believe that communities will experience disruptions. Some express concerns about the fairness or unequal treatment implicit in certain options – again, overwhelmingly, because of its construction and demolition impacts, citing Option D more than other options. Expressions of concern about the impact of the programme's measures on the city of Newport generally are widespread. They are relatively more common than the mentions of regeneration and investment benefits to the city that are spread across discussions of the highway infrastructure and public transport measures. Others emphasise perceived benefits of the various proposals for Newport against other parts of Wales, but with no consensus that any one option is the best for the city.

9.1.8 Perceptions of the M4 CEM strategy

The Consultation Document describes the Welsh Government's intention to pursue a package of interventions in order to achieve their goals for the M4 Corridor. The connections

they draw between the four themes of the transport related problems and the priorities they select among the goals suggest that respondents widely understand and share in the strategic outlook of the M4 CEM programme. They engage with and discuss the measures and their own alternatives across this range of interventions proposed by the Welsh Government, showing widespread agreement that a combination of measures will be needed as part of a successful solution.

However the strongest views and the greatest contention is found in comments on the highway infrastructure measures presented, where concerns about proximate local impacts are more salient than strategic comparisons. There are many positive views and suggestions about alternative transport modes and promoting sustainable travel choices. Respondents' comments on public transport and common measures often indicate an appreciation of the important role these will play in the package to be chosen. The view that they could contribute substantially, especially alone, to resolving transport related problems is rare though. Throughout their responses, in reviewing the range of possible interventions, most respondents balance consideration of strategic priorities and of particular impacts on transportation and communities.

Appendix

A.1 Transport Related Problems

The Welsh Government looked in detail at what travel related problems exist on the M4 Corridor Magor to Castleton, and asked people, including those involved in managing transport in and around Newport what they thought the problems amount to. This is what they said:

Capacity

1. A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times over extended periods.
2. The M4 around Newport is used as a convenient cross town connection for local traffic, with insufficient local road capacity.
3. HGVs do not operate efficiently on the motorway around Newport.
4. There is insufficient capacity through some of the Junctions (e.g. 3 lane capacity drops to 2 lane capacity).
5. The 2-lane Brynglas tunnels are a major capacity constraint.
6. The M4 cannot cope with increased traffic from new developments.

Resilience

7. Difficulties maintaining adequate traffic flows on the M4 and alternative highway routes at times of temporary disruption; alternative routes are not able to cope with M4 traffic.
8. The road and rail transport system in and around the M4 Corridor is at increasing risk of disruption due to extreme weather events.
9. When there are problems on the M4, there is severe disruption and congestion on the local and regional highway network.
10. The M4 requires essential major maintenance within the next 5-10 years; this will involve prolonged lane and speed restrictions, thus increasing congestion problems.
11. There is insufficient advance information to inform travel decisions when there is a problem on the M4.

Safety

12. The current accident rates on the M4 between Magor and Castleton are higher than average for UK motorways.
13. The existing M4 is an inadequate standard compared to modern design standards.
14. Some people's driving behaviour leads to increased accidents (e.g. speeding, lane hogging, unlicensed drivers).

Sustainable Development

15. There is a lack of adequate sustainable integrated transport alternatives for existing road users.

16. Traffic noise from the motorway and air quality is a problem for local residents in certain areas.

17. The existing transport network acts as a constraint to economic growth and adversely impacts the current economy.

A.2 Goals of the M4 CEM Programme

In response to identifying the problems listed above, Welsh Government with the help of others identifies the following Goals, which the M4 Corridor Enhancement Measures Programme should aim to achieve in order to ease the flow in the M4 Corridor between Magor and Castleton:

When the M4 CEM Programme is concluded we will benefit from:

1. Safer, easier and more reliable travel east-west in South Wales.
2. Improved transport connections within Wales and to England, the Republic of Ireland and the rest of Europe on all modes on the international transport network.
3. More effective and integrated use of alternatives to the M4, including other parts of the transport network and other modes of transport for local and strategic journeys around Newport.
4. Best possible use of the existing M4, local road network and other transport networks.
5. More reliable journey times along the M4 Corridor.
6. Increased level of choice for all people making journeys within the transport Corridor by all modes between Magor and Castleton, commensurate with demand for alternatives.
7. Improved safety on the M4 Corridor between Magor and Castleton.
8. Improved air quality in areas next to the M4 around Newport.
9. Reduced disturbance to people from high noise levels, from all transport modes and traffic within the M4 Corridor.
10. Reduced greenhouse gas emissions per vehicle and/or person kilometre.
11. Improved travel experience into South Wales along the M4 Corridor.
12. An M4 attractive for strategic journeys that discourages local traffic use.
13. Improved traffic management in and around Newport on the M4 Corridor.
14. Easier access to local key services and residential and commercial centres.
15. A cultural shift in travel behaviour towards more sustainable choices.

A.3 Coding tables

The tables below list the themes and codes applied to the text of responses to each question of the consultation and the number of times that each code was used.

Question 1b

Theme	Code	Count
Environment (E)	E - air pollution concern	37
	E - climate change/emissions concern	2
	E - general concern	7
	E - impact biodiversity/wildlife	7
	E - impact on SSSIs	3
	E - impact woodland/countryside/greenspace	1
	E - mitigation required	1
	E - noise concern	29
	E - protected area	1
	EC - average speed cameras	3
Existing Situation Comments (EC)	EC - Brynglas Tunnels - lighting	2
	EC - Brynglas Tunnels - not a problem	3
	EC - Brynglas Tunnels relief road (Malpas)	4
	EC - bus lanes	1
	EC - CAPACITY - Brynglas Tunnels - already inadequate	4
	EC - CAPACITY - congestion	69
	EC - CAPACITY - congestion is a peak-time problem	8
	EC - CAPACITY - driver behaviour - causes congestion	14
	EC - CAPACITY - HGV/large vehicle behaviour/impact	18
	EC - CAPACITY - increasing/road widening worsens congestion	11
	EC - CAPACITY - junction congestion	8
	EC - CAPACITY - M4 junctions - too many around Newport	12
	EC - CAPACITY - Newport travellers need M4	8
	EC - CAPACITY - past M4 widening positive	1
	EC - CAPACITY - peak time travel	23
	EC - CAPACITY - pinch-points/bottle-necks	15
	EC - CAPACITY - SDR - inadequate as bypass	13
	EC - CAPACITY - SDR - positive impact	1
	EC - CAPACITY - SDR - sufficient/underused	2
	EC - CAPACITY - strain from Cardiff travellers	6
	EC - CAPACITY - strain from local traffic major problem	22
	EC - CAPACITY - surrounding roads	12
	EC - CAPACITY - too much single-occupancy	2
	EC - driver behaviour	15
	EC - driver behaviour - lane changes	5
	EC - left-hand drive vehicles	1
	EC - M4 design/standards poor	23
	EC - M4 eastbound travel - observations	5
	EC - M4 improved recently	2
	EC - M4 junctions - accessibility	8
	EC - M4 junctions - closure impact	7
	EC - M4 junctions - main problem/priority	8
	EC - M4 junctions - too many around Newport	1
	EC - M4 not safely/easily accessible	2
	EC - M4 priority as main national artery/England access	1

Theme	Code	Count
	EC - M4 too close to Newport	3
	EC - North/South infrastructure criticism	2
	EC - parking	1
	EC - pedestrian/cyclist crossing	1
	EC - residents obstructed by traffic	2
	EC - RESILIENCE - congestion impact on local/rural roads	2
	EC - RESILIENCE - constant re-engineering excessive	2
	EC - RESILIENCE - few/difficult alternative routes	20
	EC - RESILIENCE - impact of accidents	38
	EC - RESILIENCE - impact of Cardiff events	1
	EC - RESILIENCE - impact on emergency services	4
	EC - RESILIENCE - M4 closure impact on whole South Wales travel	15
	EC - RESILIENCE - M4 maintenance disruptive to local community	8
	EC - RESILIENCE - M4 problems/closure impact on area congestion	13
	EC - RESILIENCE - Newport City road infrastructure inadequate	22
	EC - RESILIENCE - past maintenance/improvement work	21
	EC - RESILIENCE - policing	3
	EC - RESILIENCE - underinvestment criticised	1
	EC - RESILIENCE - variable message signs (VMS)	3
	EC - roundabouts - problem	9
	EC - SAFETY - accident/incident management (and Brunson protocol, etc)	17
	EC - SAFETY - congestion causes accidents	14
	EC - SAFETY - crash barriers	2
	EC - SAFETY - current M4 standard contributes to accident rates	4
	EC - SAFETY - driver behaviour causes accidents	8
	EC - SAFETY - inadequate information/notification systems	9
	EC - SAFETY - inclines	5
	EC - SAFETY - M4 maintenance poor	4
	EC - SAFETY - M4 width/standard too varied	3
	EC - SAFETY - pedestrians at high risk	3
	EC - SAFETY - sharp corners	2
	EC - SAFETY - variable message signs (VMS)	2
	EC - SAFETY - water levels/drainage	1
	EC - SDR - inadequate as bypass	5
	EC - Severn Bridge tolls/queues	9
	EC - significant commercial traffic	1
	EC - speed cameras	4
	EC - speed limits - 50mph westbound causes congestions	2
	EC - speed limits - 50mph westbound criticism	8
	EC - SUST DEV - air quality	3
	EC - SUST DEV - constraint to whole of South Wales	16
	EC - SUST DEV - existing motorway unsustainable	5
	EC - SUST DEV - fuel inefficiency	3
	EC - SUST DEV - journey time increases	6
	EC - SUST DEV - M4 priority as main national artery/England access	8
	EC - SUST DEV - road conditions threaten Wales's future	4
	EC - SUSTDEV - car dependency	2
	EC - traffic lights	6

Theme	Code	Count
	EC - traffic signals	3
	EC - traffic speed - observations	17
	EC - variable speed limits - effective	5
	EC - variable speed limits - ineffective	15
	EC - variable speed limits - observations	15
Goals (G)	G - act quickly	3
	G - better roads will encourage unsustainable driving	1
	G - discourage local journeys	3
	G - G1 - support	1
	G - G12 - comment	1
	G - G12 - support	1
	G - G5 - comment	1
	G - G9 - support	1
	G - integrated approach needed to problems	4
	G - long-term solution needed	7
	G - need to address causes, not just symptoms	2
	G - network - England/international traffic needs better connections	1
	G - network - local traffic needs better network	8
	G - network - road network improvement is priority	1
	G - network - S. Wales through-traffic needs better network	1
	G - peak delays priority	2
	G - reduce congestion is priority	1
	G - reduce overall traffic	5
	G - SUSTDEV - social/environmental/economic objectives priority	3
General Alternatives (GA)	GA - air travel in South Wales poor	1
	GA - alternative environmentally friendly modes	8
	GA - encourage modal shift	12
	GA - enhance cycling routes	1
	GA - flexible working/working from home	4
	GA - general challenge to solutions	7
	GA - international competition/novel solution	1
	GA - other strategy/approach	8
	GA - policing - automatic detection-systems	1
	GA - policing - greater presence	1
	GA - policing - harsher penalties	1
	GA - policing - specific suggestions	2
	GA - stagger working/shopping times	2
Locations (L)	L - Abergavenny	1
	L - BRISTOL	1
	L - Caerphilly	1
	L - Caldicot	3
	L - CARDIFF	3
	L - CARDIFF - Rover/Ocean Way	1
	L - CARDIFF Bay	1
	L - Castleton	2
	L - Chepstow	2
	L - Coryton	1
	L - Cwmbran	2
	L - Ebbw Vale	1
	L - first Severn Bridge	2
	L - Gwent Levels	3
	L - J23	1

Theme	Code	Count
	L - J23a (Magor)	8
	L - J24 (The Coldra)	10
	L - J25 (Caerleon)	10
	L - J25a (Heidenheim)	3
	L - J26 (Malpas)	9
	L - J27 (High Cross)	11
	L - J28 (Tredegar Park)	19
	L - J29 (Castleton)	3
	L - J31	1
	L - J32	1
	L - Kimberley Park	1
	L - Langstone	1
	L - M4 - specific stretch	14
	L - Magor	7
	L - Marshfield	1
	L - Monmouthshire	1
	L - NEWPORT	32
	L - NEWPORT - B2437/Cardiff Road	4
	L - NEWPORT - Belmont Hill	1
	L - NEWPORT - Bryn Bevan	1
	L - NEWPORT - Brynglas	8
	L - NEWPORT - Brynglas Road	1
	L - NEWPORT - Brynglas Tunnels	20
	L - NEWPORT - Caerleon	5
	L - NEWPORT - Caerleon Junction (rail)	2
	L - NEWPORT - Caerleon Road	6
	L - NEWPORT - Cardiff Road	2
	L - NEWPORT - Christchurch	2
	L - NEWPORT - Coedkernew	1
	L - NEWPORT - Coldra	9
	L - NEWPORT - Duffryn (and estate)	2
	L - NEWPORT - Ebbw Bridge roundabout (A48/SDR)	3
	L - NEWPORT - Forge Road	1
	L - NEWPORT - Harlequin Roundabout	4
	L - NEWPORT - High Cross	5
	L - NEWPORT - Llanwern Steel Works and Road	5
	L - NEWPORT - Maesglas	1
	L - NEWPORT - Malpas	3
	L - NEWPORT - Malpas Road	12
	L - NEWPORT - Nash College roundabout	1
	L - NEWPORT - Nash Road	1
	L - NEWPORT - Pillmawr Road	3
	L - NEWPORT - Pye Corner roundabout	1
	L - NEWPORT - Royal Oak Drive	1
	L - NEWPORT - Spytty/Nash Roundabout	1
	L - NEWPORT - St Julian's/St Julian's Hill	5
	L - NEWPORT - Tredegar House roundabout	3
	L - NEWPORT - Tredegar Park	7
	L - OTHER ROADS - A4042	2
	L - OTHER ROADS - A4051	1
	L - OTHER ROADS - A467	4
	L - OTHER ROADS - A468	1
	L - OTHER ROADS - A470	1

Theme	Code	Count
	I - OTHER ROADS - A472	1
	L - OTHER ROADS - A48	9
	L - OTHER ROADS - A48(M)	1
	L - OTHER ROADS - B4245	2
	L - OTHER ROADS - Heads of the Valleys/A465	3
	L - OTHER ROADS - M25	1
	L - OTHER ROADS - M42	2
	L - OTHER ROADS - M48	6
	L - OTHER ROADS - M50	1
	L - OTHER ROADS - M6	1
	L - OTHER ROADS - SDR (A48)	6
	L - Pontypool	2
	L - Port Talbot	1
	L - Risca	1
	L - Rogiet	3
	L - second Severn Bridge	1
	L - Severn Tunnel Junction	3
	L - SWANSEA	1
	L - Underwood	1
	L - Undy	1
Other (O)	O - consultation - criticism	15
	O - consultation - general comments	13
	O - consultation- criticism of question	1
	O - Editor's note	23
	O - M4 CEM general concern	1
	O - M4 CEM general opposition	3
	O - M4 CEM report/figures challenge	14
	O - no comment	13
	O - No comment was made	152
	O - not a comment	1
Option A (OA)	OA - CAPACITY - inadequate	1
	OA - construction impacts - concern impact/invasiveness	2
	OA - construction impacts - concern loss of land and homes	2
	OA - construction impacts - minimal	2
	OA - construction impacts - minimal	1
	OA - cost - expense concern	4
	OA - environment - concerns	2
	OA - environment - impact on protected area	1
	OA - long-term solution	1
	OA - more roads will mean more traffic	2
	OA - only true new alternative route	1
	OA - oppose	2
	OA - option - challenge	2
	OA - option - support	22
	OA - option - support consideration	6
	OA - option - support variation	4
	OA - other comments	10
	OA - phasing - positive	1
	OA - RESILIENCE - alternative if M4 closed/disrupted	3
	OA - RESILIENCE - benefit	1
	OA - RESILIENCE - benefits for M4 maintenance	2
	OA - SAFETY - benefit	1
	OA - SAFETY - more traffic will mean more accidents	2

Theme	Code	Count
	OA - SUST DEV - environmental - benefit	3
	OA - SUST DEV - will support economic growth/jobs/regeneration	6
	OA - variation - should be no/few junctions	2
	OA - will help through-traffic	3
	OA - will help/tackle local traffic	3
	OA - will not reduce traffic	1
	OA - will reduce journey times	3
	OA - will reduce noise/pollution	2
	OA - would not solve problems	1
Option B (OB)	OB - cheap fix/short-term/too little	1
	OB - not a significant change	1
	OB - option - challenge	2
	OB - option - support	2
	OB - option - support consideration	2
Option C (OC)	OC - cost effective	1
	OC - option - challenge	2
	OC - option - support	3
	OC - option - support consideration	2
	OC - SAFETY - flyover inclines dangerous in bad weather	2
	OC - views same as for Option B	1
Option D (OD)	OD - Brynglas tunnelling - cost effective	1
	OD - Brynglas tunnelling - ground unsuitable	2
	OD - Brynglas tunnelling - local community disruption	6
	OD - Brynglas tunnelling - opposed	14
	OD - Brynglas tunnelling - structural damage to buildings	2
	OD - Brynglas Tunnels - capacity observations	1
	OD - Brynglas Tunnels - emergency access	1
	OD - Brynglas Tunnels - need widening	4
	OD - cannot be adequately upgraded	1
	OD - construction impacts - damage to economy	3
	OD - construction impacts - disruption	7
	OD - construction impacts - local resident/business disruption	5
	OD - cost - expensive/too much	5
	OD - environmental effects	1
	OD - general statements	5
	OD - impact on local properties/demolitions	2
	OD - journey impacts - will worsen problems/congestion	7
	OD - junction changes - challenge	2
	OD - local roads/traffic - no impact/negative impact	1
	OD - loss of access/no local benefit	1
	OD - not a true solution/need alternative route	9
	OD - option - challenge	10
	OD - option - support	4
	OD - option - upgrade - support	1
	OD - P5	1
	OD - SAFETY - development will worsen accident rates	2
	OD - widening - challenge	3
	OD - widening - damage to city of Newport	1
	OD - widening - local resident/business disruption	8
	OD - widening - should extend further	2
	OD - widening - support	4
Problems (P)	P - CAPACITY - challenge	5

Theme	Code	Count
	P - CAPACITY - comment	11
	P - CAPACITY - priority	6
	P - most / all problems listed are important	9
	P - P1 - comment	3
	P - P1 - strongly agree	4
	P - P10 - comment	1
	P - P11 - comment	2
	P - P12 - comment	2
	P - P13 - comment	2
	P - P14 - challenge	1
	P - P14 - comment	1
	P - P15 - challenge	3
	P - P15 - comment	3
	P - P16 - comment	2
	P - P17 - challenge	1
	P - P17 - comment	4
	P - P17 - priority	2
	P - P17 - strongly agree	1
	P - P2 - comment	3
	P - P2 - strongly agree	5
	P - P2 - suggest solution	1
	P - P3 - comment	5
	P - P4 - comment	1
	P - P4 - strongly agree	2
	P - P5 - comment	1
	P - P5 - priority	3
	P - P5 - strongly agree	6
	P - P6 - comment	3
	P - P7 - comment	3
	P - P8 - challenge	1
	P - P9 - comment	3
	P - P9 - strongly agree	2
	P - Problems - challenge	5
	P - Problems - comment	3
	P - RESILIENCE - challenge	1
	P - RESILIENCE - comment	6
	P - RESILIENCE - priority	3
	P - SAFETY - comment	8
	P - SUSTDEV - comment	2
	P - SUSTDEV - priority	2
Public Transport Measures (PT)	PT - as alternative to cars	10
	PT - BUS - cross-Newport services	1
	PT - BUS - more smaller buses	1
	PT - BUS - not a real alternative	3
	PT - BUS - Park & Ride connections	11
	PT - BUS - priority at junctions	1
	PT - BUS - rail-integrated service needed	3
	PT - BUS - remove bus lanes	1
	PT - BUS - service reductions	1
	PT - BUS - services inadequate	5
	PT - BUS - to serve business/industry	1
	PT - BUS - too unreliable	4
	PT - city-centre/periphery access	1

Theme	Code	Count
	PT - commuter uses/needs	1
	PT - cycle infrastructure	1
	PT - demand has increased/will increase/latent demand	1
	PT - GWML - S. Wales/Bristol/London	2
	PT - integrated transport - across SE Wales	2
	PT - integrated transport - road/rail	6
	PT - integrated transport - smart card	1
	PT - invest in rail and air travel instead	2
	PT - journey times too slow	4
	PT - lack of good public transport encourages road use	2
	PT - MEASURES - have not been costed	2
	PT - MEASURES - will help somewhat	1
	PT - MEASURES - will not help	1
	PT - modal shift will not happen	1
	PT - not an option	5
	PT - not convenient/practical	1
	PT - price concern	4
	PT - public transport is priority	11
	PT - public travel habits/needs	1
	PT - RAIL - better commuter services	1
	PT - RAIL - Ebbw Vale Line success	1
	PT - RAIL - electrification	1
	PT - RAIL - enhance/extend the Ebbw Vale Line	2
	PT - RAIL - extensions/connections around Newport	1
	PT - RAIL - extensions/connections around Valleys	1
	PT - RAIL - extensions/connections east of Cardiff	1
	PT - RAIL - less convenient/reaching stations	1
	PT - RAIL - make cheaper/easier	5
	PT - RAIL - more calls at Severn Tunnel Junction	1
	PT - RAIL - more suburban stations	3
	PT - RAIL - not a real alternative	4
	PT - RAIL - relieves road congestion	7
	PT - RAIL - take freight off roads	3
	PT - rural areas not served	1
	PT - school services	1
	PT - serve more routes and destinations	1
	PT - service frequency improvements needed	1
	PT - specific examples	2
	PT - walking infrastructure	1
References (R)	R - AMs/MPs	1
	R - Brynglas Tunnel fire	8
	R - Gwent Police	2
	R - Local planning policy	7
	R - Other countries/regions - comparison	5
	R - other projects	5
	R - other stakeholders/public opinion	2
	R - public travel habits/needs	1
	R - refer to other question comments	4
	R - refer to other questions - Q2b	2
	R - refer to other questions - Q3a	1
	R - refer to other research/publications	3
	R - refer to other transport infrastructure/projects/experience	16
	R - refer to own research/publications	8

Theme	Code	Count
	R - refer to own travel habits/experience	43
	R - refer to UK Govt/ministers	3
	R - refer to WG/ministers	10
	R - Ryder Cup improvements	5
	R - Second Severn Crossing	1
	R - Traffic Wales	2
	R - Welsh language issues	3
Road Alternatives (RA)	RA - address bottle-necks	4
	RA - congestion in Cardiff access is priority	1
	RA - discourage single-occupancy/encourage car-sharing	7
	RA - finance with private partnership	1
	RA - finance with tolls	5
	RA - forthcoming improvements should ease problems	2
	RA - improve feeder roads	1
	RA - improve traffic management plans	1
	RA - M4 junctions - shut	2
	RA - M4 Relief Road - abandonment	4
	RA - M4 Relief Road - cost	2
	RA - M4 Relief Road - preferable	5
	RA - M4 Relief Road - reference	1
	RA - M4 Relief Road - specific suggestions	2
	RA - M4 Relief Road - tolling	1
	RA - motorbike/motorcyclist provisions	2
	RA - new/alternative routes needed	28
	RA - new/alternative tunnels/bridges needed	3
	RA - recovery/accident response needed at peak times	3
	RA - remove/reduce Severn Bridge tolls	4
	RA - speed cameras/control systems	3
	RA - suggest - alternative road/route approaches	25
	RA - suggest - better live information systems	7
	RA - suggest - Brynglas alternative	1
	RA - suggest - encourage use of SDR	5
	RA - suggest - M4 additional open junctions	1
	RA - suggest - M4 anti-spray surface	1
	RA - suggest - M4 further/specific widening	1
	RA - suggest - M4 HGV restrictions	6
	RA - suggest - M4 lane changes	1
	RA - suggest - M4 motorway fencing	1
	RA - suggest - M4 periodical junction closures	1
	RA - suggest - policing approaches	2
	RA - suggest - specific M4 junction/feeder road improvements	13
	RA - suggest - specific signage	7
	RA - suggest - speed limits	3
	RA - suggest - variable tolling	1
	RA - wider area concerned	3
Social and Economic (SE)	SE - boost image/reputation of Newport	1
	SE - community impact concern	3
	SE - compensation	1
	SE - congestion impact on city	5
	SE - congestion impact on driving cost	1
	SE - constraint on growth/economy damaged	3
	SE - cost or value concerns	12
	SE - cost should not preclude best lasting solution	5

Theme	Code	Count
	SE - demand for roads will fall/will not rise	4
	SE - demand for roads will grow	1
	SE - demand for travel should be managed	1
	SE - demolition implications	4
	SE - disruptions to local residents	13
	SE - downturn has reduced traffic	3
	SE - employment and working patterns	1
	SE - fuel/oil cost	6
	SE - GDP/GNP observations	1
	SE - impact on development land/planning designations	1
	SE - impact on economy/growth	16
	SE - impact on home values	6
	SE - impact on public health	3
	SE - impact on recreation/tourism	1
	SE - impression/impact on visitors to Wales	3
	SE - infringement of rights	1
	SE - negative impact/constraint on business	10
	SE - Newport benefit from capacity increase	1
	SE - Newport could miss-out on economic benefits	1
	SE - Newport physically divided by M4	1
	SE - Newport suffers for the rest of Wales	8
	SE - phasing - support as economical	1
	SE - poor public transport greater economic constraint	1
	SE - problems common across UK/EU	2
	SE - quality of life	1
	SE - resident unconcerned about impact	1
	SE - residents' concerns ignored	1
	SE - South Wales benefit from capacity increase	4
	SE - spending on infrastructure stimulates the economy	3
	SE - work/life balance	1

Question 2b

Theme	Code	Count
Environment (E)	E - air pollution concern	19
	E - climate change/emissions concern	2
	E - general concern	5
	E - impact biodiversity/wildlife	5
	E - impact on rivers/canals/flood plain, etc.	1
	E - impact on SSSIs	2
	E - impact on waterways	2
	E - noise concern	20
Existing Situation Comments (EC)	EC - Brynglas Tunnels - lighting	1
	EC - CAPACITY - Brynglas Tunnels - already inadequate	1
	EC - CAPACITY - congestion	24
	EC - CAPACITY - driver behaviour - causes congestion	2
	EC - CAPACITY - HGV/large vehicle behaviour/impact	6
	EC - CAPACITY - increasing/road widening worsens congestion	1
	EC - CAPACITY - junction congestion	1
	EC - CAPACITY - M4 junctions - too many around Newport	1

Theme	Code	Count
	EC - CAPACITY - Newport travellers need M4	4
	EC - CAPACITY - peak time travel	8
	EC - CAPACITY - pinch-points/bottle-necks	2
	EC - CAPACITY - SDR - inadequate as bypass	2
	EC - CAPACITY - SDR - positive impact	1
	EC - CAPACITY - SDR - sufficient/underused	1
	EC - CAPACITY - strain from Cardiff travellers	1
	EC - CAPACITY - strain from local traffic major problem	8
	EC - CAPACITY - surrounding roads	4
	EC - driver behaviour	5
	EC - driver behaviour - lane changes	3
	EC - M4 design/standards poor	3
	EC - M4 improved recently	2
	EC - M4 junctions - accessibility	1
	EC - M4 junctions - closure impact	3
	EC - M4 junctions - too few open	1
	EC - M4 junctions - too many around Newport	2
	EC - M4 not safely/easily accessible	2
	EC - M4 priority as main national artery/England access	3
	EC - RESILIENCE - congestion impact on local/rural roads	1
	EC - RESILIENCE - constant re-engineering excessive	1
	EC - RESILIENCE - few/difficult alternative routes	9
	EC - RESILIENCE - impact of accidents	6
	EC - RESILIENCE - M4 closure impact on whole South Wales travel	5
	EC - RESILIENCE - M4 diversions	1
	EC - RESILIENCE - M4 maintenance disruptive to local community	2
	EC - RESILIENCE - M4 problems/closure impact on area congestion	4
	EC - RESILIENCE - Newport City road infrastructure inadequate	14
	EC - RESILIENCE - past maintenance/improvement work	3
	EC - RESILIENCE - policing	1
	EC - roundabouts - problem	1
	EC - SAFETY - accident/incident management (and Brunson protocol, etc)	5
	EC - SAFETY - inadequate information/notification systems	4
	EC - SAFETY - inclines	3
	EC - SDR - inadequate as bypass	1
	EC - Severn Bridge tolls/queues	2
	EC - speed cameras	1
	EC - speed limits - 50mph westbound causes congestions	1
	EC - SUST DEV - constraint to whole of South Wales	4
	EC - SUST DEV - existing motorway unsustainable	9
	EC - SUST DEV - fuel inefficiency	3
	EC - SUST DEV - journey time increases	3
	EC - SUST DEV - M4 priority as main national artery/England access	4
	EC - SUST DEV - road conditions threaten Wales's future	6
	EC - traffic speed - observations	3
	EC - variable speed limits - effective	2
	EC - variable speed limits - ineffective	2

Theme	Code	Count
	EC - variable speed limits - observations	3
Goals (G)	G - achievable action needed	1
	G - act quickly	11
	G - affordability	1
	G - better roads will encourage unsustainable driving	3
	G - challenge Goals	8
	G - compare with Aims	4
	G - discourage local journeys	3
	G - emergency access improved	2
	G - G1 - comment	2
	G - G1 - support	7
	G - G10 - challenge	1
	G - G10 - comment	2
	G - G11 - comment	3
	G - G12 - comment	5
	G - G12 - support	4
	G - G13 - comment	4
	G - G13 - support	1
	G - G14 - comment	3
	G - G14 - support	1
	G - G15 - challenge	1
	G - G15 - comment	6
	G - G15 - support	5
	G - G16 - comment	1
	G - G2 - challenge	1
	G - G2 - support	5
	G - G3 - comment	3
	G - G3 - support	2
	G - G4 - comment	1
	G - G4 - support	1
	G - G5 - comment	1
	G - G5 - support	2
	G - G6 - comment	6
	G - G6 - support	2
	G - G7 - comment	1
	G - G7 - support	4
	G - G8 - comment	4
	G - G8 - support	2
	G - G9 - comment	3
	G - G9 - support	4
	G - improve business/commuter travel (on M4)	5
	G - integrated approach needed to problems	9
	G - long-term solution needed	10
	G - minimal impact on people/communities	12
	G - modal shift/change travel habits	8
	G - most / all goals listed are important	6
	G - need to address causes, not just symptoms	3
	G - network - England/international traffic needs better connections	3
	G - network - local traffic needs better network	5
	G - network - minimal disruption to local road network	7
	G - network - road network improvement is priority	1

Theme	Code	Count
	G - network - S. Wales through-traffic needs better network	1
	G - Newport's long-term needs	1
	G - Not enough attention paid to environmental issues	1
	G - options will not achieve goals	10
	G - peak delays priority	1
	G - reduce congestion is priority	4
	G - reduce environmental impact	9
	G - reduce M4 reliance	4
	G - reduce overall traffic	9
	G - RESILIENCE - alternative route	2
	G - safety	1
	G - suggest alternative goal	17
	G - support Goals with caveat	11
	G - SUSTDEV - social/environmental/economic objectives priority	10
	G - too many goals	3
General Alternatives (GA)	GA - air travel in South Wales poor	1
	GA - alternative environmentally friendly modes	6
	GA - better cycle links needed	2
	GA - close roads to shift focus to public transport	1
	GA - encourage modal shift	5
	GA - flexible working/working from home	1
	GA - general challenge to solutions	3
	GA - improve East/West travel within South Wales	3
	GA - improve North/South travel	1
	GA - Local Authority partnerships needed	1
	GA - other infrastructure in Wales needs improvement	2
	GA - other strategy/approach	5
	GA - public education	1
	GA - stagger working/shopping times	3
	L - Blaenau Gwent	1
Locations (L)	L - BRISTOL	1
	L - CARDIFF	1
	L - Castleton	1
	L - Chepstow	1
	L - Cwmbran	2
	L - first Severn Bridge	1
	L - Gwent Levels	3
	L - J24 (The Coldra)	1
	L - J25 (Caerleon)	3
	L - J25a (Heidenheim)	1
	L - J26 (Malpas)	1
	L - J28 (Tredegar Park)	2
	L - J30	1
	L - Llandeenny	1
	L - M4 - specific stretch	3
	L - Magor	3
	L - Monmouthshire	1
	L - NEWPORT	14
	L - NEWPORT - Brynglas Tunnels	10
	L - NEWPORT - Caerleon	1
	L - NEWPORT - Caerleon Road	1

Theme	Code	Count
	L - NEWPORT - Coedkernew	1
	L - NEWPORT - Coldra	1
	L - NEWPORT - Duffryn (and estate)	1
	L - NEWPORT - Harlequin Roundabout	2
	L - NEWPORT - Llanwern Steel Works and Road	3
	L - NEWPORT - Malpas Road	1
	L - NEWPORT - Old Green Interchange	1
	L - NEWPORT - Queensway	1
	L - NEWPORT - River Usk	1
	L - NEWPORT - St Julian's/St Julian's Hill	1
	L - OTHER ROADS - A465	1
	L - OTHER ROADS - A467	1
	L - OTHER ROADS - A48	1
	L - OTHER ROADS - A55	1
	L - OTHER ROADS - Heads of the Valleys/A465	1
	L - OTHER ROADS - M32	1
	L - OTHER ROADS - M48	1
	L - OTHER ROADS - M50	1
	L - OTHER ROADS - SDR (A48)	1
	L - Pontypool	2
	L - River Conwy	1
	L - River Usk	1
	L - second Severn Bridge	1
	L - SWANSEA	3
	L - Undy	2
Other (O)	O - Common Measures support	1
	O - consultation - criticism	7
	O - consultation - general comments	4
	O - consultation - support	1
	O - consultation- criticism of question	2
	O - Editor's note	19
	O - M4 CEM general opposition	7
	O - M4 CEM report/figures challenge	8
	O - no comment	12
	O - No comment was made	219
	O - not a comment	3
Option A (OA)	OA - CAPACITY - benefit	2
	OA - comparisons/similarities to M4 Relief Road proposals	1
	OA - construction impacts - concern impact/invasiveness	1
	OA - construction impacts - minimal	3
	OA - cost - comment	1
	OA - cost - expense concern	2
	OA - environment - concerns	2
	OA - environment - concerns acknowledged	1
	OA - environment - impact reasonable	1
	OA - good for business traffic	3
	OA - improve traffic management	1
	OA - journey impacts - safer local travel	1
	OA - journey impacts - will help through-traffic	1
	OA - journey impacts - will help traffic further east	1
	OA - journey impacts - will improve travel - general	1
	OA - journey impacts - will reduce journey times	1

Theme	Code	Count
	OA - long-term solution	4
	OA - M4 to be for local traffic	1
	OA - more roads will mean more traffic	8
	OA - only true new alternative route	6
	OA - option - challenge	1
	OA - option - support	21
	OA - option - support variation	18
	OA - other comments	2
	OA - other measures needed alongside	1
	OA - overdue/long-needed	1
	OA - RESILIENCE - alternative if M4 closed/disrupted	3
	OA - RESILIENCE - benefit	1
	OA - route - more fuel-efficient route	1
	OA - SAFETY - emergency access	1
	OA - should be built to motorway standard	1
	OA - should use Steelworks Access Road	1
	OA - SUST DEV - air quality improved	1
	OA - SUST DEV - will support economic growth/jobs/regeneration	5
	OA - will reduce journey times	1
Option B (OB)	OB - not a significant change	1
	OB - option - challenge	1
	OB - option - support consideration	2
	OB - RESILIENCE - will relieve M4	1
Option C (OC)	OC - option - challenge	2
	OC - option - support consideration	1
	OC - RESILIENCE - will reduce reliance on M4	1
	OC - support variation	1
Option D (OD)	OD - Brynglas tunnelling - cost effective	1
	OD - Brynglas tunnelling - local community disruption	3
	OD - Brynglas tunnelling - opposed	2
	OD - Brynglas Tunnels - capacity observations	1
	OD - Brynglas Tunnels - need widening	1
	OD - cannot be adequately upgraded	1
	OD - construction impacts - disruption	5
	OD - construction impacts - local resident/business disruption	1
	OD - cost - expensive/too much	1
	OD - emergency access	2
	OD - environmental effects	1
	OD - journey impacts - will worsen problems/congestion	1
	OD - local roads/traffic - no impact/negative impact	1
	OD - loss of access/no local benefit	1
	OD - not a true solution/need alternative route	2
	OD - option - challenge	9
	OD - option - prefer B	1
	OD - option - prefer C	1
	OD - option - upgrade - support	1
	OD - RESILIENCE - inadequate	1
	OD - resilience - no alternative if M4 closed	1
	OD - resilience - will improve/long term solution	1
	OD - SAFETY - development will worsen accident rates	1

Theme	Code	Count
	OD - widening - challenge	1
	OD - widening - support	1
Problems (P)	P - CAPACITY - challenge	3
	P - CAPACITY - comment	6
	P - CAPACITY - priority	17
	P - P17 - priority	1
	P - P3 - comment	1
	P - P9 - comment	1
	P - Problems - challenge	1
	P - RESILIENCE - challenge	1
	P - RESILIENCE - comment	2
	P - RESILIENCE - priority	11
	P - SAFETY - comment	9
	P - SAFETY - priority	3
	P - SUSTDEV - comment	5
	P - SUSTDEV - priority	10
Public Transport Measures (PT)	PT - as alternative to cars	7
	PT - BUS - cross-Newport services	1
	PT - BUS - not a real alternative	1
	PT - BUS - Park & Ride connections	5
	PT - BUS - rail-integrated service needed	1
	PT - BUS - services inadequate	6
	PT - city-centre/periphery access	2
	PT - commuter uses/needs	1
	PT - cycle infrastructure	1
	PT - demand has increased/will increase/latent demand	2
	PT - GWML - S. Wales/Bristol/London	1
	PT - integrated transport - across SE Wales	3
	PT - integrated transport - road/rail	7
	PT - MEASURES - will help somewhat	3
	PT - MEASURES - will not help	1
	PT - more useful services needed	1
	PT - not an option	2
	PT - not convenient/practical	2
	PT - out-of-town living/working	1
	PT - price concern	1
	PT - public transport is priority	4
	PT - public travel habits/needs	1
	PT - RAIL - better commuter services	1
	PT - RAIL - enhance/extend the Ebbw Vale Line	3
	PT - RAIL - extensions/connections around Newport	2
	PT - RAIL - make cheaper/easier	6
	PT - RAIL - make faster/more reliable	1
	PT - RAIL - not a real alternative	1
	PT - RAIL - price concern	1
	PT - RAIL - relieves road congestion	1
	PT - RAIL - take freight off roads	2
	PT - school services	1
	PT - serve more routes and destinations	2
	PT - specific proposal	1
References (R)	R - Brynglas Tunnel fire	3

Theme	Code	Count
	R - Local planning policy	6
	R - other correspondence	1
	R - Other countries/regions - comparison	1
	R - other stakeholders/public opinion	5
	R - refer to Newport City Council	2
	R - refer to other question comments	8
	R - refer to other questions - Q1b	2
	R - refer to other research/publications	1
	R - refer to other transport infrastructure/projects/experience	9
	R - refer to own property/commercial interest	1
	R - refer to own research/publications	1
	R - refer to own travel habits/experience	4
	R - refer to specific legislation / policy	2
	R - refer to UK Govt/ministers	2
	R - refer to WG/ministers	10
	R - Wales Spatial Plan/Travel To Work areas	1
	R - Welsh language issues	1
Road Alternatives (RA)	RA - address bottle-necks	1
	RA - bridge Magor to Castleton	1
	RA - discourage single-occupancy/encourage car-sharing	3
	RA - finance with tolls	1
	RA - forthcoming improvements should ease problems	1
	RA - improve feeder roads	1
	RA - improve traffic management plans	1
	RA - M4 Relief Road - preferable	1
	RA - M4 Relief Road - reference	3
	RA - new/alternative routes needed	4
	RA - new/alternative tunnels/bridges needed	1
	RA - park & share	1
	RA - remove/reduce Severn Bridge tolls	2
	RA - share traffic across regional network	3
	RA - speed cameras/control systems	2
	RA - suggest - alternative road/route approaches	7
	RA - suggest - encourage use of SDR	6
	RA - suggest - improve traffic management	2
	RA - suggest - M4 existing section downgrade	1
	RA - suggest - policing approaches	3
	RA - suggest - specific	4
	RA - suggest - specific M4 junction/feeder road improvements	1
	RA - suggest - speed limits	4
	RA - suggest - variable tolling	1
	RA - traffic management	6
	RA - wider area concerned	2
Social and Economic (SE)	SE - community impact concern	2
	SE - congestion impact on city	1
	SE - constraint on growth/economy damaged	2
	SE - cost or value concerns	9
	SE - cost should not preclude best lasting solution	3
	SE - demand for roads will fall/will not rise	2
	SE - demand for roads will grow	2
	SE - disruptions to local residents	5

Theme	Code	Count
	SE - employment and working patterns	2
	SE - ensure local economy benefits	1
	SE - fuel/oil cost	3
	SE - GDP/GNP observations	1
	SE - human needs trump wildlife	1
	SE - impact of new development and housing	2
	SE - impact on economy/growth	8
	SE - impact on home values	2
	SE - impact on public health	2
	SE - impression/impact on visitors to Wales	1
	SE - negative impact/constraint on business	2
	SE - phasing - support as economical	1
	SE - regenerating Newport will relieve M4	1
	SE - South Wales benefit from capacity increase	2
	SE - spending on infrastructure stimulates the economy	4
	SE - work/life balance	1

Question 3b

Theme	Code	Count
Environment (E)	E - air pollution concern	5
	E - climate change/emissions concern	3
	E - noise concern	3
Existing Situation Comments (EC)	EC - CAPACITY - congestion	23
	EC - CAPACITY - congestion is a peak-time problem	5
	EC - CAPACITY - HGV/large vehicle behaviour/impact	1
	EC - CAPACITY - increasing/road widening	2
	EC - CAPACITY - M4 dominated by private cars	3
	EC - CAPACITY - M4 junctions - too many around Newport	1
	EC - CAPACITY - Newport travellers need M4	2
	EC - CAPACITY - peak time travel	2
	EC - CAPACITY - pinch-points/bottle-necks	1
	EC - CAPACITY - SDR - inadequate as bypass	1
	EC - CAPACITY - strain from Cardiff travellers	1
	EC - CAPACITY - strain from local traffic major problem	5
	EC - CAPACITY - strain from Valleys and West travel	1
	EC - CAPACITY - surrounding roads	2
	EC - CAPACITY - too much single-occupancy	1
	EC - M4 has North/South significance too	1
	EC - M4 in wrong location	1
	EC - M4 junctions - closure impact	2
	EC - M4 junctions - main problem/priority	2
	EC - M4 priority as main national artery/England access	1
	EC - parking	2
	EC - RESILIENCE - congestion impact on local/rural roads	1
	EC - RESILIENCE - few/difficult alternative routes	2
	EC - RESILIENCE - impact of accidents	4
	EC - RESILIENCE - M4 maintenance disruptive to local community	2
	EC - RESILIENCE - Newport City road infrastructure inadequate	3

Theme	Code	Count
	EC - roundabouts - problem	1
	EC - SAFETY - congestion causes accidents	1
	EC - Severn Bridge tolls/queues	1
	EC - SUST DEV - M4 priority as main national artery/England access	1
	EC - traffic lights	1
Goals (G)	G - CAPACITY - reduction needed	1
	G - discourage local journeys	1
	G - emergency access improved	1
	G - G14 - comment	1
	G - G3 - comment	1
	G - integrated approach needed to problems	7
	G - modal shift/change travel habits	8
	G - need to address causes, not just symptoms	1
	G - network - England/international traffic needs better connections	1
	G - network - local traffic needs better network	1
	G - network - road network improvement is priority	3
	G - network - S. Wales through-traffic needs better network	1
	G - reduce environmental impact	1
	G - reduce M4 reliance	3
	G - reduce overall traffic	4
	G - safety	1
	G - support Goals with caveat	1
	G - SUSTDEV - social/environmental/economic objectives priority	2
General Alternatives (GA)	GA - alternative environmentally friendly modes	4
	GA - better cycle links needed	1
	GA - discourage car use (charging)	4
	GA - encourage modal shift	7
	GA - enhance cycling routes	1
	GA - general challenge to solutions	1
	GA - Heathrow/GWML link	1
	GA - improve North/South travel	2
	GA - other strategy/approach	1
	GA - policing - greater presence	1
	GA - policing - specific suggestions	1
	GA - public education	2
Locations (L)	L - Abergavenny	5
	L - Abertillery	2
	L - Blaenau Gwent	1
	L - Brecon and Radnor	1
	L - Bridgend	1
	L - BRISTOL	7
	L - Caerphilly	1
	L - Caldicot	1
	L - CARDIFF	14
	L - CARDIFF - Forest Farm	1
	L - CARDIFF - Heath Hospital (University Hospital of Wales)	1
	L - CARDIFF - Pentwyn (and Park & Ride)	1
	L - CARDIFF - Whitchurch/Velindre Cancer Hospital	1
	L - CARDIFF Bay	1

Theme	Code	Count
	L - Carmarthen	1
	L - Castleton	1
	L - Chepstow	7
	L - Crosskeys	1
	L - Cwmbran	9
	L - Ebbw Vale	3
	L - first Severn Bridge	1
	L - J23	1
	L - J23a (Magor)	3
	L - J24 (The Coldra)	3
	L - J26 (Malpas)	1
	L - J27 (High Cross)	1
	L - J28 (Tredegar Park)	1
	L - Langstone	1
	L - Llanelli	1
	L - LONDON	1
	L - M4 - specific stretch	1
	L - Magor	19
	L - Marshfield	1
	L - Merthyr Tydfil	1
	L - Monmouth	2
	L - Monmouthshire	3
	L - New Inn	1
	L - NEWPORT	7
	L - NEWPORT - Brynglas Tunnels	1
	L - NEWPORT - Bus Station	1
	L - NEWPORT - Caerleon	7
	L - NEWPORT - Caerleon Junction (rail)	1
	L - NEWPORT - Cardiff Road	1
	L - NEWPORT - Coedkernew	3
	L - NEWPORT - Duffryn (and estate)	4
	L - NEWPORT - Llanwern	5
	L - NEWPORT - Llanwern Steel Works and Road	1
	L - NEWPORT - Lliswerry	1
	L - NEWPORT - Maesglas	2
	L - NEWPORT - Malpas	1
	L - NEWPORT - Malpas Road	1
	L - NEWPORT - Pye Corner roundabout	1
	L - NEWPORT - Railway Station	2
	L - NEWPORT - Rhiwderin	1
	L - NEWPORT - Spytty	1
	L - NEWPORT - Tredegar Park	2
	L - NEWPORT - University, Caerleon Campus	2
	L - OTHER ROADS - A40	1
	L - OTHER ROADS - A4042	1
	L - OTHER ROADS - A4051	1
	L - OTHER ROADS - A449	1
	L - OTHER ROADS - A467	2
	L - OTHER ROADS - A468	1
	L - OTHER ROADS - A470	1
	L - OTHER ROADS - A48	1
	L - OTHER ROADS - A48(M)	2

Theme	Code	Count
	L - OTHER ROADS - M48	2
	L - Pontypool	4
	L - Pontypridd/Trefforest	1
	L - Port Talbot	1
	L - Risca	5
	L - Rogerstone	3
	L - Rogiet	1
	L - second Severn Bridge	2
	L - Severn Tunnel	2
	L - Severn Tunnel Junction	6
	L - St Mellons	1
	L - SWANSEA	3
	L - the Marches	1
	L - THE VALLEYS	3
	L - Torfaen	2
	L - Undy	2
	L - West Wales	1
Other (O)	O - Common Measures support	1
	O - consultation - criticism	4
	O - consultation - general comments	3
	O - consultation - support	1
	O - consultation- criticism of question	1
	O - Editor's note	24
	O - M4 CEM general concern	1
	O - M4 CEM report/figures challenge	8
	O - more information needed	2
	O - no comment	3
	O - No comment was made	57
	O - not a comment	2
	O - potential quotation	2
Option A (OA)	OA - construction impacts - minimal	1
	OA - journey impacts - will improve travel - general	1
	OA - more roads will mean more traffic	1
	OA - option - support	2
	OA - overdue/long-needed	1
	OA - white elephant	1
Option D (OD)	OD - construction impacts - damage to economy	1
	OD - construction impacts - disruption	1
	OD - construction impacts - local resident/business disruption	1
	OD - journey impacts - will reduce congestion/increase capacity	1
	OD - journey impacts - will worsen problems/congestion	2
	OD - local roads/traffic - no impact/negative impact	1
	OD - option - challenge	4
	OD - option - upgrade - support	3
	OD - will reduce noise/pollution	1
Problems (P)	P - CAPACITY - comment	2
	P - CAPACITY - priority	3
	P - P1 - comment	1
	P - P1 - strongly agree	1
	P - P15 - comment	1

Theme	Code	Count
	P - P2 - comment	1
	P - P3 - comment	1
	P - P4 - comment	1
	P - P5 - comment	1
	P - P5 - priority	1
	P - P7 - strongly agree	1
	P - P8 - challenge	1
	P - RESILIENCE - priority	1
	P - SUSTDEV - comment	2
	P - SUSTDEV - priority	2
Public Transport Measures (PT)	PT - as alternative to cars	45
	PT - better information needed	3
	PT - BUS - add bus lanes	2
	PT - BUS - cross-Newport services	13
	PT - BUS - express services	5
	PT - BUS - extensions/connections to Bristol	1
	PT - BUS - good service at present	9
	PT - BUS - less relief to roads than trains	3
	PT - BUS - more smaller buses	2
	PT - BUS - Newport bus station needs improving	3
	PT - BUS - not a real alternative	3
	PT - BUS - off-peak services need improvement	2
	PT - BUS - Park & Ride connections	41
	PT - BUS - priority at junctions	6
	PT - BUS - rail-integrated service needed	10
	PT - BUS - remove bus lanes	1
	PT - BUS - service reductions	4
	PT - BUS - services inadequate	19
	PT - BUS - to serve business/industry	3
	PT - BUS - too unreliable	5
	PT - capacity concern	5
	PT - cars (shared) are cheaper	6
	PT - city-centre/periphery access	8
	PT - commuter uses/needs	43
	PT - cycle infrastructure	5
	PT - demand has increased/will increase/latent demand	6
	PT - flood risk	1
	PT - GWML - S. Wales/Bristol/London	8
	PT - increase choice	5
	PT - integrated transport - across SE Wales	8
	PT - integrated transport - connecting services	6
	PT - integrated transport - road/rail	21
	PT - integrated transport - smart card	4
	PT - journey times too slow	27
	PT - LA/transport company partnership needed	1
	PT - lack of good public transport encourages road use	4
	PT - little impact on freight/long-distance	7
	PT - make accessible	16
	PT - make cheaper/easier	41
	PT - make safer	5
	PT - MEASURES - have not been costed	5

Theme	Code	Count
	PT - MEASURES - will help	60
	PT - MEASURES - will help somewhat	38
	PT - MEASURES - will help with caveat	27
	PT - MEASURES - will not help	106
	PT - modal shift will not happen	23
	PT - more useful services needed	14
	PT - needs to be convenient/practical/comfortable	10
	PT - needs to be good quality	10
	PT - needs to be reliable	10
	PT - not an option	23
	PT - not convenient/practical	36
	PT - not enough focus on these in proposals	2
	PT - not flexible/practical for business travel	7
	PT - not safe	2
	PT - Option A preferable	1
	PT - out-of-town living/working	6
	PT - price concern	40
	PT - promote as alternative	17
	PT - public transport is priority	21
	PT - public travel habits/needs	18
	PT - RAIL - better commuter services	7
	PT - RAIL - better for city regeneration	1
	PT - RAIL - Ebbw Vale Line success	2
	PT - RAIL - electrification	8
	PT - RAIL - enhance GWML services	8
	PT - RAIL - enhance/extend the Abergavenny Line	2
	PT - RAIL - enhance/extend the Ebbw Vale Line	11
	PT - RAIL - extensions/connections around Newport	8
	PT - RAIL - extensions/connections around Valleys	5
	PT - RAIL - extensions/connections east of Cardiff	5
	PT - RAIL - extensions/connections to Bristol	10
	PT - RAIL - good service at present	8
	PT - RAIL - less convenient/reaching stations	14
	PT - RAIL - make cheaper/easier	12
	PT - RAIL - make faster/more reliable	5
	PT - RAIL - more calls at Severn Tunnel Junction	5
	PT - RAIL - more suburban stations	30
	PT - RAIL - not a real alternative	2
	PT - RAIL - off-peak services need improvement	1
	PT - RAIL - Park & Ride connections	24
	PT - RAIL - parking	29
	PT - RAIL - price concern	14
	PT - RAIL - relieves road congestion	35
	PT - RAIL - resilience	2
	PT - RAIL - services inadequate	1
	PT - RAIL - take freight off roads	3
	PT - RAIL - to serve business/industry	3
	PT - round-the-clock service	3
	PT - rural areas not served	3
	PT - school services	1
	PT - serve more routes and destinations	10
	PT - service frequency improvements needed	37

Theme	Code	Count
	PT - social impact positive	3
	PT - specific examples	7
	PT - specific proposal	29
	PT - system must be financially sustainable	4
	PT - timetabling	3
	PT - unimportant	9
	PT - unreliable	11
	PT - walking infrastructure	3
	PT - wider area concerned	4
	PT - will reduce noise/pollution	11
References (R)	R - Local planning policy	2
	R - Other countries/regions - comparison	8
	R - other projects	1
	R - other stakeholders/public opinion	1
	R - previous plans	1
	R - refer to consultation document figures	2
	R - refer to Newport City Council	1
	R - refer to other question comments	12
	R - refer to other questions - Q2b	2
	R - refer to other questions - Q3a	4
	R - refer to other research/publications	5
	R - refer to other transport infrastructure/projects/experience	9
	R - refer to own research/publications	2
	R - refer to own travel habits/experience	39
	R - refer to specific legislation / policy	3
	R - refer to UK Govt/ministers	2
	R - refer to WG/ministers	9
	R - Ryder Cup improvements	1
	R - Wales Spatial Plan/Travel To Work areas	1
Road Alternatives (RA)	RA - address bottle-necks	2
	RA - discourage single-occupancy/encourage car-sharing	6
	RA - finance with tolls	1
	RA - M4 - reduce lanes	1
	RA - maintenance costs	1
	RA - motorbike/motorcyclist provisions	1
	RA - new/alternative routes needed	3
	RA - park & share	2
	RA - suggest - alternative road/route approaches	2
	RA - suggest - specific	4
	RA - suggest - specific M4 junction/feeder road improvements	1
	RA - suggest - speed limits	2
	RA - tolling as disincentive	1
	RA - traffic management	3
	RA - wider area concerned	1
Social and Economic (SE)	SE - cost or value concerns	5
	SE - demand for roads will fall/will not rise	3
	SE - demand for roads will grow	2
	SE - demand for travel should be managed	2
	SE - demolition implications	1
	SE - disability and access	2
	SE - employment and working patterns	3

Theme	Code	Count
	SE - finance/debt	2
	SE - fuel/oil cost	9
	SE - impact of new development and housing	2
	SE - impact on recreation/tourism	1
	SE - negative impact/constraint on business	2
	SE - new tech/green industry requirements	1
	SE - Newport could miss-out on economic benefits	1
	SE - Newport suffers for the rest of Wales	1
	SE - public/private interest issues	1
	SE - quality of life	1
	SE - South Wales benefit from capacity increase	1

Question 4a

Theme	Code	Count
Environment (E)	E - air pollution concern	8
	E - climate change/emissions concern	9
	E - designated area - other	1
	E - ecological impact	1
	E - general - not a concern	1
	E - general concern	6
	E - impact biodiversity/wildlife	26
	E - impact heritage sites	1
	E - impact landscape/cityscape	10
	E - impact on nature reserve	3
	E - impact on rivers/canals/flood plain, etc.	1
	E - impact on SSSIs	25
	E - impact on waterways	5
	E - impact woodland/countryside/greenspace	6
	E - mitigation - no amount enough	1
	E - new roads will damage environment	2
	E - noise concern	6
	E - reduce emissions by improving traffic flow/road standard	6
Existing Situation Comments (EC)	EC - CAPACITY - Brynglas Tunnels - already inadequate	4
	EC - CAPACITY - congestion	2
	EC - CAPACITY - HGV/large vehicle behaviour/impact	3
	EC - CAPACITY - peak time travel	1
	EC - CAPACITY - pinch-points/bottle-necks	1
	EC - CAPACITY - SDR - sufficient/underused	2
	EC - CAPACITY - strain from Valleys and West travel	1
	EC - CAPACITY - surrounding roads	1
	EC - M4 design/standards poor	3
	EC - M4 too close to Newport	1
	EC - RESILIENCE - few/difficult alternative routes	1
	EC - RESILIENCE - impact of accidents	1
	EC - RESILIENCE - M4 maintenance disruptive to local community	1
	EC - RESILIENCE - Newport City road infrastructure inadequate	4
	EC - SAFETY - sharp corners	1
	EC - SAFETY - wet weather risk	1

Theme	Code	Count
	EC - SDR - inadequate as bypass	1
	EC - SUST DEV - existing motorway unsustainable	1
	EC - SUST DEV - M4 priority as main national artery/England access	1
	EC - traffic lights	1
	EC - variable speed limits - effective	1
Goals (G)	G - act quickly	1
	G - better roads will encourage unsustainable driving	1
	G - G1 - comment	1
	G - G10 - comment	1
	G - G14 - comment	1
	G - G15 - comment	3
	G - G17 - comment	1
	G - G3 - comment	4
	G - G4 - comment	1
	G - G5 - comment	1
	G - G6 - comment	3
	G - G7 - support	1
	G - G8 - comment	1
	G - G9 - comment	2
	G - integrated approach needed to problems	1
	G - modal shift/change travel habits	1
	G - network - local traffic needs better network	3
	G - reduce overall traffic	2
	G - suggest alternative goal	1
General Alternatives (GA)	GA - alternative environmentally friendly modes	3
	GA - better cycle links needed	4
	GA - other infrastructure in Wales needs improvement	2
	GA - policing - greater presence	1
Locations (L)	L - Abergavenny	1
	L - Caldicot	1
	L - CARDIFF	3
	L - CARDIFF - Rover/Ocean Way	1
	L - CARDIFF Bay	1
	L - Castleton	2
	L - first Severn Bridge	1
	L - Gwent Levels	26
	L - J23	1
	L - J23a (Magor)	3
	L - J24 (The Coldra)	4
	L - J26 (Malpas)	1
	L - J28 (Tredeggar Park)	1
	L - J29 (Castleton)	3
	L - Llandeenny	1
	L - M4 - specific stretch	1
	L - Magor	9
	L - Monmouthshire	1
	L - NEWPORT - Brynglas Tunnels	5
	L - NEWPORT - City Bridge	1
	L - NEWPORT - Coedkernew	1
	L - NEWPORT - Docks	1
	L - NEWPORT - Duffryn (and estate)	2

Theme	Code	Count
	L - NEWPORT - Ebbw Bridge roundabout (A48/SDR)	1
	L - NEWPORT - High Cross	1
	L - NEWPORT - Llanwern Steel Works and Road	6
	L - NEWPORT - Malpas Road	1
	L - NEWPORT - Nash Road	1
	L - NEWPORT - Queensway	1
	L - NEWPORT - River Usk	3
	L - NEWPORT - Solutia Road	1
	L - NEWPORT - St Julian's/St Julian's Hill	1
	L - NEWPORT - Tredegar Park	2
	L - NEWPORT - Wetlands Centre	1
	L - Newport to Cardiff cycle route	1
	L - OTHER ROADS - A449	2
	L - OTHER ROADS - A48	1
	L - OTHER ROADS - A48(M)	1
	L - OTHER ROADS - A55	1
	L - OTHER ROADS - M6	2
	L - OTHER ROADS - SDR (A48)	2
	L - River Usk	2
	L - second Severn Bridge	2
	L - Severn Estuary	1
	L - SWANSEA	1
	L - Undy	2
	L - Usk	1
	L - Wentlooge Levels	1
Other (O)	O - Common Measures support	1
	O - consultation - criticism	3
	O - consultation - general comments	1
	O - Editor's note	4
	O - M4 CEM report/figures challenge	2
	O - more information needed	2
	O - no comment	7
	O - not a comment	2
	O - potential quotation	1
Option A (OA)	OA - CAPACITY - 6 lanes not 4	5
	OA - CAPACITY - benefit	33
	OA - CAPACITY - inadequate	3
	OA - CAPACITY - more roads will mean more traffic	11
	OA - CAPACITY - new road spreads road problems	3
	OA - CAPACITY - remove heavy goods traffic from M4	3
	OA - CAPACITY - will relieve Brynglas Tunnels congestion	15
	OA - comparisons/similarities to M4 Relief Road proposals	4
	OA - concern project feasibility/timescale	6
	OA - concern river navigability impact	2
	OA - construction impacts - concern impact/invasiveness	14
	OA - construction impacts - concern loss of land and homes	4
	OA - construction impacts - minimal	50
	OA - construction impacts - minimal demolition	7
	OA - construction impacts - minimal on central Newport	5
	OA - construction impacts - minimal on residents/businesses	19
	OA - construction impacts - significant disruption during construction	4

Theme	Code	Count
	OA - cost - comment	4
	OA - cost - concern	13
	OA - cost - expense concern	47
	OA - cost - worthwhile	19
	OA - environment - concerns	27
	OA - environment - concerns acknowledged	7
	OA - environment - flood risk	2
	OA - environment - impact on protected area	5
	OA - environment - impact reasonable	12
	OA - environment - mitigation must be significant	3
	OA - environment - mitigation possible	9
	OA - goals - would achieve	24
	OA - goals - would achieve with caveat	5
	OA - goals - would NOT achieve	25
	OA - impact on houses/property prices	6
	OA - journey impacts - faster journeys	1
	OA - journey impacts - good for business traffic	3
	OA - journey impacts - safer local travel	1
	OA - journey impacts - will help through-traffic	73
	OA - journey impacts - will help traffic further east	4
	OA - journey impacts - will help/tackle local traffic	37
	OA - journey impacts - will improve travel - general	5
	OA - journey impacts - will improve travel on M4	6
	OA - journey impacts - will NOT help/tackle local traffic on M4	19
	OA - journey impacts - will NOT help/tackle through-traffic	7
	OA - journey impacts - will NOT reduce traffic/congestion	13
	OA - journey impacts - will reduce accidents/improve safety on M4	2
	OA - journey impacts - will reduce distances travelled	1
	OA - journey impacts - will reduce journey times	26
	OA - journey impacts - will reduce traffic/congestion	48
	OA - junctions are crucial consideration	19
	OA - long-term solution	39
	OA - M4 to be for local traffic	6
	OA - may still have to carry local traffic	2
	OA - needs to attract through-traffic off M4	3
	OA - Newport will be enclosed by roads	5
	OA - only true new alternative route	4
	OA - option - challenge	23
	OA - option - oppose	22
	OA - option - prefer D	8
	OA - option - preferred option	74
	OA - option - support	56
	OA - option - support consideration	10
	OA - option - support variation	16
	OA - option - support with caveat	5
	OA - other measures needed alongside	1
	OA - overdue/long-needed	7
	OA - phasing - positive	9
	OA - phasing - specific suggestions	1
	OA - phasing challenge	9

Theme	Code	Count
	OA - problems - could address	6
	OA - problems - would NOT solve	24
	OA - problems - would solve	57
	OA - problems - would solve problems with caveat	3
	OA - RESILIENCE - alternative if M4 closed/disrupted	52
	OA - RESILIENCE - benefit	19
	OA - RESILIENCE - benefits for M4 maintenance	7
	OA - RESILIENCE - inadequate	2
	OA - RESILIENCE - real alternative route	10
	OA - RESILIENCE - reduce M4 reliance	45
	OA - RESILIENCE - separate from Brynglas Tunnels strain	1
	OA - RESILIENCE - will improve traffic management	1
	OA - route - more fuel-efficient route	2
	OA - route is crucial consideration	13
	OA - route not very important	1
	OA - SAFETY - benefit	22
	OA - SAFETY - driver behaviour will not change	2
	OA - SAFETY - emergency access	8
	OA - SAFETY - more traffic will mean more accidents	1
	OA - SAFETY - road design/standards poor	3
	OA - SDR failed as relief road	2
	OA - short-term benefit	2
	OA - should replace existing M4	3
	OA - SUST DEV - air quality improved	2
	OA - SUST DEV - benefit	5
	OA - SUST DEV - economic - benefit	5
	OA - SUST DEV - environmental - benefit	8
	OA - SUST DEV - negative	9
	OA - SUST DEV - public transport impact - negative	3
	OA - SUST DEV - social - benefit	4
	OA - SUST DEV - traffic taken away from city / built up area	4
	OA - SUST DEV - walking/cycle network impact	1
	OA - SUST DEV - will improve visitor experience of Wales	4
	OA - SUST DEV - will NOT reduce noise/pollution	9
	OA - SUST DEV - will reduce noise/pollution	47
	OA - SUST DEV - will support economic growth/jobs/regeneration	11
	OA - SUST DEV - will support new Newport development	6
	OA - SUST DEV - would NOT change own travel habits	1
	OA - tolling comments	8
	OA - uncertain benefits	4
	OA - variation - build to motorway standard	8
	OA - variation - M4 improvements needed too	4
	OA - variation - should be no/few junctions	12
	OA - variation - use Steelworks Access Road	6
	OA - wider connectivity impact	4
	OA - will improve quality of life in Newport	5
Option B (OB)	OB - CAPACITY - will not improve	1
	OB - option - challenge	4
	OB - problems - will not address	1
	OB - RESILIENCE - inadequate to relieve M4	1
	OB - ROUTE - will be underused/will not divert traffic from	1

Theme	Code	Count
	M4	
Option C (OC)	OC - CAPACITY - benefit	1
	OC - goals - would achieve	1
	OC - option - challenge	3
	OC - problems - will address	1
	OC - RESILIENCE - benefit	1
Option D (OD)	OD - Brynglas tunnelling - ground unsuitable	2
	OD - Brynglas tunnelling - opposed	1
	OD - CAPACITY - benefit	1
	OD - construction impacts - disruption	3
	OD - construction impacts - local resident/business disruption	5
	OD - cost - cost-effective	1
	OD - cost - expensive/too much	2
	OD - goals - would achieve	1
	OD - impact on local properties/demolitions	1
	OD - not a true solution/need alternative route	2
	OD - option - oppose	5
	OD - option - preferred option	1
	OD - problems - would solve	1
	OD - RESILIENCE - benefit	1
Problems (P)	P - CAPACITY - comment	1
	P - CAPACITY - priority	1
	P - P1 - comment	2
	P - P10 - comment	1
	P - P16 - comment	1
	P - P3 - comment	1
	P - P5 - strongly agree	1
	P - P7 - comment	2
	P - Problems - comment	1
	P - RESILIENCE - priority	1
	P - SAFETY - comment	1
Public Transport Measures (PT)	PT - as alternative to cars	1
	PT - BUS - Park & Ride connections	1
	PT - integrated transport - road/rail	1
	PT - MEASURES - will not help	1
	PT - public transport is priority	8
	PT - RAIL - not a real alternative	1
	PT - service frequency improvements needed	1
	PT - specific proposal	1
References (R)	R - Brynglas Tunnel fire	2
	R - M4 Relief Road	5
	R - other projects	4
	R - other stakeholders/public opinion	1
	R - previous plans	4
	R - refer to Newport City Council	2
	R - refer to other question comments	2
	R - refer to other questions - Q1b	1
	R - refer to other questions - Q5	1
	R - refer to other research/publications	7
	R - refer to other transport infrastructure/projects/experience	12

Theme	Code	Count
	R - refer to own property/commercial interest	3
	R - refer to own research/publications	1
	R - refer to own travel habits/experience	11
	R - refer to specific legislation / policy	1
	R - refer to technical specifications/requirements	1
	R - refer to UK Govt/ministers	3
	R - refer to WG/ministers	7
	R - Ryder Cup improvements	1
	R - Second Severn Crossing	1
Road Alternatives (RA)	RA - discourage single-occupancy/encourage car-sharing	1
	RA - finance with tolls	2
	RA - M4 Relief Road - abandonment	1
	RA - M4 Relief Road - cost	1
	RA - M4 Relief Road - preferable	2
	RA - M4 Relief Road - reference	4
	RA - new/alternative routes needed	1
	RA - new/alternative tunnels/bridges needed	1
	RA - remove/reduce Severn Bridge tolls	1
	RA - suggest - alternative road/route approaches	15
	RA - suggest - better use of existing infrastructure (general)	2
	RA - suggest - M4 existing section downgrade	2
	RA - suggest - M4 further/specific widening	1
	RA - suggest - M4 HGV restrictions	2
	RA - suggest - specific junction/connection needed	1
	RA - suggest - specific M4 junction/feeder road improvements	1
	RA - suggest - specific signage	1
	RA - suggest - speed limits	1
	RA - Valleys need connection	1
Social and Economic (SE)	SE - boost image/reputation of Newport	1
	SE - community impact concern	2
	SE - congestion impact on city	1
	SE - demand for travel should be managed	1
	SE - ensure local economy benefits	1
	SE - equity/fairness in decision	1
	SE - GDP/GNP observations	1
	SE - impact on economy/growth	2
	SE - impact on public health	2
	SE - impact on recreation/tourism	1
	SE - negative impact/constraint on business	3
	SE - Newport benefit from capacity increase	3
	SE - Newport could miss-out on economic benefits	4
	SE - Newport physically divided by M4	1
	SE - quality of life	2
	SE - South Wales benefit from capacity increase	8

Question 4b

Theme	Code	Count
Environment (E)	E - air pollution concern	20
	E - general concern	9

Theme	Code	Count
	E - impact biodiversity/wildlife	1
	E - impact heritage sites	4
	E - impact on nature reserve	1
	E - impact on rivers/canals/flood plain, etc.	1
	E - impact woodland/countryside/greenspace	1
	E - mitigation required	1
	E - noise concern	14
Existing Situation Comments (EC)	EC - CAPACITY - congestion	36
	EC - CAPACITY - HGV/large vehicle behaviour/impact	15
	EC - CAPACITY - M4 junctions - too many around Newport	1
	EC - CAPACITY - peak time travel	20
	EC - CAPACITY - pinch-points/bottle-necks	11
	EC - CAPACITY - SDR - inadequate as bypass	2
	EC - CAPACITY - SDR - sufficient/underused	5
	EC - CAPACITY - strain from Cardiff travellers	1
	EC - CAPACITY - strain from local traffic major problem	13
	EC - CAPACITY - strain from Valleys and West travel	1
	EC - CAPACITY - surrounding roads	4
	EC - driver behaviour	1
	EC - driver behaviour - lane changes	3
	EC - M4 in wrong location	1
	EC - M4 junctions - accessibility	1
	EC - M4 junctions - closure impact	1
	EC - M4 junctions - main problem/priority	2
	EC - M4 junctions - too many around Newport	2
	EC - M4 too close to Newport	1
	EC - RESILIENCE - congestion impact on local/rural roads	2
	EC - RESILIENCE - few/difficult alternative routes	14
	EC - RESILIENCE - impact of accidents	16
	EC - RESILIENCE - impact on emergency services	1
	EC - RESILIENCE - M4 closure impact on whole South Wales travel	15
	EC - RESILIENCE - M4 maintenance disruptive to local community	2
	EC - RESILIENCE - M4 problems/closure impact on area congestion	1
	EC - RESILIENCE - Newport City road infrastructure inadequate	10
	EC - RESILIENCE - past maintenance/improvement work	1
	EC - roundabouts - problem	5
	EC - SAFETY - accident/incident management (and Brunson protocol, etc)	1
	EC - SAFETY - congestion causes accidents	1
	EC - SAFETY - inadequate information/notification systems	4
	EC - SAFETY - inclines	1
	EC - SAFETY - M4 width/standard too varied	1
	EC - SDR - inadequate as bypass	1
	EC - SUST DEV - existing motorway unsustainable	3
	EC - SUST DEV - fuel inefficiency	2
	EC - SUST DEV - journey time increases	2
	EC - SUST DEV - M4 priority as main national artery/England access	3

Theme	Code	Count
	EC - SUST DEV - road conditions threaten Wales's future	1
	EC - traffic lights	1
	EC - traffic speed - observations	1
	EC - variable speed limits - observations	1
Goals (G)	G - act quickly	3
	G - G1 - comment	1
	G - G10 - challenge	1
	G - G13 - support	1
	G - G14 - comment	1
	G - G15 - challenge	1
	G - G15 - comment	1
	G - G3 - challenge	1
	G - G3 - comment	3
	G - G3 - support	1
	G - G4 - comment	2
	G - G5 - comment	1
	G - G6 - challenge	1
	G - G6 - comment	1
	G - G7 - comment	1
	G - G7 - support	1
	G - G8 - comment	1
	G - G9 - comment	1
	G - long-term solution needed	8
	G - minimal impact on people/communities	3
	G - modal shift/change travel habits	1
	G - options will not achieve goals	1
	G - peak delays priority	1
	G - reduce overall traffic	1
	G - suggest alternative goal	1
General Alternatives (GA)	GA - encourage modal shift	4
	GA - enhance cycling routes	1
	GA - other strategy/approach	2
Locations (L)	L - Alway	1
	L - Castleton	1
	L - Church Street	1
	L - Gwent Levels	1
	L - J24 (The Coldra)	6
	L - J28 (Tredeggar Park)	15
	L - M4 - specific stretch	6
	L - Magor	2
	L - NEWPORT	27
	L - NEWPORT - Brynglas Tunnels	11
	L - NEWPORT - Caerleon Road	1
	L - NEWPORT - Chepstow Road	1
	L - NEWPORT - Coldra	4
	L - NEWPORT - Docks/Port of Newport	2
	L - NEWPORT - Duckpool Road	1
	L - NEWPORT - George Street Bridge	1
	L - NEWPORT - Llanwern Steel Works and Road	2
	L - NEWPORT - Maesglas	1
	L - NEWPORT - Nash College roundabout	1
	L - NEWPORT - Nash Road	1

Theme	Code	Count
	L - NEWPORT - River Usk	2
	L - NEWPORT - Spytty	1
	L - NEWPORT - Tredegar House roundabout	6
	L - NEWPORT - Tredegar Park	9
	L - OTHER ROADS - A48	1
	L - Pont Ebbw Junction	1
Other (O)	O - Common Measures support	4
	O - consultation - criticism	3
	O - consultation - general comments	5
	O - consultation - request to be consulted on next stages	1
	O - consultation- criticism of question	1
	O - Editor's note	10
	O - M4 CEM general opposition	3
	O - M4 CEM report/figures challenge	1
	O - more information needed	2
	O - no comment	7
	O - not a comment	2
Option A (OA)	OA - CAPACITY - more roads will mean more traffic	2
	OA - cost - expense concern	2
	OA - environment - concerns	2
	OA - option - challenge	3
	OA - option - support	3
	OA - option - support consideration	1
	OA - option - support variation	1
Option B (OB)	OB - CAPACITY - does not address M4 priority	40
	OB - CAPACITY - more SDR traffic negative	21
	OB - CAPACITY - SDR enhancements will improve capacity	3
	OB - CAPACITY - will increase traffic/SDR already too busy	28
	OB - CAPACITY - will not improve	14
	OB - cheap fix/short-term/too little	40
	OB - construction impacts - minimal	13
	OB - construction impacts - negative	22
	OB - cost - expensive/poor value/low cost-benefit ratio	14
	OB - cost - inexpensive/cost-effective	32
	OB - GOALS - does not/will not achieve goals	54
	OB - GOALS - does/will achieve goals	3
	OB - good interim/trial measure	5
	OB - HGVs/freight/commercial traffic should use SDR	2
	OB - jargon	2
	OB - journey impacts - only local benefit	15
	OB - journey impacts - SDR should be used for local traffic	2
	OB - journey impacts - through-traffic benefits to detriment of local traffic	6
	OB - journey impacts - will help/tackle local traffic	5
	OB - journey impacts - will improve SDR traffic flow	9
	OB - journey impacts - will improve traffic flow	4
	OB - journey impacts - will not help local/Newport city transport network	37
	OB - journey impacts - will not help/tackle through-traffic	27
	OB - journey impacts - will not improve SDR traffic flow	21
	OB - journey impacts - will reduce journey times	1
	OB - journey impacts - will reduce traffic/congestion	3

Theme	Code	Count
	OB - junction changes - impacts	1
	OB - not a significant change	76
	OB - option - challenge	87
	OB - option - oppose	2
	OB - option - prefer A	20
	OB - option - prefer A - with caveat	6
	OB - option - prefer C	6
	OB - option - prefer C - with caveat	10
	OB - option - prefer D	1
	OB - option - prefer D - with caveat	4
	OB - option - support	8
	OB - option - support consideration	76
	OB - option - support in conjunction with other measures/options	16
	OB - phasing - positive	2
	OB - problems - will not address	29
	OB - RESILIENCE - alternative if M4 closed/disrupted	1
	OB - RESILIENCE - construction will cause disruption	2
	OB - RESILIENCE - inadequate to relieve M4	26
	OB - RESILIENCE - will relieve M4	21
	OB - route - most direct	1
	OB - route - specific suggestion	15
	OB - route - too indirect/slow	16
	OB - route - traffic management/lights/layout poor	25
	OB - route - will be underused/will not divert traffic from M4	48
	OB - SDR - adequate/no problem/efficient/successful	5
	OB - SDR - inadequate/needs improvement	55
	OB - SDR - not a bypass or motorway	10
	OB - SDR - valuable for south Newport/local traffic	4
	OB - severance	1
	OB - SUST DEV - negative	1
	OB - SUST DEV - public transport impact - negative	2
	OB - SUST DEV - walking/cycle network impact	3
	OB - SUST DEV - will NOT reduce noise/pollution	2
	OB - SUST DEV - will not support economic growth/jobs/regeneration	2
	OB - SUST DEV - will reduce noise/pollution	3
	OB - SUST DEV - will support economic growth/jobs/regeneration	2
	OB - SUSTDEV - SDR enhancement will not promote	1
	OB - SUSTDEV - will not help climate change	2
	OB - variation - layout	37
	OB - variation - roundabouts	38
	OB - variation - traffic lights	22
	OB - variation - use Steelworks Access Road	6
Option C (OC)	OC - option - challenge	4
	OD - Brynglas tunnelling - structural damage	1
	OD - cannot be adequately upgraded	1
	OD - cost - expensive/too much	1
	OD - option - challenge	8
	OD - option - support	2
Problems (P)	P - CAPACITY - priority	2

Theme	Code	Count
	P - P1 - comment	1
	P - P10 - comment	1
	P - P16 - comment	1
	P - P7 - comment	1
	P - RESILIENCE - comment	5
	P - RESILIENCE - priority	1
	P - SAFETY - comment	15
	P - SUSTDEV - comment	10
	P - SUSTDEV - priority	1
Public Transport Measures (PT)	PT - BUS - add bus lanes	2
	PT - BUS - Park & Ride connections	1
	PT - BUS - priority at junctions	2
	PT - BUS - services inadequate	1
	PT - BUS - too unreliable	1
	PT - cycle infrastructure	1
	PT - integrated transport - road/rail	2
	PT - lack of good public transport encourages road use	1
	PT - MEASURES - will help	1
	PT - MEASURES - will not help	1
	PT - modal shift will not happen	1
	PT - public transport is priority	1
	PT - RAIL - electrification	1
	PT - RAIL - enhance GWML services	1
	PT - specific proposal	1
	PT - walking infrastructure	1
References (R)	R - Gwent Police	1
	R - Local planning policy	5
	R - Other countries/regions - comparison	1
	R - other projects	1
	R - other stakeholders/public opinion	2
	R - previous plans	6
	R - refer to consultation documentation	1
	R - refer to Newport City Council	1
	R - refer to other question comments	15
	R - refer to other questions - Q2b	1
	R - refer to other research/publications	1
	R - refer to other transport infrastructure/projects/experience	13
	R - refer to own research/publications	1
	R - refer to own travel habits/experience	12
	R - refer to specific legislation / policy	1
	R - refer to WG/ministers	1
Road Alternatives (RA)	RA - forthcoming improvements should ease problems	1
	RA - improve feeder roads	1
	RA - M4 Relief Road - reference	1
	RA - park & share	1
	RA - speed cameras/control systems	1
	RA - suggest - Brynglas alternative	1
	RA - suggest - encourage use of SDR	2
	RA - suggest - specific M4 junction/feeder road improvements	1
	RA - suggest - speed limits	1

Theme	Code	Count
	RA - tolling as disincentive	2
Social and Economic (SE)	SE - community impact concern	5
	SE - constraint on growth/economy damaged	1
	SE - cost or value concerns	4
	SE - demand for roads will grow	3
	SE - disruptions to local residents	7
	SE - fuel/oil cost	1
	SE - impact of new development and housing	1
	SE - impact on economy/growth	1
	SE - impact on public health	3
	SE - impact on recreation/tourism	1
	SE - negative impact/constraint on business	3
	SE - phasing - support as economical	1
	SE - quality of life	2
	SE - route/traffic should be away from built-up areas	3
	SE - spending on infrastructure stimulates the economy	1

Question 4c

Theme	Code	Count
Environment (E)	E - air pollution concern	8
	E - climate change/emissions concern	1
	E - general concern	4
	E - impact biodiversity/wildlife	3
	E - impact heritage sites	3
	E - impact landscape/cityscape	6
	E - noise concern	5
Existing Situation Comments (EC)	EC - CAPACITY - congestion	21
	EC - CAPACITY - congestion is a peak-time problem	1
	EC - CAPACITY - HGV/large vehicle behaviour/impact	4
	EC - CAPACITY - peak time travel	6
	EC - CAPACITY - pinch-points/bottle-necks	2
	EC - CAPACITY - SDR - inadequate as bypass	1
	EC - CAPACITY - SDR - sufficient/underused	3
	EC - CAPACITY - strain from local traffic major problem	8
	EC - CAPACITY - strain from Valleys and West travel	2
	EC - driver behaviour	2
	EC - M4 junctions - accessibility	1
	EC - M4 junctions - main problem/priority	1
	EC - M4 junctions - too many around Newport	3
	EC - North/South infrastructure criticism	1
	EC - RESILIENCE - few/difficult alternative routes	12
	EC - RESILIENCE - impact of accidents	4
	EC - RESILIENCE - M4 closure impact on whole South Wales travel	1
	EC - RESILIENCE - M4 problems/closure impact on area congestion	1
	EC - RESILIENCE - Newport City road infrastructure inadequate	4
	EC - RESILIENCE - past maintenance/improvement work	1
	EC - roundabouts - problem	2

Theme	Code	Count
	EC - SAFETY - inadequate information/notification systems	3
	EC - SDR - inadequate as bypass	4
	EC - SUST DEV - constraint to whole of South Wales	1
	EC - SUST DEV - existing motorway unsustainable	1
	EC - traffic lights	1
Goals (G)	G - act quickly	2
	G - G1 - comment	1
	G - G13 - comment	1
	G - G14 - comment	1
	G - G15 - comment	1
	G - G3 - comment	3
	G - G5 - comment	1
	G - G6 - comment	2
	G - G7 - comment	1
	G - G8 - comment	1
	G - G9 - comment	1
	G - integrated approach needed to problems	1
	G - long-term solution needed	12
	G - modal shift/change travel habits	1
	G - options will not achieve goals	1
	G - reduce M4 reliance	1
	G - RESILIENCE - technology/future-proofing	1
	G - safety	1
	G - SUSTDEV - social/environmental/economic objectives priority	1
General Alternatives (GA)	GA - alternative environmentally friendly modes	1
	GA - better cycle links needed	3
	GA - encourage modal shift	2
Locations (L)	L - Alway	2
	L - CARDIFF	2
	L - Castleton	1
	L - Gwent Levels	1
	L - J23	1
	L - J23a (Magor)	1
	L - J24 (The Coldra)	11
	L - J26 (Malpas)	1
	L - J28 (Tredeggar Park)	21
	L - M4 - specific stretch	5
	L - Marshfield	1
	L - national cycle route	1
	L - NEWPORT	22
	L - NEWPORT - Brynglas Tunnels	2
	L - NEWPORT - Coedkernew	1
	L - NEWPORT - Coldra	2
	L - NEWPORT - Docks/Port of Newport	2
	L - NEWPORT - Llanwern	1
	L - NEWPORT - Llanwern Steel Works and Road	7
	L - NEWPORT - Maesglas	1
	L - NEWPORT - Queensway	1
	L - NEWPORT - River Usk	3
	L - NEWPORT - Transporter Bridge	1
	L - NEWPORT - Tredeggar House roundabout	1

Theme	Code	Count
	L - NEWPORT - Tredegar Park	6
	L - OTHER ROADS - A449	1
	L - OTHER ROADS - A48	1
	L - OTHER ROADS - M50	1
	L - Pill	1
	L - Ringland	1
	L - St Mellons	1
Other (O)	O - Common Measures support	3
	O - consultation - general comments	1
	O - consultation- criticism of question	1
	O - Editor's note	8
	O - M4 CEM general opposition	2
	O - M4 CEM report/figures challenge	1
	O - more information needed	3
	O - no comment	6
	O - No comment was made	1
	O - not a comment	2
Option A (OA)	OA - CAPACITY - benefit	1
	OA - environment - concerns	2
	OA - journey impacts - will reduce journey times	1
	OA - option - challenge	2
	OA - RESILIENCE - benefit	1
	OA - SUST DEV - will support economic growth/jobs/regeneration	1
Option B (OB)	OB - option - challenge	4
Option C (OC)	OC - CAPACITY - benefit	18
	OC - CAPACITY - does not address M4 priority	18
	OC - CAPACITY - inadequate	6
	OC - CAPACITY - more roads will mean more traffic	4
	OC - CAPACITY - will increase traffic/SDR already too busy	14
	OC - CAPACITY - will not improve	2
	OC - cheap fix/short-term/too little	18
	OC - construction impacts - disruption to people and property	25
	OC - construction impacts - disruption	16
	OC - construction impacts - local properties/demolitions	3
	OC - cost - cost effective/lower cost	8
	OC - cost - expensive/poor cost-benefit ratio	29
	OC - disruption - least disruptive option	3
	OC - environment - concerns	1
	OC - environment - impact reasonable	3
	OC - environment - mitigation must be significant	1
	OC - environment - mitigation possible	1
	OC - GOALS/PROBLEMS - will address	11
	OC - GOALS/PROBLEMS - will address with caveat	5
	OC - GOALS/PROBLEMS - will NOT address	55
	OC - HGVs/freight/commercial traffic should use SDR	3
	OC - jargon	7
	OC - journey impacts - faster journeys	6
	OC - journey impacts - only local benefit	13
	OC - journey impacts - through-traffic benefits to detriment of local traffic	9

Theme	Code	Count
	OC - journey impacts - TRAFFIC FLOW - will improve	46
	OC - journey impacts - TRAFFIC FLOW - will NOT improve	16
	OC - journey impacts - will help through-traffic	4
	OC - journey impacts - will help/tackle local traffic	5
	OC - journey impacts - will NOT help/tackle local traffic	12
	OC - journey impacts - will NOT help/tackle through traffic	5
	OC - journey impacts - will NOT separate through from local traffic	3
	OC - junction changes - challenge	6
	OC - junction changes - support	6
	OC - junction changes - too many junctions	4
	OC - Newport will be enclosed by roads	2
	OC - not a significant change	30
	OC - option - challenge	49
	OC - option - prefer A	13
	OC - option - prefer B	7
	OC - option - prefer D	3
	OC - option - preferable to B	52
	OC - option - preferred option	8
	OC - option - second choice	2
	OC - option - support	10
	OC - option - support consideration	34
	OC - option - support in conjunction with other measures	21
	OC - option - support with caveat	16
	OC - option - views same as for Option B	50
	OC - phasing - positive	5
	OC - RESILIENCE - benefit	9
	OC - RESILIENCE - driver behaviour will not change	2
	OC - RESILIENCE - inadequate	11
	OC - RESILIENCE - inadequate for maintenance	2
	OC - RESILIENCE - inadequate to relieve M4	2
	OC - RESILIENCE - will reduce reliance on M4	17
	OC - RESILIENCE - will relieve M4	31
	OC - route - specific suggestion	18
	OC - route - too indirect/slow	5
	OC - route - traffic management/lights/layout poor	28
	OC - route - underused/will not divert traffic from M4	23
	OC - SAFETY - benefit	6
	OC - SAFETY - emergency access	1
	OC - SAFETY - flyover inclines dangerous in bad weather	2
	OC - SDR is not a problem	4
	OC - SDR not a bypass or motorway	9
	OC - severance	3
	OC - SUST DEV - environmental - benefit	4
	OC - SUST DEV - negative	3
	OC - SUST DEV - walking/cycle network impact	3
	OC - SUST DEV - will NOT reduce noise/pollution	5
	OC - SUST DEV - will reduce noise/pollution	15
	OC - SUST DEV - will support economic growth/jobs/regeneration	3
	OC - SUST DEV - will support new Newport development	1
	OC - tolling comments	1

Theme	Code	Count
	OC - variation - use Steelworks Access Road	3
Option D (OD)	OD - cost - expensive/too much	1
	OD - option - challenge	1
	OD - RESILIENCE - benefit	1
	OD - will support economic growth/jobs/regeneration	1
Problems (P)	P - P1 - comment	1
	P - P10 - comment	1
	P - P15 - comment	1
	P - P16 - comment	1
	P - P3 - comment	1
	P - P4 - comment	2
	P - P5 - comment	1
	P - P7 - comment	2
	P - SAFETY - comment	1
	P - SUSTDEV - comment	7
	P - SUSTDEV - priority	2
Public Transport Measures (PT)	PT - BUS - cross-Newport services	1
	PT - BUS - Park & Ride connections	2
	PT - BUS - priority at junctions	2
	PT - cycle infrastructure	4
	PT - MEASURES - will not help	1
	PT - not convenient/practical	1
	PT - public transport is priority	3
	PT - RAIL - extensions/connections east of Cardiff	1
	PT - specific proposal	1
	PT - walking infrastructure	3
References (R)	R - Other countries/regions - comparison	1
	R - other projects	1
	R - previous plans	2
	R - refer to other question comments	63
	R - refer to other questions - 4b	1
	R - refer to other questions - Q1b	1
	R - refer to other research/publications	1
	R - refer to other transport infrastructure/projects/experience	3
	R - refer to own property/commercial interest	1
	R - refer to own travel habits/experience	7
	R - refer to specific legislation / policy	1
	R - refer to technical specifications/requirements	1
Road Alternatives (RA)	RA - park & share	1
	RA - suggest - alternative road/route approaches	3
	RA - suggest - better live information systems	3
	RA - suggest - better use of existing infrastructure (general)	1
	RA - suggest - specific	1
	RA - suggest - specific signage	1
	RA - suggest - speed limits	1
Social and Economic (SE)	SE - community impact concern	9
	SE - cost or value concerns	1
	SE - demand for roads will grow	2
	SE - demand for travel should be managed	1
	SE - demolition implications	7
	SE - disruptions to local residents	1

Theme	Code	Count
	SE - GDP/GNP observations	1
	SE - impact of new development and housing	1
	SE - impact on economy/growth	2
	SE - impact on home values	1
	SE - impact on recreation/tourism	1
	SE - negative impact/constraint on business	2
	SE - Newport suffers for the rest of Wales	2
	SE - spending on infrastructure stimulates the economy	3

Question 4d

Theme	Code	Count
Environment (E)	E - air pollution concern	38
	E - climate change/emissions concern	1
	E - general concern	10
	E - impact biodiversity/wildlife	2
	E - impact heritage sites	1
	E - impact landscape/cityscape	3
	E - impact on rivers/canals/flood plain, etc.	3
	E - impact on SSSIs	3
	E - noise concern	38
Existing Situation Comments (EC)	EC - Brynglas Tunnels - not a problem	1
	EC - CAPACITY - Brynglas Tunnels - already inadequate	2
	EC - CAPACITY - congestion is a peak-time problem	4
	EC - CAPACITY - HGV/large vehicle behaviour/impact	1
	EC - CAPACITY - Newport travellers need M4	1
	EC - CAPACITY - peak time travel	2
	EC - CAPACITY - pinch-points/bottle-necks	1
	EC - CAPACITY - strain from local traffic major problem	1
	EC - CAPACITY - surrounding roads	1
	EC - driver behaviour	1
	EC - driver behaviour - lane changes	1
	EC - M4 design/standards poor	6
	EC - M4 eastbound travel - observations	1
	EC - M4 junctions - too many around Newport	1
	EC - M4 not safely/easily accessible	1
	EC - RESILIENCE - M4 problems/closure impact on area congestion	3
	EC - RESILIENCE - past maintenance/improvement work	8
	EC - SAFETY - accident/incident management (and Brunson protocol, etc)	4
	EC - SAFETY - inclines	2
	EC - SAFETY - sharp corners	1
	EC - traffic lights	1
Goals (G)	G - act quickly	3
	G - better roads will encourage unsustainable driving	4
	G - discourage local journeys	1
	G - G1 - comment	1
	G - G10 - challenge	1
	G - G10 - comment	1
	G - G12 - challenge	1

Theme	Code	Count
	G - G15 - challenge	1
	G - G15 - comment	2
	G - G3 - challenge	1
	G - G3 - comment	1
	G - G4 - comment	1
	G - G6 - comment	1
	G - G7 - comment	3
	G - G8 - comment	1
	G - G8 - support	1
	G - G9 - comment	1
	G - modal shift/change travel habits	3
	G - options will not achieve goals	1
General Alternatives (GA)	GA - alternative environmentally friendly modes	1
	GA - encourage modal shift	1
	GA - other strategy/approach	1
	GA - public education	1
Locations (L)	L - Abergavenny	1
	L - Almondsbury	1
	L - Bridgend	1
	L - Castleton	1
	L - Cwmbran	3
	L - Gwent Levels	2
	L - J23	1
	L - J24 (The Coldra)	2
	L - J25 (Caerleon)	13
	L - J25a (Heidenheim)	4
	L - J26 (Malpas)	16
	L - J28 (Tredegar Park)	5
	L - J29 (Castleton)	2
	L - Kimberley Park	1
	L - M4 - specific stretch	5
	L - Magor	1
	L - NEWPORT	6
	L - NEWPORT - Belmont Hill	1
	L - NEWPORT - Bettws	1
	L - NEWPORT - Brynglas	7
	L - NEWPORT - Brynglas Tunnels	11
	L - NEWPORT - Caerleon	3
	L - NEWPORT - Caerleon Road	2
	L - NEWPORT - Christchurch Hill	2
	L - NEWPORT - Coldra	1
	L - NEWPORT - Harlequin Roundabout	2
	L - NEWPORT - Heidenheim Drive	3
	L - NEWPORT - Llanwern Steel Works and Road	4
	L - NEWPORT - Malpas	9
	L - NEWPORT - Malpas Road	7
	L - NEWPORT - River Usk	1
	L - NEWPORT - Shaftesbury	1
	L - NEWPORT - St Julian's/St Julian's Hill	1
	L - NEWPORT - Stockton Close	1
	L - OTHER ROADS - A4042	4
	L - OTHER ROADS - A4051	2

Theme	Code	Count
	L - OTHER ROADS - A467	1
	L - OTHER ROADS - A468	1
	L - OTHER ROADS - A48	1
	L - OTHER ROADS - SDR (A48)	4
	L - Pontypool	1
	L - Usk	1
Other (O)	O - consultation - criticism	4
	O - consultation - general comments	1
	O - Editor's note	1
	O - M4 CEM general opposition	2
	O - M4 CEM general support	1
	O - M4 CEM report/figures challenge	2
	O - more information needed	2
	O - no comment	6
Option A (OA)	OA - construction impacts - minimal	1
	OA - environment - concerns	1
	OA - environment - impact reasonable	1
	OA - option - support	1
	OA - option - support consideration	1
	OA - RESILIENCE - will be underused/will not divert traffic from M4	1
	OA - SUST DEV - traffic taken away from city / built up area	1
Option B (OB)	OB - option - challenge	1
	OB - option - support consideration	1
Option D (OD)	OD - Brynglas tunnelling - ground unsuitable	29
	OD - Brynglas tunnelling - ineffective	10
	OD - Brynglas tunnelling - local community disruption	20
	OD - Brynglas tunnelling - opposed	14
	OD - Brynglas tunnelling - structural damage	12
	OD - Brynglas Tunnels - capacity observations	9
	OD - Brynglas Tunnels - need widening	19
	OD - Brynglas Tunnels - other suggestions	9
	OD - cannot be adequately upgraded	4
	OD - CAPACITY - benefit	5
	OD - CAPACITY - inadequate	7
	OD - cheap fix/short-term/too little	4
	OD - concern project feasibility/timescale	15
	OD - construction impacts - concern	42
	OD - construction impacts - damage to economy	20
	OD - construction impacts - demolition/compulsory purchase/land take	60
	OD - construction impacts - disruption	101
	OD - construction impacts - local resident/business disruption	73
	OD - construction impacts - outweighed by benefits	2
	OD - cost - cost-effective	6
	OD - cost - expensive/too much	70
	OD - disruption can be minimised/less than other options	5
	OD - emissions (G10)	9
	OD - environment - less impact/will benefit	8
	OD - goals - would achieve	21
	OD - goals - would achieve some goals/not all	17

Theme	Code	Count
	OD - goals - would not achieve	42
	OD - journey impacts - more attractive to commercial traffic	2
	OD - journey impacts - will help through-traffic	11
	OD - journey impacts - will NOT help/tackle local traffic on M4	3
	OD - journey impacts - will NOT help/tackle through-traffic	1
	OD - journey impacts - will not reduce / will increase journey times	1
	OD - journey impacts - will not reduce congestion/will not increase capacity	15
	OD - journey impacts - will reduce congestion/increase capacity	47
	OD - journey impacts - will reduce journey times	1
	OD - journey impacts - will worsen problems/congestion	20
	OD - junction changes - challenge	20
	OD - junction changes - support	5
	OD - least fuel efficient route	1
	OD - local roads/traffic - loss of access/no local benefit	8
	OD - local roads/traffic - no improvement/negative impact	46
	OD - local roads/traffic - reduction/positive impact	3
	OD - not a priority	2
	OD - not a true solution/need alternative route	23
	OD - option - challenge	92
	OD - option - prefer A	18
	OD - option - prefer B	1
	OD - option - prefer C	1
	OD - option - preferred option	6
	OD - option - second preference	12
	OD - option - support	36
	OD - option - support consideration	4
	OD - option - support with caveat/qualification	30
	OD - other benefits	1
	OD - other measures needed alongside	15
	OD - overdue/long-needed	2
	OD - phasing - positive	1
	OD - problems - would not solve	10
	OD - problems - would solve	11
	OD - public transport - negative impact	2
	OD - RESILIENCE - inadequate	2
	OD - RESILIENCE - no alternative if M4 closed	48
	OD - RESILIENCE - not long term solution	26
	OD - RESILIENCE - will improve/long term solution	11
	OD - SAFETY - benefit	5
	OD - SAFETY - development will worsen accident rates	4
	OD - SAFETY - emergency access	2
	OD - SAFETY - more roads will mean more traffic	3
	OD - SAFETY - will not improve/will worsen	3
	OD - SUST DEV - benefit	1
	OD - SUST DEV - negative	1
	OD - SUST DEV - will encourage investment	3
	OD - SUST DEV - will reduce noise/pollution	2
	OD - variation - specific suggestion	3
	OD - widening - challenge	15

Theme	Code	Count
	OD - widening - damage to city of Newport	6
	OD - widening - local resident/business disruption	3
	OD - widening - support	3
Problems (P)	P - CAPACITY - challenge	1
	P - CAPACITY - comment	1
	P - P1 - comment	1
	P - P10 - comment	1
	P - P16 - comment	1
	P - P7 - comment	1
	P - SAFETY - challenge	1
Public Transport Measures (PT)	PT - as alternative to cars	1
	PT - BUS - Park & Ride connections	1
	PT - cycle infrastructure	2
	PT - economic benefit	1
	PT - environment benefit	1
	PT - health/safety benefit	2
	PT - implement and assess before proposing road development	1
	PT - MEASURES - will help	1
	PT - promote as alternative	3
	PT - RAIL - Ebbw Vale Line success	1
	PT - RAIL - electrification	1
	PT - RAIL - extensions/connections east of Cardiff	1
	PT - RAIL - make faster/more reliable	1
	PT - RAIL - take freight off roads	1
	PT - walking infrastructure	2
References (R)	R - Brynglas Tunnel fire	5
	R - local media coverage	1
	R - other correspondence	1
	R - other projects	4
	R - refer to construction of existing Brynglas tunnels/M4	9
	R - refer to consultation documentation	2
	R - refer to local opposition	3
	R - refer to other question comments	9
	R - refer to other questions - 4b	3
	R - refer to other questions - Q1b	1
	R - refer to other questions - Q4a	2
	R - refer to other questions - Q5	1
	R - refer to other research/publications	1
	R - refer to other transport infrastructure/projects/experience	4
	R - refer to own property/commercial interest	4
	R - refer to own travel habits/experience	4
	R - refer to specific legislation / policy	2
	R - refer to WG/ministers	3
Road Alternatives (RA)	RA - improve feeder roads	1
	RA - M4 Relief Road - abandonment	1
	RA - M4 Relief Road - preferable	3
	RA - park & share	1
	RA - suggest - alternative road/route approaches	1
	RA - suggest - better use of existing infrastructure (general)	1
	RA - suggest - Brynglas alternative	1

Theme	Code	Count
	RA - suggest - encourage use of SDR	2
	RA - suggest - improve traffic management	1
	RA - suggest - M4 existing section downgrade	1
	RA - suggest - M4 lane changes	1
	RA - suggest - M4 safety measures	1
	RA - suggest - specific	1
	RA - suggest - specific M4 junction/feeder road improvements	2
Social and Economic (SE)	SE - community impact concern	5
	SE - compensation	2
	SE - constraint on growth/economy damaged	2
	SE - cost or value concerns	1
	SE - employment and working patterns	1
	SE - equity/fairness in decision	1
	SE - health	3
	SE - human needs trump wildlife	2
	SE - impact on development land/planning designations	1
	SE - impact on economy/growth	8
	SE - impact on future generations	1
	SE - impact on home values	8
	SE - impact on recreation/tourism	1
	SE - impression/impact on visitors to Wales	2
	SE - Newport benefit from capacity increase	1
	SE - Newport could miss-out on economic benefits	2
	SE - Newport physically divided by M4	1
	SE - quality of life	2
	SE - residents' concerns ignored	3
	SE - South Wales benefit from capacity increase	1

Question 5

Theme	Code	Count
Environment (E)	E - air pollution concern	90
	E - climate change/emissions concern	72
	E - designated area - other	12
	E - ecological impact	47
	E - ENVIRONMENTAL ASSESSMENT - challenge/inadequate	6
	E - general - not a concern	2
	E - general concern	11
	E - impact biodiversity/wildlife	72
	E - impact heritage sites	60
	E - impact landscape/cityscape	72
	E - impact on nature reserve	4
	E - impact on rivers/canals/flood plain, etc.	49
	E - impact on SSSIs	67
	E - impact on waterways	61
	E - impact woodland/countryside/greenspace	2
	E - mitigation - no amount enough	5
	E - mitigation required	5
	E - new roads will damage environment	15
	E - noise concern	37

Theme	Code	Count
	E - protected area	4
	E - reduce emissions by improving traffic flow/road standard	1
Existing Situation Comments (EC)	EC - Brynglas Tunnels - lighting	1
	EC - Brynglas Tunnels - not a problem	1
	EC - CAPACITY - Brynglas Tunnels - already inadequate	5
	EC - CAPACITY - congestion	41
	EC - CAPACITY - congestion is a peak-time problem	5
	EC - CAPACITY - driver behaviour - causes congestion	4
	EC - CAPACITY - HGV/large vehicle behaviour/impact	21
	EC - CAPACITY - increasing/road widening worsens congestion	1
	EC - CAPACITY - junction congestion	3
	EC - CAPACITY - peak time travel	21
	EC - CAPACITY - pinch-points/bottle-necks	10
	EC - CAPACITY - strain from Cardiff travellers	6
	EC - CAPACITY - strain from local traffic major problem	22
	EC - CAPACITY - strain from Valleys and West travel	1
	EC - CAPACITY - surrounding roads	3
	EC - driver behaviour	13
	EC - driver behaviour - lane changes	10
	EC - M4 design/standards poor	11
	EC - M4 improved recently	47
	EC - M4 junctions - accessibility	2
	EC - M4 junctions - main problem/priority	3
	EC - M4 junctions - slip roads	4
	EC - M4 junctions - too many around Newport	9
	EC - M4 not safely/easily accessible	1
	EC - M4 priority as main national artery/England access	2
	EC - M4 too close to Newport	7
	EC - Newport is blackspot	1
	EC - parking	1
	EC - residents obstructed by traffic	2
	EC - RESILIENCE - congestion impact on local/rural roads	2
	EC - RESILIENCE - few/difficult alternative routes	20
	EC - RESILIENCE - impact of accidents	13
	EC - RESILIENCE - impact of events	1
	EC - RESILIENCE - impact on emergency services	2
	EC - RESILIENCE - M4 closure impact on whole South Wales travel	21
	EC - RESILIENCE - M4 diversions	4
	EC - RESILIENCE - M4 maintenance disruptive to local community	6
	EC - RESILIENCE - M4 problems/closure impact on area congestion	1
	EC - RESILIENCE - Newport City road infrastructure inadequate	10
	EC - RESILIENCE - past maintenance/improvement work	17
	EC - RESILIENCE - policing	2
	EC - roundabouts - problem	1
	EC - SAFETY - accident/incident management (and Brunson protocol, etc)	4
	EC - SAFETY - congestion causes accidents	3

Theme	Code	Count
	EC - SAFETY - crash barriers	1
	EC - SAFETY - current M4 standard contributes to accident rates	6
	EC - SAFETY - cyclists at high risk	1
	EC - SAFETY - driver behaviour causes accidents	4
	EC - SAFETY - inadequate information/notification systems	9
	EC - SAFETY - inclines	4
	EC - SAFETY - M4 maintenance poor	2
	EC - SAFETY - M4 width/standard too varied	1
	EC - SAFETY - sharp corners	1
	EC - SAFETY - variable message signs (VMS)	4
	EC - SDR - inadequate as bypass	5
	EC - Severn Bridge tolls/queues	5
	EC - speed limits - 50mph westbound criticism	1
	EC - SUST DEV - air quality	1
	EC - SUST DEV - constraint to whole of South Wales	18
	EC - SUST DEV - existing motorway unsustainable	20
	EC - SUST DEV - fuel inefficiency	1
	EC - SUST DEV - journey time increases	2
	EC - SUST DEV - M4 priority as main national artery/England access	28
	EC - SUST DEV - road conditions threaten Wales's future	14
	EC - traffic lights	3
	EC - traffic signals	2
	EC - traffic speed - observations	3
	EC - variable speed limits - effective	12
	EC - variable speed limits - ineffective	10
	EC - variable speed limits - observations	53
Goals (G)	G - achievable action needed	3
	G - act quickly	18
	G - affordability	1
	G - better roads will encourage unsustainable driving	1
	G - challenge Goals	6
	G - concern project feasibility/timescale	4
	G - discourage local journeys	1
	G - G1 - comment	1
	G - G10 - challenge	2
	G - G10 - comment	2
	G - G14 - comment	1
	G - G15 - comment	2
	G - G15 - support	1
	G - improve business/commuter travel (on M4)	1
	G - improve driver behaviour	2
	G - integrated approach needed to problems	18
	G - invest properly in eventual construction	1
	G - long-term solution needed	37
	G - minimal disruption to M4	1
	G - minimal impact on people/communities	7
	G - modal shift/change travel habits	2
	G - most / all goals listed are important	2
	G - need to address causes, not just symptoms	1
	G - network - England/international traffic needs better	4

Theme	Code	Count
	connections	
	G - network - local traffic needs better network	2
	G - network - minimal disruption to local road network	1
	G - network - road network improvement is priority	1
	G - network - S. Wales through-traffic needs better network	2
	G - no new roads	2
	G - Not enough attention paid to environmental issues	1
	G - reduce congestion is priority	2
	G - reduce environmental impact	3
	G - reduce overall traffic	2
	G - RESILIENCE - technology/futureproofing	2
	G - safety	1
	G - suggest alternative goal	7
	G - support Goals with caveat	2
	G - SUSTDEV - social/environmental/economic objectives priority	12
	G - take traffic away from densely populated areas	1
General Alternatives (GA)	GA - air travel in South Wales poor	2
	GA - alternative environmentally friendly modes	8
	GA - better cycle links needed	2
	GA - encourage modal shift	33
	GA - enhance cycling routes	3
	GA - flexible working/working from home	2
	GA - general challenge to solutions	4
	GA - more roads will mean more traffic	3
	GA - other strategy/approach	52
	GA - public education	1
	GA - stagger working/shopping times	5
Locations (L)	L - Allt yr Yn woodland	1
	L - Bark Street	1
	L - Bassaleg School	1
	L - Beechwood Park	1
	L - Bettws	1
	L - Bishton	1
	L - BRISTOL	2
	L - Caerphilly	1
	L - Caldicot	3
	L - CARDIFF	7
	L - CARDIFF - Pentwyn (and Park & Ride)	1
	L - CARDIFF Bay	1
	L - Chepstow	1
	L - Corporation Road junction	1
	L - Coryton	2
	L - first Severn Bridge	1
	L - Forge Lane/Caerphilly Road	1
	L - Glebelands	1
	L - Grove Park	1
	L - Gwent Levels	69
	L - Iron Acton	1
	L - J23	1
	L - J23a (Magor)	6
	L - J24 (The Coldra)	9

Theme	Code	Count
	L - J25 (Caerleon)	10
	L - J25a (Heidenheim)	2
	L - J26 (Malpas)	15
	L - J27 (High Cross)	8
	L - J28 (Tredegar Park)	11
	L - J29 (Castleton)	1
	L - J32	1
	L - Kimberley Park	4
	L - Llandeenny	4
	L - M4 - specific stretch	24
	L - Magor	10
	L - Magor Marsh	3
	L - Marshfield	1
	L - Melksham	1
	L - Monmouthshire	1
	L - Nash and Goldcliff	3
	L - national cycle route	1
	L - NEWPORT	41
	L - NEWPORT - Brynglas	9
	L - NEWPORT - Brynglas Drive	1
	L - NEWPORT - Brynglas Hill	1
	L - NEWPORT - Brynglas Road	2
	L - NEWPORT - Brynglas Tunnels	28
	L - NEWPORT - Caerleon	2
	L - NEWPORT - Caerleon Road	5
	L - NEWPORT - Cardiff Road	1
	L - NEWPORT - Chepstow Road	1
	L - NEWPORT - Christchurch	1
	L - NEWPORT - Coedkernew	1
	L - NEWPORT - Duffryn (and estate)	1
	L - NEWPORT - enclosed docks	1
	L - NEWPORT - Forge Road	1
	L - NEWPORT - Glasllwch	1
	L - NEWPORT - Grove Park Roundabout	1
	L - NEWPORT - Harlequin Roundabout	1
	L - NEWPORT - Heidenheim Drive	1
	L - NEWPORT - High Cross	1
	L - NEWPORT - Llanwern	3
	L - NEWPORT - Llanwern Steel Works and Road	5
	L - NEWPORT - Malpas	6
	L - NEWPORT - Malpas Road	5
	L - NEWPORT - Pant Road	4
	L - NEWPORT - Redwick North Row junction	1
	L - NEWPORT - River Usk	3
	L - NEWPORT - St Julian's/St Julian's Hill	3
	L - NEWPORT - Tredegar House roundabout	1
	L - NEWPORT - Wetlands Centre	3
	L - OTHER ROADS - A3	1
	L - OTHER ROADS - A40	1
	L - OTHER ROADS - A4042	1
	L - OTHER ROADS - A467	1
	L - OTHER ROADS - A48	4

Theme	Code	Count
	L - OTHER ROADS - A48(M)	1
	L - OTHER ROADS - B4245	4
	L - OTHER ROADS - B4265	1
	L - OTHER ROADS - Heads of the Valleys/A465	2
	L - OTHER ROADS - M25	1
	L - OTHER ROADS - M42	1
	L - OTHER ROADS - M48	3
	L - OTHER ROADS - M48/B4245 interchange	1
	L - OTHER ROADS - M6	1
	L - Port Talbot	1
	L - Redwick	1
	L - River Ebbw	2
	L - River Usk	9
	L - Rogiet	1
	L - second Severn Bridge	3
	L - Severn Estuary	61
	L - Severn Tunnel Junction	2
	L - Shaftesbury	2
	L - St Brides	3
	L - SWANSEA	1
	L - The Elms (Undy)	1
	L - Torfaen	1
	L - Undy	5
	L - Uskmouth	1
	L - Weston Super Mare	1
	L - Whitson	4
Other (O)	O - Common Measures support	6
	O - consultation - criticism	94
	O - consultation - general comments	25
	O - consultation - request to be consulted on next stages	15
	O - consultation - support	2
	O - consultation- criticism of question	6
	O - decision making process not clear enough	60
	O - Editor's note	42
	O - M4 CEM general concern	5
	O - M4 CEM general opposition	16
	O - M4 CEM general support	9
	O - M4 CEM report/figures challenge	92
	O - more information needed	26
	O - no comment	13
	O - not a comment	45
	O - personal details	2
	O - potential quotation	22
Option A (OA)	OA - CAPACITY - benefit	16
	OA - CAPACITY - inadequate	1
	OA - CAPACITY - more roads will mean more traffic	65
	OA - compensation/claims	1
	OA - concern river navigability impact	2
	OA - construction impacts - concern impact/invasiveness	9
	OA - construction impacts - concern loss of land and homes	1
	OA - construction impacts - minimal	20
	OA - construction impacts - minimal demolition	2

Theme	Code	Count
	OA - construction impacts - significant disruption during construction	1
	OA - cost - comment	5
	OA - cost - expense concern	18
	OA - cost - worthwhile	6
	OA - environment - concerns	33
	OA - environment - concerns acknowledged	3
	OA - environment - flood risk	6
	OA - environment - impact on protected area	17
	OA - environment - impact reasonable	10
	OA - environment - mitigation possible	6
	OA - journey impacts - faster journeys	3
	OA - journey impacts - will help through-traffic	1
	OA - journey impacts - will help/tackle local traffic	6
	OA - journey impacts - will NOT help/tackle local traffic on M4	1
	OA - junctions are crucial consideration	1
	OA - long-term solution	15
	OA - option - challenge	77
	OA - option - oppose	8
	OA - option - preferred option	9
	OA - option - support	29
	OA - option - support consideration	56
	OA - option - support variation	11
	OA - option - support with caveat	8
	OA - other comments	12
	OA - phasing - challenge	1
	OA - phasing - positive	4
	OA - problems - would solve	1
	OA - RESILIENCE - alternative if M4 closed/disrupted	11
	OA - RESILIENCE - benefit	7
	OA - RESILIENCE - only true new alternative route	9
	OA - RESILIENCE - real alternative route	2
	OA - route is crucial consideration	1
	OA - SAFETY - benefit	6
	OA - SUST DEV - air quality improved	2
	OA - SUST DEV - economic - benefit	5
	OA - SUST DEV - negative	52
	OA - SUST DEV - social - benefit	8
	OA - SUST DEV - traffic taken away from city / built up area	9
	OA - SUST DEV - will not help climate change	4
	OA - SUST DEV - will reduce noise/pollution	4
	OA - SUST DEV - will support economic growth/jobs/regeneration	10
	OA - tolling comments	3
	OA - variation - build to motorway standard	7
	OA - variation - should be no/few junctions	8
	OA - variation - should use Steelworks Access Road	7
Option B (OB)	OB - CAPACITY - more SDR traffic negative	6
	OB - CAPACITY - will not improve	2
	OB - cheap fix/short-term/too little	4
	OB - construction impacts - minimal	1

Theme	Code	Count
	OB - cost - expensive/poor value/low cost-benefit ratio	1
	OB - cost - inexpensive/cost-effective	3
	OB - goals - does not/will not achieve goals	1
	OB - good interim/trial measure	2
	OB - journey impacts - through-traffic benefits to detriment of local traffic	1
	OB - not a significant change	4
	OB - option - challenge	19
	OB - option - support	2
	OB - option - support consideration	10
	OB - option - support variation	1
	OB - other comments	1
	OB - RESILIENCE - inadequate to relieve M4	3
	OB - route - will be underused/will not divert traffic from M4	1
	OB - SDR - inadequate/needs improvement	1
Option C (OC)	OC - CAPACITY - benefit	1
	OC - CAPACITY - more SDR traffic negative	1
	OC - cheap fix/short-term/too little	6
	OC - construction impacts - disruption	1
	OC - construction impacts - least disruptive option	1
	OC - cost - cost effective/lower cost	1
	OC - cost - expensive/poor cost-benefit ratio	1
	OC - not a significant change	2
	OC - option - better than Option B	1
	OC - option - challenge	16
	OC - option - support	2
	OC - option - support consideration	20
	OC - option - support in conjunction with other measures	2
	OC - option - support with caveat	1
	OC - option - views same as for Option B	1
	OC - other comments	1
	OC - phasing - positive	1
	OC - RESILIENCE - inadequate to relieve M4	4
	OC - RESILIENCE - will relieve M4	3
	OC - route - specific suggestion	4
	OC - SUST DEV - severance	1
Option D (OD)	OD - Brynglas tunnelling - cost effective	2
	OD - Brynglas tunnelling - ground unsuitable	4
	OD - Brynglas tunnelling - ineffective	1
	OD - Brynglas tunnelling - local community disruption	7
	OD - Brynglas tunnelling - opposed	4
	OD - Brynglas tunnelling - structural damage	4
	OD - Brynglas Tunnels - capacity observations	5
	OD - Brynglas Tunnels - need widening	4
	OD - cannot be adequately upgraded	5
	OD - cheap fix/short-term/too little	5
	OD - construction impacts - concern	20
	OD - construction impacts - damage to economy	5
	OD - construction impacts - demolition/compulsory purchase/land take	2
	OD - construction impacts - disruption	6
	OD - construction impacts - disruption can be minimised/less	1

Theme	Code	Count
	than other options	
	OD - construction impacts - impact on local properties/demolitions	22
	OD - construction impacts - local resident/business disruption	26
	OD - cost - expensive/too much	15
	OD - emergency access	1
	OD - environment - effects	12
	OD - general statements	2
	OD - journey impacts - congestion - will not reduce	1
	OD - journey impacts - will help through-traffic	1
	OD - journey impacts - will reduce congestion/increase capacity	1
	OD - journey impacts - will worsen problems/congestion	15
	OD - junction changes - challenge	7
	OD - option - challenge	57
	OD - option - oppose	4
	OD - option - other measures needed alongside	1
	OD - option - support	6
	OD - option - support consideration	14
	OD - option - support variation	1
	OD - option - support with caveat/qualification	3
	OD - other comments	1
	OD - RESILIENCE - inadequate	7
	OD - RESILIENCE - not long term solution	2
	OD - SAFETY - development will worsen accident rates	1
	OD - SAFETY - more roads will mean more traffic	1
	OD - SUST DEV - negative	1
	OD - variation - specific suggestion	3
	OD - widening - challenge	6
	OD - widening - damage to city of Newport	1
	OD - widening - local resident/business disruption	3
	OD - widening - should extend further	1
	OD - widening - support	4
Problems (P)	P - CAPACITY - challenge	6
	P - CAPACITY - comment	10
	P - CAPACITY - priority	11
	P - most / all problems listed are important	1
	P - P1 - strongly agree	1
	P - P15 - comment	1
	P - P2 - comment	1
	P - P3 - comment	1
	P - P5 - strongly agree	1
	P - Problems - challenge	3
	P - Problems - comment	1
	P - RESILIENCE - challenge	1
	P - RESILIENCE - comment	9
	P - RESILIENCE - priority	4
	P - SAFETY - comment	13
	P - SAFETY - priority	2
	P - SUSTDEV - challenge	4
	P - SUSTDEV - comment	20

Theme	Code	Count
	P - SUSTDEV - priority	23
	P - will only worsen	2
Public Transport Measures (PT)	PT - as alternative to cars	5
	PT - BUS - add bus lanes	4
	PT - BUS - cross-Newport services	1
	PT - BUS - express services	1
	PT - BUS - Park & Ride connections	9
	PT - BUS - priority at junctions	2
	PT - BUS - rail-integrated service needed	2
	PT - BUS - remove bus lanes	2
	PT - BUS - services inadequate	6
	PT - BUS - too unreliable	1
	PT - cars (shared) are cheaper	1
	PT - commuter uses/needs	1
	PT - cycle infrastructure	9
	PT - GWML - S. Wales/Bristol/London	1
	PT - integrated transport - across SE Wales	1
	PT - integrated transport - road/rail	3
	PT - integrated transport - smart card	1
	PT - invest in rail and air travel instead	3
	PT - lack of good public transport encourages road use	1
	PT - make accessible	1
	PT - make cheaper/easier	7
	PT - MEASURES - have not been costed	8
	PT - MEASURES - will help	5
	PT - MEASURES - will help somewhat	6
	PT - MEASURES - will not help	1
	PT - more useful services needed	3
	PT - not an option	1
	PT - not convenient/practical	4
	PT - not enough focus on these in proposals	3
	PT - price concern	4
	PT - promote as alternative	11
	PT - public transport is priority	12
	PT - public travel habits/needs	1
	PT - RAIL - better commuter services	4
	PT - RAIL - electrification	10
	PT - RAIL - enhance/extend the Ebbw Vale Line	7
	PT - RAIL - extensions/connections around Newport	1
	PT - RAIL - extensions/connections east of Cardiff	1
	PT - RAIL - extensions/connections to Bristol	1
	PT - RAIL - make cheaper/easier	7
	PT - RAIL - make faster/more reliable	3
	PT - RAIL - more calls at Severn Tunnel Junction	1
	PT - RAIL - more suburban stations	10
	PT - RAIL - Park & Ride connections	1
	PT - RAIL - parking	2
	PT - RAIL - relieves road congestion	9
	PT - RAIL - re-nationalise	1
	PT - RAIL - take freight off roads	13
	PT - school services	1

Theme	Code	Count
	PT - specific examples	2
	PT - specific proposal	6
	PT - walking infrastructure	7
	PT - wider area concerned	2
References (R)	R - AMs/MPs	1
	R - Brynglas Tunnel fire	12
	R - Gwent Police	1
	R - Habitats Directive	55
	R - Local planning policy	10
	R - other correspondence	9
	R - Other countries/regions - comparison	23
	R - other projects	1
	R - other stakeholders/public opinion	37
	R - previous plans	10
	R - refer to construction of existing Brynglas tunnels/M4	1
	R - refer to local opinion	2
	R - refer to Newport City Council	1
	R - refer to other question comments	18
	R - refer to other questions - Q1b	1
	R - refer to other questions - Q2b	1
	R - refer to other research/publications	68
	R - refer to other transport infrastructure/projects/experience	32
	R - refer to own property/commercial interest	8
	R - refer to own research/publications	10
	R - refer to own travel habits/experience	41
	R - refer to specific legislation / policy	37
	R - refer to technical specifications/requirements	1
	R - refer to UK Govt/ministers	14
	R - refer to WG/ministers	117
	R - Ryder Cup improvements	1
	R - Traffic Wales	1
	R - Wales Spatial Plan/Travel To Work areas	1
	R - Welsh language issues	2
Road Alternatives (RA)	RA - congestion in Cardiff access is priority	1
	RA - congestion in Cardiff is priority	1
	RA - discourage single-occupancy/encourage car-sharing	10
	RA - finance with private partnership	1
	RA - finance with tolls	2
	RA - forthcoming improvements should ease problems	6
	RA - improve feeder roads	3
	RA - improve traffic management plans	3
	RA - M4 junctions - shut	3
	RA - M4 Relief Road - abandonment	4
	RA - M4 Relief Road - cost	1
	RA - M4 Relief Road - preferable	5
	RA - M4 Relief Road - reference	6
	RA - M4 Relief Road - specific suggestions	1
	RA - new/alternative routes needed	2
	RA - new/alternative tunnels/bridges needed	3
	RA - park & share	2
	RA - recovery/accident response needed at peak times	1
	RA - remove/reduce Severn Bridge tolls	4

Theme	Code	Count
	RA - speed cameras/control systems	2
	RA - suggest - alternative road/route approaches	21
	RA - suggest - better live information systems	5
	RA - suggest - better use of existing infrastructure (general)	2
	RA - suggest - Brynglas alternative	3
	RA - suggest - encourage use of SDR	14
	RA - suggest - improve traffic management	7
	RA - suggest - M4 additional open junctions	2
	RA - suggest - M4 existing section downgrade	1
	RA - suggest - M4 HGV restrictions	12
	RA - suggest - M4 lane changes	3
	RA - suggest - M4 motorway fencing	1
	RA - suggest - M4 periodical junction closures	1
	RA - suggest - north/south route	1
	RA - suggest - policing approaches	9
	RA - suggest - specific	20
	RA - suggest - specific M4 junction/feeder road improvements	10
	RA - suggest - specific signage	3
	RA - suggest - speed limits	14
	RA - suggest - variable tolling	3
	RA - tolling as disincentive	5
	RA - traffic management	23
Social and Economic (SE)	SE - community impact concern	24
	SE - compensation	4
	SE - congestion impact on city	3
	SE - constraint on growth/economy damaged	2
	SE - cost or value concerns	36
	SE - cost should not preclude best lasting solution	6
	SE - demand for roads will fall/will not rise	60
	SE - demand for roads will grow	11
	SE - demand for travel should be managed	7
	SE - demolition implications	10
	SE - disruptions to local residents	20
	SE - downturn has reduced traffic	1
	SE - employment and working patterns	2
	SE - ensure local economy benefits	1
	SE - equity/fairness in decision	10
	SE - finance/debt	5
	SE - freight needs road travel	2
	SE - fuel/oil cost	55
	SE - GDP/GNP observations	6
	SE - health	3
	SE - human needs trump wildlife	1
	SE - impact of new development and housing	2
	SE - impact on development land/planning designations	6
	SE - impact on economy/growth	13
	SE - impact on home values	16
	SE - impact on public health	17
	SE - impact on recreation/tourism	58
	SE - impression/impact on visitors to Wales	3
	SE - infringement of rights	2

Theme	Code	Count
	SE - Irish/European significance of route	3
	SE - negative impact/constraint on business	6
	SE - Newport benefit from capacity increase	1
	SE - Newport could miss-out on economic benefits	2
	SE - Newport suffers for the rest of Wales	5
	SE - phasing - support as economical	2
	SE - poor public transport greater economic constraint	1
	SE - problems common across UK/EU	4
	SE - quality of life	69
	SE - regenerating Newport will relieve M4	3
	SE - residents' concerns ignored	7
	SE - route/traffic should be away from built-up areas	1
	SE - school traffic	2
	SE - spending on infrastructure stimulates the economy	16

A11 Consultation Workshop Report: Newport



Catrin Ellis **Associates**

M4 Corridor Enhancement Measures Programme

M4 CEM Stakeholder Consultation Workshop – Newport

13th March 2012

Transcribed Report



About the M4 CEM project group (Welsh Government and their contractors, Arup)

The M4 CEM project group has been working on developing the M4 Corridor Enhancement Measures Programme since it was initiated in 2009. As well as developing proposals put forward in the Consultation Document, published on March 6th, 2012, the group has produced a number of interim reports and more detailed studies. Many of these are available to download by visiting www.m4cem.com

The Group is also delivering measures which have been identified as providing some relief to the problems of safety, capacity and resilience in the M4 Corridor. Sections of steel central barriers have been replaced with concrete ones to improve capacity and resilience. In addition, a Variable Speed Limit system has been introduced between Junction 24 at Coldra and Junction 28 at Castleton. The Welsh Government has also deployed traffic officers on the M4 who deal with routine incidents on the network and undertake general traffic and road management to minimise disruption to road users.

About the facilitators

The M4 CEM Engagement Programme is designed and delivered by Catrin Ellis Jones, of Catrin Ellis Associates (CEA) in line with the needs of the M4 CEM Management Team, comprising staff from the Welsh Government and Arup. CEA is an independent business with many years experience in facilitation, training, partnership working and consensus building in Wales, the UK and internationally. Part of the facilitation team at this event were James Martin-Jones (CEA) and M4 CEM team members from Arup. Contact: catrinellis@yahoo.com / m.07725721519

About this Report

The workshop used plenary and small group working. This report produced by Catrin Ellis Jones of Catrin Ellis Associates, is a full transcript of all written notes made to record participants' contributions throughout the day. Each section starts with an explanation of the task (in the grey box).

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Aims of the M4 CEM Consultation workshop

To give participants an opportunity to:

- have their questions answered and voice initial responses to the outline plans and options for the M4 CEM, and
- help participants develop their thinking prior to making their own written submissions to the consultation, or submitting a response on behalf of an organisation

Opening session: Welcome and introduction to the day

Martin Bates, the Welsh Government's Project Director responsible for progressing this Public Consultation Exercise, welcomed participants and made the following remarks.

To set the scene I am going to repeat a quotation from the Minister with responsibility for Transport, Carl Sargeant, who said ***"We're all aware that congestion is a problem on this part of the M4, so easing the flow on the M4 between Magor and Castleton is a key priority for the Welsh Government and a commitment in the prioritised National Transport Plan."***

There are display boards around the room repeating some of the information from the Consultation Document. Consultation and/or engagement requires participation and as said on the cover of Newsletter 2 and repeated on the first board: ***"We need your help to shape a **strategy** to reduce traffic congestion on the M4 Magor to Castleton"***.

Several of you have already contributed through the earlier Stakeholder Workshops, the last of which was in November last year. The exhibitions and workshops have helped the Welsh Government prepare for this consultation, by shaping and refining our understanding of the transport problems people experience in the M4 Corridor between Magor and Castleton, and exploring the benefits and barriers associated with different approaches to solving these problems.

The Welsh Government, via the Consultation Document, is now seeking the public's views on;

- a) The 17 Existing Transport Related Problems
- b) The 15 Goals of the M4CEM Programme
- c) The Public Transport Measures whose main aim is to reduce traffic on the M4~ these may give wider benefits to society as well; and
- d) The Highway Infrastructure Measures – 4 options, whose aim is to increase highway capacity and improve resilience and safety.

The identified Problems and Goals which have come out of the earlier workshops are wide-ranging, and reflect the complexity of the challenge which the M4CEM Programme is seeking to address. From the work to date Welsh Government recognises that no single solution delivers all the Goals.

There has already been some publicity in the media, but this has centred on the Brynglas Tunnels rather than on the Public Consultation itself. On behalf of the Welsh Government, I would assure you that no decision has been taken on the way forward. This consultation is your opportunity to let the Welsh Government know how you think the existing problems should be addressed.

During your deliberations today I would like you to keep in mind a second quote from the Minister, which says: ***"Improving access to our schools, hospitals and workplaces is essential if we are to improve efficiency and productivity and in turn make us more competitive."***

"Improving Access" in my opinion means that doing nothing is not an option. However, it can include improvements to both Public Transport and Highway Infrastructure.

There will probably be much discussion today about various aspects of this consultation; but in order to get your views heard, I would ask that you complete the on-line Response Form – as well as the questions themselves, there is room for comments and I would assure you that they all are read.

Catrin Ellis Jones, the workshop facilitator, introduced the aims and objectives of the day. She noted that this workshop is about helping you develop your thinking on the M4 CEM proposals through discussion and exploration of the proposals with others, having any questions answered by the project team, and thus helping you to respond to the consultation questions afterwards. It is also an opportunity for Welsh Government to hear participants' initial feedback.

To ensure that your views are given full consideration, it is necessary for individuals and organisations to provide responses to the questions posed in the Consultation Document and Response Form. The various ways in which responses can be submitted were described, e.g. using the response form, a written submission, or online at www.wales.gov.uk/consultations, or accessing the consultation via www.m4cem.com. The advantages of responding online were outlined (enables respondents to update anytime during the consultation period, ease and convenience).

Session 2: Context and introduction to the M4 CEM – key points from Sections 1, 2, and 6 of the Consultation Document (CD)

Allan Pitt, Consulting Planner at Arup, referred to the context-setting sections of the M4 CEM described in the Consultation Document (CD)(p 4 – 7). This presentation was followed by discussion at tables and then by a Q&A session in plenary.

Plenary feedback

Q = Question; A = Answer; C = Comment

Q: In 2009 the Welsh Government (WG) determined that a new M4 was not affordable. So what is “affordable”? It is no good us coming up with proposals that are not affordable.

A: The previous M4 proposal was intended to be built “in one hit”. By contrast, the current proposals are all intended to be delivered using a phased approach – i.e. the WG is looking for a set of enhancement measures that will be delivered in stages, so that costs can be spread out over several financial years. The phasing of the selected package(s) will be based on priorities. So the public can help both with the choice of options, and with the selection of priorities for the phasing of these. In this way, all the options set out in the consultation can be made affordable over time.

Session 3: Identifying the most important Problems & Goals

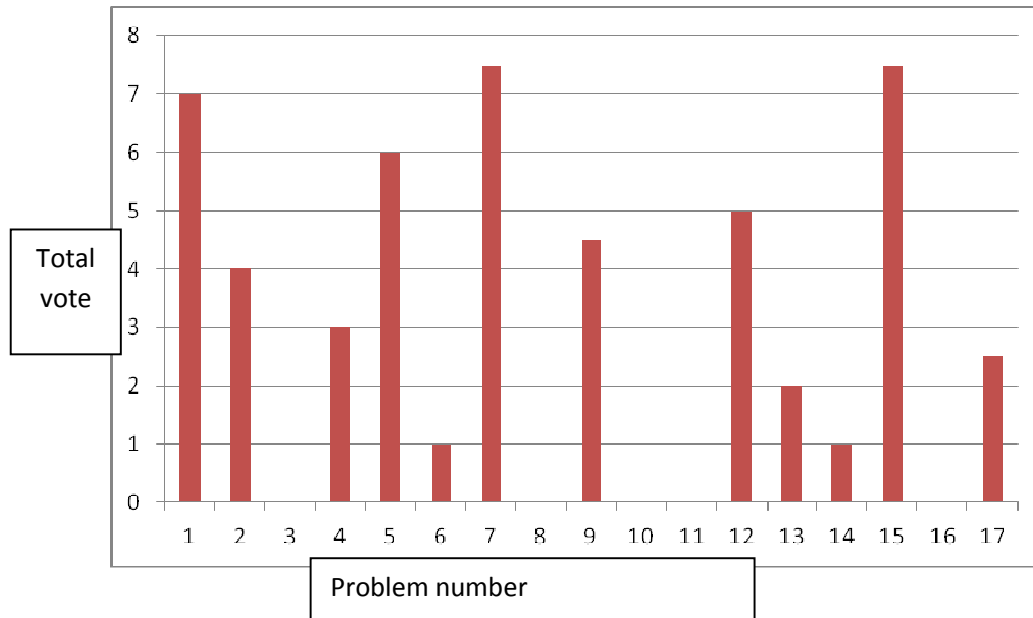
Allan Pitt, presented the transport-related problems encountered within the M4 Corridor, Magor to Castleton. These are based on traffic data, and have been the subject of review by local people and stakeholders during earlier dialogue on the M4 CEM. He referred to the sections of the CD on pages 8 – 19. He also described how in response to each problem, a number of goals had been set which if achieved would solve the problems. The Goals are listed on p 20 of the CD.

The facilitator invited participants to review the list of transport-related problems on p.18 of the CD and the list of M4 CEM goals on p.20, and to refer to Q1a and Q2. Each participant was invited to list her/his top 4 problems and top 4 goals. Comments and questions on these were then briefly shared in plenary. Discussion proceeded again at tables, comparing participants’ selections of problems and goals, and a flavour of these conversations too were shared in plenary.

This session was followed by a break for refreshments.

Summary of table discussions as noted on worksheets

Problems: participants [individually] selected four problems they regard as the most important to address. The number of votes for each priority problem are added up and represented in the diagram.



The following 4 problems were identified as most important:

Problem 7 - Difficulties maintaining adequate traffic flows on the M4 and alternative highway routes at times of temporary disruption; alternative routes are not able to cope with M4 traffic.

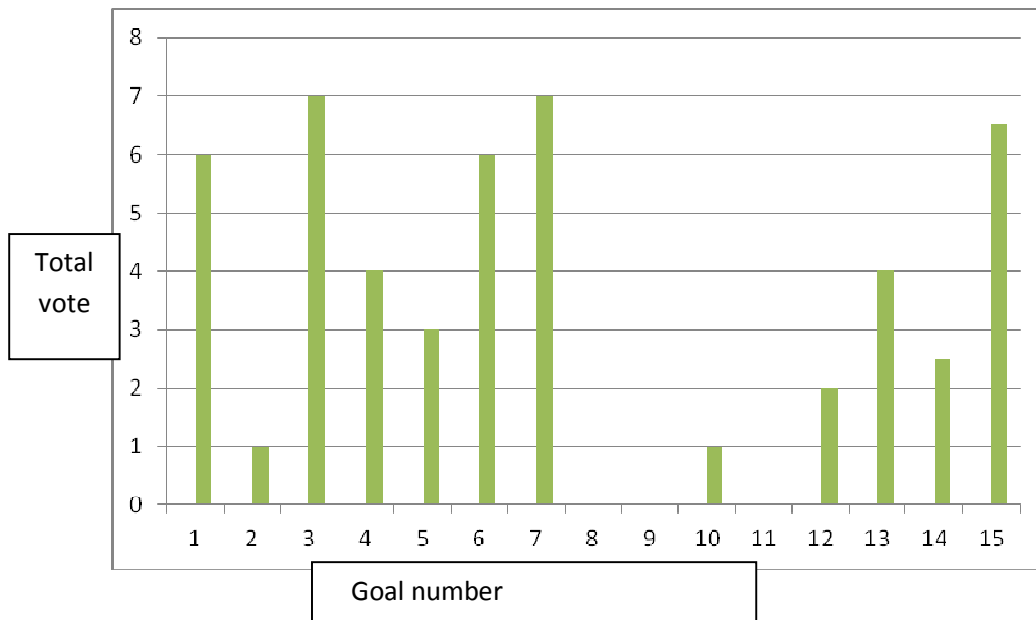
Problem 15 - There is a lack of adequate sustainable integrated transport alternatives for existing road users.

Problem 1 - A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times over extended periods.

Problem 5 - The 2-lane Brynglas tunnels are a major capacity constraint.

Some participants felt certain problems describe similar or inter-related issues, namely: 7 and 9 (*Difficulties maintaining adequate traffic flows on the M4 and alternative highway routes at times of temporary disruption, alternative routes are not able to cope with M4 traffic; and When there are problems on the M4, there is severe disruption and congestion on the local and regional highway network*) and 15 and 17 (*There is a lack of adequate sustainable integrated transport alternatives for existing road users; and The existing transport network acts as a constraint to economic growth and adversely impacts the current economy*).

Goals: participants [individually] selected their four top priority goals to achieve. The number of votes for each goal are added up and represented in the diagram.



The following 5 goals achieved the most popular priority ranking:

Goal 3 – More effective and integrated use of alternatives to the M4, including other parts of the transport network and other modes of transport for local and strategic journeys around Newport.

Goal 7 – Improved safety on the M4 Corridor between Magor and Castleton.

Goal 15 – A cultural shift in travel behaviour towards more sustainable choices.

Goal 1 – Safer, easier and more reliable travel East-West in South Wales

Goal 6 – Increased level of choice for all people making journeys within the transport corridor by all modes between Magor and Castleton, commensurate with demand for alternatives.

Comments:

- Whatever is done needs to be future-proof, and not thinking only about capacity but also about emergency needs.
- Speed vs. reliability – what is really needed?
- Is it affordable?
- We need to be certain about the impacts of the proposed M4 CEM measures on the local road network – and the additional funding needed to accommodate and mitigate these must be identified and made available.
- There are issues associated with the closure of junctions.

Plenary feedback - Initial comments and questions on Problems and Goals

C: There appears to be some duplication.

A: Yes, some of the problems are very similar, as are some of the goals. The differences are subtle in some cases. This reflects the complexity of the permutations and their effects. It is interesting to consider the issue of travel habits in the Consultation Response form - these are the “drivers” underlying both the problems and the goals.

C: Problem 2 refers to “insufficient local road capacity”. This is a bit misleading – it should also refer to other transport modes.

Q: Goal 14 (easier access to local key services and residential and commercial centres) – is that generally or by car?

A: Generally.

Participants’ selections of problems and goals – reports back from tables on level of agreement, and comments/questions

C: Interesting discussion on safety – should it be a key driver? If other key drivers are addressed (capacity and resilience) safety would automatically be improved.

C: We agreed on problems, but there was less consensus on goals. A number of differences were revealed in terms of the ways routes are used, and our various travel needs.

C: Public transport is not given much emphasis as being part of the solution in the CD. There are practically no public transport options for people coming from Gwent to work in Newport or Cardiff at the moment.

C: Closing motorway junctions may help long distance transport, but it would create problems for more local users. WG would need to deal with the issue of possible junction closures with a great deal of care.

Session 4: Section 8 of the CD – Public Transport Measures

After an introduction by Dan Saville, Arup Director, to the overall approach to the CEM and to the Public Transport Measures in Section 8 of the CD, the participants were invited to agree answers to CD Qs 3a and 3b; and these responses were then shared in plenary.

Summary of table discussions as noted on worksheets

Responses to the following question: which of the public transport measures listed have the potential to reduce your use of the M4?

- More stations with Park & Ride facilities
- Additional train services on local routes.
- Main line services are there for strategic journeys – so we would favour increasing their hours of operation; and making sure people can afford this way of travelling.
- More seating is required on popular routes – WG should invest in this.
- Invest in Park & Ride and Park & Share – and widen the area to include travel to work distances (e.g. Abergavenny)

Responses to the following question: To what extent do you think the public transport measures selected by your group address your group's priority problems or goals?

In addition to the above public transport measures, a Wales-wide (or at least a S.E. Wales-wide) and affordable “SMART card” or integrated ticket is required.

Plenary discussion on the initial introduction (which indicated that research on travel patterns on the M4 had led to the conclusion that public transport can only be part of the solution to congestion on the M4).

Q: Isn't this negative to public transport?

A: It is not intended to be. However, congestion on the M4 is a very tough nut to crack. Studies have concluded that public transport is in practice most useful for travel to and from population centres, and that most of the traffic on the M4 does not fall into this category. This is all about a strategy to reduce congestion on the M4 Magor to Castleton.

Q: But surely if we improve the road network around the M4, we could run more buses; and this would ease traffic on the motorway?

A: Yes this can make a contribution. But if you analyse the nature of the actual demand on the M4 – i.e. of the typical movements that traffic is making in using it – it is very difficult in practice to make these movements on public transport. As a result, the analysis indicates that investment in public transport does not significantly reduce traffic flows on the M4. There is a public transport overview available for download on the

Consultation website which analyses this. WG recognises the economic, social, and environmental benefits of public transport, but the conclusion is that investment in public transport is not in itself going to help significantly address the problems on the M4

C: We appear to be dismissing public transport.

A: No, it has a contribution to make – but we have to recognise that public transport can only deliver part of the solution. Investing in public transport is recognised by WG as having great value – but unfortunately not in terms of easing traffic flows on the M4. This is because of the travel patterns evident on the M4.

C: WG should do the right thing – i.e. invest in public transport because it is the right thing to do in terms of carbon emissions reductions etc.

A: Yes, but we have to recognise that if we invest highly in public transport, we will not make much difference to the problems on the M4. There is limited funding. WG will need to consider investment in public transport in the context of the overall funding available for M4 CEM.

C: We would suggest that WG considers hosting a specific meeting on public transport so that the issues can be properly presented to the Minister.

A: Yes, WG will consider this.

Post meeting note: It was decided it would be inappropriate to have a workshop on only one type of measure given that Welsh Government are seeking a strategy to ease flow on the M4 motorway which will embrace a wide range of measures.

Plenary feedback on Qs 3a and b

C: We would suggest a better interchange in Newport between bus and train – the aim should be to align the bus station with the train station - e.g. bring it to Queensway.

C: We would suggest more Park & Rides connecting to public transport – e.g. at Magor.

C: Better integration of the transport system is needed– this could address Goal 15.

C: Smart cards (all purpose travel permits) should be considered – this could/should be considered (are these in the common measures?)

A: All-Wales smart cards are being trialled in Newport at the moment. They make it much easier for commuters etc. It would be good to have one card that can be used for the whole of the region (rather than just Cardiff). It was noted that the UK Government has recently announced that it is considering a national Smart card.

Session 5: Highway Option A: A new high quality road to the South of Newport

After a brief presentation and discussion of Highway Option A, tables discussed the option and there was a short plenary discussion of points raised.

Summary of table discussions as noted on worksheets

Responses to the following question: To what extent do you think that Highway Infrastructure Option A will address your group's priority problems or goals?

It would deliver a single good quality (i.e. at least dual carriageway) route with no junctions (except at either end), with the ability to provide more capacity (e.g. if the old M4 is shut as a result of an incident).

How much traffic will use this new road? Would it help tackle the queues at Junction 28 related to commuters from the Caerphilly direction or from the A48 and the A449?

Looking at a road scheme in isolation does not address the necessity to provide choice and alternatives.

There would be massive environmental impacts.

Plenary discussion as part of the presentation

C: The reason the M4 corridor around Newport doesn't work at the moment is that there are so many junctions – so any relief road should aim to minimise/exclude these.

A: The additional road could be built in stages – demand could then be reviewed in a staged way, and next steps determined accordingly.

C: In terms of increasing highway capacity, Option A looks like the best scheme.

A: Yes it is the option that would increase highway capacity most.

Q: Would the additional road be tolled?

A: Studies indicate so far that it would not make sense to toll the additional road unless the current M4 is also tolled. Note that the Severn Bridge toll is under review – this is obviously a material consideration.

Q: How has the cost been estimated?

A: The additional road was assessed as a dual 2 lane carriageway. There are possible additional costs (e.g. the route takes the road through an area that has been used as a rubbish tip, which could mean increase costs).

Q: How would you phase it?

A: The steelworks access road acquired by WG is currently being upgraded into a dual carriageway, so the additional road could go from J23 as Phase 1. The next phase

would depend on load and demand factors. This first phase would give additional capacity over the River Usk and hence potentially deliver some reasonable benefits.

Session 6: Highway Option B: At grade junction improvements to the A48 Newport Southern Distributor Road (SDR)

After a brief presentation and discussion of Highway Option B, participants discussed the option at their tables, and this was followed by a short plenary discussion of points raised.

This session was followed by a break for lunch.

Summary of table discussions as noted on worksheets

Responses to the following question: To what extent do you think that Highway Infrastructure Option B will address your group's priority problems or goals?

It would mean several years of continuous disruption to traffic while road works take place – but it still would not help very much to get traffic off the existing M4.

It could help if there was an accident on the M4 – but HGVs are still likely to stay on the M4.

The Nash College roundabout should be reviewed, and the layout amended to reduce the risk of accidents and other hazards.

It would be possible to take advantage of the road works to build in cycle lanes, and also to improve and enhance access for people walking in the immediate area.

It would not help the existing Junction 28/Tredegar Park issues.

Discussion on the presentation

Q: Would this route be shorter/quicker than the M4?

A: There is not much in it; but it could include a “green wave”, zonal approach, allowing more efficient throughput of traffic.

C: Risk of people each side of SDR feeling cut off from the other side – i.e. a “severance” issue, with the road creating a barrier to getting from one side to the other.

C: This option is not thought likely to ease the flow on the M4 on its own, but it is considered likely to add resilience to the road network.

Q: How much traffic would it take off the M4?

A: The report indicates that it would take some traffic off the M4, but not by an amount thought to be significant. Option B is marginal in terms of costs/benefits. A big part of this would be how it is signposted – we would not want heavy traffic taking this route.

Plenary feedback on Q4b

C: This proposal does not address the goals of choice and other options. It would not change anyone's travel behaviour. It would need to avoid risk of multiple junctions.

C: We are not that enthusiastic about this one. It only marginally addresses the problems, and it does not look like good value for money. The problems at Junctions 24 and 28 are not addressed by this scheme.

Session 7: Highway Option C: Grade separated junction improvements to the A48 SDR

After a brief presentation and discussion of Highway Option C, participants discussed the option at their tables, and this was followed by a short plenary discussion of points raised.

Summary of table discussions as noted on worksheets

Responses to the following question: To what extent do you think that Highway Infrastructure Option C will address your group's priority problems or goals?

How much time would it now take to travel continuously at 50mph between Junction 24 and Junction 28?

Will this help the existing issues at Junction 28?

How much traffic will it take off the M4?

Will the Brynglas Tunnels need to be rebuilt anyway?

How do the construction implications compare to those resulting from the tunnel widening?

Discussion on the presentation

Q: What speed is expected for the route?

A: It is designed as a 50mph route.

Q: Could cars go the whole way between Junctions 24 and 28 without having to negotiate junctions?

A: Yes, but grade separation would increase the severance factor of this route. Some of the existing junctions would be closed, so people would have to go to one of the

remaining crossing points (which would be grade-separated, so crossing should be straightforward).

C: We have concerns over the aesthetics and the potential impacts on accessibility, especially around the docks entrance – filled with horror at the engineering challenges.

A: Yes the docks area is a sensitive part of this route.

Q: Cost/benefit?

A: The broad strategy here is about reinforcing the SDR as an alternative route for traffic to the south of Newport and beyond, while using an existing route. This proposal has some advantages over Option A, but some potential disadvantages in terms of noise and pollution.

Q: Which junctions would be closed (grade-separated)?

A: We don't yet know – this would be worked up in more detail if this proposal is taken forward. In very general terms, it is not considered appropriate to keep two adjacent junctions open – so about 50% would be likely to be grade-separated. See rough plan on p.43.

Plenary feedback on Q4c

C: We don't like it.

C: Fig. 7 shows the worst congestion at J28-29. Option C doesn't do anything to assist with this. [Possible mix and match proposal.....]

Session 8: Highway Option D: Online Widening to dual 4 of the M4 between Junctions 24 and 29, including an additional tunnel at Brynglas

After a brief presentation and discussion of Highway Option D, participants discussed the option at their tables, and this was followed by a short plenary discussion of points raised.

Summary of table discussions as noted on worksheets

Responses to the following question: To what extent do you think that Highway Infrastructure Option D will address your group's priority problems or goals?

All the money would be spent on providing more capacity – after a long period of disruption resulting from the road works – but nothing would be spent on increasing provision for alternative modes and future behaviour/travel choices.

There are concerns about significant structural damage to the local environment.

Discussion on the presentation

Q: With this option, would an incident on the M4 lead to the same chaos in Newport as we get at the moment?

A: Option D would not offer additional resilience from an alternative route; but the wider carriageways at full motorway standard should make incidents less likely. By comparison, Option A would offer greater resilience. There is a general perception that Brynglas is the problem, so the new tunnels proposed in Option D appear to capture people's (and the media's) imagination.

Post meeting note: Option D does have the benefit of additional resilience resulting from minor incidents, because the additional lanes would enable more lanes to be open to traffic, whereas at present a minor incident can result in the whole eastbound or westbound carriageway being closed to all traffic, resulting in congestion in Newport.

C: When the borings for the first Brynglas tunnel were undertaken, significant damage occurred to the buildings above. Further works could cause more damage. Across Wales, Newport is seen as a bottleneck both for the M4 and for trains – so there are differences of perception and interests between Newport and the rest of Wales. These interests and perceptions should be properly considered and fairly weighed against each other.

Plenary feedback on Q4d

C: This does not resolve the resilience issue to any large extent, and the works would cause major disruption.

C: It does not do anything for alternative modes of travel.

C: There are things in Option D that might be good enough in themselves – i.e. without going to 4 lane carriageways

A: Yes, though it is necessary to consider where traffic goes when a junction is closed. Newport Council would need to know how it should deal with traffic displaced as a result of a junction closure.

Q: Are the costs of dealing with displaced traffic included in the estimated cost of Option D?

A: No, Option D does not look at the wider local network or how displaced traffic would need to be dealt with. There could be cost implications. Estimated costs for each option are statements in time. The bulk of the cost is in the work on the motorway. Within this, there is a significant (44%) allowance for uncertainty (costs and allowances).

Q: If all the measures on public transport in the CD were taken, is it right that this would add 50% to existing public transport provision?

A: Yes –see the public transport overview, available for download from the M4 CEM website.

Session 9: Discussion and feedback on Q5

The facilitator invited participants to agree answers to Q5 in the Consultation Document, and these were then considered in plenary. Dan Saville also referred to the Common Measures that are proposed in conjunction with all of the Options.

C: The overall costs of transport issue: if public transport costs increase more than cost of fuelling cars, traffic may rise – and vice versa. There may be an increase in car-sharing. Motorway traffic has apparently decreased slightly over the last year across the country as a result of increasing fuel costs. Transport cost differentials could make a big difference – but it is very hard/impossible to second guess this.

A: Yes, although it should be noted that the rate of traffic growth along the M4 round Newport has lessened, but traffic is still increasing.

Session 10: Closing session

The facilitator confirmed next steps in the consultation and how the proceedings today would be taken forward.

Martin Bates expressed his thanks and appreciation to all participants, and the workshop ended at 3.00pm

Participants

17 participants, comprising local residents and representatives of organisations took part in the workshop.



Participants involved in table discussions at M4 CEM Consultation Workshop
Tredegar House, Newport 13th March, 2012

A12 Consultation Workshop Report: Cardiff



Catrin Ellis **Associates**

M4 Corridor Enhancement Measures Programme

M4 CEM Stakeholder Consultation Workshop – Cardiff

15th March 2012

Transcribed Report



About the M4 CEM project group (Welsh Government and their contractors, Arup)

The M4 CEM project group has been working on developing the M4 Corridor Enhancement Measures Programme since it was initiated in 2009. As well as developing proposals put forward in the Consultation Document, published on March 6th, 2012, the group has produced a number of interim reports and more detailed studies. Many of these are available to download by visiting www.m4cem.com

The Group is also delivering measures which have been identified as providing some relief to the problems of safety, capacity and resilience in the M4 Corridor. Sections of steel central barriers have been replaced with concrete ones to improve capacity and resilience. In addition, a Variable Speed Limit system has been introduced between Junction 24 at Coldra and Junction 28 at Castleton. The Welsh Government has also deployed traffic officers on the M4 who deal with routine incidents on the network and undertake general traffic and road management to minimise disruption to road users.

About the facilitators

The M4 CEM Engagement Programme is designed and delivered by Catrin Ellis Jones, of Catrin Ellis Associates (CEA) in line with the needs of the M4 CEM Management Team, comprising staff from the Welsh Government and Arup. CEA is an independent business with many years experience in facilitation, training, partnership working and consensus building in Wales, the UK and internationally. Part of the facilitation team at this event were James Martin-Jones (CEA) and M4 CEM team members from Arup. Contact: catrinellis@yahoo.com / m.07725721519

About this Report

The workshop used plenary and small group working. This report produced by Catrin Ellis Jones of Catrin Ellis Associates, is a full transcript of all written notes made to record participants' contributions throughout the day. Each section starts with an explanation of the task (in the grey box).

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Aims of the M4 CEM Consultation workshop

To give participants an opportunity to:

- have their questions answered and voice initial responses to the outline plans and options for the M4 CEM, and
- help participants develop their thinking prior to making their own written submissions to the consultation, or submitting a response on behalf of an organisation

Opening session: Welcome and introduction to the day

Martin Bates, the Welsh Government's Project Director responsible for progressing this Public Consultation Exercise, welcomed participants and made the following remarks.

To set the scene I am going to repeat a quotation from the Minister with responsibility for Transport, Carl Sargeant, who said ***"We're all aware that congestion is a problem on this part of the M4, so easing the flow on the M4 between Magor and Castleton is a key priority for the Welsh Government and a commitment in the prioritised National Transport Plan."***

There are display boards around the room repeating some of the information from the Consultation Document. Consultation and/or engagement requires participation and as said on the cover of Newsletter 2 and repeated on the first board: ***"We need your help to shape a **strategy** to reduce traffic congestion on the M4 Magor to Castleton"***.

Several of you have already contributed through the earlier Stakeholder Workshops, the last of which was in November last year. The exhibitions and workshops have helped the Welsh Government prepare for this consultation, by shaping and refining our understanding of the transport problems people experience in the M4 Corridor between Magor and Castleton, and exploring the benefits and barriers associated with different approaches to solving these problems.

The Welsh Government, via the Consultation Document, is now seeking the public's views on;

- a) The 17 Existing Transport Related Problems
- b) The 15 Goals of the M4CEM Programme
- c) The Public Transport Measures whose main aim is to reduce traffic on the M4~ these may give wider benefits to society as well; and
- d) The Highway Infrastructure Measures – 4 options, whose aim is to increase highway capacity and improve resilience and safety.

The identified Problems and Goals which have come out of the earlier workshops are wide-ranging, and reflect the complexity of the challenge which the M4CEM Programme

is seeking to address. From the work to date Welsh Government recognises that no single solution delivers all the Goals.

There has already been some publicity in the media, but this has centred on the Brynglas Tunnels rather than on the Public Consultation itself. On behalf of the Welsh Government, I would assure you that no decision has been taken on the way forward. This consultation is your opportunity to let the Welsh Government know how you think the existing problems should be addressed.

During your deliberations today I would like you to keep in mind a second quote from the Minister, which says: ***"Improving access to our schools, hospitals and workplaces is essential if we are to improve efficiency and productivity and in turn make us more competitive."***

"Improving Access" in my opinion means that doing nothing is not an option. However, it can include improvements to both Public Transport and Highway Infrastructure.

There will probably be much discussion today about various aspects of this consultation; but in order to get your views heard, I would ask that you complete the on-line Response Form – as well as the questions themselves, there is room for comments and I would assure you that they all are read.

Catrin Ellis Jones, the workshop facilitator, introduced the aims and objectives of the day. She noted that this workshop is about helping you develop your thinking on the M4 CEM proposals through discussion and exploration of the proposals with others, having any questions answered by the project team, and thus helping you to respond to the consultation questions afterwards. It is also an opportunity for Welsh Government to hear participants' initial feedback.

To ensure that your views are given full consideration, it is necessary for individuals and organisations to provide responses to the questions posed in the Consultation Document and Response Form. The various ways in which responses can be submitted were described, e.g. using the response form, a written submission, or online at www.wales.gov.uk/consultations, or accessing the consultation via www.m4cem.com. The advantages of responding online were outlined (enables respondents to update anytime during the consultation period, ease and convenience).

Session 2: Context and introduction to the M4 CEM – key points from Sections 1, 2, and 6 of the Consultation Document (CD)

Allan Pitt, Consulting Planner at Arup, referred to the context-setting sections of the M4 CEM described in the Consultation Document (CD, p 4 – 7). This presentation was followed by discussion at tables and then by a Q&A session in plenary.

Plenary feedback

Q = Question; A = Answer; C = Comment

The measures already taken – notably what has been done in terms of strengthening the central barrier, and the introduction of the Variable Speed Limit – have improved safety, capacity and resilience. But we recognise that more still needs to be done. There is also an ongoing problem of access to/from Caerleon; and more data collection is also needed.

There is a perception that the Brynglas tunnels are one of the key problems in terms of current traffic flow. But widening or rebuilding these is problematic in engineering terms, given the potential risks to buildings in Brynglas. As a result, the most practical solution would be an M4 relief road, as this would deliver better long-term benefits than seeking to improve the current M4 corridor.

Session 3: Identifying the most important Problems & Goals

Allan Pitt presented the transport-related problems encountered within the M4 Corridor, Magor to Castleton. These are based on traffic data, and have been the subject of review by local people and stakeholders during earlier dialogue on the M4 CEM. He referred to the sections of the CD on pages 8–19. He also described how in response to each problem, a number of goals had been set which if achieved would solve the problems. The Goals are listed on p 20 of the CD.

The facilitator invited participants to review the list of transport-related problems on p.18 of the CD and the list of M4 CEM goals on p.20, and to refer to Q1a and Q2. Each participant was invited to list her/his top 4 problems and top 4 goals. Comments and questions on these were then briefly shared in plenary. Discussion reverted to tables, comparing participants' selections of problems and goals, and these too were shared in plenary.

This session was followed by a break for refreshments.

Plenary feedback - initial comments and questions on Problems and Goals

C: The data is not fully robust or up to date – it does not include the effect of measures taken over the last year or two, nor does it take account of the effects of the road works during the same period.

A: There is some new data coming in now on accident information and flows that is likely to indicate that safety has improved as a result of recent measures.

C: Shouldn't the CD make this clear?

A: It does to some extent – e.g. the dates of traffic data are provided; and there is a reference to the Variable Speed Limit (the VSL, introduced in June 2011); and there is a reference in the FAQ to accident and safety improvements since the introduction of the VSL. The plan is to update this information during the consultation period as new data becomes available.

C: The speeds indicated on the new VSL electronic signs are mandatory (not advisory), but drivers are not clear about this. The information screens at the motorway edge could/should be used to make this clear. The VSL signs are confusing also because there is an additional set of electronic signs providing advisory speeds limits.

C: Goal 3 - We appreciate that WG has provided subsidies to keep railway lines open; but there is a loop coming round from Ebbw Vale that terminates at Newport Central but has not been reopened. Not extending it to Newport means that you have to go all the way back to Cardiff to get there.

A: The challenge is that that particular stretch of line can only be operated at 10mph, and trains need to come onto main line access Newport Central, thereby causing disruption to the main line service. This could compromise the half hour frequency of the Cardiff-London service.

C: Our understanding is that this frequency could be accommodated, and that the real challenge is the need to make the Ebbw Vale line a dual line – which is a perfectly deliverable proposition, but would require investment. It would enable the Ebbw Vale line to offer a 15 minute service, and the impact on this would be profound and greatly alleviate pressure on Junction 28.

Q: What about frequency enhancements on the Abergavenny line, including re-opening Caerleon Station?

A: A new station at Caerleon would provide wider regional benefits to the public transport network but may not significantly reduce traffic currently using the M4. Please refer to public transport overview available on-line (www.m4cem.com) for a set of illustrative public transport measures aimed at reducing traffic congestion problems on the M4 between Magor and Castleton.

Q: Could the train be split, with one half going into Newport, and the other into Cardiff?

A: It would still not be possible to increase the frequency.

C: It is surprising that the carbon footprint of the M4 is not identified as one of the Problems for the M4 CEM. This should be considered in the context of the WG CO2 emissions strategy.

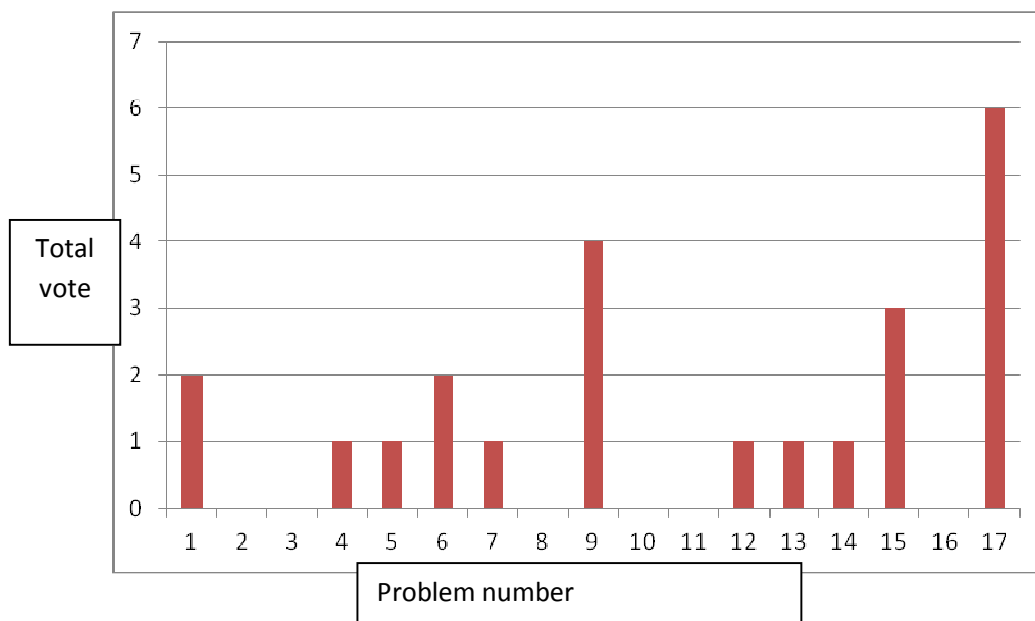
A: This issue is to some extent encompassed within the Goals.

C: Yes, but if we are asked to prioritise key Problems, the carbon footprint issue is not listed.

A: Fair point – suggest that this issue be raised as a comment.

Summary of table discussions as noted on worksheets

Problems: participants [individually] selected four problems they regard as the most important to address. The number of votes for each priority problem are added up and represented in the diagram.



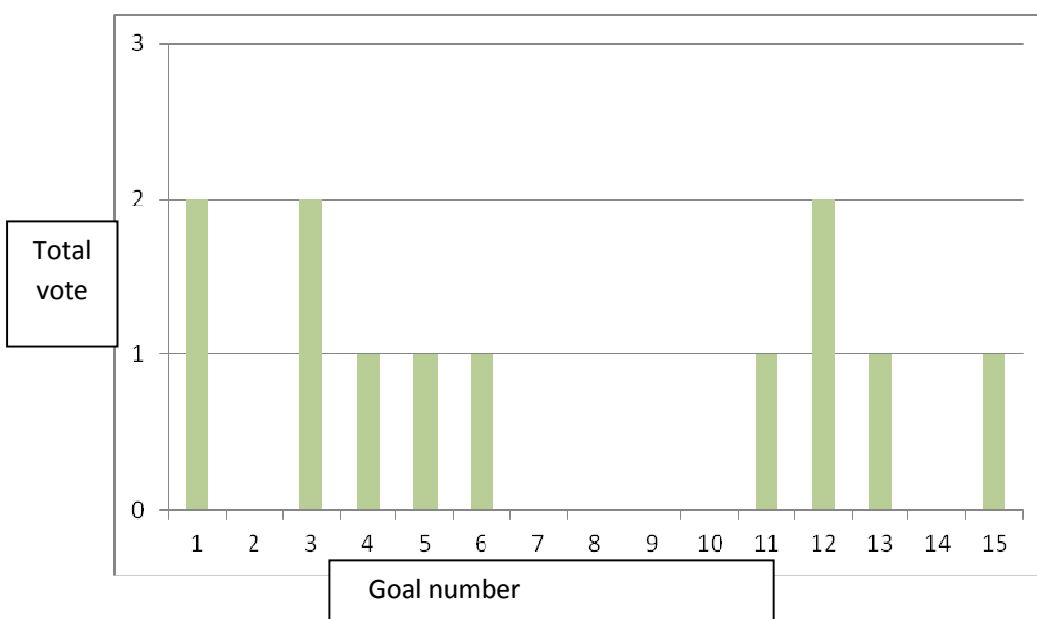
Both table groups identified Problem 17 – *The existing transport network acts as a constraint to economic growth and adversely impacts the current economy*– as the most important problem needing to be addressed. The groups suggested that the problems on the existing transport network acts as a constraint to economic growth not only in M4 corridor, but that it adversely affects the hugely and nationally important, South Wales economy.

Problem 9 - *When there are problems on the M4, there is severe disruption and congestion on the local and regional highway network*; and Problem 15 – *There is a lack of adequate sustainable integrated transport alternatives for existing road users*; and Problem 1 - *A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times over extended periods*; and Problem 6 - *The M4 cannot cope with increased traffic from new developments* – gained the next largest number of votes.

One table group suggested that there are other problems that need to be addressed, which are not included in the list, namely:

- Reducing the carbon footprint associated with travel and transport – not just per vehicle per kilometre
- There is insufficient capacity for other forms of public transport through motorway junctions

Goals: participants [individually] selected their four top priority goals to achieve. The number of votes for each goal are added up and represented in the diagram. Only one group undertook this exercise.



Only goals 1, 3 and 12 received more than one vote each:

Goal 1 – Safer, easier and more reliable travel East-West in South Wales – one group specified improving reliability and safety (over and above ease) is most important.

Goal 3 – More effective and integrated use of alternatives to the M4, including other parts of the transport network and other modes of transport for local and strategic journeys around Newport.

Goal 12 – An M4 attractive for strategic journeys that discourages local traffic use.

Participants' selections of M4 CEM Problems and Goals – reports back from tables on level of agreement, and comments/questions

The most support is for Goal 1. Some duplication between the Goals was noted.

Everyone agreed that Problem 17 is a key one (i.e. that congestion is an economic constraint).

Particular problems identified: 9 and 15.

On 15, perhaps a P&R at the Severn Tunnel junction would help address it

Session 4: Section 8 of the CD – Public Transport Measures

After an introduction by Dan Saville, Arup Director, to the overall approach to the CEM and to the Public Transport Measures in Section 8 of the CD, the participants were invited to agree answers to CD Qs 3a and 3b; and these responses were then shared in plenary.

Summary of table discussions as noted on worksheets

Responses to the following question: which of the public transport measures listed have the potential to reduce your use of the M4?

- A new station at Llantarnam and/or St Mellons.
- Through routes using trains/buses (i.e. integrated).
- Integrated public transport in Newport – through ticketing and proximity.
- Public transport from the Valleys.
- A fare structure for train journeys that is perceived to give good value for money.
- Park & Ride to the east of Cardiff – between Cardiff and Newport. This addresses the issue of single rail hub and has been successful elsewhere (e.g. Parkway stations).
- The potential of Caerleon station.

Plenary discussion on the initial introduction (which indicated that research on travel patterns on the M4 had led to the conclusion that public transport can only be part of the solution to congestion on the M4).

C: Some of the common measures could be delivered quite quickly.

A: Yes, we are looking to develop an overall long-term strategy; some elements of which could be delivered relatively soon.

Q: How do you generate figures for the impact of improved public transport on M4 flows?

A: We used roadside interviews to develop a pattern across the region.

C: A methodology of that sort could lead to the conclusion that it is not necessary to re-open a train station at Caerleon. However, re-opening a Caerleon train station could well lead to many new movements on the train.

A: Journeys from centre to centre work best for train travel. But the great majority of traffic movements on the M4 do not follow this pattern.

Q: Does the model you have used make an allowance for new movements resulting from additional train connections?

A: It is right that new movements would result from such additional rail connections. However, new rail journeys are outside the scope of the model because they are new journeys, and would not therefore relieve existing traffic on the M4. Research also indicates that additional rail connections would not significantly reduce the volume of traffic on the M4.

C: We understand the conclusion in the context of the M4 corridor that getting people out of their cars and onto the train is constrained. But access to trains is also constrained along this corridor. If there were more stations e.g. west of Cardiff, you could get more people onto trains, and that could make a significant difference.

A: We have modelled additional P&R facilities to public transport in this context – but again, the model indicates that such facilities would not materially reduce M4 traffic volumes.

Q: What is happening to the former steelworks site? Cardiff Airport is currently failing – why not develop an airport on that site?

A: The site was not considered to have the necessary orientation for airport runways, and housing is currently being constructed on part of the former steelworks.

Post meeting note: Only part of the steelworks site has been sold to developers. Tata Steel still own and operate the remainder.

C: Using this site for housing would be a terrible decision for the site: the orientation would be okay for an airport, and it would be located adjacent to the main railway line and to the M4. This is relevant to traffic flows.

Plenary feedback on Qs 3a and b

C: The best contributions could be made through P&R links to stations, and through modal integration (e.g. better transfers between public transport modes through smart ticketing, and by co-locating bus and train stations).

C: Improve public transport between Newport and Cardiff

C: Open a new train station at St Mellons and Llantarnam.

Session 5: Highway Option A : A new high quality road to the south of Newport

After a brief presentation and discussion of Highway Option A, tables discussed Q4a: and there was a short plenary discussion of points raised.

Summary of table discussions as noted on worksheets

Responses to the following question: To what extent do you think that Highway Infrastructure Option A will address your group's priority problems or goals?

- This option addresses Problem 17. It also addresses Problem 9, freeing up traffic around the M4.
- It does not really address Problem 15, but it does have some indirect benefits – e.g. less congestion for buses; and more capacity.
- It could help achieve Goal 12, with reduced junctions.
- Signage would be an important consideration in encouraging through traffic to take the optimal route.
- There is not currently much development to the South of Newport – there may be potential to make this area more desirable in development terms.
- There could be knock-on impacts on Junction 29 onwards due to increased congestion at this point. Junction 32 at Coryton already experiences congestion without any additional flow caused by improved (Junctions 23-29).
- It frees up traffic through to Junction 29 on the existing motorway for Valleys' traffic, and is therefore a great benefit for Newport; but it is possibly detrimental for Cardiff and further west.

Plenary discussion on the presentation

C: Problem 17 and Goal 1 figured strongly here. We felt that these are quite well addressed by Option A. In terms of the Problem 9 issue, Option A would offer benefits in alleviating disruption and congestion.

C: Option A would improve the situation for people trying to get into Newport, but it could have the knock-on effect of increasing pressure on traffic flows beyond Junction 29.

C: The queues at the Coryton junction are partly caused by situating supermarkets, hotels etc. there. This sort of development should be avoided at junctions - instead the emphasis should be on flyovers and loops to maximise traffic flow.

C: It is possible that WG could invest heavily in Option A, but still not reduce traffic congestion overall. The real strategic gap is in terms of land use planning, which rests with the Wales Spatial Plan. We still do not have the close coordination between different levels of government that we need. This is a real strategic risk for this programme.

A: There is a review of the planning system in Wales ongoing at the moment. This process should feed into this.

Session 6: Highway Option B: At grade junction improvements to the A48 Newport Southern Distributor Road (SDR)

After a brief presentation and discussion of Highway Option B, participants discussed the option at their tables in relation to Q4b - *To what extent do you think Highway Option B will address the problem and achieve the goals you have chosen?*, and this was followed by a short plenary discussion of points raised. This session was followed by a break for lunch.

Summary of table discussions as noted on worksheets

Responses to the following question: To what extent do you think that Highway Infrastructure Option B will address your group's priority problems or goals?

- This option is not going to solve the problems of the M4. It is not a long term solution.
- It does not address Junction 28-29, but Junction 28 improvements are being addressed separately.
- It may improve connectivity with south Newport.
- It would give some improved resilience to the road network. It could deliver minor benefits in relation to Problem 9.
- Although it would benefit air quality in the M4 area, it would be detrimental to properties around the SDR.
- A mid-Wales route should be considered as an additional option.
- We doubt that Option B would help in the case of catastrophic failure on the M4 – but it could help in the case of minor incidents.
- Perhaps this option could be used as an interim fix.
- Again, improved signage could be important – e.g. giving estimated travel times for the different routes.
- It has the potential to be implemented quickly.

Discussion on the presentation

Q: One of the overall Goals relates to the economy – for each scheme, have you modelled what the economic effects might be?

A: There is some underlying information on this, as reflected in the appraisals for each of the options. As a relatively modest scheme, it could be implemented more quickly, but it would not give the longer term increase in capacity and potential economic impacts that Option A (for example) would offer.

Plenary feedback on Q4b

C: Option B looks like an interim fix – not a long term solution.

Session 7: Highway Option C: Grade separated junction improvements to the A48 SDR

After a brief presentation and discussion of Highway Option C, participants discussed the option at their tables in relation to Q4c - *To what extent do you think Highway Option C will address the problem and achieve the goals you have chosen?* - and this was followed by a short plenary discussion of points raised.

Summary of table discussions as noted on worksheets

Responses to the following question: To what extent do you think that Highway Infrastructure Option C will address your group's priority problems or goals?

- This option is substantially better than Option B; but it would be a 50mph route not a 70mph route.
- This option addresses Problem 9 better than Option B does.
- There are two major schools on this route; so there are issues of safety and access to schools to be considered.
- A point on SAR was raised, based on current traffic from Llanwern.
- It is an improvement on the current situation; but it is expensive. There is consensus at this table that it is not worth the extra cost relative to Option B.

Plenary feedback on Q4c

Q: Junction 28 – what can be delivered at a reasonable price? Would bus priority measures help here? It would be once in a lifetime opportunity to introduce these at Junction 28.

A: Yes – but priority bus lanes would need to be extended into Newport to make them work effectively. There are no bus priority lanes in Newport at present. Bus priority at traffic lights through the use of transponders could provide priority without the need for additional lanes.

C: This option is substantially better than Option B, but it is still not a long term solution.

C: Yes – an improvement on the current situation, but it looks expensive for what it would be likely to deliver.

Session 8: Highway Option D: Online Widening to dual 4 of the M4 between Junctions 24 and 29, including an additional tunnel at Brynglas

After a brief presentation and discussion of Highway Option D, participants discussed the option at their tables, and this was followed by a short plenary discussion of points raised.

Summary of table discussions as noted on worksheets

Responses to the following question: To what extent do you think that Highway Infrastructure Option D will address your group's priority problems or goals?

- When finished, this option would meet the CEM Goals; but the disruption during construction could act as a deterrent to economic growth.
- This option does not really address Goals 1, 3, and 12. "All our eggs are in one basket".
- There is a risk of damaging and/or exacerbating damage caused by tunnel boring beneath Brynglas Ridge. Would there be a need for assurances on this point, and/or a need to recognise this risk?

Plenary feedback on Q4d

When finished, it meets the goals – but it would lead to disruption in the meantime.

It is not clear whether Goals 3 and 12 would be met.

The costs of building and running the tunnel are difficult to quantify.

Session 9: Discussion and feedback on Q5

The facilitator invited participants to agree answers to Q5, and these were then considered in plenary. Dan Saville also referred to the Common Measures that are proposed in conjunction with all of the Options.

Summary of table discussions as noted on worksheets

Responses to the following question: Do you have any additional comments, suggestions, observations, key messages?

- It is important to recognise the interaction between these proposals and SAR.
- The small take-up for this workshop is a shame – we feel it has helped our understanding of the issues and the proposals.

- There are concerns about the longer-term needs of the region. The wider problems to consider include commuting to Bristol and Cardiff.
- The industrial profile of South Wales means that HGVs are an important consideration.
- Greenhouse gas emissions for all the options are neutral (both for WelTAG and for Goal 10) – the analysis of this issue needs to be given further consideration before the final decision is taken.
- Giving buses priority at junctions would be worthy of serious consideration.
- Why not start Option A at Junction 23A rather than Junction 23, and stop short at Junction 28 to reduce the length and therefore the cost?
- Option D heading east is four lanes until Junction 24, three lanes till Junction 23a, and then two lanes through the junction; therefore the plans need to deal with the 2 lane constriction.
- We accept that something has to be done – and it is important that we make the right choice.
- It would be possible to deliver Option B as an interim measure to complement a longer term solution.
- Alternative routes are important.

Plenary feedback on Q5

- Why does Option D start at Junction 24? Eastbound from Junction 24, there is also a need to widen the two lanes sections to four lanes.
- There is a need to think about the long term, the region as a whole, and getting it right; also the value of alternative routes in terms of resilience.
- Option B could be considered as a interim measure.
- All options are appraised as neutral in terms of their carbon impacts. This tends to indicate that this aspect may not have been fully assessed. They should be, given WG's carbon footprint targets.

Session 10: Closing session

The facilitator confirmed next steps in the consultation and how the proceedings today would be taken forward.

Martin Bates expressed his thanks and appreciation to all participants, and the workshop ended at 3.00pm

We will type up the transcript of this workshop including the work sheets; and send these to participants. The transcripts of the workshops will go on to the M4 CEM web site, along with the feedback from the drop-in sessions.

Please respond to the consultation; and please encourage friends and relations to respond too. This will greatly help the Minister get the broad feedback needed to help make the decision.

Participants

Eight participants took part in the whole day's deliberations. They were members of the public and representatives of organisations.

A handful of others dropped in to look at the exhibition panels and talk to team members.

A13 Consultation Workshop Report: Swansea



Catrin Ellis **Associates**

M4 Corridor Enhancement Measures Programme

M4 CEM Stakeholder Consultation Workshop – Swansea

20th March 2012

Transcribed Report



About the M4 CEM project group (Welsh Government and their contractors, Arup)

The M4 CEM project group has been working on developing the M4 Corridor Enhancement Measures Programme since it was initiated in 2009. As well as developing proposals put forward in the Consultation Document, published on March 6th, 2012, the group has produced a number of interim reports and more detailed studies. Many of these are available to download by visiting www.m4cem.com

The Group is also delivering measures which have been identified as providing some relief to the problems of safety, capacity and resilience in the M4 Corridor. Sections of steel central barriers have been replaced with concrete ones to improve capacity and resilience. In addition, a Variable Speed Limit system has been introduced between Junction 24 at Coldra and Junction 28 at Castleton. The Welsh Government has also deployed traffic officers on the M4 who deal with routine incidents on the network and undertake general traffic and road management to minimise disruption to road users.

About the facilitators

The M4 CEM Engagement Programme is designed and delivered by Catrin Ellis Jones, of Catrin Ellis Associates (CEA) in line with the needs of the M4 CEM Management Team, comprising staff from the Welsh Government and Arup. CEA is an independent business with many years experience in facilitation, training, partnership working and consensus building in Wales, the UK and internationally. Part of the facilitation team at this event were Alfie Stroud (CEA) and M4 CEM team members from Arup.

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About this Report

The workshop used plenary and small group working. This report produced by Catrin Ellis Jones of Catrin Ellis Associates, is a full transcript of all written notes made to record participants' contributions throughout the day. Each section starts with an explanation of the task (in the grey box).

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Aims of the M4 CEM Consultation workshop

To give participants an opportunity to:

- have their questions answered and voice initial responses to the outline plans and options for the M4 CEM, and
- help participants develop their thinking prior to making their own written submissions to the consultation, or submitting a response on behalf of an organisation

Opening session: Welcome and introduction to the day

Martin Bates, the Welsh Government's Project Director responsible for progressing this Public Consultation Exercise, welcomed participants and made the following remarks.

To set the scene I am going to repeat a quotation from the Minister with responsibility for Transport, Carl Sargeant, who said ***"We're all aware that congestion is a problem on this part of the M4, so easing the flow on the M4 between Magor and Castleton is a key priority for the Welsh Government and a commitment in the prioritised National Transport Plan."***

There are display boards around the room repeating some of the information from the Consultation Document. Consultation and/or engagement requires participation and as said on the cover of Newsletter 2 and repeated on the first board: ***"We need your help to shape a **strategy** to reduce traffic congestion on the M4 Magor to Castleton"***.

Several of you have already contributed through the earlier Stakeholder Workshops, the last of which was in November last year. Those Workshops have helped the Welsh Government prepare for this consultation.

The Welsh Government, via the Consultation Document, is now seeking the public's views on;

- a) 17 Existing Transport Related Problems
- b) 15 Goals of the M4CEM Programme
- c) Public Transport Measures whose main aim is to reduce traffic on the M4~ these may give wider benefits to society as well; and
- d) Highway Infrastructure Measures – 4 options, whose aim is to increase highway capacity and improve resilience and safety.

The identified Problems and Goals which have come out of the earlier Workshops are wide-ranging, and reflect the complexity of the challenge which the M4CEM Programme is seeking to address. From the work to date, Welsh Government recognises that no single solution delivers all the Goals.

There has already been some publicity, but this has centred on the Brynglas Tunnels rather than on the Public Consultation itself. On behalf of the Welsh Government, I would assure you that no decision has been taken on the way forward. This consultation is your opportunity to let the Welsh Government know how you think the existing problems should be addressed.

During your deliberations today I would like you to keep in mind a second quote from the Minister, which says: ***"Improving access to our schools, hospitals and workplaces is essential if we are to improve efficiency and productivity and in turn make us more competitive."***

"Improving Access" in my opinion means that doing nothing is not an option. However, it can include improvements to both Public Transport and Highway Infrastructure.

There will probably be much discussion today about various aspects of this consultation; but in order to get your views heard, I would ask that you complete the on-line Response Form – as well as the questions themselves, there is room for comments and I would assure you that they all are read.

Catrin Ellis Jones, the workshop facilitator, introduced the aims and objectives of the day. She noted that this workshop is about helping you develop your thinking on the M4 CEM proposals through discussion and exploration of the proposals with others, having any questions answered by the project team, and thus helping you to respond to the consultation questions afterwards. It is also an opportunity for Welsh Government to hear participants' initial feedback.

To ensure that your views are given full consideration, it is necessary for individuals and organisations to provide responses to the questions posed in the Consultation Document and Response Form. The various ways in which responses can be submitted were described, e.g. using the response form, a written submission, or online at www.wales.gov.uk/consultations, or accessing the consultation via www.m4cem.com. The advantages of responding online were outlined (enables respondents to update anytime during the consultation period, ease and convenience).

Session 2: Context and introduction to the CEM – key points from Sections 1, 2, and 6 of the Consultation Document (CD)

Allan Pitt, Consulting Planner at Arup, referred to the Consultation Document (CD) and outlined the context-setting sections of the M4 CEM. This presentation was followed by discussion at tables and then by a Q&A session in plenary.

Plenary feedback

Q = Question; C = Comment (*Participants' contributions*)

A = Answer (*from Welsh Government and their Consultants*)

Q: "It's the economy, stupid!"* – road use is not just a matter of preference. The big aims of M4 CEM seem to me to be contradictory. Is our main aim to grow and service the Welsh economy? Or is it to prioritise sustainability and lower carbon emissions, which may contradict the aim of economic growth? The South East section of the M4 in Wales is so strategically significant that any programme for protecting or improving it must be mainly concerned with its key infrastructure role and its economic effect.

**Participant borrowed from Bill Clinton's 1992 campaign slogan to make his point in engaging manner.*

C: The either/or approach is not an option – that analysis comes from the car-centric culture, which we need to get away from. The Welsh Government's reports are based on projections premised on an expectation of rising car use. Current patterns of car use are often habits arising from an unsustainable transport culture more than a matter of need. Alternatives will have to be developed and this culture must be changed; the M4 CEM reports don't cover the impact of peak oil, rising energy costs, and the resulting likely fall in car demand.

A: A combination of approaches is needed. There is no one aim or solution. There is a discussion to be had about priorities. There is clearly some tension between the range of goals and priorities, but connected issues arising from this consultation are being passed-on to other parts of the Welsh Government for their attention.

A: Other improvements to the M4 are already underway – Variable Speed Limit signs have been installed and are now running automatically, concrete central barriers have replaced steel barriers in sections, to improve safety, other improvements are programmed. New traffic surveys are planned which will enable the traffic modelling to be updated. The Welsh Government is still pushing for mainline rail electrification beyond Cardiff to Swansea and also electrification of Valleys routes. The Welsh Government does not regard road use in the M4 corridor in isolation.

A: The Welsh Government's 2009 decision to reject the M4 relief road project as unaffordable was based on a plan to build it in a single phase. New solutions are based on more affordable phased investment.

Q: How does the Welsh Government ensure consistency of message on the programme aims? The controversy around tunnelling at Brynglas is based on memories of damage caused in the 1960s. Cost estimates of hundreds of millions of pounds quoted in the

media without context, the threat of 15 years' disruption, plus the problem of different sets of data, none fully comprehensive, have unsurprisingly dominated the coverage. Opportunities for broad engagement have been lost because of how the M4 CEM aims have been publicised in the media and the Welsh Government has communicated its objectives in this area.

A: We issue press releases which contain a full pack of information but we can have no control on how the press wish to report "a story" to suit their own agendas. There were many approaches that the media could have been taken – they decided to focus on Brynglas tunnels, perhaps because of the tunnel closure in July 2011.

C: The topography of Wales is not as convenient for cycling or other 'no carbon' transport as the Netherlands and other European countries. Public transport can't cope with the diversity of travel necessary in South Wales so it's not an option for the majority. Hours of work and the diversity of jobs require car commuting; the fragmentation of work, major industry leaving South Wales, and small or out-of-town employers all have an effect. Firms have been trying to explain the importance of roads to highway agencies for ages. The road to Milford Haven – 6th largest tonnage port in UK – is poor quality after St Clears; what about through-road traffic from Ireland to England? Focus on coastal cycle paths? These are not relevant to commuters! WG Road policy documents are improving since 2008's soft statement; the content of the M4 CEM Consultation Document is stronger but still does not show firm enough understanding of need for good roads to build jobs in communities.

C: There is an exhibition tomorrow about transport plans in Crumlin, Caerphilly: the topography and the geography of the town and the Ebbw valley are a real barrier to people making transport choices not involving their cars, in the area. The weather we experience here is also a factor. These elements are often under-appreciated in planning Welsh transport.

C: The M4 is important to the prosperity of the whole of Wales, but it is central to the local transport infrastructure of the Newport area too. Are both these needs equally valued as aims? The Consultation document mentions Junction closures.

A: The role of the M4 in the Newport areas is appreciated and motorway junction closures are an option being considered. The M4 motorway started as a ring-road, post-war, and so has many more junctions than would be permitted under current road standards. The programme is engaging locally on possible junction closures and Newport County Council has indicated that it is happy to have some closed but not others. The east side slip roads at J26 near Brynglas are considered to be sub-standard; and therefore we are considering closing them or modifying how and when they can be accessed. All these possibilities are under consideration.

Session 3: Identifying the most important Problems & Goals

Allan Pitt, presented the transport-related problems encountered within the M4 Corridor, Magor to Castleton. These are based on traffic data, and have been the subject of review by local people and stakeholders during earlier dialogue on the M4 CEM. He referred to the sections of the CD on pages 8 – 19. He also described how in response to each problem, a number of goals had been set which if achieved would solve the problems. The Goals are listed on p 20 of the CD.

The facilitator invited participants to review the list of transport-related problems on p.18 of the CD and the list of M4 CEM goals on p.20, and to refer to Q1a and Q2. Each participant was invited to list her/his top 4 problems and top 4 goals. Comments and questions on these were then briefly shared in plenary. Discussion reverted to tables, comparing participants' selections of problems and goals, and these too were shared in plenary.

This session was followed by a break for refreshments.

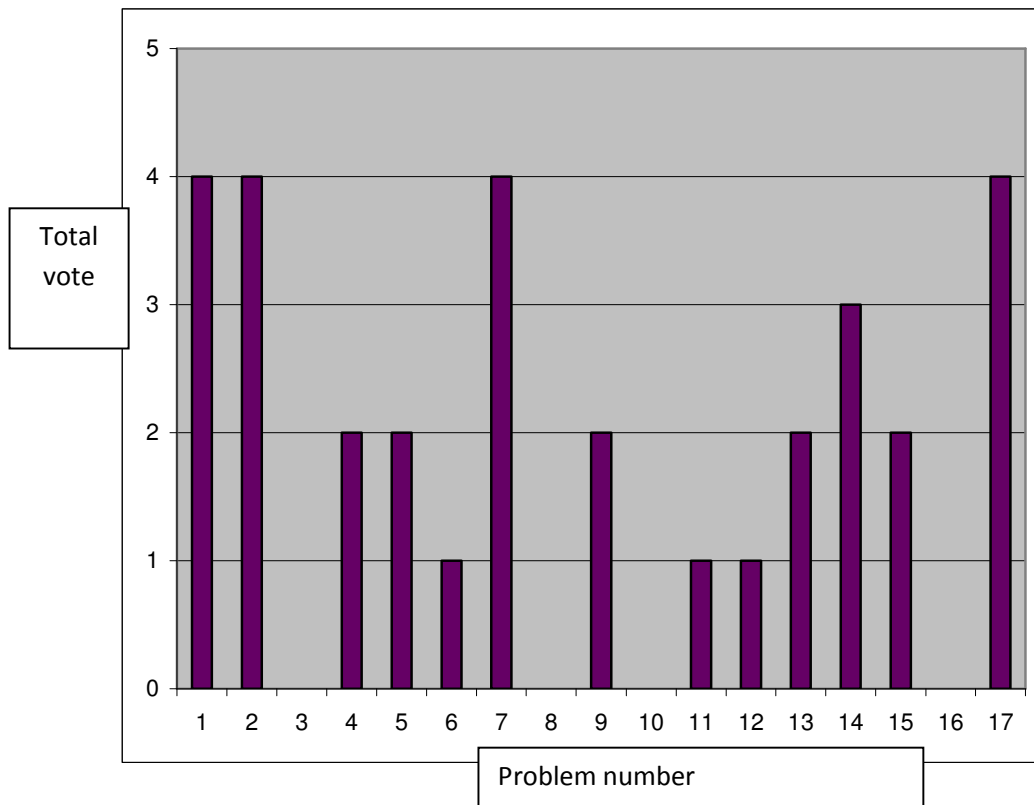
Plenary feedback - Initial comments and questions on Problems and Goals

C: References are made differently throughout the documentation about where we need ease of travel: either "East-West" as in Goal 1 or "along the M4". The former seems to acknowledge there are other routes and corridors for East-West travel in South Wales, e.g. A472 Newbridge to Pontypool. People stagger their working patterns to avoid snarl-up roundabouts near / around the M4 – there are other road congestion problems in the area that impact very directly, but aren't much addressed.

A: Addressing problems at roundabouts on major routes in the corridor area is part of the package of measures described in the consultation document. There are likely to be requests from broader interests, e.g. SEWTA (South East Wales Transport Alliance) to address issues along some of the other routes in the area.

Participants' selections of problems and goals – reports back from table worksheets

Problems: participants [individually] selected four problems they regard as the most important to address. The number of votes for each priority problem are added up and represented in the diagram below.

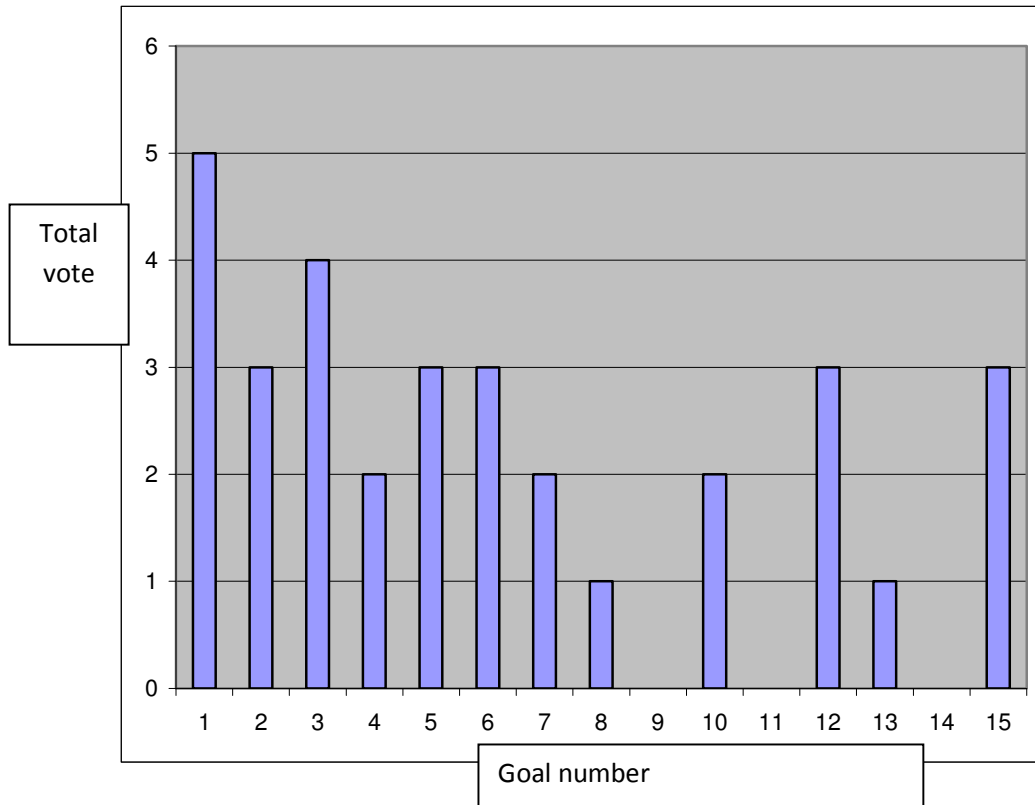


Several participants identified Problem 17 – *The existing transport network acts as a constraint to economic growth and adversely impacts the current economy* – among their most significant, with one stressing the long-term sustainability aspect of the M4’s impact on the economy as particularly problematic.

One table mainly selected capacity and resilience problems as the most pressing problems, noting the significance of local Newport traffic needs among the context of these problems. Problem 1 – *A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times over extended periods*; Problem 2 – *The M4 around Newport is used as a convenient cross town connection for local traffic, with insufficient local road capacity*; and Problem 7 – *Difficulties maintaining adequate traffic flows on the M4 and alternative highway routes at times of temporary disruption; alternative routes are not able to cope with M4 traffic* – were regarded as most significant by this table. These problems were also selected by participants in the other group.

The second table focused on problems relating to safety and sustainable development as the most important for addressing, with most selected among them Problem 14 - *Some people’s driving behaviour leads to increased accidents (e.g. speeding, lane hogging, unlicensed drivers)*.

Goals: participants [individually] selected their four top priority goals to achieve. The number of votes for each goal are added up and represented in the diagram.



Goal 1 – *Safer, easier and more reliable travel East-West in South Wales* – was the most selected by participants , although the other aspects of East-West travel in South Wales were highlighted in plenary discussion (see above).

Goal 3 – *More effective and integrated use of alternatives to the M4, including other parts of the transport network and other modes of transport for local and strategic journeys around Newport* – was the next most-selected goal, receiving four votes in total, indicating the significance of traffic within Newport.

Each receiving the next highest number of votes were goals 2, 5, 6,12 and 15. These are, about achieving:

2) *Improved transport connections within Wales and to England, the Republic of Ireland and the rest of Europe on all modes on the international transport network.*

5) *More reliable journey times along the M4 corridor.*

6) *Increased level of choice for all people making journeys within the transport corridor by all modes between Magor and Castleton, commensurate with demand for alternatives.*

12) *An M4 attractive for strategic journeys that discourages local traffic use*

15) *A cultural shift in travel behaviour towards more sustainable choices*

Session 4: Section 8 of the CD – Public Transport Measures

After an introduction by Allan Pitt, Arup, to the overall approach to the CEM and to the Public Transport Measures in Section 8 of the CD, the participants were invited to agree answers to CD Qs 3a and 3b; and these responses were then shared in plenary.

Summary of table discussions as noted on worksheets

Responses to the following question: which of the public transport measures listed have the potential to reduce your use of the M4?

- More bus/train connecting services.
Issues identified around this measure included:
 - The extra time added to journeys
 - The affordability of fares and potentially their integration
 - Aging rolling stock in need of upgrading
 - The need for bus and train services to operate near one another for ease of access and making connections
- Better park & ride services
- Additional local bus services
- Additional mainline affordable train services

Responses to the following question: to what extent do you think the public transport measures (selected by the group), address your group's priority problems or goals?

Only one table wrote-down a response to this question, noting that public transport should form part of any package to address local traffic issues. Public transport also needs to be better connected. Public transport could not be a solution to the problems [of the M4] on its own.

Plenary feedback on Qs 3a and b

Bus-train connecting services

C: More bus-train connecting services would be needed to approach the flexibility of travel offered by cars. Above all the proximity [of bus stops / stations to railway stations] would be important, making it easy to access both bus and train station. It rains a lot in Wales, and will always be hard to persuade people to wait for the bus or cycle.

C: The weather is not really an issue – many non-car commuters in Wales already put up with it.

C: Even bus and train connecting services may not be able to substitute for cars when travellers have multiple urban and rural destinations. For this reason, questions of transport sustainability are closely connected to regional planning; perhaps we need to push urban hubs, focusing people's daily destinations on developed areas. That way public transport could be made more genuinely convenient and less of the willing compromise it otherwise has to be for all but those most conveniently placed.

C: Alternatives needn't always be geographical – there are video conferencing/non-travel options available too.

Rail

C: As much as connections are important, rail is the main alternative to road travel in South Wales, as shown during the temporary closure of the M4. That is why electrification would make a big difference. New rolling stock would be necessary to manage much real expansion, and would be a big improvement too.

A: Welsh Government has made the case to central government for electrification of the mainline to Swansea and also the electrification of the Valley lines independently of the M4 CEM Programme. Public transport modelling suggests that investment in bus and rail improvements would produce a significant modal increase in the Newport area but only reduce traffic on the M4 by less than 3%.

New bus services

C: More bus transport options would make a big difference to local journey choices. Ideally they would be hop-on-hop-off, perhaps with an integrated charging system, even linked to trains. To make an impact though, they must be affordable. Bus transfers are expensive, and make car travel cheaper by comparison.

A: Clearly public transport can only be part of a package.

C: Is the affordability of using the bus or train really a question of perception? Advertising affordable fares, as First Great Western did with Swansea to Cardiff fares, can generate real demand growth – 10% in that particular case. On the other hand, the complexities of the fares and purchasing system are a downside.

C: Local government needs to push integration of transport services and promote a joined-up approach to planning, e.g. is it consistent to push free city centre parking while encouraging Park & Ride services?

Session 5: Highway Option A (a new high quality road to the south of Newport)

After a brief presentation and discussion of Highway Option A, tables discussed the option and there was a short plenary discussion of points raised.

Summary of table discussions as noted on worksheets

- Option A just moves the problem on to Llantrisant.
- It would improve the problem of driver behaviour and would give drivers a road built to current standards.
- It would have a significant environmental impact.
- This option touches on lots of the Goals put forward – including the table's priority, Goal 15 – giving strategic benefits. Some Goals, though, might only be achieved once option is complete – phasing and interim benefits are a significant concern and a factor in preferences. The controversy over any scheme crossing the Gwent Levels, would involve a significant Public Local Inquiry, which would have to consider all issues and this could last for a significant period of time, perhaps years.
- As well as a road in, Option A would be a road OUT of Wales. Without considering this, the appraisal scoring may be inaccurate. Also, comparative costing using the new eco-system services seems not to have been done.
- If built in stages, the partial benefits gained need to be considered. Goal 1 – *Safer, easier and more reliable travel East-West in South Wales* – would only be achieved when it was complete.
- If used strategically, it would help achieve Goal 3 – *More effective and integrated use of alternatives to the M4, including other parts of the transport network and other modes of transport for local and strategic journeys around Newport*. It would also help with Goal 12 – *An M4 attractive for strategic journeys that discourages local traffic use*.
- The Option A road would also improve resilience and capacity problems identified in earlier sessions.

Plenary feedback on Q4a

Phasing

Q: How could Option A be phased?

A: Phasing would be developed depending on demand and to improve affordability. The WG will investigate which phases should be developed first. For example the first phase could run from Junction 23a, along part of the improved Steelworks Access Road to

connect into a central section which would include a new crossing of the River Usk. An alternative could be to build a link-up from Junction 29 to the SDR first. These beginnings could be joined-in to existing network as demand requires.

Q: Have the different benefits of each stage been assessed in looking at phasing?

A: Each stage has distinctive benefits and all are part of the assessment.

Q: What improvements could be made to the Steelworks Access Road itself to serve as part of this option?

A: Work is currently underway on the second phase of upgrading the Steelworks Access Road. It is a private road currently, but it will be opened for public use once the upgrading has been completed. It could form part of the Option A road, though there are speed limit restrictions, etc., which must be considered.

C: The costs and benefits of Option A depend on phasing. If phased, road building also spreads benefits, may be better off building one new relief road at higher cost, or building tunnels for lesser but quicker impact. More information needed on phasing and benefits that way.

A: Benefits of Option A would be greater than the former M4 relief road, even though the relief road would have been delivered in one hit. Not only cost and phased benefits, but also the environmental impacts of Option A would be much less than for the relief road, because of the alignment in the Gwent levels. A range of beneficial measures that can be delivered in phases would be more financially manageable and would lend themselves to a more integrated approach led by the WG.

The road

Q: Would there be junctions on new road? What would be the speed limit? How many lanes would it have?

A: It would run from Junctions 23 to 29, and should be free flowing all the way. There may possibly be one or two junctions on the route, but the speed limit is intended to be 70mph. It would be a dual two-lane road.

C: Dual carriageways on this section of the M4 have been insufficient ever since the 1960s bridge road was built. The new roads built then have been under improvement since the 1970s. The result has been to leave little remaining trust in highways decision making. As soon as you build a road, you will attract traffic: it doesn't automatically solve problems or save money. Meanwhile, there will still be no cross-Newport road to deal with local traffic demand.

A: Traffic modelling shows that a new route – with 2 lanes each way and free-flowing – should be able to solve a lot of the M4 traffic problems, though it could be upgraded to three lanes if necessary in future. That possibility is included in proposal under consultation.

Growth

C: If we believe there is a linkage between road travel capacity in South Wales and economic capacity for growth, this new linkage should certainly be planned to permit for expansion.

C: On the other hand economic decline of South Wales has more to do with globalisation and South-East England dominance than transport; the primacy of transport case for growth has not been proven.

Q: Isn't a longer-term solution needed even than this? What about future growth – perhaps supported by more sustainable forms of road transport? Traffic flow maps show that local traffic and north-south traffic from the valleys and Gwent are major needs. Even Option A does not address this.

A: Data suggests new road would take-off around 50% of traffic from M4. It would not solve all problems, but it would make a major impact.

Session 6: Highway Option B: At grade junction improvements to the A48 Newport Southern Distributor Road (SDR)

After a brief presentation and discussion of Highway Option B, participants discussed the option at their tables, and this was followed by a short plenary discussion of points raised.

This session was followed by a break for lunch.

Summary of table discussions as noted on worksheets

- Option B may help locally in Newport, but it does little for many of the identified problems.
- At junctions, public transport needs to be given priority to achieve Goal 15 – *A cultural shift in travel behaviour towards more sustainable choices*. High-occupancy vehicle lanes might be an alternative.
- Option B is the least objectionable of the proposals on environmental grounds.
- It would give extra resilience on the network by dealing with some of the current problems on the SDR, but it is definitely not seen as a long term solution – rather, it is a possibility for relieving problems.
- Junctions are likely to be an intractable problem in making this Option effective.
- It may help locally in Newport, but it does little to address the major problems, particularly those most identified by one table which were sustainable development and safety related. Developed with sustainable approaches though (e.g. bus and

multi-occupancy vehicle priority) it could best achieve a cultural shift, as cited by Goal 15.

Plenary feedback on Q4b

Q: Could Option B be used as an interim solution, on the way to building extra tunnels for the M4?

A: Yes, that is technically possible. Neither could be just a temporary solution – they would be permanent – but they could be phased together.

C: Option B could also be considered combining with an alternative solution at Brynglas, such as making a cutting.

Q: Is the SDR a private or public road?

A: The SDR is a public road constructed and maintained by a private company. Any changes to it will need to be agreed with the private company.

Session 7: Highway Option C: Grade separated junction improvements to the A48 SDR

After a brief presentation and discussion of Highway Option C, participants discussed the option at their tables, and this was followed by a short plenary discussion of points raised.

Summary of table discussions as noted on worksheets

- Option C would help to achieve Goal 1 – *Safer, easier and more reliable travel East-West in South Wales* – although not as well as Option A would.
- It would not do anything to achieve Goal 12 – *An M4 attractive for strategic journeys that discourages local traffic use*.
- Option C is at best a partial solution, serving essentially as a diversion route for traffic – which already happens when there are problems on the M4 – and doing little to address the traffic problems at Junction 28.
- By making the current SDR route more free-flowing, Option C may just attract more traffic to that road.
- As with Option B, to be effective for sustainable development goals, Option C would need to include some measures for giving public transport and cyclists priority.

- Option B is felt to be a better version of C, doing a reasonably similar job, but for substantially less. Option C, in this sense, as a 'Making Better Use' solution, is not really doing 'more for less', but more for substantially more.
- Meanwhile, combining Options B and D would have the added benefit of bringing real improvements to the existing M4 and the SDR, and provide an alternative route during work on the M4 (Option D).

Plenary feedback on Q4c

Q: How much would local use of the road change through Option C? What would happen to the junctions?

A: About 50% of the currently open junctions on the SDR would be closed under this option and there would be a need for changes to the local highway network to accommodate this.

Session 8: Highway Option D: Online Widening to dual 4 of the M4 between Junctions 24 and 29, including an additional tunnel at Brynglas

After a brief presentation and discussion of Highway Option D, participants discussed the option at their tables, and this was followed by a short plenary discussion of points raised.

Summary of table discussions as noted on worksheets

- Option D would address two of the safety problems selected by one of the tables: Problem 13 – *The existing M4 is an inadequate standard compared to modern design standards*; Problem 14 – *Some people's driving behaviour leads to increased accidents (e.g. speeding, lane hogging, unlicensed drivers)*.
- Option D would work towards Goal 1 – *Safer, easier and more reliable travel East-West in South Wales*; and for Goal 12 – *An M4 attractive for strategic journeys that discourages local traffic use*; if it were combined with junction closures. It would do nothing, however, for Goal 3 – *More effective and integrated use of alternatives to the M4, including other parts of the transport network and other modes of transport for local and strategic journeys around Newport*.
- Option D would address the perceived problem of the bottlenecks at Brynglas, and would be phased to address the worst of the problems first.
- It would unavoidably cause significant disruption: the tunnels would be constructed off-line, but the road widening and tying-in process would cause the most disruption.

- It would not be so environmentally difficult as Option A.
- It would likely be more disruptive than Option A, but probably less disruptive than Options B and C.
- Could a cutting be made at Brynglas instead? It would be safer, though a much higher-impact engineering operation. But there will be a great deal of disruption to the local area anyway.
- If the tunnels or some other part of the M4 infrastructure failed, what is the alternative? This would not help with resilience. A new route, combined with real efforts to encourage a cultural shift to address sustainable development concerns, would seem to tackle more problems and achieve more goals.

Plenary feedback on Q4d

C: What is really needed is a culture shift away from fossil fuels. The existing Brynglas tunnels were thought to be sufficient for future needs at the time, but projections are often inadequate.

A: The Option D proposals are all physically possible and include upgrades that are much needed anyway, including slip road improvements and straightening-out bends. But even Option D would still not bring the M4 completely up to modern standards – there would be no hard shoulders in the tunnels for instance.

Q: What would the speed limit be in the new tunnels?

A: The standard speed limit through the tunnels would be 70mph.

Session 9: Discussion and feedback on Q5

The facilitator invited participants to consider their answers to Q5: “Have you any additional comments to make regarding how to address the travel related problems occurring in the M4 Corridor, Magor to Castleton?”. Responses to Q5 were then considered in plenary.

Key messages noted on group worksheets

- A combination of measures is needed including junction closures to reduce local traffic on the M4. Should this be full time, or just during the peak period?
- Ramp metering should be added to junctions.
- Should Option B be included as a short-term relief measure? Or as a diversion while Options A or D are being constructed.

- Extend the variable speed limit to Junction 29 to overcome any congestion problems between Junctions 28 and 29.
- We need integrated travel and joined-up thinking with Newport City Council, e.g. improve local bus services, park & ride etc. and increase car park charges in Newport as a disincentive to drivers.
- If behaviour is to change, a carrot and stick approach will be needed.
- Another important road improvement measure for the area is a link road from the B4245 road to the M48 to the east of Magor, which the community there has been pushing for.
- Ecological impacts should be quantitatively measured as far as possible.

Plenary feedback on Q5

Wider M4 challenges

Q: What about wider M4 problems, such as at Junctions 23 and 24, and at Llantrisant, Coryton, and Port Talbot? What about some park and ride solutions to the west of Cardiff, to pre-empt demand at Newport. For equivalent financial outlay, other major improvements could be made, falling outside the scope of M4 CEM.

A: Prioritising Magor to Castleton may be a matter of not trying to over-extend political will. There are other public transport measures underway too.

Growth and culture shift

C: Refusing to ever-increase road capacity could be what is needed to encourage the cultural shift we want. Business campaigns for road access, of course, because they do not initially want to champion new models. Business drives the roads, not the roads driving business in Wales.

A: Wales would be placed at a strategic disadvantage if we pursued an approach like this

C: We have fewer 'motorways per head' than England. Compare the M11 as Cambridge's semi-private road, to the winding A-roads to Aberystwyth. Areas of Wales with good road connections are often successful.

C: The M4's construction in fact coincided with South Wales's industrial decline. It was not the cause, of course, but it alone could not compensate for other failures and outside trends.

Session 10: Closing session

The facilitator confirmed next steps in the consultation and how the proceedings today would be taken forward.

Martin Bates expressed his thanks and appreciation to all participants, and the workshop ended at 3.00pm

List of Participants

Eight participants took part in the day's deliberations.

They were members of the public and representatives of organisations.

A14 Common comment topics

Common comments by theme

A large number of comments have been made by respondents to each of the M4 CEM Consultation questions. The tables below show the number of comments attached to common themes, where ten or more comments have been made about a particular topic.

Key	
P	Problems
G	Goals
PT	Public Transport Measures
OA	Highway Infrastructure Option A
OB	Highway Infrastructure Option B
OC	Highway Infrastructure Option C
OD	Highway Infrastructure Option D
RA	Road alternatives
GA	General Alternatives
EC	Existing situation comments
R	References
L	Locations
E	Environment
SE	Social and Economic
O	Other

Problems	
Subject (Code)	Number of comments
EC - CAPACITY - congestion	71
R - refer to own travel habits/experience	43
EC - RESILIENCE - impact of accidents	39
E - air pollution concern	38
L - NEWPORT	33
E - noise concern	30
RA - new/alternative routes needed	28
RA - suggest - alternative road/route approaches	25
EC - M4 design/standards poor	24
EC - CAPACITY - peak time travel	23
OA - option - support	23
EC - CAPACITY - strain from local traffic major problem	22
EC - RESILIENCE - Newport City road infrastructure inadequate	22
EC - RESILIENCE - past maintenance/improvement work	22
EC - RESILIENCE - few/difficult alternative routes	21
L - NEWPORT - Brynglas Tunnels	21
L - J28 (Tredegar Park)	19
EC - CAPACITY - HGV/large vehicle behaviour/impact	18
EC - SAFETY - accident/incident management (and Brunson protocol, etc)	17
EC - traffic speed - observations	17
EC - SUST DEV - constraint to whole of South Wales	16
O - consultation - criticism	16

R - refer to other transport infrastructure/projects/experience	16
EC - CAPACITY - pinch-points/bottle-necks	15
EC - driver behaviour	15
EC - RESILIENCE - M4 closure impact on whole South Wales travel	15
EC - variable speed limits - ineffective	15
EC - variable speed limits - observations	15
SE - impact on economy/growth	15
EC - CAPACITY - driver behaviour - causes congestion	14
EC - SAFETY - congestion causes accidents	14
L - M4 - specific stretch	14
O - M4 CEM report/figures challenge	14
OD - Brynglas tunnelling - opposed	14
SE - disruptions to local residents	14
EC - CAPACITY - SDR - inadequate as bypass	13
EC - RESILIENCE - M4 problems/closure impact on area congestion	13
O - consultation - general comments	13
EC - CAPACITY - increasing/road widening worsens congestion	12
EC - CAPACITY - M4 junctions - too many around Newport	12
EC - CAPACITY - surrounding roads	12
GA - encourage modal shift	12
L - NEWPORT - Malpas Road	12
PT - BUS - Park & Ride connections	12
PT - public transport is priority	12
RA - suggest - specific M4 junction/feeder road improvements	12
SE - cost or value concerns	12
L - J27 (High Cross)	11
P - CAPACITY - comment	11
L - J24 (The Coldra)	10
L - J25 (Caerleon)	10
OA - other comments	10
OD - option - challenge	10
PT - as alternative to cars	10
R - refer to WG/ministers	10
SE - negative impact/constraint on business	10

Goals	
Subject (Code)	Number of comments
EC - CAPACITY - congestion	24
OA - option - support	21
E - noise concern	20
E - air pollution concern	19
OA - option - support variation	18
G - suggest alternative goal	17
P - CAPACITY - priority	17
L - NEWPORT	15
EC - RESILIENCE - Newport City road infrastructure inadequate	14
R - refer to WG/ministers	13
G - act quickly	12
G - minimal impact on people/communities	12

P - SUSTDEV - priority	12
G - support Goals with caveat	11
P - RESILIENCE - priority	11
G - long-term solution needed	10
G - options will not achieve goals	10
G - SUSTDEV - social/environmental/economic objectives priority	10
L - NEWPORT - Brynglas Tunnels	10
R - refer to other transport infrastructure/projects/experience	10

Public Transport Measures	
Subject (Code)	Number of comments
PT - MEASURES - will not help	106
PT - MEASURES - will help	60
PT - as alternative to cars	45
PT - commuter uses/needs	43
PT - BUS - Park & Ride connections	42
PT - make cheaper/easier	42
PT - price concern	40
R - refer to own travel habits/experience	39
PT - MEASURES - will help somewhat	38
PT - service frequency improvements needed	37
PT - not convenient/practical	36
PT - RAIL - relieves road congestion	35
PT - RAIL - more suburban stations	30
PT - specific proposal	30
PT - RAIL - parking	29
PT - journey times too slow	27
PT - MEASURES - will help with caveat	27
PT - modal shift will not happen	25
PT - RAIL - Park & Ride connections	24
EC - CAPACITY - congestion	23
PT - not an option	23
PT - integrated transport - road/rail	22
PT - public transport is priority	22
L - Magor	19
PT - BUS - services inadequate	19
PT - public travel habits/needs	18
PT - promote as alternative	17
PT - make accessible	16
L - CARDIFF	14
PT - BUS - cross-Newport services	14
PT - more useful services needed	14
PT - RAIL - less convenient/reaching stations	14
PT - RAIL - price concern	14
PT - RAIL - enhance/extend the Ebbw Vale Line	12
PT - RAIL - make cheaper/easier	12
R - refer to other question comments	12
PT - BUS - rail-integrated service needed	11
PT - needs to be convenient/practical/comfortable	11

PT - needs to be good quality	11
PT - unreliable	11
PT - will reduce noise/pollution	11
L - Cwmbran	10
O - M4 CEM report/figures challenge	10
PT - BUS - good service at present	10
PT - needs to be reliable	10
PT - RAIL - extensions/connections to Bristol	10
PT - serve more routes and destinations	10
R - refer to other transport infrastructure/projects/experience	10

Highway Infrastructure Option A	
Subject (Code)	Number of comments
OA - option - preferred option	75
OA - journey impacts - will help through-traffic	73
OA - option - support	56
OA - problems - would solve	56
OA - RESILIENCE - alternative if M4 closed/disrupted	52
OA - construction impacts - minimal	50
OA - cost - expense concern	49
OA - journey impacts - will reduce traffic/congestion	48
OA - SUST DEV - will reduce noise/pollution	47
OA - RESILIENCE - reduce M4 reliance	45
OA - long-term solution	39
OA - journey impacts - will help/tackle local traffic	37
OA - CAPACITY - benefit	34
L - Gwent Levels	28
E - impact biodiversity/wildlife	27
OA - environment - concerns	27
E - impact on SSSIs	26
OA - goals - would NOT achieve	26
OA - journey impacts - will reduce journey times	26
OA - problems - would NOT solve	25
OA - goals - would achieve	24
OA - option - challenge	23
OA - SAFETY - benefit	23
OA - option - oppose	22
OA - junctions are crucial consideration	20
OA - RESILIENCE - benefit	20
OA - construction impacts - minimal on residents/businesses	19
OA - cost - worthwhile	19
OA - journey impacts - will NOT help/tackle local traffic on M4	19
OA - option - support variation	17
RA - suggest - alternative road/route approaches	16
OA - CAPACITY - will relieve Brynglas Tunnels congestion	15
OA - construction impacts - concern impact/invasiveness	15
OA - cost - concern	14
OA - CAPACITY - more roads will mean more traffic	13
OA - journey impacts - will NOT reduce traffic/congestion	13

OA - route is crucial consideration	13
OA - environment - impact reasonable	12
OA - SUST DEV - will support economic growth/jobs/regeneration	12
OA - variation - should be no/few junctions	12
R - refer to other transport infrastructure/projects/experience	12
R - refer to own travel habits/experience	11
E - impact landscape/cityscape	10
OA - option - support consideration	10
OA - RESILIENCE - real alternative route	10
PT - public transport is priority	10

Highway Infrastructure Option B	
Subject (Code)	Number of comments
OB - option - challenge	88
OB - not a significant change	77
OB - option - support consideration	77
OB - GOALS - does not/will not achieve goals	56
OB - SDR - inadequate/needs improvement	56
OB - route - will be underused/will not divert traffic from M4	48
OB - CAPACITY - does not address M4 priority	42
OB - cheap fix/short-term/too little	40
OB - variation - roundabouts	38
EC - CAPACITY - congestion	37
OB - journey impacts - will not help local/Newport city transport network	37
OB - variation - layout	37
OB - cost - inexpensive/cost-effective	33
OB - problems - will not address	29
L - NEWPORT	28
OB - CAPACITY - will increase traffic/SDR already too busy	28
OB - journey impacts - will not help/tackle through-traffic	27
OB - RESILIENCE - inadequate to relieve M4	26
OB - route - traffic management/lights/layout poor	25
OB - construction impacts - negative	23
OB - variation - traffic lights	22
OB - CAPACITY - more SDR traffic negative	21
OB - journey impacts - will not improve SDR traffic flow	21
OB - RESILIENCE - will relieve M4	21
E - air pollution concern	20
EC - CAPACITY - peak time travel	20
OB - option - prefer A	20
OB - option - support in conjunction with other measures/options	18
EC - RESILIENCE - impact of accidents	16
EC - RESILIENCE - M4 closure impact on whole South Wales travel	16
L - J28 (Tredegar Park)	16
OB - route - specific suggestion	16
OB - route - too indirect/slow	16
R - refer to other question comments	16
EC - CAPACITY - HGV/large vehicle behaviour/impact	15
OB - cost - expensive/poor value/low cost-benefit ratio	15

OB - journey impacts - only local benefit	15
P - SAFETY - comment	15
E - noise concern	14
EC - RESILIENCE - few/difficult alternative routes	14
OB - CAPACITY - will not improve	14
OB - construction impacts - minimal	14
EC - CAPACITY - strain from local traffic major problem	13
R - refer to other transport infrastructure/projects/experience	13
R - refer to own travel habits/experience	12
EC - CAPACITY - pinch-points/bottle-necks	11
L - NEWPORT - Brynglas Tunnels	11
OB - option - prefer C - with caveat	11
EC - RESILIENCE - Newport City road infrastructure inadequate	10
L - NEWPORT - Tredegar Park	10
OB - SDR - not a bypass or motorway	10
P - SUSTDEV - comment	10

Highway Infrastructure Option C	
Subject (Code)	Number of comments
R - refer to other question comments	64
OC - GOALS/PROBLEMS - will NOT address	55
OC - option - preferable to B	52
OC - option - views same as for Option B	52
OC - option - challenge	50
OC - journey impacts - TRAFFIC FLOW - will improve	48
OC - option - support consideration	35
OC - RESILIENCE - will relieve M4	32
OC - not a significant change	30
OC - cost - expensive/poor cost-benefit ratio	29
OC - route - traffic management/lights/layout poor	28
OC - construction impacts - disruption to people and property	25
L - NEWPORT	23
OC - route - underused/will not divert traffic from M4	23
L - J28 (Tredegar Park)	22
EC - CAPACITY - congestion	21
OC - option - support in conjunction with other measures	21
OC - route - specific suggestion	19
OC - CAPACITY - benefit	18
OC - CAPACITY - does not address M4 priority	18
OC - cheap fix/short-term/too little	18
OC - construction impacts - disruption	17
OC - RESILIENCE - will reduce reliance on M4	17
OC - journey impacts - TRAFFIC FLOW - will NOT improve	16
OC - option - support with caveat	16
OC - SUST DEV - will reduce noise/pollution	15
OC - CAPACITY - will increase traffic/SDR already too busy	14
OC - journey impacts - only local benefit	13
OC - option - prefer A	13
EC - RESILIENCE - few/difficult alternative routes	12

G - long-term solution needed	12
OC - journey impacts - will NOT help/tackle local traffic	12
L - J24 (The Coldra)	11
OC - GOALS/PROBLEMS - will address	11
OC - RESILIENCE - inadequate	11
OC - option - support	10

Highway Infrastructure Option D	
Subject (Code)	Number of comments
OD - construction impacts - disruption	101
OD - option - challenge	92
OD - construction impacts - local resident/business disruption	74
OD - cost - expensive/too much	72
OD - construction impacts - demolition/compulsory purchase/land take	61
OD - journey impacts - will reduce congestion/increase capacity	48
OD - RESILIENCE - no alternative if M4 closed	48
OD - local roads/traffic - no improvement/negative impact	46
OD - construction impacts - concern	43
OD - goals - would not achieve	42
E - air pollution concern	39
E - noise concern	39
OD - option - support	36
OD - option - support with caveat/qualification	31
OD - Brynglas tunnelling - ground unsuitable	30
OD - RESILIENCE - not long term solution	26
OD - not a true solution/need alternative route	23
OD - goals - would achieve	21
OD - Brynglas tunnelling - local community disruption	20
OD - Brynglas Tunnels - need widening	20
OD - construction impacts - damage to economy	20
OD - journey impacts - will worsen problems/congestion	20
OD - junction changes - challenge	20
OD - goals - would achieve some goals/not all	18
OD - option - prefer A	18
L - J26 (Malpas)	16
OD - concern project feasibility/timescale	15
OD - journey impacts - will not reduce congestion/will not increase capacity	15
OD - other measures needed alongside	15
OD - widening - challenge	15
OD - Brynglas tunnelling - opposed	14
L - J25 (Caerleon)	13
L - NEWPORT - Brynglas Tunnels	12
OD - Brynglas tunnelling - structural damage	12
OD - option - second preference	12
OD - problems - would solve	12
OD - journey impacts - will help through-traffic	11
OD - RESILIENCE - will improve/long term solution	11
E - general concern	10
OD - Brynglas tunnelling - ineffective	10
OD - Brynglas Tunnels - other suggestions	10

OD - problems - would not solve	10

Additional Comments*	
Subject (Code)	Number of comments
R - refer to WG/ministers	122
O - consultation - criticism	95
O - M4 CEM report/figures challenge	94
E - air pollution concern	91
OA - option - challenge	81
E - impact biodiversity/wildlife	76
E - climate change/emissions concern	75
E - impact landscape/cityscape	75
L - Gwent Levels	73
SE - quality of life	72
E - impact on SSSIs	71
R - refer to other research/publications	69
OA - CAPACITY - more roads will mean more traffic	68
L - Severn Estuary	64
E - impact on waterways	63
E - impact heritage sites	62
O - decision making process not clear enough	60
SE - demand for roads will fall/will not rise	60
OD - option - challenge	59
SE - impact on recreation/tourism	59
OA - option - support consideration	57
R - Habitats Directive	56
SE - fuel/oil cost	56
OA - SUST DEV - negative	54
EC - variable speed limits - observations	53
GA - other strategy/approach	53
E - impact on rivers/canals/flood plain, etc.	50
E - ecological impact	47
EC - M4 improved recently	47
L - NEWPORT	43
R - refer to own travel habits/experience	42
EC - CAPACITY - congestion	41
R - refer to specific legislation / policy	41
G - long-term solution needed	39
R - other stakeholders/public opinion	38
E - noise concern	37
O - Editor's note	36
SE - cost or value concerns	36
GA - encourage modal shift	35
OA - environment - concerns	34
R - refer to other transport infrastructure/projects/experience	34
OA - option - support	30
EC - SUST DEV - M4 priority as main national artery/England access	29
L - NEWPORT - Brynglas Tunnels	28
OD - construction impacts - local resident/business disruption	27

O - consultation - general comments	26
O - more information needed	26
P - SUSTDEV - priority	25
L - M4 - specific stretch	24
OD - construction impacts - impact on local properties/demolitions	24
R - Other countries/regions - comparison	24
RA - traffic management	23
SE - community impact concern	23
EC - CAPACITY - peak time travel	22
EC - CAPACITY - strain from local traffic major problem	22
P - SUSTDEV - comment	22
EC - CAPACITY - HGV/large vehicle behaviour/impact	21
EC - RESILIENCE - few/difficult alternative routes	21
EC - RESILIENCE - M4 closure impact on whole South Wales travel	21
EC - SUST DEV - existing motorway unsustainable	21
RA - suggest - alternative road/route approaches	21
OA - construction impacts - minimal	20
OA - environment - impact on protected area	20
OB - option - challenge	20
OC - option - support consideration	20
RA - suggest - specific	20
SE - disruptions to local residents	20
EC - SUST DEV - constraint to whole of South Wales	19
G - integrated approach needed to problems	19
OA - cost - expense concern	19
OD - construction impacts - concern	19
R - refer to other question comments	19
E - new roads will damage environment	18
SE - impact on public health	18
G - act quickly	17
OC - option - challenge	17
SE - impact on home values	17
EC - RESILIENCE - past maintenance/improvement work	16
O - M4 CEM general opposition	16
OA - CAPACITY - benefit	16
OA - long-term solution	16
SE - spending on infrastructure stimulates the economy	16
L - J26 (Malpas)	15
O - consultation - request to be consulted on next stages	15
OD - cost - expensive/too much	15
EC - RESILIENCE - impact of accidents	14
OD - journey impacts - will worsen problems/congestion	14
OD - option - support consideration	14
P - SAFETY - comment	14
R - refer to UK Govt/ministers	14
RA - suggest - encourage use of SDR	14
RA - suggest - speed limits	14
E - general concern	13
EC - driver behaviour	13
EC - SUST DEV - road conditions threaten Wales's future	13

OA - other comments	13
PT - public transport is priority	13
PT - RAIL - take freight off roads	13
E - designated area - other	12
EC - M4 design/standards poor	12
EC - variable speed limits - effective	12
G - SUSTDEV - social/environmental/economic objectives priority	12
R - Brynglas Tunnel fire	12
RA - suggest - M4 HGV restrictions	12
SE - impact on economy/growth	12
L - J28 (Tredegar Park)	11
OA - option - support variation	11
OA - RESILIENCE - alternative if M4 closed/disrupted	11
OD - environment - effects	11
P - CAPACITY - comment	11
P - CAPACITY - priority	11
PT - promote as alternative	11
R - Local planning policy	11
RA - suggest - specific M4 junction/feeder road improvements	11
SE - demand for roads will grow	11
EC - CAPACITY - pinch-points/bottle-necks	10
EC - driver behaviour - lane changes	10
EC - RESILIENCE - Newport City road infrastructure inadequate	10
EC - variable speed limits - ineffective	10
L - J25 (Caerleon)	10
L - Magor	10
OA - environment - impact reasonable	10
OA - option - preferred option	10
OA - SUST DEV - will support economic growth/jobs/regeneration	10
OB - option - support consideration	10
P - RESILIENCE - comment	10
PT - RAIL - electrification	10
PT - RAIL - more suburban stations	10
PT - RAIL - relieves road congestion	10
R - previous plans	10
RA - discourage single-occupancy/encourage car-sharing	10
SE - demolition implications	10
SE - equity/fairness in decision	10

* For data processing purposes, where respondents submitted a response that did not correspond to the structure of the consultation questions, or included a further response or an attachment alongside their answers to the questions, this was processed with Question 5 as Additional Comments. This includes proforma responses that were received from campaign groups.

A15 Strategic Stakeholder Workshop Transcript

M4 Corridor Enhancement Measures
Engagement Team

**M4 (Magor to Castleton) -
Corridor Enhancement Measures**

Strategic Stakeholder Workshop
Transcript Report

11-

Draft 1 | April 2011



Llywodraeth Cymru
Welsh Government



ARUP

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1 Introduction

In early 2011 the Welsh Assembly Government hosted a workshop for Strategic Stakeholders in the area of the Magor to Castleton transport corridor, as part of the M4 Corridor Enhancement Measures Engagement Programme. The workshop was one of several events and more information about them can be found at <http://wales.gov.uk/topics/transport/roads/schemes/ewsouth/m4mctcip/?lang=en>.

This document is a transcript of the worksheets and flipcharts produced at the workshop and the text has not been changed, other than simple editing where something was unclear. A summary report of the workshop can also be found on the above website.

1.1 Transport Problems

1.1.1 Comments on current Welsh Assembly Government list of problems

Participants were asked to review the Welsh Assembly Government's current analysis of the main transport problems on this transport corridor, indicate whether they agreed with the problem and add comments or amendments. The worksheets they used are transcribed below.

Text highlighted in yellow refers to undecipherable text received on completed worksheets.

Problem 1. Difficulties maintaining adequate traffic flows on the M4 at the times of temporary disruption (for example, following accidents, problems caused by severe weather, or during major events)	
✓	Agree - major problem Linked with no 9 and 14 ** Need to emphasise the criticalness of the infrastructure – when it goes wrong, there is no alternative 2 main issues Major events – heavy traffic flow in a short period of time Accidents – the unexpected → lack of information is a problem. Also motorway information signs can be misleading and people don't always trust them Not just users of M4 Need to consider other people affected by this problem Adding to known congestion periods with a sporting event should be avoided, etc Brynglas tunnels affecting flow 3-2-3 (J24 and Brynglas) Lack of adequate diversion routes Lack of adequate alternatives to car
✗	

Problem 2. A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times

✓	Statement – what is problem? Regular congestion? There is congestion in whole of Newport at peak times
	The M4 however will be able to cope with a certain level of traffic
	J28 a particular problem – heavy traffic enters from a number of directions
	The M4 at Newport was not built as a motorway and not designed to cope with increased traffic from new business developments
	An accepted fact
	Link to point 11 → it limits the flow of goods/skills/investment etc. tunnels are biggest risk → the closure would have significant economic impact
✗	Economic factors may reduce car use
	Improvements to public transport links

Problem 3. Traffic levels are forecast to continue to increase, therefore problems 1 and 2 will worsen over time

✓	It mustn't accept that the traffic levels will increase, and therefore restriction potential solutions
	Need to have more reliable forecasts
✗	There is existing data showing flows dropping. Are the forecasts still right?
?	Need clarification, what is evidence to suggest further growth.
	Conflicting pressures
	fuel prices ↓
	recession ↓
	removal of bridge tolls (?) ↑
	increased development ↑
	flexible working ↓ (reduces peak hour congestion)

Problem 4. The existing transport network acts as a constraint to economic growth (for example, as freight companies see increasing delays in deliveries, they may decide not to invest in South Wales)

✓	Not just network by tolls, perception of congestion
	But again perhaps too narrow a focus on the other bits of the transport network (public, sea, air)
	Correction: it's not the freight companies who invest but their customers
	Good roads don't guarantee investment but are a prerequisite
	Should refer to all companies
	Links to point 1 → esp. lack of adequate alternatives for road user
✗	Disagree – don't believe M4 acts as a constraint to economic growth greater aspects, economy connectivity to markets, labour costs which will be bigger constraints to economic growth
	Perceived issue not matched by reality

Problem 5. The M4 requires essential major maintenance within the next 5-10 years; this will involve prolonged lane and speed restrictions, thus increasing congestion problems

✓	Reword this to highlight the actual problem
	Need to consider alternatives. Think bigger and further afield. Lack of full width and continuous hard shoulder.
	Would add that other major infrastructure programmes should be planned together
	Multi agency cooperation
✗	All roads require maintenance

Problem 6. HGVs cope badly with congestion as they take longer to get going again once they've stopped, thus adding to the congestion.

✓	The geography of any motorway network in Wales, will lead to HGVs taking longer than normal to transverse
	Reword this to highlight the actual problem, not the symptom
	Lorries using multiple lanes and disrupting traffic flow
	Old 1 lane 1 had disappeared
✗	HGVs do not behave any differently to other vehicles.
	Sweeping statements – depends also on load
	Disagree – not a major problem
	All vehicles cope badly with congestion
	A fact: limited effect on congestion unless significant uphill gradient
	Overtaking HGVs showing poor driver behaviour

Problem 7. The congested, slow moving traffic on the motorway around Newport adds to air pollution problems

✓	All congestion adds to air pollution *
	Seem to be same issue (as 8 see below) – these don't appear to be true but we don't know the extent of the problem
	Should also include side road/feeder roads
	A fact
	It's the stop-start and volume (not slowness)
✗	

Problem 8. Stop-start traffic movement on the M4 results in greater greenhouse gas emissions that free-flowing traffic

✓	Problem – difficult to keep free flow – which is also the actual problem in many of Welsh Assembly Government statements
	* As above – see no 7
	as no 7 – two problems could be combined
	Seem to be same issue (as 4 see above) – these don't appear to be true but we don't know the extent of the problem
	OK
	A fact
✗	

Problem 9. The road and rail transport system in and around the M4 corridor is at increasing risk of disruption due to extreme weather events (for example, flooding)

✓	Agree – with reservations – no con???ing
	Agree, though curious as to why reference to road and rail here, but not in other locations
	Bad example
	As volume of user (road/rail) raises, along with extreme weather events combination is greater
✗	Not aware of any evidence around this section of the M4
	Not prone to flooding
	As flooding waters would empty into river Usk

Problem 10. Traffic noise from the motorway is a problem for local residents

✓	Could make it worse
	A fact – altered by stop-start or continuous traffic
✗	Not a major issue and not made any worse
	Good provision of noise barriers along M4
	Linked back to 3
?	Don't live locally to motorway but believe it is – probably more in certain areas

Problem 11. Welsh Assembly Government's aim for an improved gateway into Wales is not currently met by the M4 corridor

✓	South Wales only!
	Agree - This is key question
	Reword
	A fact – need to consider <u>all</u> options for transport. Wales is <u>not</u> just the M4 corridor! Does M4 just go to Cardiff – but is this an issue?
✗	Not a consistent 3 lane provision
	Is Welsh Assembly Government commitment to 3 lanes throughout
	Wales begins at Monmouthshire (from the east) and gateways into Wales, come from England, at locations away from M4
	It suggests that Wales begins after the M4 corridor Would suggest a change to wording 'aim for an improved gateway to Cardiff'
?	What is Welsh Assembly Government's aim?
	What is meant by improved?
	Gateway for what? Haulage, tourists, Irish movement (Ireland ↔ Wales/England), special events e.g. rugby
	Gateway is not just road but also the setting

Problem 12. The existing transport system limits what local Councils can do to develop their areas	
✓	Link roads to the M4 need to be improved
	Forge lane congestion into J28 is a limiter to development
	The limitations of the M4 however do provide an opportunity for some local councils to take an advantage (e.g. Monmouthshire) as the gateway councils
	Should also refer to businesses etc
	A fact – consider sustainable transport. Needs expansion to clarify what 12 means on “limit”/“constraint” on local councils
✗	
?	Is the problem ‘business will not come because the M4 is always blocked’? Is the problem the geography defining where transport system is?
	Clarification on what is meant by scope of “transport system” Limits of rail system/public transport

Problem 13. The current accident rates on the M4 between Magor and Castleton are high than average for UK motorways	
✓	But the 50mph speed limit has significantly reduced the accident problem
	Dropping rapidly as a result of the 50mph average speed limit. Is the collision rate <u>still</u> higher than national average?
✗	They were but no current statistics available – improvements since 50mph
	Evidence of 80% decrease in RTCs since 50mph/AV speed cams Evidence from M25 scheme that PIA will drop from high level
?	Statement not necessarily a problem What is the problem to be addressed? Fewer deaths? Freer traffic flow? Less accidents?

Problem 14. The current problems on the M4 between Magor and Castleton at times have a significant knock-on effect, severely disrupting travel within South Wales	
✓	During full closures problems affect all E-W routes including SDR, A472, A465 so need to be included in solution
	* Linked with questions 1, 9 and 14
	Agree – the scheme needs to pay equal attention to this and not just concern itself with traffic entering South Wales along the M4
	Problem would occur anywhere along the M4 – not necessarily limited to the Magor to Castleton stretch
	Link to 1, 2 and 3 None of the alternatives can cope bad diversions
✗	

1.2 Other comments on worksheets

Other worksheet notes recorded by participants stated:

- Many of these listed problems are statements, so nothing that is done on the M4 will change that – as evidenced in problem 6. My personal view is that the problems are too M4 –solution specific.
- Water pollution/run off can go directly into Usk; issue with congestion to remove the containment.
- Conflict of local vs. long distance traffic. What is the road being used for. Consider its use and split up the traffic uses.
- Consider travel behaviour – personal travel planning etc. The sustainable options (soft options). Integration – joined up thinking is needed.

1.3 New problems

Participants were asked to consider whether there were any other important transport problems in the corridor and write them down on strips of flip chart paper. The strips were put up at the front of the room and in some cases the facilitator asked for clarification. The notes of clarification are in the right hand column. The problems were put into rough categories with the assistance of the participants and shown together. This explains why the numbering below appears to be sporadic.

Problem	Flip chart notes and clarifications on strips from plenary discussion
29. Information signs are not always kept up to date following an incident. People don't tend to trust them and so ignore them.	<i>Inappropriate and ineffective use of messaging systems causes problems of itself e.g. delay in removing outdated information.</i>
28. The carriageway is not consistently 3 lane throughout the section.	<i>So it is hard for HGVs to change lanes and if there is an incident the road has to be closed for longer. Lack of hard shoulder makes it harder to deal with incidents and also means that maintenance and upgrading cause more problems.</i>
27. Water pollution, caused by (a series of) one off incidents affects the River Usk, SSSI, SAC as runoff from the road. Fire Brigade / EA then have to remove pollutants, thus causing more congestion.	<i>Sorting it out can take a while over a wide time period especially if it occurs out of office hours, as people may not be available to deal with it immediately, thus causing further delay. However, this problem is not specific to this section of M4.</i>
32. HGVs – distribution goods [make] unnecessary journeys	<i>Need localised distribution and production to reduce number of HGVs.</i>
17. Llanwern Road will make bottleneck at end of SDR much worse (J28 / Ebbw Bridge roundabout)	
16. Changes to the sequencing of the traffic lights at the J28 roundabout have caused huge congestion for traffic leaving Newport. Also it's a big safety problem and only a matter of time before a serious accident happens.	<i>This was done to improve things, but has caused big knock-on negative effects.</i>
15. Mix of local traffic with through traffic on M4.	
31. Are the M4 tolls the constraint to economy rather than congestion and the quality of the M4?	<i>And may proposed changes make this worse ?</i>
30. Poor journey time reliability	
26. Need to integrate other Assembly policy areas in arriving at solutions.	<i>Silo thinking. Seems to be no connection between Welsh Assembly Government integrated transport policy and considering the corridor as a road issue. There is a disconnect between integrated transport policy and major projects.</i>
25. No consideration of sustainable options – rail, tram, personal travel plans, 'soft options'	<i>Welsh Assembly Government should look into promoting personal and organisational travel plans. Requires leadership from Welsh Assembly Government.</i>
24. Lack of public transport provision for new developments (business, private housing) or out of town.	<i>e.g. setting up new business park without public transport access.</i>

23. <u>Integrated</u> transport (multi modal, P&R, P&S, types of user are freight, public, private) and information	
22. Non integration of transport systems, cycling being an example.	
21. This study refers to the M4 (as a road). It should examine the S. Wales corridor as a whole – to reflect Welsh Assembly Government policy there is a need to integrate rail and road schemes. Problem is the scheme ignores the context of the Severn Bridge –J34.	
20. Put more thought to trams and trains.	
19. The car culture. Travel choices. Implications of peak oil on prices / demand / use.	<i>We have to move away from the car culture.</i>
33. Risk of Crindau Tunnel closure!! No alternative is a major risk to Wales economy.	
18. Too many junctions on M4	<i>Around Newport</i>
34. The local geography constrains the options for new routes for road and rail.	
35. If the M4 is shut there is an economic cost to businesses.	
36. There are a great many cars on the road and people who want to move around.	

1.4 Plenary discussion on Problems

One further comment was made in the general discussion:

- Journey times being slower e.g. at peak is not the same as unreliable journey times.

2 Transport Goals

2.1 Comments on current Welsh Assembly Government transport goals

Participants were asked to review the Welsh Assembly Government's current analysis of the main transport goals on this transport corridor, indicate whether they agreed with the problem and add comments or amendments. The worksheets they used are transcribed below.

Goal 1. Make it easier and quicker to travel East-West in South Wales	
✓	Safer should be included; quicker should be reliable For those who need to, along the M4 corridor Do we need to refer to quicker and instead to And radial area as it affects other roads west-east and valleys Local transport better access to economic centres If at capacity unachievable to have a quicker journey * Easier, quicker and more sustainable Are these going to be SMART (key ones) goals! Combine with 8 + 12 + 2***
✗	
?	Mixed views – reliability more than speed

Goal 2. Improve transport connections to England, the Republic of Ireland and the rest of Europe etc	
✓	Agree – investment is very important And what about North-South? Connections with Wales are important 20 minutes quicker by train when electrified Consider <u>all</u> modes of transport *** see 1 above
✗	
?	Not immediate goal (will drop out from above)*

Goal 3. Promote more effective use of alternatives to the M4, including other parts of the transport network and other modes of transport for local journeys around Newport	
✓	Agree – strongly!! This is the top priority travel is not to be constrained Should read make more effective use Essential Yes but widen area to include whole corridor
✗	

?	

Goal 4. Make best possible use of the existing M4 and local road network

✓	Agree
	As long as not ignoring alternatives not charging for use not adversely impacting environment/communities not taking roads over capacity
	A fact
✗	How do we know that we are not already at the 'best' possible use Needs to be alternative routes – local road networks leading to the M4 are poor and cannot cope with quantity of traffic
?	What does this mean? Given east-west alternatives due to valley topography M4 corridor essential for local as well as strategic movements
	What does this mean? Are these compatible? If M4 flows well local network may be gridlocked? Need to integrate with rail.

Goal 5. Make journey times along the M4 corridor more reliable

✓	Agree
	Need to manage expectation
	Would question though whether current journey times are unreliable, in terms of prediction
	Not just reliable but consistent journey times less stop/start speed to give most efficient fuel use
	It's an outcome
	Consider times are reliable, but may be considered too long. Time are predictably slow at certain regular times, but one of events cause unpredictable congestion
	Needs to be higher level aspiration
✗	

Goal 6. Increase the level of choice for all people making journeys within the transport corridor between Magor and Castleton

✓	Agree
	Is the same as number 3
	And that there are other transport choices funded and marketed Investment in sustainable travel infrastructure cannot cycle!!! (bike) Should be considered alongside sustainable travel towns and also look at Newport
	By all modes
✗	Increase incentives so other existing choices are more attractive

Goal 7. Make it easier for people to access key services as well as residential and commercial centres	
✓	Agree
	Not sure what objective is
	Parking
	Yes, by improving public transport and local road access
✗	
?	But we need to look at other policies, e.g. health, education and look at their impact on transport demand
	Needs to link to Welsh spatial plan and local development plans.
	Needs one view and joined up thinking
	Conflicts with national aspirations to centralise major hubs (e.g. hospitals) Planning policies and land use are conflicts

Goal 8. Improve safety on the M4 between Magor and Castleton.	
✓	Agree
	How? Specifically what? Less accidents? Less deaths? Less congestion?
	*** see No 1
✗	

Goal 9. Improve air quality in areas next to the M4 around Newport	
✓	Agree
	But if you move cars from one place to another it still exists – it's just dispersed
	Needs a target, integrate with environmental health (have targets?) and also LDP as business etc also impact on air quality
	**** + 11
✗	

Goal 10. Reduce the disturbance to people of high noise levels, from M4 traffic between Magor and Castleton	
✓	Agree – low priority
	Though there are benefits to living near motorways which should be balanced against any disturbance caused by noises.
	Typo, but agree with 10
✗	
?	How? Just for this section of M4? Surely a small part of much wider system**
	Local issue

Goal 11. Reduce greenhouse gas emissions per vehicle and/or person kilometre	
✓	Agree
	Also needs to say reduction in greenhouse gas emissions overall
	**** see No 9 above

✕	
?	Specifically how? Better engine design? Lower speeds and more efficient fuel use? ** as above (see goal 10)

Goal 12. Improve the travel experience into South Wales along the M4 Corridor

✓	Increase visual biodiversity adjacent to the corridor. Use wild flows (flowers??) to improve the travel experience *** see No 1
✕	Not really
?	Needs definition Obvious yes, summation of previous question As long as it doesn't increase the level of unnecessary travel, and for travel not to be done for the sake of travelling Meaningless. In what way? Specifically? Covered by all above? Economic impact? Time? View? Reliability?

2.2 Other comments on worksheets

Other worksheet notes recorded by participants included:

- Joined up thinking e.g. health, air pollution, special planning and transport system. The goals appear to facilitate more travel rather than considering whether investment could reduce the need to travel particularly by car. Invest to facilitate more commuting by rail rather than car. Ensure children can get to school without having to travel by car.
- Address local/long distance conflicts. Facilitate free flow from traffic – even if there is a need to reduce traffic (chevrons to keep spaces). Reduce the need to travel! Not just facilitate a better journey.
- We would suggest reducing the number of goals:
 - o Journey times - 1, 2, 5 & 7
 - o Integrated transport approach for travel along the corridor – 3, 4 & 6
 - o Environmental – 9, 10 & 11
 - o Safety – 8
 - o 12 is probably unnecessary?
- None of the goals are SMART – how will we know when they have been achieved, how will the outputs be measured?
- We don't disagree with any of the goals (this group made no comments or ticks on the template – just these comments)

2.3 New goals

Participants were asked to consider whether there were any other important transport goals in the corridor and write them down on strips of flip chart paper. The strips were put up at the front of the room and in some cases the facilitator asked for clarification. The notes of clarification are in the right hand column. The goals were put into rough categories with the assistance of the participants and shown together. This explains why the numbering below appears to be sporadic.

GOAL	<i>Flip chart notes and clarifications on strips from plenary discussion</i>
18. Better communication between / within travel organisations.	<i>This refers to Welsh Assembly Government (responsible for motorway), LAs (responsible for trunk road network), rail and other infrastructure and transport providers</i>
17. To create an integrated transport system.	
23. Create a new link to the M48 to serve Rogiet / Caldicot area and an increased park and ride facility at Severn Tunnel Junction.	
22. Improve public transport service quality / reduce fares and increase park and ride sites for passenger transfer from M4 to rail / bus into Newport and Cardiff.	
16. To improve public transport frequencies to encourage people out of their cars.	
15. Travel less	
14. Reduce the need to travel!!!	
19. Road maintenance causes less disruption on the M4.	
21. To create a major civil engineering project that will facilitate a large number of new jobs.	
13. Support economic growth of S. Wales	
14. Promote a better Wales.	
20. Increase biodiversity	<i>so as to improve the travel experience (existing Goal 12)</i>

2.4 Plenary discussion on Goals

There was a small amount of additional general discussion on goals which was recorded on flip charts, as set out below:

Goal 1: if traffic flows faster, you get more noise therefore ‘reducing noise’ could be seen as contradictory.

Goal 3: was most important goal for one table

- Goals need to be ‘SMART’ or how will we know if they have been achieved?
[NB the goals were turned into plain English by the M4 Corridor Enhancement Measures team and may have lost some of their ‘smartness’ in translation]
- No measure should have a detrimental effect on the surrounding area.
- Solutions should be for the whole corridor.

3 Overall Aims

3.1 Comments on current Welsh Assembly Government overall aims

Participants were asked to review the Welsh Assembly Government's current analysis of the overall aims for the M4 Corridor Enhancement Measures programme, indicate whether they agreed with them and add comments or amendments. The worksheets they used are transcribed below.

2010-2020 Aim 1. Make it easier for people to reach services such as shops, hospitals, leisure service and places of work, by road, public transport, walking or cycling....	
✓	Only relates to local users
	Reduce social inequality and improve overall access
	But there is a risk that by improving links to major economic/social centres, local communities and businesses will suffer as people use services in 'hubs. Shift from car-biased out of town developments to town-centric transport initiatives and retail promotion [worksheet made link to comment in Aim 2 'transport infrastructure is not the panacea]
	Agree – to make easy and affordable
✗	
?	Suggest aim should read – “to make it easier and safer for ...” [What about investing in broadband to reduce the need to travel, or in more stringent application of land use policy to ensure services are provided nearer to people]

2010-2020 Aim 2. to support and encourage prosperity in the region and across Wales by delivering a more efficient transport network on this important economic gateway to South Wales	
✓	Striking balance between local and strategic?
	And international markets
	Misses out reference to sustainable. Encourage long-term prosperity
	Transport infrastructure is not the panacea. Skills and access to skills also in this category? Attracting inward investment, esp. to growth industry Pilot electric car infrastructure
	Relates to local use of M4 currently; Misses out reference to sustainability; M4 should be a strategic route and not be a local network “Transport is a means to an end, and not an end in itself”. It's aim thus must be to facilitate the economic prosperity of Wales”
✗	
?	Economic central (and first priority)
	Future proofing needed e.g. If support and encourage prosperity will the transport network be able to cope?

	Support Newport as a thriving place

2010-2020 Aim 3. to prevent and reduce negative effects of the M4 Corridor Enhancement Measures programme on people and the environment and, where practicable, provide improvements to balance against them.	
✓	To help combat effects of climate change This does encompass radical thinking and need to address the problem when it has been moved somewhere else! Aim to mitigate carbon emissions Not to detriment of other communities using innovation to counteract any negative effects. Measure environmental impact of whole scheme i.e. carbon cost from inception, build and lifecycle. Take systems view Do full value analysis (NPV/whole life cost) Agree – but where practicable to be removed
✗	
?	Make positive and use positive language e.g. Improve air quality – against measurable targets Enhance roadside verges, biodiversity, visually attractive Implement existing biodiversity action plan for Welsh Assembly Government highways estate Management and maintenance Scheme will make a positive contribution to overarching Welsh Assembly Government goals to reducing green house gas emissions and tackling the contribution of transport to climate change

3.2 Other comments on worksheets

Other worksheet notes recorded by participants included:

- Better order of strategic aims → Environmental, Social, Economic – all good aims – change order and consider dropping titles as they are We/TAG pillars and could be emotive!
- Strategic Aims – how will we know when we get there?!?
- Longer term aims:-
 - Put 3 lanes through tunnels. Technology has changed and it can now be done.
 - Separate local and long distance issues and address subsequent problems as a result of this.
- Short term
 - Improve safety for all
- Suggest new aim – SAFETY

3.3 Plenary discussion on Welsh Assembly Government aims

There was a small amount of additional general discussion on government aims, which was recorded on flip charts, as set out below:

- Discussion Environment: could be a more positive, beefed up statement.
- Economic: should be about long term prosperity.

3.4 New overall aims to 2020

Participants were asked to consider whether there should be any additional overall aims to 2020 and write them down on strips of flip chart paper. The strips were put up at the front of the room and in some cases the facilitator asked for clarification. The notes of clarification are in the right hand column. The aims were put into rough categories with the assistance of the participants and shown together, hence the numbering being out of order.

AIM 2010 - 2020	Flip chart notes and clarifications on strips from plenary discussion
7. Put 3 lanes in tunnels – engineering technology has changed.	
6. To make safer journeys for all (modes)	
5. Improve safety by creating a road environment which significantly reduces road traffic collisions by 2020.	<i>Technology and engineering have changed since original M4 feasibility study – worth looking at again.</i>
4. Individual – impact on people’s lives; emotional impact; injury (in addition to economic / COBA category of ‘Accident’); stress, lifestyle impact loss of mobility.	<i>Impact of an accident on individuals isn’t accounted for, nor is safety. Only economic aspects of accidents currently considered. The social aim should seek to improve the well-being of the people of S Wales.</i>
10. Separating local economy requirements from (inter) national economy.	
9. Separate local and long distance travel.	
8. To ensure tie-in with re-franchising of Wales rail network by 2018.	

3.5 New overall aims from 2020 onwards

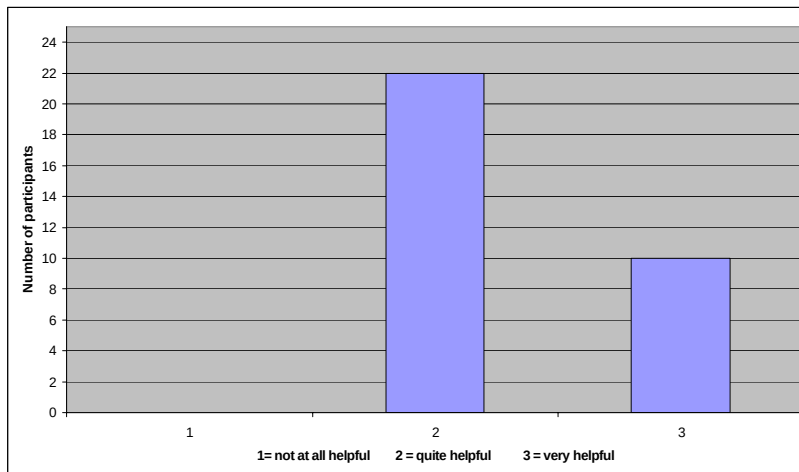
Lastly, participants were asked for suggestions for overall aims for beyond 2020, again working on strips of flipchart paper. The aims suggested by participants are listed below:

AIM 2020 onwards	Flip chart notes and clarifications on strips from plenary discussion
14. Do nothing! Peak oil and congestion will remove the problem.	Leave things alone and people will reorganise their lives.
13. Consider alternative ways of funding transport improvements (e.g. road pricing, business levies)	e.g. as Crossrail has done
12. Reduce social inequality	Measures should seek to reduce social inequality, e.g. more equal access to services. 'Think local' e.g. as in Transition Movement. Look at ability to raise local (Welsh) taxes.
11. Ban cars	Unless running on renewable fuel. Move to a sustainable transport system not reliant on oil and pollution.

4 Evaluations

At the end of the workshop, participants were asked to complete an evaluation form. Results are detailed below.

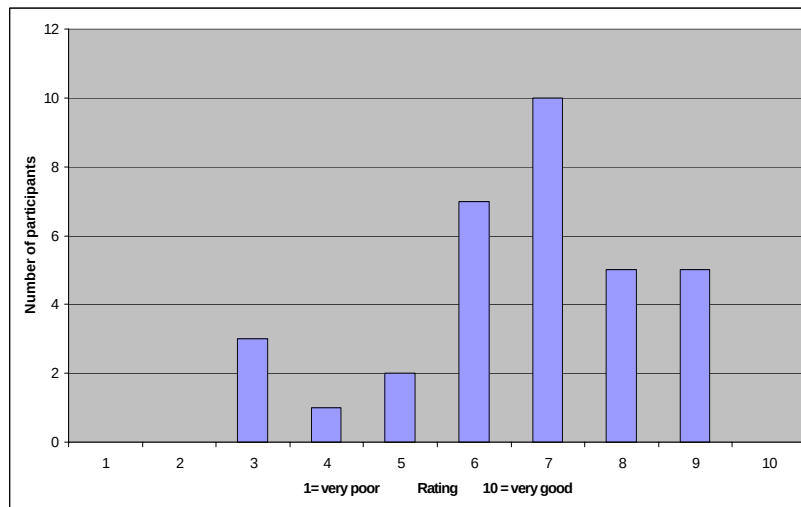
How helpful did you find the pre-workshop briefing material that you were sent in advance?



Comments

- Focus on the issue
- Had seen most of it before. Difficult to understand what we would be doing on the day. Would have helped to have goals etc at start rather than end
- Standing in for colleague so didn't get chance to read in advance
- More information gathered for the shelved M4 route
- Prelist of attendees would have been useful
- And well complemented by material in workshop
- Only because I was more aware of the background beforehand

Overall, how did you rate this workshop?



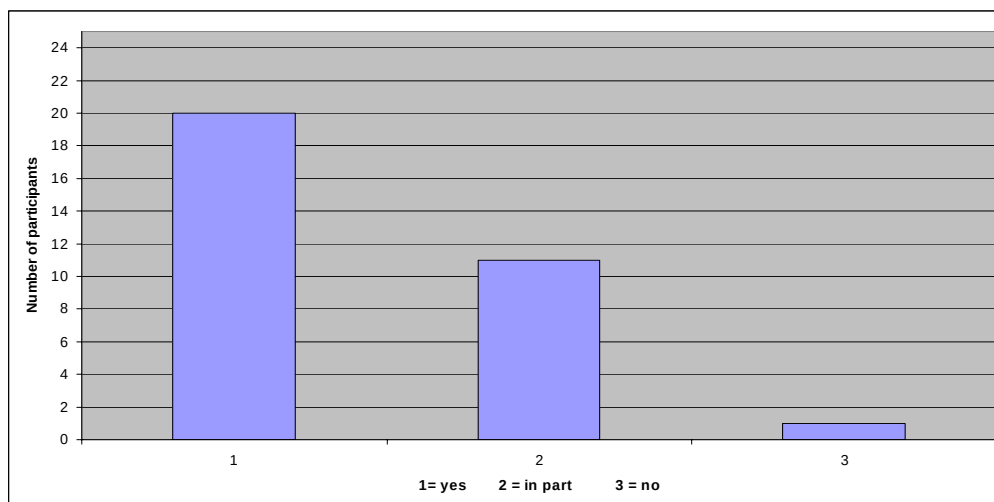
Comments

- Although quite long, a very useful workshop
- Catrin coordinated the workshop very well
- Participants did not reflect the multicultural make up of Newport city – all white attendance
- Very well facilitated but contributions from Allan Pitt poor and pointless
- Negativity was managed negatively by facilitator. Too long. Too many sweeping generalisations accepted * see Q4
- Presentation and facilitation poor – issues badly defined e.g. problem = fail, problem = effects
- Sparked a lot of debate
- Many varied views, many of which I did not agree with
- Perceived tokenish (*sic*) consultation
- The subject is too complex to be properly addressed at this level. All we can do is state the obvious!
- It was really good to hear some varied views from people with varied experiences of living and working in the area – and to try to justify my own to them. However somehow I didn't feel we were focussing on the wider – Newport and the spatial plan – just roads

Were the aims of the day met?

Namely, that you have:

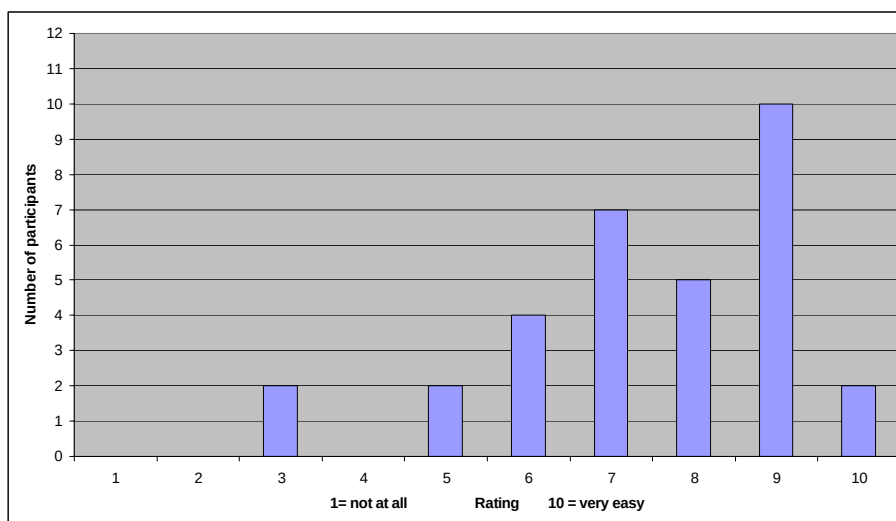
- Heard more about the M4 Corridor Enhancement Measures programme
- Contributed your views on transport related problems, goals and aims in the M4 Corridor, Magor to Castleton, between now and 2020, feeding into Welsh Assembly Government's development of the M4 Corridor Enhancement Measures programme



If no, what was missing?

- Session too long – instructions complicated
- Restricting workshop therefore no solutions. Was prohibitive
- No quantitative data
- No detail of programme
- Too much time devoted to addressing obvious faults. Examination of the causes of the problems would have been more productive IMHO
- I didn't feel the aims and objectives (TPOs) were really up for discussion, I presume because it's all been done many times before – but I felt all this work is still leading to creating road capacity rather than investing to change travel behaviour, tackle climate change and facilitate sustainable development

Did the workshop format make it easy for you to express your views on the issues?



Comments

- Format worked well, but some of the aims/objectives/goals were fairly obvious
- Good table discussions
- But impossible to hear other attendees
- Group overall too large
- See previous comment. Some feedback was dismissed negatively by facilitator on multiple occasions. Also an atmosphere of Welsh Assembly Government bashing. Ranting.
- Facilitators tried hard to make most of subject area
- I was able to express my views, but I didn't write them down unless we were able to reach a collective agreement on our table. Perhaps other people were less inhibited – but did we really get full representation from the pro-road lobby? (does this contradict my other comments?)

What message would you like to give you Welsh Assembly Government as they go forward with M4 Corridor Enhancement Measures?

- Outcomes need to be integrated to deliver true SD well being and environmental ambitions need to be opportunistically pursued
- Deliver
- Consider lorries in any planning for the economy of South Wales
- To ensure solutions are economically viable and due consideration is given to solutions to assist public transport (both road and rail) and improve safety
- It is not just about the M4, it is about looking at how all modes are being used to minimise the impact. Planning policy is also a key part
- A number of messages
- Engagement with stakeholders has to continue, but must be expanded to include the general public, and not just those of us who are professionally involved with transportation.
- Second, to strengthen the engagement with SEWTA
- Look at the wider issue and integrate thinking
- Do nothing! People will adapt to current traffic congestion and future oil shortages
- More information needs to be made available to the public regarding what is happening with the M4 corridor
- Motorway exit road structure combined with reduced speed limit has let to HGVs using centre lane for significant distances (and not left hand lane). Moving between lanes more difficult/dangerous. Traffic lights on roundabouts sometimes cause more problems than they resolve (e.g. J28)
- Think about the bigger picture as the “M4 corridor” could be too narrow an area to consider. Regional options that may initially “move” the problem somewhere else and then deal with these issues. Look at other parallel routes, consider active re-routing of traffic. B) Ensure integrated thinking of all modes. I am still reading reports that conflict especially highways and rail. I am sure it can be done.
- Any plans must be sustainable and future proofed so that they are not out of date before completion
- The congestion problem on the M4 will not go away until you:-
- Deal with removing the 3 to 2 to 3 lane problem at the Brynglas tunnels OR
- Introduce an alternative motorway in the Newport area!!!
- Draw in other assembly policy areas to ensure holistic approach to goals and solutions – planning, social, health etc

- I work in a business located near J28 and there are many rumours circulating that J27 is to be closed. This is worrying. At peak times the amount of traffic travelling down the valley through Risca etc means that the J27 and J28 are at full capacity and heavily congested. Closing J27 would mean that J28 /Forge Lane would simply be transferred from J27. The whole city programme needs to consider local business users and not just travellers from further afield. 2) Please, please do something soon about the traffic lights on the J28 roundabout. The new sequencing causes such congestion for traffic leaving Newport – there will soon be a serious accident.
- Carry on listening
- More emphasis on Smart “soft” measures
- Sustainable solutions – look at all issues such as ‘soft’ measures – personal and school travel plans, travel awareness – rail, train. Green solutions and biodiversity – make the road corridors/rail more pleasant to drive – wildflower banks, native deciduous trees, wildlife/SUDs ponds. Avoid impact on natural environment (pollution into Usk River SSS, SAC)
- Think about the big picture. We have an opportunity to improve the transport, logistical problems for the majority of people living in Wales!
- Talk to colleagues in other Welsh Assembly Government departments. Be aware of wider Welsh Assembly Government targets (air quality, sustainability etc) and how this scheme can contribute to WSP. SMART targets. Welcome new approach.
- Look at the big picture. The effect on Wales and in particular SE Wales including the valley
- Consultation = good. Involve all of your departments, esp. the integrated transport and sustainability teams. This was not a very diverse mix of people. Was it representative of the SE Wales demographic?
- Needs to be better defined e.g. discussions crept between M4 specifically and broader integrated transport issues. Goals could have all been linked into 1. Problem badly worded and some could be made worse. Insufficient recognition of feeder road network and inability of agencies to communicate and plan.
- Think more about public transport options
- Please recognise the clear link between infrastructure and the economy of Wales. A solution to the problems currently encountered needs to be found. Do not leave a legacy of inaction. The M4 is a critical part of the infrastructure.
- Manage expectation better. Congestion at peak times is acceptable and should be about awareness not investment to resolve
- Remember the motorway was originally intended as an alternative route for through traffic avoiding local congestion. Perhaps we have lost sight of that principle.
- Investment in transport should be determined before budgets are allocated to modes of travel. Cost = benefits analysis shows walking and cycling

schemes?? Provide the highest value for money, road schemes only seem to have large benefits because they cost so much and are valued over 60 years where each second is valued equally and individually.

A16 Councils Workshop Transcript

M4 Corridor Enhancement Measures
Engagement Team

**M4 (Magor to Castleton) -
Corridor Enhancement Measures**

Councils Workshop Transcript
Report

11-

Draft 1 | April 2011



Llywodraeth Cymru
Welsh Government



ARUP

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1 Introduction

In early 2011 the Welsh Assembly Government hosted a workshop for Councils in the area of the Magor to Castleton transport corridor, as part of the M4 Corridor Enhancement Measures Engagement Programme. The workshop was one of several events and more information about them and to find out further information about the M4 Corridor Enhancement Measure please visit the Road scheme pages of the Welsh Government Transport website www.wales.gov.uk/transport.

This document is a transcript of the worksheets and flipcharts produced at the workshop and the text has not been changed, other than simple editing where something was unclear. A summary report of the workshop can also be found on the above website.

1.1 Transport Problems

1.1.1 Comments on current Welsh Assembly Government list of problems

Participants were asked to review the Welsh Assembly Government's current analysis of the main transport problems on this transport corridor, indicate whether they agreed with the problem and add comments or amendments. The worksheets they used are transcribed below.

Text highlighted in yellow refers to undecipherable text received on completed worksheets.

Problem 1. Difficulties maintaining adequate traffic flows on the M4 at the times of temporary disruption (for example, following accidents, problems caused by severe weather, or during major events)	
✓	Exacerbation of certain sections. Communication difficulties compound management and services. Difficulty in parallel/ comp?? with ÷ local/city network. Pressure on local/city network -= access and egress – to compensate
	Robustness of network.
	Serious accidents are the main issue due to lack of hard shoulder and resilience.
✗	

Problem 2 . A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times	
✓	Never designed to cope. Too many junctions – 24, 25a, 26, 27. Mileage through city? Reduction in number of junctions would compound problems on local/city network
✗	
?	Why aren't sustainable alternatives being considered?
	What is the purpose of the M4? Can it have a dual purpose i.e. long distance travel and local transport across the city?

Problem 3. Traffic levels are forecast to continue to increase, therefore problems 1 and 2 will worsen over time	
✓	Assume traffic growth. Cardiff Park & Ride lessons – intercept traffic before reaching local/city network → unless significant investment in public transport and communication on alternative modes of travel – bus – rail – Park & Ride. School travel plans.
	Peak periods are extending
	Morning and evening peaks will extend in time. Will growth continue due to recession/economic forces? Is it growing at a greater rate than the model predicts?
✗	
?	If this has been identified and proven, why then is sustainable travel (or lack of alternative transport) not been identified as a problem e.g. dedicated bus lanes, Park & Ride facilities

Problem 4. The existing transport network acts as a constraint to economic growth (for example, as freight companies see increasing delays in deliveries, they may decide not to invest in South Wales)	
✓	Also consider that the tolls on the Severn crossings are a particular factor.
	International freight travel to Ireland → alternatives via shipping/trains. Common practice within Europe.
	Linked to SSC [Second Severn Crossing]/Severn Crossing tolls. Situation could be exacerbated by essential maintenance work. Enhance capacity and level service/welcoming to counter other growth centres e.g. Bristol/Gloucester
✗	P Employer/business behaviour. Consumer models – 24hr stores. Not network responsibility/burden. s/b more responsible recruitment/business models. Planned delivery models across 24 hours.

Problem 5. The M4 requires essential major maintenance within the next 5-10 years; this will involve prolonged lane and speed restrictions, thus increasing congestion problems	
✓	Tunnel maintenance could be a significant problem in the coming years.
	Major and additional impact 4. Limited space for essential maintenance reduces flexibility for work and extends period of working. Negative working assists maintaining flows, but may nuisance to local people/residents
✗	P 24 hour work programme. ↑ T&C motorway workforce
?	Not enough emphasis to alternative networks e.g. rail

Problem 6. HGVs cope badly with congestion as they take longer to get going again once they've stopped, thus adding to the congestion.	
✓	Also adds additional fuel consumption and extra costs for hauliers.
	Gradient → impacts on HGV stop-start
✗	Highly qualified, time served drivers public perk bigger than Ford Ka no greater addition to congestion
	Experience suggests this not true. Problem due to incident on tail gating (through 50mph section)

Problem 7. The congested, slow moving traffic on the motorway around Newport adds to air pollution problems	
✓	The reduced speed limit (50mph) over last 18-24 months has been shown to improve air quality.
	Evidence base
	AQMA– St Julian's, Kalpas, J27, Coldra. 50mph = note dropt in certain pollutants in the AQMA over 18 months
	Potential exceedence may result in EC actions on ??? This may be assisted by controlled motorway. *
✗	

Problem 8. Stop-start traffic movement on the M4 results in greater greenhouse gas emissions that free-flowing traffic	
✓	Results in significant extra consumption of fuel.
	Linked to 7 – increase in fuel costs. Evidence base.
	Similar issue to No 7.*
✗	

Problem 9. The road and rail transport system in and around the M4 corridor is at increasing risk of disruption due to extreme weather events (for example, flooding)	
✓	Snow and ice.
	Definitely a risk but pattern of risk needs to be defined more accurately. Standards of drainage are no longer fit for purpose arising from climate change – rain incidence and intensity
✗	Flooding

Problem 10. Traffic noise from the motorway is a problem for local residents	
✓	Need to consider further mitigation.
	See glazing, noise barriers.
	Residents noise concerns. Cutting shrubbery/screening. Night time construction work (typically 2am-3am).
	M4 notified as a noise action are a (candidate) under the EC Noise Directive. Night time noise from maintenance operations is a major issue.
✗	

Problem 11. Welsh Assembly Governments aim for an improved gateway into Wales is not currently met by the M4 corridor	
✓	Agree – existing M4 is not fit for purpose.
	Combination of M4 tolls. Alignment of route avoid Junction 27 (sharp curve). Bottleneck.
	What is this aim and where is the gateway defined? Is this a perception issue or one of traffic management? Clarification required. Wider issue a major concern – may be constrained by access on the motorway.
✗	Major gateway. Trans Europe freight locations. → s/b train service bus operators

Problem 12. The existing transport system limits what local Councils can do to develop their areas	
✓	M4 outside the jurisdiction of the local authority. M4 should have gone further north. Potential for improving access to communities e.g. developing Park & Ride, alternative options. Joined up approach – financial consultants of rail, local budgets, strategic investment. Better integration required.
✗	Not convinced

Problem 13. The current accident rates on the M4 between Magor and Castleton are high than average for UK motorways	
✓	We anticipate that the VSL will help this situation. Before 50mph limit. Agree. But note that the accident rate has dropped following the reduction in speed limit to 50mph (Gwent police report to full council). Is there evidence to support this? Will variable speed limits increase or decrease the accident rate – compared to the 50mph speed limit.
✗	The controlled motorway will improve the situation...actions taken.
?	How has the accident rate changed since the implementation of 50mph limit

Problem 14. The current problems on the M4 between Magor and Castleton at times have a significant knock-on effect, severely disrupting travel within South Wales	
✓	Agree. Inadequate capacity for peak flows and lack of resilience. Can cause major disruption – traffic standstills – major economic and social effects – missed appointments, travel plan disruptions
✗	

1.2 New problems

Participants were asked to consider whether there were any other important transport problems in the corridor and write them down on strips of flip chart paper. The strips were put up at the front of the room and in some cases the facilitator asked for clarification. The notes of clarification are in the right hand column. The problems were put into rough categories with the assistance of the participants and shown together, hence the numbering being out of order.

PROBLEM	<i>Flip chart notes and clarifications on strips from plenary discussion</i>
15. Not enough sustainable alternatives to the single occupancy car e.g. bus priority, park and ride facilities, rail capacity in particular.	
20. Not enough emphasis paid to alternative freight options rather than road.	
16. Lack of public transport capacity to take cars off M4.	
17. Absence of integrated transport options. Lack of easy, clear, friendly access to rail and bus services.	<i>Must have links to take people between transport modes. Add long distance HGV's into this – no provision to take them off onto rail.</i>

19. Rail service not modern enough (slow, not electrified) and too expensive to deter M4 use.	<i>Not everyone agreed with this, but did agree that it depends on the time of day. Rail demand is at capacity now.</i>
18. Congestion on the M4 is the biggest problem that local bus operators have. Any congestion or hold-ups immediately impacts their services.	<i>Local buses don't use M4 much, but when they do, congestion is a huge problem for them. Many buses use intersections though and they, along with Newport busses which don't operate on or via the M4 at all are affected by any congestion on the motorway.</i>
32. Congestion on Pont Ebbw and Tredegar Park roundabouts.	
30. No access to Caldicot / Severn Tunnel Junction areas, have to use Magor junction.	<i>Traffic is pushed onto local roads as it can't access the motorway.</i>
29. Not enough attention paid to local alternative roads to detract from M4.	<i>Including when there are accidents. People should consider using local roads for local journeys.</i>
26. Knock on effect on local roads following congestion and accidents on M4.	
27. Poor communication between Welsh Assembly Government and NCC regarding road works around the M4, which impact on M4 traffic.	
28a. Road works and congestion on adjacent roads.	
28b Lack of comparable East-West route (alternative when M4 closed)	
21. No sufficient escape routes or management to redirect traffic following an accident on M4. Insufficient road space to use as a re-directed route. Insufficient emergency facilities.	<i>There is not enough capacity E/W when there is a problem.</i>
22. Motorway work involving restrictions requires more clarity / advice to public.	
23. Takes too long to clear accidents.	
31. Local Development plans nearly finished. No junction.	<i>Why are we discussing all this now and not earlier, when Newport was developing its local plan? Now the plan is finished and there is no new junction.</i>
25. New development around motorway junctions adds to the problems.	
24. Fundamental issue of building adjacent to M4 corridor encouraging more usage of M4 when the M4 is unable to cope with the capacity.	
26. Ireland is one of our large trading partners, congestion around Newport might be having wide ranging economic effects.	
33. Too many junctions – lack of adequate local links between junctions.	

2 Transport Goals

2.1 Comments on current Welsh Assembly Government transport goals

Participants were asked to review the Welsh Assembly Government's current analysis of the main transport goals on this transport corridor, indicate whether they agreed with the problem and add comments or amendments. The worksheets they used are transcribed below.

Goal 1. Make it easier and quicker to travel East-West in South Wales	
✓	s/b strategic – plus “safer” [ed] i.e. “make it easier and quicker and SAFER to travel...” In addition more reliable (5) and safe (8)
✗	Disagree. This is an over-simplification. The M4 accommodates a wide range of movements, particularly regional movements between the Valleys, Newport and Cardiff.

Goal 2. Improve transport connections to England, the Republic of Ireland and the rest of Europe etc	
✓	Using the rail network for international [freight] traffic; motor rail. Integrated – multi-modal transfer points Should include increased use of rail infrastructure to maximise connectivity
✗	

Goal 3. Promote more effective use of alternatives to the M4, including other parts of the transport network and other modes of transport for local journeys around Newport	
✓	Only if project includes improvements to local/city network Including Duffryn link road, Llanwern Steel works site
✗	
?	What about ‘other modes’ for all journeys, not just local journeys?

Goal 4. Make best possible use of the existing M4 and local road network	
✓	Better use of technology and driver (and transport user) information
✗	
	Add: and other transport networks.

Goal 5. Make journey times along the M4 corridor more reliable	
✓	And safer. Reliability, particularly at peak times.
✗	

Goal 6. Increase the level of choice for all people making journeys within the transport corridor between Magor and Castleton	
✓	The goal need not be restricted to increasing the choice between 23a and 29 – the goal could be widened.
	New → use more demand restraint methods
	Including measures for improving rail links. Park and ride (east/west Newport)
✗	Why not Magor and Castleton. Should be for all E-W travel but also North from A449 – Midlands and further north (also air and bus/coach connections)

Goal 7. Make it easier for people to access key services as well as residential and commercial centres	
✓	However, an increase in junctions would introduce safety/time issues
	Also convenient and reliable access
✗	

Goal 8. Improve safety on the M4 between Magor and Castleton.	
✓	
✗	Improve safety on the whole transport network.

Goal 9. Improve air quality in areas next to the M4 around Newport	
✓	Link with speed limits (e.g. improvements made in air quality in last 18 months)
	Also applies to other communities, not just Newport. Needs to be a corridor based objective, not just specific to the M4.
✗	

Goal 10. Reduce the disturbance to people of high noise levels, from M4 traffic between Magor and Castleton	
✓	Improved screening/road surface. Work with home owners on improved sound proofing (e.g. Newport city houses)
	Change goal to → reduce disturbance to people of high noise levels from all transport modes and traffic within the corridor.
✗	

Goal 11. Reduce greenhouse gas emissions per vehicle and/or person kilometre	
✓	
✗	

Goal 12. Improve the travel experience into South Wales along the M4 Corridor	
✓	(including Severn Bridge tolls)
✗	

2.2 New goals

Participants were asked to consider whether there were any other important transport goals in the corridor and write them down on strips of flip chart paper. The strips were put up at the front of the room and in some cases the facilitator asked for clarification. The notes of clarification are in the right hand column. The goals were put into rough categories with the assistance of the participants and shown together, hence the numbering being out of order.

GOAL	<i>Flip chart notes and clarifications on strips from plenary discussion</i>
13. More use of local rail stations. Greater use of rail network for commuter traffic.	
21. Encourage modal shift and change in travel behaviour.	
17. To introduce more strategic parkways to encourage rail travel.	
16. Promote alternative travel options to single car occupancy use of M4.	
22a. To develop an integrated transport system which is an exemplar for Wales, UK and Europe.	
22b. To present a joined up focus to integrate the transport and land use processes and outcomes.	<i>Land use planning (UDP) and regional transport plan are currently integrated, but only up to a point – there is room for improvement.</i>
14. Encourage and promote off peak travel.	
23. Encourage and prioritise alternative A449 / A470 and HOV routes to reduce demand on M4.	
18. Prioritise education for foreign HGV drivers, young drivers who are not required as part of the driving test to be assessed on motorway driving and foreign drivers in general.	
20. Prioritise enforcement on the M4 corridor	<i>The group felt that there were quite a number of foreign HGV's that shouldn't be on the M4 as they didn't meet the required standard.</i>
19. Improve the way accidents are dealt with.	<i>Better inter-agency co-operation.</i>
15. Discourage local trip movement(s) on M4 around Newport.	
Should there be a goal on the identification of what the junction or functions of the motorway should be?	<i>NB this was on a worksheet, not presented as a strip.</i>

2.3 Plenary discussion on Goals

There was a small amount of additional general discussion on goals which was recorded on flip charts, as set out below:

- Need to clarify the function of the M4 – whether it's for short or long distance travel. So, a goal could be to make it a local (or) long distance strategic route. This is key and needs to be sorted out.
- Reduce level of pollution generated by vehicles by improving design – perhaps a role for Welsh Assembly Government to lobby for this.
- At present, people travelling south from Valleys, wanting to travel East or E/W, are channelled down to the Newport junctions. It would be useful to know more about the volume of this kind of journey. If there are many, we could look at directing them to join the M4 further west or east.

3 Overall Aims

3.1 Comments on current Welsh Assembly Government overall aims

Participants were asked to review the Welsh Assembly Government's current analysis of the overall aims for the M4 Corridor Enhancement Measures programme, indicate whether they agreed with them and add comments or amendments. The worksheets they used are transcribed below.

2010-2020 Aim 1. Make it easier for people to reach services such as shops, hospitals, leisure service and places of work, by road, public transport, walking or cycling....	
✓	More than just people to services – but should be providing services to people e.g. ambulances, fire services. Is it therefore “access” to services?
	But keeping in mind the general function of the motorway as the highest level of strategic highway. Concentrate on improving the local highway network and transport options to remove local traffic from the M4.
✗	Change aim No 1 from Social to Accessibility Revise aim to – To make it easier for people to reach services such as shops commercial centres, regional NHS facilities, hospitals, leisure service and places of work, by road, public transport, (walking or cycling) ←local.... s/b Strategic social s/n before local/city split Local transport needs Strategic long distance time lines business support
?	Re-order: walking & cycling, public transport or road. Note: stop the use of the car for the school run would remove most of the road capacity issues

2010-2020 Aim 2. to support and encourage prosperity in the region and across Wales by delivering a more efficient transport network on this important economic gateway to South Wales	
✓	“Economic region of South Wales” rather than the gateway to SW
	Recognising impact on the local (Newport) economy. → Diversification of the Welsh and local economies.
	Strategic aim and entirely appropriate
✗	
?	This is too narrow a geographical perspective – it is important to all of South Wales and parts of Mid Wales. It is also part of the Trans European Road Network.

2010-2020 Aim 3. to prevent and reduce negative effects of the M4 Corridor Enhancement Measures programme on people and the environment and, where practicable, provide improvements to balance against them.	
✓	Should also support the wider objectives and requirements for carbon reduction, climate change adaption and network framework/green infrastructure. Should also <u>enhance</u> , not only reduce/prevent/avoid negative effects – support positive effects. Should include an aim not to increase carbon emissions. It is not certain that these are achievable in the period up to 2020 – they are longer term
	To provide a transport package to support local need What is the function of this road – is it a strategic bypass or feeding local need
✗	

3.2 New overall aims to 2020

Participants were asked to consider whether there should be any additional overall aims to 2020 and write them down on strips of flip chart paper. The strips were put up at the front of the room and in some cases the facilitator asked for clarification. The notes of clarification are in the right hand column. The aims were put into rough categories with the assistance of the participants and shown together, hence the numbering being out of order.

AIM 2010 - 2020	<i>Flip chart notes and clarifications on strips from plenary discussion</i>
5. Greater role for Local Authorities in shaping / managing the M4	<i>e.g. via delegated powers from Assembly</i>
8. Widen the transport choices available to most people.	<i>e.g. Newport currently poorly served in terms of stations</i>
7. Future proof the effectiveness of the corridor (at least until 2020)	<i>Future is uncertain, e.g. who knows what will happen to oil prices? And what will happen to economy beyond 2020</i>
4. Establish the role of the M4 (strategic route) and enforce it.	
Change the public perception to see M4 as a long strategic route demand management tool awareness influence incentivise behaviour moral gesture	<i>NB this new aim added on a worksheet, placed next to 4 as they are very similar.</i>
6. Find a solution that meets a social, economic or environmental aim without seriously prejudicing either of the others.	<i>Implicit judgements made in ranking these aims. Concerned about how any solution may meet one aim but harm others – any solution should meet <u>all</u> aims.</i>

3.3 New overall aims from 2020 onwards

Lastly, participants were asked for suggestions for overall aims for beyond 2020, again working on strips of flipchart paper.

AIM 2020 onwards	Flip chart notes and clarifications on strips from plenary discussion
Increase prosperity and economic growth and manage the resulting traffic growth.	Look at assumptions that link prosperity / economic growth to traffic growth. What evidence do we have that they are linked?
Build the new M4	

Worksheet notes on aims from 2020 onwards

Other worksheet notes recorded by participants on the above topic included:

- Long term issues
- Sustainable communities – “post peak oil”/middle cost
- Infrastructure will need to be flexible to adapt to changing economic, social and environmental conditions
- Therefore aim should be to develop an integrated transport infrastructure which is sustainable and robust for changing conditions and provides choice to users
- Consider the wider social, economic and environmental changes such as post peak oil, sustainable communities – need to future proof transport solutions:-
- Therefore high level aim: “to develop integrated transport solution(s) which are sustainable, flexible and robust for changing long term economic, social and environmental conditions, and provides choice to users

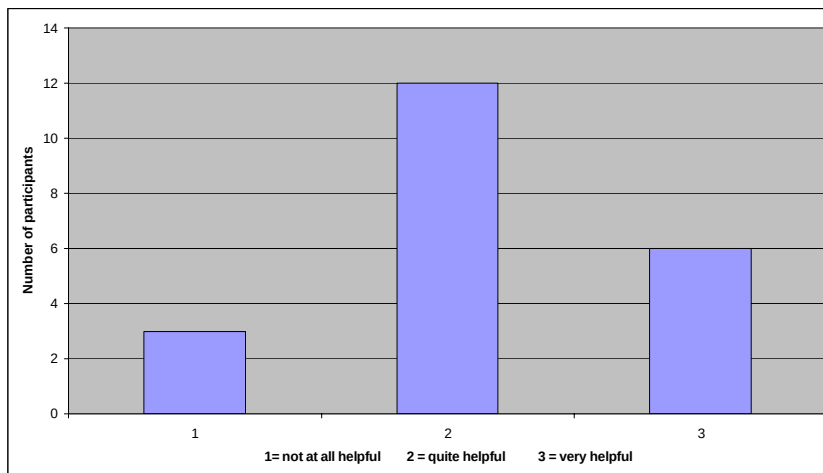
3.4 Plenary discussion on aims (to 2010 and beyond)

Discussion also highlighted that the transport hierarchy should start with walking and cycling, with sustainable transport modes taking precedence over the private vehicle.

4 Evaluations

At the end of the workshop, participants were asked to complete an evaluation form. Results are detailed below.

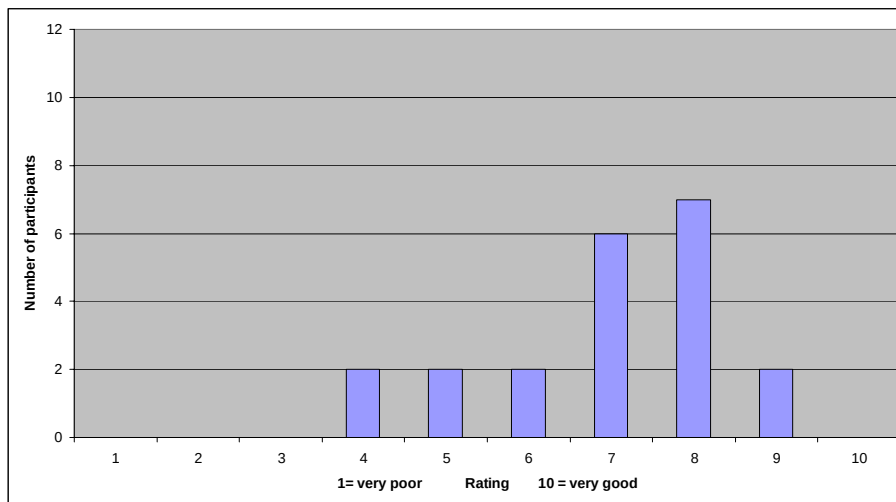
How helpful did you find the pre-workshop briefing material that you were sent in advance?



Comments

- Good notes on board
- An effective way of obtaining views and comments
- It would have been helpful to have more information on the geographical context of the corridor measures
- As a member of the project group I found nothing new.
- It indicated subject was around Newport only and deferred attendance
- Did not get a pack, being a late replacement for a colleague
- Very helpful. However! There could have been a discussion on practical measures which could be implemented to achieve the goods etc – but I assume this comes next. People had lots of ideas but no chance here to express them. * (see Q3)

Overall, how did you rate this workshop?

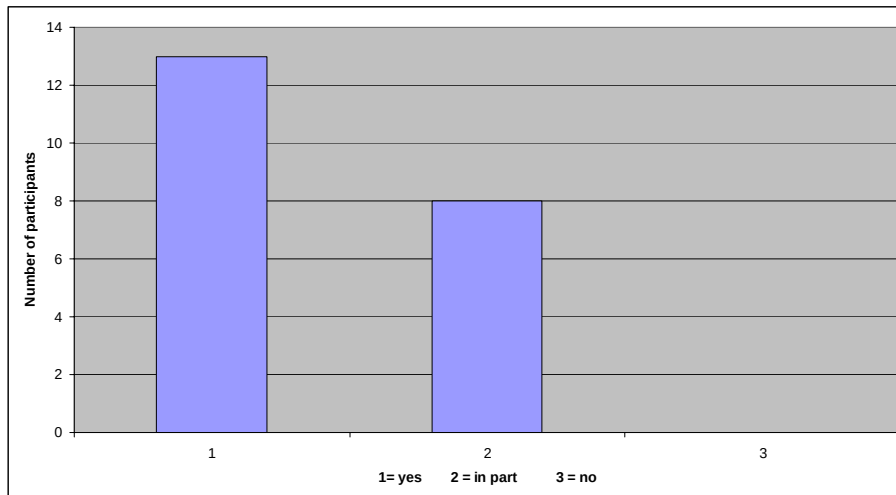


Comments

- Recognising that this was 'high level' – those discussion of the possible solutions would have been useful
- Facilitators helped → more re~~???~~ on objectives?
- Good format
- As above. From an audience a wide range of backgrounds
- Well structured process which was effectively managed
- Not particularly well managed. The definition of the tasks was somewhat confusing.
- Presentations were repetitive as already had the info in the pre-workshop material
- The early **plethora** of presenters and instructions could have been taken at a more leisurely pace to prevent the confusion that initially occurred for some!!

Were the aims of the day met? Namely, that you have

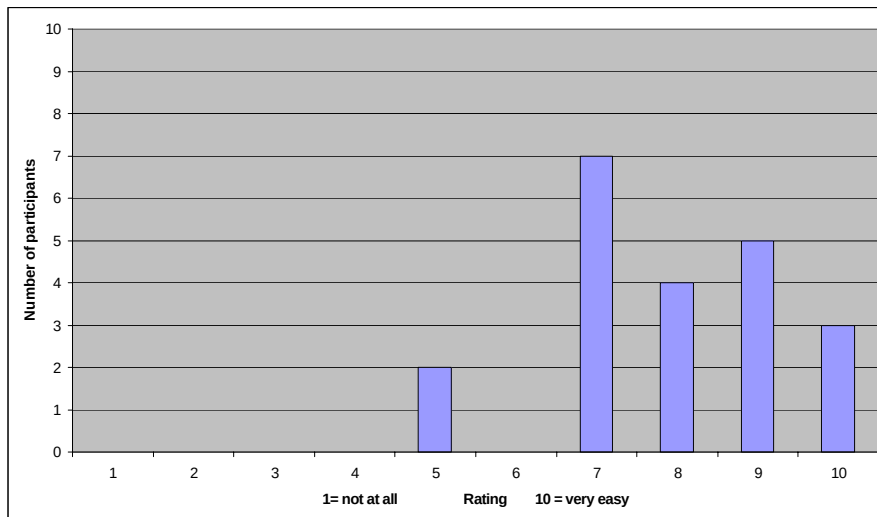
- Heard more about the M4 Corridor Enhancement Measures programme
- Contributed your views on transport related problems, goals and aims in the M4 Corridor, Magor to Castleton, between now and 2020, feeding into Welsh Assembly Government's development of the M4 Corridor Enhancement Measures programme



If no, what was missing?

- Suggestions for solutions
- Welsh Assembly Government's ideas for the future
- Heard nothing of the individual schemes that form the programme at this stage
- See answer to Q1*

Did the workshop format make it easy for you to express your views on the issues?



Comments

- Good to listen to other views
- Round table format was effective – but perhaps too much paperwork!
- What message would you like to give you Welsh Assembly Government as they go forward with M4 Corridor Enhancement Measures?
- Build a parkway at Severn Tunnel junction
- If M4 relief road is a priority then Welsh Assembly Government must fund the proposal as any other solution will be short term only and may well restrict economic regeneration
- Get it right first time
- Don't close access to the M4 in Newport
- Allow further input into the management of the M4 and decision making for local authorities
- Look at ways to remove traffic from M4 which does not need to use it e.g. Park & Ride, Duffryn Link and Queensway
- Comments on the public transport agenda were many and varied. Hopefully the strategy will support links to Severn Tunnel junction
- Build M4 (new) keeping existing M4 as strategic route. Close junctions for local traffic.
- Servicing the whole of S Wales and beyond through 2 lanes in the Brynglas tunnels is never going to work. The stimulus to the economy of a major road scheme (new M4) would be extremely valuable in helping the S Wales economy out of recession directly, as well as all the benefits of improved accessibility.
- Is it congestion or congestion at peak? Can we incentivise off peak car use?

- There is a need for stronger linkages between the M4 Corridor Enhancement Measures process, regional transport plans and land use planning
- Consider contra-flow M4 in that existing motorway traffic travel east and a new M4 travel west or visa versa (less expensive option). Introduction of school buses especially at primary school level (this would solve a significant % of M4 usage). Open up or create more smaller railway stations by using/upgrading existing rail lines
- Need to address the funding of key infrastructure in Wales
- Focus on alternative travel rather than road improvements. Look at a long term rather than the usual short term arrangements/improvements. In reality an M4 will not be upgraded so we need to focus on improvements in public transport including freight arrangements.
- Re open H??/Magor Undy. Remove traffic of roads M4/M48
- Keep the public and unitary authorities fully informed of proposals
- Ensure that the development of transport solutions are linked to and integrated with the wider land use planning, SD, Carbon reductions and environmental shortages in SE Wales, Wales and wider UK. A full specialist planning context and RTPs. Also consider 'future proofing' options and solutions which take account of long term issues such as carbon emissions, climate change, natural framework, and sustainable communities.
- This consultation appears to be a delaying tactic to avoid having to embark on the project and spend money
- I am concerned that Welsh Assembly Government have made a decision to take 'soft' smarter choice measures, ignoring the longer term issue. However, the further studies on the 'softer' issues are showing negative results and therefore won't be implemented in full to negate the need for a new road.
- All in any group were critical of the decision to cancel the proposals for the second M4 and comments that, at best, this exercise is only tinkering with the problems and cannot address current problems effectively. However, we agreed that the aims etc are worthy. Current economic conditions are peak oil issues. Also suggest that it might be as affordable to maintain, consolidate and manage, rather than assume/future economic growth and prosperity will increase beyond what we already have.

A17 First Stakeholder Meeting Report



M4 Corridor Enhancement Measures Programme

First deliberative meeting of the

M4 CEM Stakeholder Forum

July 27th, 2011

Transcribed Report



Llywodraeth Cymru
Welsh Government

ARUP

About the facilitators

The M4 CEM Engagement Programme is designed and delivered by Catrin Ellis Jones, of Catrin Ellis Associates (CEA) in line with the needs of the M4 CEM Management Team, comprising staff from the Welsh Government and Arup. CEA is an independent business with many years experience in facilitation, training, partnership working and consensus building in Wales, the UK and internationally. Part of the facilitation team at this event were James Martin-Jones (CEA) and M4 CEM team members from Arup.

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About this Report

The workshop used plenary and small group working. This report produced by Catrin Ellis Jones of Catrin Ellis Associates, is a full transcript of all written notes made to record participants' contributions throughout the day. Each section starts with an explanation of the task (in the grey box).

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Summary and conclusions

The meeting enabled a wide range of especially invited Forum Members to explore together a long list of possible measures addressing problems in the M4 Corridor area, arising from increasing demand and substandard design of the motorway between junctions 23a and 29.

More than one hundred possible interventions were explored by the Forum, which were grouped into types of interventions, falling into 4 workstreams, listed here:

Workstream 1 – Highways Infrastructure

- New road building
- Increase capacity on existing roads
- New junctions
- Junction improvements
- Close junctions or slip roads
- Introduce climbing lanes

Workstream 2 – Highway network management

- High occupancy vehicle lanes
- Manage speed of traffic
- Controlled motorway / active traffic management
- Improve incident management
- Improve event management
- Encourage use of alternative routes
- Introduce traffic signal lights coordination and control
- Improve winter maintenance services
- Manage HGV traffic
- Use ramp metering

Workstream 3 – Alternative travel modes

- Enhance capacity of rail network
- New train stations / station improvements
- Improve train frequencies
- Introduce Inter-City express programme
- Transfer road freight onto rail
- Improve bus and coach patronage
- Improve mode interchange
- Improve conditions for walking and cycling

Workstream 4 – Smarter choices and promoting sustainability

- Encourage modal shift
- Provide information to help people plan their journeys
- Reduce the need to travel
- Reduce River Severn crossing toll charging
- Develop technologies to reduce environmental impacts
- Reduce impact of travel schemes on communities
- Improve collaborative working practices

Forum members questioned the technical team's approach to their initial appraisal of the measures, and provided relevant constructive criticism to a number of issues under consideration.

On appraising interventions on performance against goals, several Forum Members felt that the environmental effects of interventions should be taken into account sooner than is customary to the

“normal” interpretation of the WelTAG appraisal system; they sought assurances that environmental impact be a key factor in determining whether a measure is adopted or not.

A number of comments suggested that enabling the economic well-being of the nation should be a primary consideration, above others.

One **new measure** was suggested under the Highways infrastructure workstream – namely to continue the programme of improvements to the A465, and improve its connections to the M4 to provide an alternative E-W passage in South Wales.

A number of **sub-measures** were added to the list of possible interventions under consideration in Workstream 4.

Forum Members were invited at the end of the day to give a **concluding message to Welsh Government** as it proceeds with the development of the M4 Corridor Enhancement Measures Programme (see Evaluation, p 56-61). These have been grouped under subheadings here:

On the economy

- Look at building capacity for the future of Wales. Economic prosperity must take priority over social and environmental issues.
- The priority **must** be the **economy**!

On delivery, affordability and benefits

- Carry on, and identify budget streams for the respective improvements that will follow.
- Please try and do a little, even if money is tight.
- The do nothing option is NOT an option!
- Invest now and the benefits will come.
- Don't go for soft options!!! Sometimes the harder options are more cost beneficial in the long term!!!
- To move as quickly as possible for strategy publication to implementation of schemes.

On the environment and sustainable development

- Need to ensure consideration to wider implications/benefit of schemes and ensure environmental concerns are taken seriously.
- Prioritise ecological issues.
- Be sensitive in terms of environment – not just prioritise economics.
- Think SD!!
- Think it through sustainably from the start. Sustainable Development is not just environmental considerations, it is an approach which would help this project be better.
- Keep thinking strategically and taking account of the full suite of social, economic and environmental opportunities.
- Make sure the social and environmental pillars of SD are just as much a part of the analysis as the economic/transport. I am sure it is – but doesn't come across presentationally at the moment.

Competing or complimentary measures?

- Don't build more roads but improve integrated transport such as integrated ticketing, public transport networks and interchanges.
- Focus on smarter choices and less on building new road infrastructure.

On engagement and keeping people informed

- Essential to engage more widely – especially with Industry.
- Continue wide engagement.
- Keep people informed.
- Evidence/justify your proposals.

Joining-up

- The need for a more joined-up approach.
- Integrate with other Welsh Government transport planning activity.
- Consider finding related/linked proposals/initiatives not directly under WG remit.

The scope of the M4 Corridor Enhancement Measures Programme

- Really concentrate on m4 CEM issues and not get caught up with national and wider regional issues.
- Take a wider viewpoint on the benefits to the region/Wales as a whole, rather than the immediate local benefits.
- This is wider than merely a transport link – not sure all involved today appreciated this.

Introduction

Mr Russell Bennett, Head of Infrastructure Projects Unit, Transport Division, Department of Local Government and Communities, Welsh Government, welcomed the assembled group and expressed the Welsh Government's commitment to working with participants during the day, and beyond, to enable the Forum to gain a thorough understanding of the political and policy context and the drivers for strategic M4 Corridor Enhancement Measures, and to contribute their knowledge and experience as they see fit.

He thanked Forum Members for agreeing to take part in this important stage of pre-consultation dialogue in order to help ensure that the alternative strategies proposed for the consideration of the Welsh People during the Formal Consultation on the M4 CEM Programme are robust, well tested, and have been formulated following the widest consideration of all possible interventions to resolve problems within the corridor area (Magor to Castleton) associated with the sub-standard design of this stretch of the M4 and increasing demands on the transport network.

Aims of the First Deliberative Meeting of the M4 CEM Stakeholder Forum

This meeting brought together Key Stakeholders – individuals selected on the basis of their expert knowledge and understanding – covering a broad range of interests and experience around travel related issues affecting the M4 Corridor area, Magor to Castleton. Among Forum members are local authority officers, people from organisations with statutory responsibility and non-statutory interests in social, environmental and economic factors affecting the area as well as staff from the Welsh Government Departments.

The overarching aims of the meeting were to:

- Consider the context in which solutions to problems (identified in earlier engagement events), are to be addressed;
- Expand the Forum and the Welsh Government's understanding of who is doing / planning what with respect to addressing travel related problems in the corridor area;
- Begin to explore together a long list of possible measures addressing problems in the M4 Corridor area, particularly those resulting from increasing demand and substandard design of the motorway between junctions 23a and 29

Programme

09.30	Registration & coffee/tea	
10.00	Welcome and Introduction to the Stakeholder Forum, and to workshop 1	
10.20	The M4 CEM Programme: context & scene setting Russell Bennett Head of Infrastructure Projects Unit Local Government and Communities, Welsh Government	Overview of the M4 CEM Programme: • What it does and does not seek to address, • How it links with other initiatives and policies, • How can we aim for future-proof solutions to problems • How WG will be engaging with people. Discussion and feedback
11.05	Introducing the list of possible M4 Corridor Enhancement Measures Richard Saunders Associate Director Arup	A wide range of possible measures have been compiled, which address the issues relating to increasing demand on the transport system in the area / region and the sub-standard design of the M4 between J23a and J29. We shall explain these possible measures have come from, and give an

		overview of the initial assessment process – as recorded in the workbook. There will be time for questions of clarification.
11.25	Coffee break	
11.35	Classifying the measures – part 1 The purpose is to deliberate over each measure, both: - its performance against the goals (transport planning objectives) set for the M4 CEM programme, and - any risk factors associated with the measure, its deliverability, feasibility and acceptability	From this late morning session, through the early afternoon, participants will look in turn at measures in each of the 4 work streams, where solutions to problems identified and agreed might be found. Where possible, and if participants have expressed a strong interest in one particular work stream, they will begin working on this topic. Everyone will spend some time looking at the measures in each work stream.
12.25	Lunch	
13.15	Classifying the measures – part 2 through part 4	
15.05	Coffee break	
15.20	Reflections on the task of classifying and assessing measures and on whether any solutions have been overlooked	Highlight any particularly striking or insightful issues that have emerged from the working sessions. Having explored the full range of possible measures under consideration at present, participants are invited to add any new measures.
1530	Next Steps – what happens next in the process to present a set of alternative strategies to delivering the goals of the M4 CEM Programme for Formal Consultation Dan Saville Director , Arup	This presentation covers: - How we move from individual measures to designing a strategy that will provide future-proof (or as close as is possible to future-proof) solutions; - Further opportunities for the Stakeholder Forum to be involved in the development process.
1540	Reflections on the development of the M4 CEM and the work of the Stakeholder Forum	Reflection & Plenary discussion Participants are invited to make important points about the way forward, and in particular, to indicate whether they feel the Stakeholder Forum can be improved or enabled further (e.g. does it require further support, is any particular voice / perspective missing?)
1555	Thanks	Evaluation forms will be distributed to enable participants to help us improve the way we work together.
1600	Close	

The M4 CEM Programme: context & scene setting

Presentation 1: The M4 CEM Programme: context and scene setting, including updates on development of the programme to date, Mr Russell Bennett, Head of Infrastructure Projects Unit, Transport Division, Department of Local Government and Communities, Welsh Government.

The presentation was followed by a few minutes for participants to reflect together at their tables and to identify together key comments and questions, which were then shared in plenary.

Comment (C) : We are surprised that the goals of the M4 CEM – being used as criteria against which the merits of possible measures are judged are so weak with respect to **sustainable development** (SD) – they are restricted to air quality and noise emissions. Land takeover and the far wider environmental impacts of construction should be included.

Related to this comment, our **Question (Q)** is : Measure 1(a) is not a new corridor; it comes out relatively well against the agreed M4 CEM goals – but would have really major environmental impacts, including negative impact of designated (SSSI) land. When is full EIA carried out?

Answer (A) : There will be an Strategic Environmental Assessment on the full strategy, and an Environmental Impact Assessment on its components. I am not sure if the SEA will be on the M4 CEM alone or on full Wales Transport Strategy.

C: The Vision Statement [see page 1 of the Workbook / Measures Appraisal document] focuses on transport. For me, the M4 CEM is all about **economic development**, and this is not fully reflected. Also not convinced on the argument that the M4 relief road is not affordable.

A: Yes but the M4 CEM is also wider than economic development – it includes poverty and environmental issues. Need to try to get the balance right. The affordability issue relates to the transport budget, not necessarily the overall WG budget.

Response from participant (R) : yes - a combination of measures should be possible that can address the issues in a balanced way.

C: On the decision not to take forward the M4 relief road proposal, Jane Davidson has referred to **environmental issues** (impacts on protected areas etc.) – not only to issues of cost.

A: The decision not to proceed with the M4 relief road was made by the Transport minister.

Q: Why are the **train operators** not here today?

A: They were invited. Mr Bennett noted that he is also responsible for rail infrastructure.

R: Network Rail and the train companies really need to be involved in the M4 CEM engagement process, because there are a number of multimillion pound rail schemes in the pipeline.

C: There is an All-Wales Rail Group which Network Rail and the train companies are members of – suggest the M4 CEM is added to the agenda of its next meeting if possible.

Q: When the M4 has to be closed because of an incident, the current **diversions in the M4 Corridor Area** don't seem to work well. Is it intended that the M4 CEM will seek to address these problems as well as the broader strategic issues?

A: The diversion routes are probably the best available, but the volume of traffic is such that they don't work optimally. So the M4 CEM plans as they emerge should help.

C: **Junction 28** seems to be at the centre of the problems facing the M4 CEM – it is a major pinch point. Both the Ebbw roundabout and Junction 28 are key. It is useful to understand these as key areas for this whole exercise.

A: Yes – the M4 CEM includes plans for improvements at both Junction 28 and the Ebbw roundabout.

R: Can we include these in our work today?

A: Yes – Measure 4(d) is relevant to this *[see p.30 of the Workbook / Measures Appraisal document]* specifically the improvements in relation to Junction 28 through the route to Cleppa Park roundabout (marked in red).

C/Q: This process should **avoid focussing only on the Newport area** – it should also consider the wider benefits including west of the tunnels and more widely. How will the Welsh Government (WG) ensure that some of the **SD measures** will be **implemented**?

A: We are working with Newport to ensure complementarities – this is a separate workstream within Newport Council. Broader SD-focused measures will be followed up by the WG Planning Department as part of the overall national Transport Plan.

C: The **most important challenge** is the bottleneck around Newport and addressing the **economic impacts** that this presents. We need to recognise this and prioritise the M4 CEM goals accordingly.

A: WG and Arup are using the WelTAG approach which encourages us not to prioritise at this stage, but to do so a bit later on. At this stage the aim is to achieve a package of measures that delivers optimal results.

Q: How about separating the M4 CEM goals into **priorities in terms of the short, medium and long term**? This might enable us to go through the matrix analysis more quickly – starting with the short term first.

A: May be a good idea – but the current WelTAG process we have adopted keeps the measures separate at this stage. Scenario-testing particular priorities may well be a good idea at the next stage.

Q: The **M4 relief road** has been dismissed, but has a cost-benefit analysis been done?

A: The previous process identified a new M4 relief road as the best way forward except in relation to environmental issues and cost. There is a measure in the workbook – 1(a) – outlining an incremental approach to achieving something like a new M4 relief road, minimising impacts and phasing costs. Suggest at this stage that we work with the measures identified so far (and any others proposed).

C: In relation to performance against M4 CEM goals, Measure 1(a) is almost all amber or green despite its environmental impacts. This result indicates that the **M4 CEM goals need to be re-assessed** – as they do not **adequately address environmental issues**.

A: The goals were arrived at through working with a wide range of stakeholders, during Stage 1 of the Engagement Process, following an exploration of the problems experienced in the M4 Corridor Area, thus enabling the identification of goals or objectives to address these problems.

R: But this suggestion for a re-assessment of the M4 CEM goals is not an extreme view – the impacts on the environment need to be given more weight than they are at present.

A: As we get to the WELTAG stage, the environmental impacts will be considered in more detail. The Aims of the programme were also consulted upon, in Stage 1 and these overarching aims do guide the choice of M4 CEM that are ultimately implemented – one of the aims indicates that “positive effects overall on people and the environment” should result from any interventions *[see page 1 of workbook]*.

Q: Will the final scheme put forward to ministers consider **lost opportunity costs**? Economic consequences/implications are key – i.e. the impacts to Wales as a whole.

A: We will produce a comprehensive analysis of all the options. Arup has in the past produced a report on the consequences of doing nothing, and would expect to do something similar in the context of the M4 CEM.

Introducing the list of possible M4 Corridor Enhancement Measures

Presentation 2: Introducing the long list of M4 Corridor Enhancement Measures: Programme: context and scene setting, including updates on development of the programme to date, Mr Richard Sanders, Associate Director, Arup.

A wide range of possible measures have been compiled already; they address the issues relating to increasing demand on the transport system in the area / region and the sub-standard design of the M4 between J23a and J29. Some of these measures are interventions which have been studied in considerable detail, others represent less developed ideas. The talk explained where these possible measures have come from, gave an overview of the initial assessment process – as recorded in the workbook, and asked participants for their views, specifically in terms of the potential benefits, as measured against the stated goals as well as thoughts on the “Acceptability, Deliverability, Feasibility and Risk” of each possible intervention.

The presentation was followed by a few minutes for participants to reflect together at their tables and to identify together any questions of clarification, to which they required answers before being able to undertake their exploration of the long list of measures. Questions were then shared in plenary.

Q: Is it possible to get better clarification (i.e. larger scale versions) of the **maps**? The detail will obviously be important.

A: Yes this will happen. And there is a supplementary workbook including more detailed maps which can be made available and will be put on the web site.

Q: Is there any **data on the specifics of journeys made on the M4** (length, frequency etc.)?

A: Yes, volumes of data are available and they (or at least selected highlights) can be put on to the web site.

R: A high level summary would be useful.

C: Measures should be measurable – if not, we cannot know if they have delivered. In the context of my own department's work, the current M4 CEM measures document would be thrown out on the basis that the measures are not currently measurable.

Q: All the measures aim to alleviate issues in relation to the M4 CEM. But is it part of the thinking to consider where **bottlenecks will be “moved to”** elsewhere in the road network, if we successfully address them here?

A: Once we have packages of measures for consideration at the next Stakeholder Forum, we will start considering their impacts more widely.

Q: The **Rail Strategy of 2008** has proved to have **underestimated demand**. There is a risk of using out-of-date data – has this been factored in to the M4 CEM?

A: Fair comment – we should discuss this further in the context of the workstreams.

Q: Will the format of the presentation in the M4 CEM workbook for this meeting of the Forum be tailored for different audiences? The **information** and current traffic light system may not be clear to **other audiences**, as it does not in itself fully address all the issues.

A: The workbooks have been generated specifically for you, the Forum, and as a tool for the technical team, to ensure a basic level of understanding of the implications of each potential intervention is assessed in an equivalent manner. It is part of the detail of work in progress, which can be introduced to others through deliberation. We are not envisaging this version of the workbook will be distributed widely. Materials we are producing for a wider audience – information giving, without the benefit of being on hand to explain and explore together with people – is simpler and more accessible.

Exploring the measures

Group work sessions

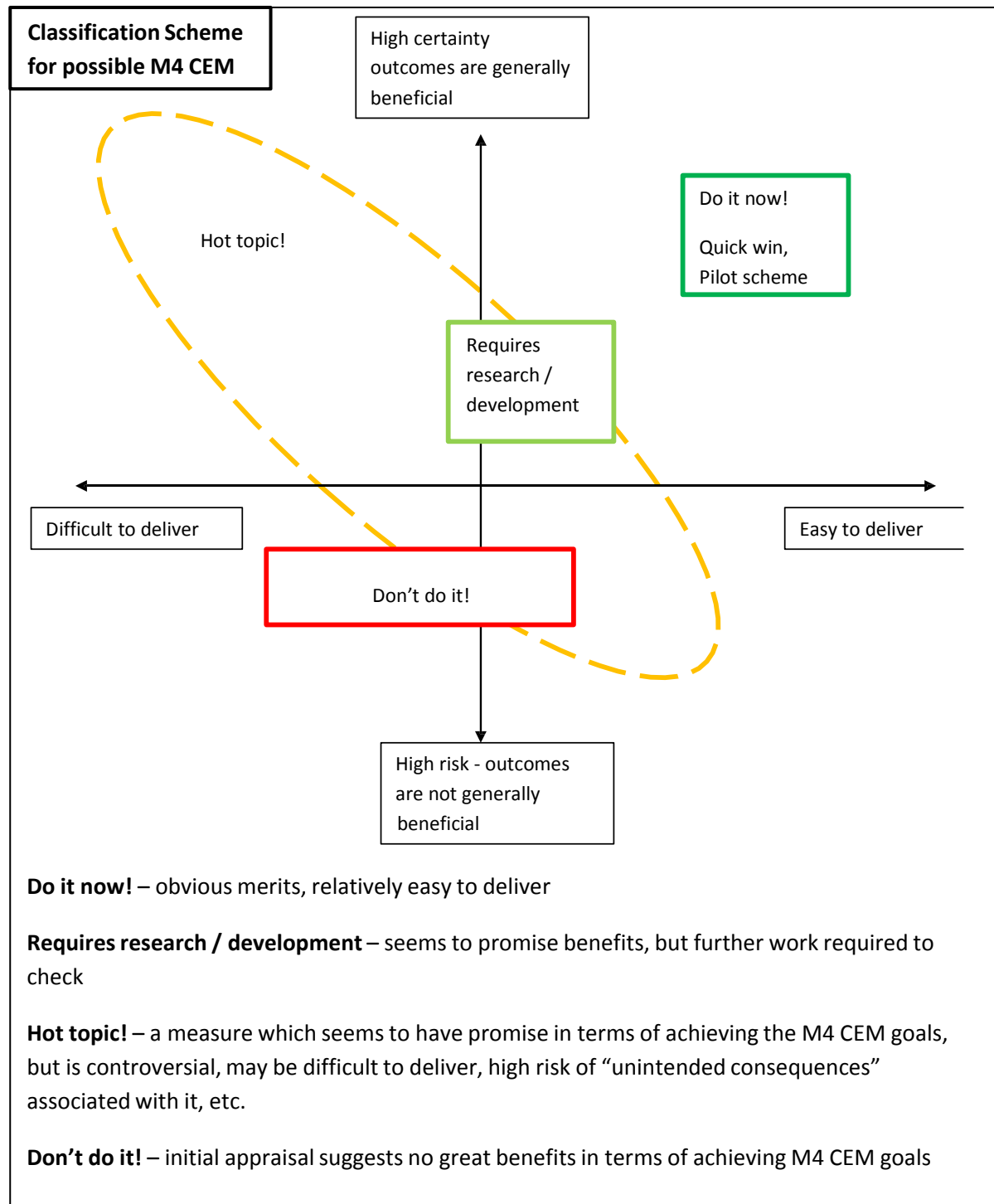
Following the plenary sessions and a short break, participants selected one of the four workstreams into which the possible measures fall, and now formed new groups of between seven and nine people.

The new workstream-themed-groups assembled around a display illustrating a very preliminary classification of the measures in that workstream, undertaken as a “starting point for discussions” in advance by Arup. The classification scheme being used, differentiated measures under 4 headings: “Do it now”; “Requires further research”; “Hot topic”; “Don’t do it”. The definitions of these four headings are illustrated in the following diagram.

The task to be undertaken by the groups, with respect to each workstream in turn, was to look at and explore the preliminary classification in front of them, and to deliberate whether they thought it correct. If the group felt that a measure was not classified correctly, they could reclassify it, indicating why this should be so, paying specific attention to the performance against goals as well as Environmental, Social and Economic impacts (positive and negative) and the “Acceptability, Deliverability, Feasibility and Risk” of each possible intervention

Discussions were supported by a technical expert from Arup, and were recorded on flip charts at each station.

The notes, are written up with measures in the order of the “starting classification”, a photograph at the end of each section summarises changes made by Forum Members.



Workstream 1 : Highways infrastructure

Workstream 1 : Highways infrastructure This is about building and improving highways networks so that they work more efficiently for travellers and cause less problems for people living near them

General Comments:

- Should goals include environmental issues across all measures? And therefore be considered up front as part of the first sift? Without considering environmental aspects the process does not fully consider WG sustainable development objectives.
- Concerns were raised that “missing” goals are not being considered until later in the assessment process.
- Why is there no specific environmental focussed goal? The current way of displaying environmental issues is slightly misleading.
- Which are the most cost-effective measures?
- Could the cost of packages of measures be in the same price bracket as the New M4?
- What are the implications of fuel prices/carbon issues into the future? Does the new traffic growth modelling take this into account? What effect will fuel prices have on future traffic growth – do DFT growth forecasts account for carbon pricing?
- South Wales travel distances to work are lower than other areas in the UK.
- Some measures have costs associated with them, but others do not. Affordability is hard to measure, even just ball park figures would enable a better comparison to be made.
- Need to look at providing a holistic solution, including all users, public transport, etc.

Do it now!

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
1a) M4 Alternative Route: new dual 2-lane all-purpose road to the south of Newport (including Duffryn Link)	Do it Now!	1: Needs More Research 2: Do it now! 3: Needs More Research / Do it now! 4: Needs More Research / Do it now!
• This cannot be done now as a whole, however could be delivered in several stages as a phased programme. Duffryn Link and Coedkernew Rail Station should be priorities. • Long term strategy is very important. Need to input to the Newport CC Local Development Plan within the next month. Early dialogue is required as it is in progress now, a plan for the next 25years. Need to look at future development: Housing, etc. and locations proposed for this. • What is the capacity difference between this and the previously proposed M4 Relief Road (3 lane motorway)? • Consider promoting this as a new access to Newport (to take long distance traffic off M4). Needs combining with an effective access method to get into Newport e.g junction closing in conjunction with 1a if 1a had better access. Consider looking at Newport travel/accessibility to M4 needs. • If 1a is pursued you get around double the capacity for a similar cost to widening the Brynglas tunnels.		

• Need to look at where travel patterns are in Newport and work out the best solutions. Combine with an effective access strategy for Newport. • The community of Caerleon has a major concern of severance and access to the network. Access may be required to a possible new hospital at Llanfrehfa. • The road is going to be around for a long time (legacy). • Is it the right thing to do now: Benefit/cost.?		
Benefits	Disbenefits	
• Takes traffic off existing corridor – moves traffic away from residential areas, possibly reduces severance across existing motorway.	• Goes through the Gwent Levels SSSIs, River Usk crossing and historic environment. Needs a lot of looking into. What mitigation could be provided? • Concern of moving bottleneck traffic issues to Magor. • Very difficult to integrate social and environmental issues/benefits. • May have same junction problems as existing M4. • Moves traffic closer to residential areas in south Newport that do not experience such high traffic volumes at present.	
1e) Link (and new M48 Junction) between B4245 and M48 east of Magor	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
• Generally positive response, but may not perform as expected. • Why widen/provide a crawler lane when all traffic is slow moving at peak period? Off peak the traffic volume is lower and there is room to pass slow moving lorries. • Could have Park & Ride at Newport tunnels. • Without having costs, hard to put it in DIN. Classification of road would affect cost, motorway vs trunk road, etc. Does it have to be motorway standard? • Standing alone not very useful – needs to be with other measures.		
Benefits	Disbenefits	
• Take pressure off J23.		
2c) At-grade improvement to the A48 Southern Distributor Road (SDR)	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
• A lot of roundabouts at present, which makes tyre wear of HGVs high. Signalising junctions (in place of roundabouts) and setting up the signal system to provide a green wave would be beneficial – needs More R&D. Very similar to 5d. • Link to 2d. • If tolled this measure would become undesirable. • Increasing developments around the SDR mean this option may be required. • Need to ensure that traffic on the SDR does not back up and cause further problems on the M4. • Include cycling and pedestrian facilities within the upgrade of the SDR.		

Benefits		Disbenefits	
- Upgrade to provide positive benefit for HGVs. - Local bus stops could serve peripheral development.		- Local bus stops do not work with upgraded route. - Could duplicate the problem at present – have a “Southern” bypass and a “northern bypass”. (M4). - Newport SDR upgrade: Depreciation of current assets (the current route) may require considerable investment. This could increase cost and make other options more viable.	
2l) Dualling of the A465 Heads of the Valleys road		Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- Consider strategic links to/from A465. Upgrade other trunk roads – (New measure). - Include strategic signing to A465 from A40/A449. Make A465 better advertised to attract users (New measures). - Change public perceptions that M4 is the only way in to Wales.			
Benefits		Disbenefits	
A465 upgrade is a good alternative to the M4 – strategic route.			
4a) J23A circulatory improvements		Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
Link to M4 junction (Measure 1e).			
Benefits		Disbenefits	

Requires more research

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
2d) Grade-separated improvement to SDR	Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
1a and 2d are mutually exclusive. Requires a Cost Benefit analysis. - Spytty Retail Park due to expand – increase amenities / trip generators. - If tolled this measure would become undesirable. - Increasing developments around the SDR mean this option may be required. Little/no existing bus stops, would be good to have but may not work with upgraded route. - Need to ensure that traffic on the SDR does not back up and cause further problems on the M4. - Include cycling and pedestrian facilities within the upgrade of the SDR.		
Benefits	Disbenefits	
Low environmental impact.	- Impact on residents, air quality issues. - Could duplicate the problem at present – have a “Southern” bypass and a “northern bypass”. (M4). - Newport SDR upgrade: Depreciation of current assets (the current route) may require considerable investment. This could increase cost and make other options more viable.	
2k) Incremental widening between J26 and J29 (k1. J26-J27; k2. J27-J28; k3. J28-J29)	Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
Benefits	Disbenefits	
4b) Widening of west facing slip roads at Junction 26	Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
- Fits with other measures (other junction improvement). - Need to consider impact on buses – traffic flow to fit with bus movements. - Not convinced that there is a problem here. Travel this route regularly but have never seen any accidents. Need to look at accident / safety records.		

Benefits	Disbenefits	
	- Canal is a historic feature. Low headroom crossings over canals cause problems / sever canal access. - Check with Newport CC ecologist – Brecon and Monmouth canal may be a SSSI.	
4c) J27 safety improvements	Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
Benefits	Disbenefits	
5a) Close access to motorway from J25	Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
- Link with 5b. - Access measures: Ramp metering/Close at peak times (so half measures). - Hugely relies on what other measures are used with this one. - We perceive losses twice as strongly as we perceive gains! - Closing slip roads is a different issue/solution to closing junctions, e.g. closing 25/25a argument.		
Benefits	Disbenefits	
Could be trialed easily.	- Concerns to increased loading on other junctions. - Pushes problem to J28. Besides, topography is a problem that limits diversion to alternative access point(s). - Caerleon people are very bitter about J25 partial closure (for Malpas Relief Road). Too many junctions /too closely spaced. "By closing accesses you are killing Newport".	
5b) Close access to motorway from J27	Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
- Closure puts extra pressure on the rest of the network – knock-on effect. Extra R&D needed on traffic figures. - Don't get side tracked by safety issues. Debatable traffic accidents around J27 – where is the accident record evidence? Weaving length is a problem (too short). - Link with 5a. - Access measures: Ramp metering/Close at peak times (so half measures). - Hugely relies on what other measures are used with this one. Perceive loss twice as strongly as gain!		

Benefits	Disbenefits	
- Affects local journeys, if other measures are implemented could be possible. - Possible benefit to community – less severance from using crossings for non-motorway traffic. - Could be trialed easily.	- Closes off certain destinations – where will traffic go? J28, 26 not option – no suitable road links. - Pushes problem to J28. Besides, topography is a problem that limits diversion to alternative access point(s). - Network resilience issues. - Concerns to increased traffic loading on other junctions. - Large consideration to valley topography – losing access/restricting certain destinations.	
5c) Removal of east facing slip roads at J26	Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
Benefits	Disbenefits	
	- Concerns to increased loading on other junctions. - Pushes problem to J28. Besides, topography is a problem that limits diversion to alternative access point(s).	
6a) Climbing lanes at High Cross	Requires more research	1: Don't do it! 2: Don't do it! 3: Don't do it! 4: Don't do it!
Including climbing lanes is seen as offering little benefit due to the capacity constraints imposed by the tunnels.		
Benefits	Disbenefits	
	Will only move/exacerbate capacity issues at Brynglas Tunnels.	
6b) Climbing lanes at St Julian's Hill	Requires more research	1: Don't do it! 2: Don't do it! 3: Don't do it! 4: Don't do it!
Including climbing lanes is seen as offering little benefit due to the capacity constraints imposed by the tunnels.		
Benefits	Disbenefits	
	Will only move/exacerbate capacity issues at Brynglas Tunnels.	

Hot Topic!

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
2f) On-line widening, 3 lane (60mph) (+ hard shoulder) through Brynglas Tunnels	Hot topic!	1: Hot topic! 2: Hot topic! 3: Don't do it! 4: Don't do it!
- Not going to be a quick fix. Needs more looking at using modern engineering techniques – boring, etc, - lots of analysis. Brynglas – must consider widening of D2 viaducts to immediate east and west of tunnels. - In Hot topics but widening either side of tunnel is “don't do it”. Should be kept as a package with 2e and 2g – all in Hot topics. - Widening existing tunnels not feasible. Creating new bores are the preferred solution. 3 lane through tunnel not with hard shoulder (cost saving) – not required. - Hot topic but doubtful on implementation. - Link with 2f/2g/2h/2i/2j – big issue – widen to 3 lane throughout. Future demand may not require 4 lanes. - Need to look at the long term benefits. - Not a total solution - needs to be in conjunction with other measures. - Suggested package – 3 lanes + extra tunnel bore + close 2 or 3 junctions + local improvements to cater for displaced traffic. - Existing M4 needs remedial work, so do it all together and upgrade capacity at same time.		
Benefits	Disbenefits	
Removing the bottleneck would be a great help in relieving problem meeting goals.		
4d) J28 Improvements	Hot topic!	1: Hot topic! 2: Hot topic! 3: Hot topic! 4: Hot topic!
- Traffic analysis needs to be taken largely into account - would be good if traffic flows show feasible. Depends on traffic analysis and wider SDR strategy. - Make sure bus considerations and bus users are included with operator consultation. - Improvements to allow free flow of buses through junctions. Modal splits. - Bus priority/bus gates, etc. Ditto all junctions on SDR.		
Benefits	Disbenefits	

Don't do it!

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
1b) Combine a new M4 with a lagoon barrage	Don't do it!	1: Don't do it! 2: Don't do it! 3: Don't do it! 4: Don't do it!
Benefits	Disbenefits	
	Not looking like it is to go ahead, relies on others and isn't in the WG policies.	
1c) Cardiff Peripheral Distributor Road Eastern Bay Link	Don't do it!	1: Requires More Research 2: Don't do it! / Requires more research 3: Don't do it! / Requires more research 4: Don't do it! / Requires more research
- Similar to 1a - synergy with traffic benefits of goals. - Newport solution intrinsically linked to east Cardiff, therefore cannot discount 1e – Eastern Bay Link.		
Benefits	Disbenefits	
Would keep traffic off M4.	- Removal of M4 traffic – consider implications for Newport Local Highway Network. - Concerns of moving bottleneck towards Cardiff. - Cannot see how it will benefit the goals.	
1d) Corporation Road Link	Don't do it!	1: Don't do it! 2: Don't do it! 3: Don't do it! 4: Don't do it!
Consider as part of other measures – junction closure measures specifically.		
Benefits	Disbenefits	
1f) Create road between Celtic Springs and Rogerstone roundabout so traffic from Cardiff can avoid J28 and access Rhymney Valley, Sirhowy Valley and Ebbw Vale	Don't do it!	1: Don't do it! 2: Don't do it! 3: Don't do it! 4: Don't do it!
Need to relate to LDP.		
Benefits	Disbenefits	

	- Green field site – does not link with Newport. - Crosses site with environmental / possible archaeological issues.	
1g) Link between M48 and Second Severn Crossing	Don't do it!	1: Don't do it! 2: Don't do it! 3: Don't do it! 4: Don't do it!
Idea of improved signing for better warning of travel time across Severn.		
Benefits	Disbenefits	
2a) Permanent hard shoulder running lanes on the existing M4	Don't do it!	1: Don't do it! 2: Don't do it! 3: Don't do it! 4: Don't do it!
Benefits	Disbenefits	
	Need to spend a significant sum just to create a continuous hard should.	
2b) Upgrade Steelworks Access Road to dual 3 lanes	Don't do it!	1: Don't do it! 2: Don't do it! 3: Don't do it! 4: Don't do it!
Needs monitoring – Dual 2 seems adequate at present, possible wider structures to accommodate extra lane in future.		
Benefits	Disbenefits	
	Impacts on SSSI if proposals go outside current corridor.	
2e) On-line widening, 3 lane (60mph) (+ hard shoulder) west of Brynglas Tunnels	Don't do it!	1: Don't do it! 2: Hot topic 3: Hot topic 4: Don't do it!
- All plans should take into account technology in car developments (ie better braking, handling, computer systems) but maybe not driver behaviour changes? - Hot topic but doubtful on implementation. - Link with 2f/2g/2h/2i/2j – big issue – widen to 3 lanes throughout. Future demand may not require 4 lanes. - Need to look at the long term benefits. - Not a total solution - needs to be in conjunction with other measures.		
Benefits	Disbenefits	
	A lot of money for the benefits provided.	
2g) On-line widening, 3 lane (60mph) (+ hard shoulder) east of Brynglas Tunnels	Don't do it!	1: Don't do it! 2: Hot topic 3: Hot topic 4: Don't do it!

- Hot topic but doubtful on implementation. - Link with 2f/2g/2h/2i/2j – big issue – widen to 3 lanes throughout. Future demand may not require 4 lanes. - Need to look at the long term benefits. - Not a total solution - needs to be in conjunction with other measures.		
Benefits	Disbenefits	
2h) On-line widening, 4 lane (60mph) (+ hard shoulder) west of Brynglas Tunnels	Don't do it!	1: Don't do it! 2: Hot topic 3: Hot topic 4: Hot topic
Link with 2f/2g/2h/2i/2j – big issue. Future demand may not require 4 lanes.		
Benefits	Disbenefits	
- Logic of increasing to 4 lanes - if 3 lanes is enough don't do it – but increases capacity. - Benefit of crawler lane in peak rush hour?	High cost for marginal benefit.	
2i) On-line widening, 4 lane (60mph) (+ hard shoulder) through Brynglas Tunnels	Don't do it!	1: Don't do it! 2: Hot topic 3: Hot topic 4: Hot topic
Link with 2f/2g/2h/2i/2j – big issue. Future demand may not require 4 lanes.		
Benefits	Disbenefits	
2j) On-line widening, 4 lane (60mph) (+ hard shoulder) east of Brynglas Tunnels	Don't do it!	1: Don't do it! 2: Hot topic 3: Hot topic 4: Hot topic
Link with 2f/2g/2h/2i/2j – big issue. Future demand may not require 4 lanes.		
Benefits	Disbenefits	
3a) Reinstate motorway access westbound at J25	Don't do it!	1: Don't do it! 2: Needs More Research 3: Don't do it! 4: Don't do it!
- Daft idea! - Could be combined with other measures.		
Benefits	Disbenefits	



The measures as they were classified at the end of the exploration of possible interventions undertaken by Forum Members.

Workstream 2 : Road network management

Workstream 2 : Road network management This is about managing our existing roads better, and includes ideas about how to minimise peak-time congestion, traffic associated with popular events and improve the response to accidents or bad weather so that there is less disruption for everyone.

Do it now!

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
3a) Improve traffic flows through traffic monitoring, incident management and queue detection	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
General comments: • Enforcement of highway behaviour is required to ensure this works effectively. • A campaign of educating drivers needs to be part of this measure. • J28/27 – What is causing the congestion problems? (Requesting that more research takes place). • Traffic management system already in place, so no need to install more.		
Benefits	Disbenefits	
4) Improve incident management	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
• Find signs are out of date – need to be more regularly updated • Signs are required further away from event/accident – this way road users make their own decision • Specific journey times through incidents etc should be given to inform choice. • Use a web page to better inform people of different diversion options etc. • At the moment main media is through radio for drivers. • Make use of a rest area to show information about traffic etc • In times of emergency, there should be better cooperation between local authorities. • Need to consider how to deal with spills – storage of chemicals etc. • Need to educate drivers, make them safer drivers. If people moved to inside lane this would prevent congestion. • Create better access routes for emergency vehicles • Make use of new quick 'laser' survey equipment for recording evidence at accident sites, to reduce period of closures. • The traffic cameras on the web are a good idea as you can assess the condition of the traffic, but		

when there are accidents they get switched off which is when they are needed the most. - Screening incidents to stop 'rubber necking' would help reduce congestion when accidents occur. - Some roads have high barriers which work well as you cannot see what is going on in the other direction.		
Benefits	Disbenefits	
People can make their own decision to choose which diversion route they use.	You don't want people checking internet while driving – safety concerns.	
5) Better event management	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- Already in place – can it be improved? - Park and rides are currently just in Cardiff. - Ryder Cup increased the public transport services and it worked well. - Incidents linked with big events can cause a massive problem with the motorway traffic. - Better links between events and traffic rush hour etc - Can't stop people driving to events, maybe control the coaches - Need to get event managers on board early, involve them with the organisation of the traffic control for the event too. - Use planning for Ryder Cup as good example – planned a long time in advance - Need to include examples of Cardiff events as these are more numerous than large events at Newport. - Events in Cardiff are the main cause for these types of problems, worksheets need to reflect this. - Encourage alternative transport use at early stage - for example when you are buying event tickets, similar to success with Ryder Cup. - Not just the big events that cause these problems, sometimes smaller events close to junctions can cause problems as well. - Ryder Cup information was shown on approach roads all the way back as far as Bristol. - Information needs to get to both people involved and people who are not. - Park & Ride from Severn Tunnel junction could be an option to reduce flow down the M4. - Travel planning needs to be linked with events management.		
Benefits	Disbenefits	
6) Encourage use of alternative routes to M4 and Improve traffic management for diversion routes	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- Technical issue with Sat Nav's – they seem to lead you on M4→M5 if going to Midlands rather than A449/M50, which could help ease the congestion on the M4. - It will be important that the Sat Nav suppliers tie in with these new routes. - Variable message signs need to be further away from a problem; give people a chance to make a change to their journey.		

Benefits	Disbenefits
	Ensure fair consideration of impact on non-motorised users on alternative routes.

Requires more research

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
1) High occupancy vehicle lanes	Requires more research	1: Don't Do it! 2: Requires more Research 3: Requires more Research 4: Requires more Research
- Reduced car park fees for 'car share' rather than reduce capacity on motorway. - Also make car park fees more expensive for bigger cars, (4x4) → (but this could penalise people who live in rural areas). - It only is a disadvantage when first introduced, eventually will start to work – aligns with W.4_2b - Need to show people the advantage of this and also how to use it. - What about having a coach to bring people to work – similar to a 'school bus'. - Need to install very clear signs which highlight extremely high fines if people don't adhere to rules. - Probability of being caught is more important than value of the fine.		
Benefits	Disbenefits	
- This type of system will make car sharing more attractive. - When there are company subsidies for 'car share' it works really well.	- These work to a degree, but you seem them empty a lot of the time, frustrates other road users, people obviously aren't using them as they should. - Very difficult to find people to 'car share' due to shift patterns in work.	
3b) Dynamic temporary use of the hard shoulder at peak times (ATM)	Requires more research	1: Requires more Research 2: Requires more Research 3: Requires more Research 4: Requires more Research
Benefits	Disbenefits	
- Does give additional capacity at peak times - Could be used in emergency to help divert traffic - Allowing people to use the hard shoulder coming to a slip road, will help reduce necessary queuing on the motorway at peak times. - Proven elsewhere.	- Works on M42, but would not work in this case due to intermittent hard shoulder, lots of infrastructure work would be required. - Problems for emergency vehicles. - Could cause more of a bottleneck into the tunnels - Would need lots of infrastructure work to provide hard shoulder throughout and refuges.	

	There are safety issues with this system.	
7) Introduce traffic signal lights coordination and control systems on the local road system	Requires more research	1: Requires more Research 2: Requires more Research 3: Requires more Research 4: Requires more Research
- Introduce part time signals to help with incidences as well as traffic congestion - Should Welsh language be dropped on variable message signs? (important message needs to be read quickly). Must refer to the Welsh Language Board. - J28 full introduction of traffic lights would ease queues out of Newport - Traffic lights which will respond to congestion rather than on a fixed timing for certain times of day. Link to Measure 3a. - Who controls J28? Need integration between local authority and Traffic Wales/SEWTRA - New lights tend to be more 'intelligent' – these systems need to be reviewed as they sometimes are bias to certain traffic flows.		
Benefits	Disbenefits	
- Link various signals together if there is an incident in one place, this would help to divert the traffic at an early stage. - Timing of lights important, once you hit one green light should get a 'clear run' through the rest, not hitting red light after red light. "Green Wave"		
8) Improve road management during times of poor weather	Requires more research	1: Requires more Research 2: Requires more Research 3: Requires more Research 4: Requires more Research
- M4 is a local road for some people. - M4 actually coped well with the bad snow we had this winter; it was the roads approaching/leaving that caused the problem. - But is this type of snowfall still a rare event in current climate? - Everyone leaving work at the same time was the real issue, maybe if forecasts are bad people should work from home. - When do you cancel public services? Police will stop them due to safety. - Train service got progressively worse as the days went on (breakdown of rolling stock) - this needs to be addressed.		
Benefits	Disbenefits	
10) Use of ramp metering	Requires more research	1: Don't Do It 2: Requires More Research. 3: Requires More Research. 4: Requires More Research.
It is important that if such a scheme was implemented then people need to understand why and how this works.		

- Significant evidence showing that people junction hopping → happens with Sat Nav; would there be a way that you could influence the pre-settings of Sat-Nav. Discussions with suppliers.
- Brought in on M5/M6, where traffic would be at a standstill for most of the time. The M4 is never this bad, so would probably not be needed.
- Would need detailed modelling to see if this system would work → could spend this money more wisely than wasting it on research.
- Car drivers going faster on slip road than the motorway → this type of behaviour will cause problems with any measure implemented – there is a need for better enforcement to prevent bad behaviour and education for drivers.

Benefits	Disbenefits
• It could be possible to close certain ramps during heavy traffic times, this would then ease the flow. • This type of system encourages people to find alternative routes.	• This will only push the problem back to the feeder roads. • Can cause a lot more congestion on approach to motorway, so you end up shifting the problem on to the approach roads and local network.

Hot Topic!

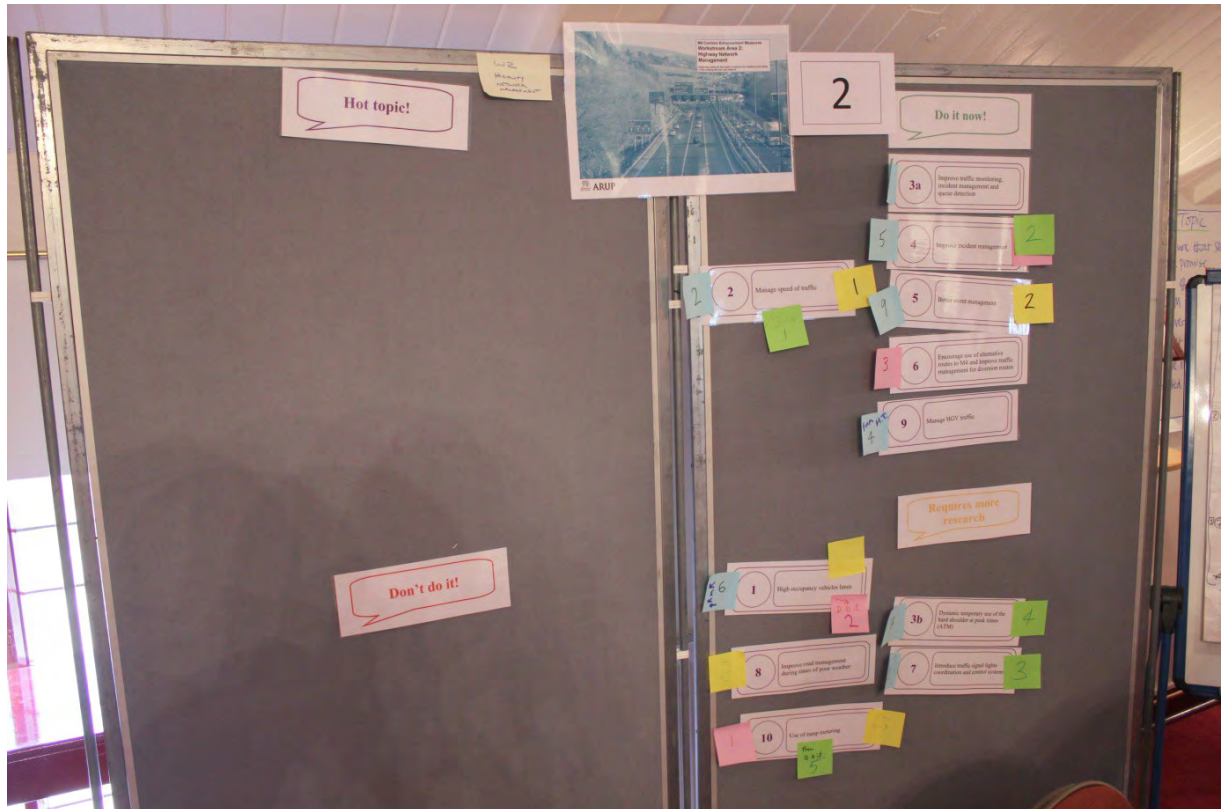
Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
2) Manage speed of traffic	Hot Topic!	1: Do It Now 2: Do It Now 3: Do It Now 4: Do It Now

- Currently trialling a variable speed limit within the study area, we need to see how this works before expanding the areas which it covers.
- Lack of information on alternative routing, people need to be made aware at an earlier stage before joining motorway so they can change their travel plans.
- Could expand the VSL system to include from J28 to 29
- Accident records need to be reviewed to see where the accidents along this stretch of motorway are located.
- J26/27/28 – biggest problems
- needs to be move intelligent in control of system, different speed bands, etc
- Does this stop dangerous driving?
- It should just be 50mph throughout, as this worked well when it was enforced during construction.
- It was much better with an average 50mph speed limit, rather than the variable speed limit.
- Should be enforced during 'peak' times only.
- When there was a 50mph average speed limit enforced it worked well.
- But should only be enforced during peak times.

Benefits	Disbenefits	
- It reduces accidents – links to measure 2_4. - It should just be 50mph throughout, as this worked well when it was enforced during construction.	- There never seems to be any holds up from J28 to Cardiff. - Problems during times when not busy. There is still a 50mph speed limit when not needed as there is no traffic on the road.	
9) Manage HGV traffic	Hot Topic!	1: Do It Now 2: Do It Now 3: Do It Now 4: Do It Now
- Acceptability box in the workbook needs to be further summarised – reviewed - HGVs with speed limitations are prohibited from outside lanes. - How would you manage this? Enforcement required to stop HGVs who aren't suppose to use the lanes from using them? - Has this been modelled to assess the impact on journey times?		
Benefits	Disbenefits	
Lorry overtaking ban does seem to work	- Overnight parking for HGVs is a problem – people don't want them near where they live. - By legislation HGVs are governed to a top speed, so this cannot be an option as it already exists. - Remember you do not want to take HGVs off purpose built M4 road, would cause a problem for local roads. - Does HGV lane include buses/coaches? – could be a problem if so, further research would be needed to determine how many buses use this stretch of M4.	

Don't do it!

No measures in this classification.



The measures as they were classified at the end of the exploration of possible interventions undertaken by Forum Members.

Workstream 3: Alternative travel modes

Workstream 3: Alternative travel modes This is about getting more people to travel and access services, homes, work and leisure without driving a car.

Do it now!

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
1a) Electrification of Great Western Main Line (GWML) from London to Swansea	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- Title should read "Electrification of Great Western Main Line (GWML) from London to Swansea and South Wales Rail Network" - WG have committed to improve/electrify the lines for Ebbw Valley, the Valleys, Abergavenny, Chepstow thus comment in workbook "Compatibility with other measures" is out of date - General agreement that this is a good measure that should be delivered as soon as possible		
Benefits	Disbenefits	
This would improve reliability and frequency, and thus make journeys by rail more attractive	May not be easy to deliver	
1e) Train lengthening	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
Benefits	Disbenefits	
- Would increase capacity of peak hour trains which are very busy, and thus make journeys by rail more attractive - This is a "no brainer"	Would require new rolling stock and some station improvements	
2) New train stations / station improvements	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- General agreement that this is a good measure, however it was felt that additional new stations should be included in the description: Magor, Caerleon, and Llanwern in particular. - City centre stations are not always best for access – 'Parkway' type station may be more accessible by car		

Benefits		Disbenefits	
- Improved catchment and thus more people able to switch to rail - Increase in car parking provision at stations to encourage use as park and rail, in particular Severn Tunnel Junction and Newport, but also many others - Secure bike parking improvements also good to encourage cycle access			
5) Transfer road freight onto rail		Do it Now!	1: Do it Now! 2: Do it Now! 3: Requires more Research 4: Requires more Research
- How can WG force companies to use rail instead of road? Companies decide for themselves how they will transfer freight - Is it possible to introduce tax incentives for freight to use rail instead of road? - Road/Rail interface difficult, but may be useful to create centralised transfer hubs - This measure depends on the load types and weights involved			
Benefits		Disbenefits	
- CO₂ emissions need to be considered, 80% reduction in CO₂ emissions by freight using rail as opposed to road. Thus this measure must be done. - Useful for bulk items (e.g. coal), or isolated destinations (e.g. waste to energy sites)		- Freight has most impact in city centres - Often still need highway at the final destination	
6b) Use of systematic and enforced bus priority measures on the local road network		Do it Now!	1: Do it Now! 2: Do it Now! 3: Requires more Research 4: Requires more Research
- Could allow HGVs to use bus lanes as they travel at similar speeds and this has been successful in Newcastle and Exeter. - Newport Bus currently updating bus routing – need to consider the revisions before proposing bus priority			
Benefits		Disbenefits	
- May have a positive impact on modal shift to bus - Newport University have agreed a significant discount with Newport Bus, and good progress is being made in promoting bus transport to both students and staff. It is hoped that students will continue to use buses once they graduate		Roads around Newport are very narrow unlike those around Cardiff thus this measure may create a bigger problem at peak times	

6c) Introduce a Bus Rapid Transit (BRT) service route linking East Newport to West Newport via the City Centre	Do it Now!	1: Do it Now! 2: Do it Now! 3: Requires More Research 4: Requires More Research
- Is there enough demand for this service? - Newport have introduced a “2hours free” parking offer recently which has boosted trade in the centre, this successful offer would be hard for BRT to compete with - Need to consider optimum route through Newport that would ease M4 traffic the most - Possible to start with BRT and convert to light rail in the future?		
Benefits	Disbenefits	
- Could provide a viable public transport option for areas not currently well served, and thus may encourage modal shift. - Could link with Park and Ride (Measure 7a)	May need significant funding in order to operate effectively	
6d) Improve bus services between Bristol/Newport/Cardiff	Do it Now!	1: Requires More Research 2: Requires More Research 3: Don't do it! 4: Don't do it!
- Should re-title this measure to read “Improve bus services between Bristol and Newport or Bristol and Cardiff” - Who will fund these improvements? Need for kick-start funding at least - Need to have bus stops located near the motorway to enable people who live nearby to catch the bus from there to get to the city centre and catch the train instead of driving to the train station		
Benefits	Disbenefits	
	- Is there a market for this? Difficult to compete with rail - Not a significant demand, and demand is tidal (i.e. Newport to Bristol in the AM, and Bristol to Newport in the PM) - This measure is commercially driven, if it were viable why hasn't it been done already?	
6e) Improve bus stop facilities	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- These improvements are being done anyway to a limited extent - This measure needs to be part of a bus service improvement scheme package of measures.		
Benefits	Disbenefits	
- This is a low cost measure but is visible and thus will have a big public impact. - Possible to design stops to be more recognisable and easily identifiable by for route for example or area		

6f) Achieve a reduction in fares for all public transport	Do it Now!	1: Don't Do It 2: Don't Do It 3: Don't Do It 4: Don't Do It
Links with measure 6g (subsidy)		
Benefits	Disbenefits	
Need to use this measure as an incentive to selected groups identified as potential public transport users. eg occupiers of a new development could get free travel on the local bus route.	- Current prices are already attractively low (bus in particular), but many special offers/deals (weekly tickets etc) are not well advertised - This will not incentivise car users to change to public transport (far more concerned with frequency and reliability) - Price of service related to profit thus if number of passengers using public transport increases the fares will decrease anyway - Increasing the cost of fuel is the best financial incentive to encourage car users to change to using the bus or train	
6i) Improve coach journey times	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
Not really discussed, but acknowledged that it is difficult to achieve		
Benefits	Disbenefits	
	Difficult to achieve	
7b) Provide better transport mode integration including revised ticketing	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- More frequent services ("turn up and go") would be required for this to work effectively thus kick-start funding needs to be sourced - Need more car parking spaces at stations to facilitate passengers - Oyster card type ticketing "All Wales travel card" proposed by 2014		
Benefits	Disbenefits	
- All in one ticketing would be most beneficial, in particular by Smart Card - Could also provide discounted tickets in booklet form to facilitate occasional users of the service - Need to integrate bus and rail time-tables to ensure passengers changing from bus to train and vice versa don't have long waiting times	- Difficult to achieve in some areas, e.g. Pontypridd railway station is three-quarters of a mile away from the bus station. - Would require changes to legislation in order to work most effectively	

8a) Provide cycle friendly infrastructure	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- Title should read for journeys "less than 5 miles" (not 2) - Need to provide facilities for cyclists i.e. parking, changing rooms, showers, hair straighteners "Pool bikes" at offices to enable workers to use them to go to meetings at other offices in the locality - Proposals need to be more specific, eg route examples		
Benefits	Disbenefits	
- Generally agreed that this is a positive step, but may have limited impact on M4 - If car users start cycling for journeys of less than 5 miles their mentality towards driving all the time will change i.e. they will become more conscious of using cars on longer journeys and will start considering alternatives by using public transport bus/train.		
8b) Provide walking friendly infrastructure	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Don't do it! (Outside Scope)
- Need to improve mapping, sign posting and publicising of walking routes - Measure should maybe be combined with 8a and considered together		
Benefits	Disbenefits	
Generally seen as a positive measure, but not one that is likely to have a significant impact on the M4		

Requires more research

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
1b) Provide additional services to the north of Cardiff	Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
• Should re-title to "Provide additional services to Newport" • Need station located at Caerleon • Need improvements to service to Abergavenny, Chepstow, and Severn Tunnel Junction (many existing through trains don't stop) • Need to improve access to stations in order to increase demand for service		
Benefits	Disbenefits	
• Increased services would likely encourage modal shift to public transport • Some rail service improvements would be very easy to deliver in principle (existing trains not stopping at stations)		
1c) Introduce Ebbw Vale rail link to Newport	Requires more research	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
• Need Network Rail involvement at these consultations • Has already been confirmed by WG		
Benefits	Disbenefits	
• Would increase catchment of rail services • Would relieve Junction 28 bottleneck		
1d) Introduce a light rail system in Cardiff	Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
• Should be re-titled "Introduce a light rail system in Cardiff/Newport Area" • Cost of light rail may not be prohibitive if public/private investment can be sourced. • Successful example in Dublin, but Dublin is much larger than Cardiff • Careful planning needed to encourage modal shift from cars to light rail. Need to ensure that light rail will not only appeal to people who used to use buses. • Consider alternatives such as BRT, tram, light rail and monorail.		

Benefits		Disbenefits	
- Light rail has shown benefits in other cities - Light rail could serve areas of Cardiff where otherwise passengers would have to change stations to complete their journeys. Light rail could offer these passengers a more direct service route - Potential to have BRT in Newport Cardiff Corridor and convert to light rail at a future date?		Light rail has often proved costly in other cities	
3) Improve train frequencies		Requires more research	1: Do it Now 2: Do it Now 3: Do it Now 4: Do it Now
Note in workbook "committed investment in the speed upgrade of the Relief Lines" is NOT happening			
Benefits		Disbenefits	
- Would increase capacity and attractiveness of rail services - Can be done immediately, with local research to support it - Existing trains not stopping at stations like Lydney and Chepstow could stop with no impact on timetable			
4) Inter-city Express Programme (IEP)		Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
Not really discussed/outside scope of the M4 CEMs project			
Benefits		Disbenefits	
7a) Provide park & ride / park & share facilities at key M4 junctions		Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
- Should be re-titled "Provide park & ride" - nearer communities and to enable travel mode interchanges as opposed to being located at key motorway junctions "Provide park & share" should be additional measure - Some research has been done and is available, requires more research but would be a good proposal - Park and Ride needs to be promoted regionally as opposed to sub-regionally - Need to change perceptions of bus comfort as people believe them to be uncomfortable as they have been in the past			

Benefits	Disbenefits
Examples with good onward transport have been successful (i.e. significant bus priority or rail based)	

Hot Topic!

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
6g) Improve and subsidise public transport (bus, train and coach)	Hot topic!	1: Hot topic! 2: Hot topic! 3: Hot topic! 4: Hot topic!
- To what extent should public transport get subsidised? - WG would need to reprioritise funding		
Benefits	Disbenefits	
- Generally agreed that this was a positive step, but would probably need to be implemented as a wider initiative - Focused funding may yield most positive results, eg funding free public transport for the under 18s to change their future mindset and a better chance they will continue to use the service.	- Current rail subsidy in Wales is £5/ passenger/journey on average - If new service is being provided this measure would be very expensive.	
6h) Re-regulate commercial bus services	Hot topic!	1: Don't do it! (Outside Scope) 2: Don't do it! (Outside Scope) 3: Don't do it! (Outside Scope) 4: Don't do it! (Outside Scope)
This is a national issue (Wales Wide) and is not related to M4 CEM assessment		
Benefits	Disbenefits	
Potential for WG to franchise commercial buses following Transport for London model in order to gain overarching control and thus better coordination of services and easier cross ticketing		

Don't do it!

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
6a) Use of systematic and enforced bus priority measures on the M4	Don't do it!	1: Don't do it! 2: Don't do it! 3: Don't do it! 4: Don't do it!
Should create new measure "Use of systematic and enforced bus priority measures on the M4 junctions" to assist services that cross the motorway at junctions and get caught in congestion (Junction 28 in particular)		
Benefits	Disbenefits	
Potential for High Occupancy Vehicle (HOV) and taxi usage	- Likely to have major negative impact on general highway capacity - Bus lanes on motorway need continuity, and unlikely to be able to provide this - Limited number of bus/coach services would benefit	

Additional measures / sub-measures proposed by the groups:

- Provide park & share
- Use of systematic and enforced bus priority measures on the M4 junctions
- Introduce Rapid Transit on Newport-Cardiff corridor

Additional comments:

- Money origin is key to prioritisation (ie local government, Welsh Government, Central Government, or private sector)
- When will the "Do it now!" measures happen? Some of these have been discussed for many years
- There is a difference between what WG can actively do, what they can incentivise, and what they can merely encourage
- Need to consider alternative routes not just centre to centre



The measures as they were classified at the end of the exploration of possible interventions undertaken by Forum Members.

Workstream 4: Smarter Sustainable Choices and Promoting Well-being

Workstream 4: Smarter Sustainable Choices and Promoting Well-being

This means thinking of ways of organising our lives so that we can prevent further travel-related problems

General Comments contributed by participants before and during the course of exploring individual measures

- All measures seem to require a culture shift
- Modal shift will require a stick approach – most likely to be delivered through road use pricing
- Acknowledging that this is a long term strategy, it is difficult to predict the context of alternative travel modes in years to come
- Information on traffic flows and the breakdown between local and long distance trips would help discussion on the value of the measures
- Need to use carrot and stick approaches to see appreciable changes in behaviour
- Need to identify important large employers and organisations to target these measures at – this is likely to be the best way to approach delivery
- Estates directors (Universities specifically) are under pressure from students and parents associated with their car ban on university residences – there needs to be culture change rather than putting impetus on employers – the problem comes down to the historic culture of a 17 year old wanting to learn how to drive and have a car come their birthday
- How can we deduce how much to budget for these measures?
- Maybe smarter choices will be best delivered and most effective as part of packages – but it is difficult to prioritise these “soft” measures over “harder” measures
- The value of these measures are mainly social
- These measures could lead to a possible reduction in demand and pressure on roads pace (perhaps 10% - 15%) if delivered in combination

Do it now!

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
1d) Introduce decriminalised parking enforcement and Red Route enforcement measures in Cardiff and Newport	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
• Civil parking (rather than ‘decriminalised’) is already in operation within Cardiff and Newport • The emphasis should be changed to improve parking and moving traffic enforcement		
Benefits	Disbenefits	

1g) Introduce a travel sustainability checklist to be applied to new developments	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- This is already being implemented - Needs stronger planning regulations - What is an acceptable standard in terms of sustainability? - This is a good starting point, but needs to be included at an early stage – possibly include in policy - Need to strictly enforce 1 parking space per residential unit to force a culture change (in London parking is so difficult to come by for more than one car per household that people opt to travel by tube instead)		
Benefits	Disbenefits	
	People now expect to have more than 1 car per household	
2a) Develop School Travel Plans and safe routes to school schemes	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- We need sustainable travel plans – to encourage modal shift. - They need to be in place early so that as people move into homes and offices, they have public transport already in place - Link to 1g and travel sustainability checklists - Requires a targeted approach to delivery – looking at rolling out the approach to large employers, schools and other organisations first		
Benefits	Disbenefits	
2b) Develop Workplace Travel Plans	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
See 2a)		
Benefits	Disbenefits	
2c) Promote local and regional car share schemes	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
- Some car share schemes are already in operation – but what resources can but put in to support people? - Need to identify areas where this would be a good idea e.g. at M48		

• Success is dependent on the provision of facilities e.g. parking and security • Link to 3c and travel behaviour		
Benefits	Disbenefits	
	• Barriers to delivery include the culture of people wanting to have control over time, and not being reliant on another person	
3a) Locate key services in town centres (not out of town) in order to satisfy government sustainable development policy	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
• The driver for change should be preventing the development of out of town offices / business parks rather than retail • It is understandable that some development (such as manufacturing) locate development around motorway junctions to improve accessibility – but we need better public transport to encourage business / employees to shift modes • Manufacturing businesses need good highway infrastructure links, whereas offices are more mobile as long as other transport mode options are available. Doctors, hospitals etc need to be where people can get to them • Need to link new development with public transport – which is not currently happening • Out of town stores contribute to the problem, encouraging people onto roads to the detriment of town centre businesses		
Benefits	Disbenefits	
	• This is a problem associated with local authority and Welsh Government policy – which contributes to congestion links.	
3c) Provide travel and behaviour information through education programmes	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
• The measure should take into account the Travel Smart Programme in Wales. TravelSmart works with households offering tailor-made information and support, enabling people to walk, cycle and use public transport more often • Education should focus on reducing the need to travel		
Benefits	Disbenefits	
• It is a small scheme but would achieve a major positive impact		
5b) Incentivise fuel efficient cars	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
• This is already being implemented • This would have to be UK-wide		

- WG can seek to influence UK Govt – but broadly WG has to focus on what it can do for M4 CEM – should not spend too much time considering options that only fly if taken up UK-wide - WG can influence Welsh local authorities and tie R&D into more efficient engines – also helping create industry and jobs in the process! - Emphasis should also focus on facilities for motorbikes / bicycle infrastructure		
Benefits	Disbenefits	
7) Improve collaborative working from policy development and data sharing to delivery in order to reduce the negative impacts of current travel patterns	Do it Now!	1: Do it Now! 2: Do it Now! 3: Do it Now! 4: Do it Now!
We should promote intelligence clustering at a larger spatial scale		
Benefits	Disbenefits	

Requires more research

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
1f) Include English buses on the free passes for elderly	Requires more research	1: Requires more research 2: Do it now 3: Do it now 4: Do it now
- Moved to Do it now as part of a package including improved local bus services - Need to extend free use to the youth to change travel pattern / choice at this early stage - During peak times free travel should not be available (as already in England) - Travellers can cross border if no interchange at the moment		
Benefits	Disbenefits	
3d) Invest in IT and broadband connections to reduce need to travel	Requires more research	1: Do it now 2: Do it now 3: Do it now 4: Do it now
- Moved to Do it Now from Requires More Research - Such an approach is already occurring in city centres – but rural areas need significant investment - Needs infrastructure in place (e.g. security access (VPN) broadband cloud technology)		

Benefits	Disbenefits	
	Working from home is successful for some businesses / organisation but not all	
5a) Promote use of electric vehicles	Requires more research	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
- This would have to be UK-wide - WG can seek to influence UK Govt – but broadly WG has to focus on what it can do for M4 CEM – should not spend too much time considering options that only fly if taken up UK-wide		
Benefits	Disbenefits	
6a) Improve aesthetics of routes within the M4 corridor	Requires more research	1: Do it now 2: Do it now 3: Requires more research 4: Requires more research
- What evidence is there for keeping people awake / improving wildlife corridors etc? - Cost benefit analysis required.		
Benefits	Disbenefits	
This should tie in with significant programmes to improve biodiversity: through wildlife corridors i.e. bringing multipurpose benefits	This might lead to more car use	
6b) Use of low noise surfacing, noise barriers and noise proofing of homes along existing M4	Requires more research	1: Do it now 2: Do it now 3: Do it now 4: Do it now
- Moved to Do it now from Requires More Research - Could cover a range of solutions		
Benefits	Disbenefits	
- Generally we already know this works so why aren't we doing it? - Surfacing also linked to safety e.g. reduce water spray - Shouldn't a certain degree of noise be accepted by who choose to live close to the M4? - In practice, we would do this when surfaces need to be replaced anyway		

Hot Topic!

1a) Motorway tolling on the whole of the M4/M48 in South Wales	Hot topic!	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
- This is linked with 1b – both moved to Requires More Research from Hot Topic - Revenue from tolls needs to more than cover cost - Alternative non-tolled routes should exist with capacity if this is implemented - Different (lesser) prices should be in place for HGVs to support business - Tolling on M4 would drive users onto A roads to avoid local use of M4, so if delivered we should have less junctions		
Benefits	Disbenefits	
- Both are an approach to achieving a culture change but should be delivered on a regional or UK basis, as in isolation it would harm Wales economically. It is politically sensitive but overall a good idea - Automatic number plate recognition could be used as opposed to introducing toll booth infrastructure – this would be more affordable	- Tolling on a new SDR would mean asking people to pay twice – which would have a negative effect on the Welsh economy - How will people/businesses be affected? We want to encourage business and tourism to Wales and so it is essential that the road user is exempt from further charges - Unless attractive alternative non-tolled roads are in place, it is essentially an additional tax to come to Wales - The national attitude is that we already pay for our roads - Linked to 4a and 4b - tolls have detrimental impact on business – this measure will be economic suicide unless tolling and road user charging is implemented UK wide. We need to attract more business but also want clearer roads	
1b) Urban road pricing	Hot topic!	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
See 1a		
Benefits	Disbenefits	

1e) Increases in parking charges	Hot topic!	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
- Moved to Requires More Research from Hot Topic - Pricing is a key issue - Incentivising shopping trips may help, i.e. spend £x and get free parking - Different approach may be needed between out of town, town centre and workplace locations - There needs to be a regional strategy e.g. workplace charging would require cohesive approach – need public transport in place to provide real alternatives - No charging in out of town parking takes people out of town centres		
Benefits	Disbenefits	
- Park and Ride is statistically ineffective – parking pricing policy may support such facilities - A package should be adopted to improve effectiveness – there needs to be both a consistent parking and pricing strategy with Park & Ride alternatives	- Many car parks are not council owned and private operators will be reluctant to revise prices that don't meet their needs - Increases in parking charges may reduce shopping trips – the economic impact on local businesses may be negative	
3b) Encourage local employers and schools to offer more flexible working arrangements so people can avoid the peak travel times	Hot topic!	1: Do it now 2: Do it now 3: Do it now 4: Do it now
- Moved to Do it Now from Hot Topic - The school run is a big part of the problem - The measure involves two very different issues (employment and schools) – these would have different impacts and so should be separated. The deliverability of school arrangements would be particularly difficult – but staggering different school starting times is a good idea - Linked to 2a and school travel planning - Linked to Workstream 2 with High Occupancy Vehicle Lanes – if peak time congestion was resolved there would be no need for them - Linked to public transport measures and school bus measures – these would help the delivery of alleviating traffic congestion attributed to school drop-offs - Linked with 1b – peak time congestion charging could change driver culture to encourage travel at off peak times in order to avoid charges - Catchment areas for schools should be smaller - Welsh language schools have wide catchment areas which lead to longer distance trips		
Benefits	Disbenefits	
Welsh Government now has control over school times - they have the ability to stagger school start times so 1 bus can serve more than 1 school per day	Parental choice is important on issues such as schooling – which will act as a barrier to delivery	

4a) Maintain/Increase River Severn Crossing tolls	Hot topic!	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
4a – link with 4b - Both moved to Requires More Research from Hot Topic - In terms of travel to work to Cardiff, there is a very small percentage of westbound traffic crossing over the River Severn - From a business perspective a pricing increase alone would be negative – linked to 1a and 1b, we would need a road pricing strategy for the region/UK - The M4 road west of the Severn Crossing is not fit for purpose – road conditions would need to be better if people are to pay for it – we need engineering solutions as well - An increase would be good if tolls would go towards local investment projects - A lot of drivers avoid the Severn Crossing toll and travel down the north side of the estuary to join at Junction 24, thus adding to congestion at this point 4b – could be implemented overnight - Regional/national consistency with pricing is necessary to ensure people / businesses are not discouraged from travelling to/locating in Wales		
Benefits	Disbenefits	
4b) Reduce/Remove River Severn Crossing tolls	Hot topic!	1: Requires more research 2: Requires more research 3: Requires more research 4: Requires more research
Benefits	Disbenefits	

Don't do it!

Measure	Original classification	Alternative views tick / note alternative suggested by work group(s)
1c) Increase Fuel Duty	Don't do it!	1: Hot topic 2: Hot topic 3: Don't do it 4: Hot topic / Don't do it
- Moved to Hot Topic from Don't do it, ended up being placed between Don't do it and Hot Topic by the last group – subject to much debate by all between these two categories - Needs to be part of the road pricing package - There should be a difference between private and commercial vehicles in order to protect business travel - Rising petrol prices are dealing with this measure effectively already		

Benefits	Disbenefits
	• This is not a Welsh Government decision – not yet devolved. • This is a social mobility issue – it is unjust for people living in rural areas • Many people are feel fed up about level of petrol duties already • Fuel duty is essentially tax unless money goes into 'green measures' • Also VAT – there are major conflicting issues, particularly social mobility in rural areas • There will also be a negative impact on food prices, travel, and business



The measures as they were classified at the end of the exploration of possible interventions undertaken by Forum Members.

Additional measures and sub-measures

After the participants had contributed their thinking on each of the workstreams in turn, the Forum meeting convened for a plenary session.

During the group work, participants identified some additional measures or submeasures, and were asked during the plenary session to reflect on whether they had identified any additional measures. All additional measures / submeasures considered by participants during the meeting are listed here.

Workstream 1 – Infrastructure

- Further dualling of the A465 and improving the links connecting the A465 and the M4 should be considered as an important alternative route enabling strategic E-W access.

Workstream 3 – Alternative modes

- Provide park & share
- Use of systematic and enforced bus priority measures on the M4 junctions
- Introduce Rapid Transit on Newport-Cardiff corridor

Workstream 4 – Smarter Choices

- 7 Collaborative Working: Need for an overarching communication campaign; and a united approach to governance – potentially through a capital region transport authority delivery body.
- 1e: Introduction of a workplace parking levy
- 1e: Regulate residents parking numbers strictly or introduce residents parking schemes
- 1f: Charge nominal fee for pensioners using free bus passes at peak times
- 2a & 2b: Introduce Residential Travel Plans, build on the work of the Sustainable Travel Centre
- 2a: Ensure children go to their most local school
- 2a & 2b: Introduce Station Travel Plans
- 2c: Build on the strength of car clubs
- Promote use of motorbikes
- Introduce a carbon tax programme

The M4 CEM Programme: Next Steps

Presentation 3: The M4 CEM Programme: what will be happening next.

Mr Dan Saville, M4 CEM Project Lead, Director, Arup

An explanation of the process of exploring the evidence base with respect to individual measures, and following up on ideas contributed today, to sift measures. From a shorter list of measures, combinations of measures will be drawn up into packages of measures that work well as a whole. Initial ideas for combinations of measures will be presented to, and reviewed by the Stakeholder Forum at their next meeting in late October.

The presentation was followed by a few minutes for participants to reflect together at their tables and to identify together key comments and questions, which were shared in plenary.

Comment (C) : Dan Saville stated that today's Forum has indicated a possible need to review the Goals, particularly in relation to environmental considerations.

C: It is imperative that the rail companies and Network Rail should be engaged in this process – as well as the need to do a presentation to them at the next opportunity.

Q: When will there be an announcement as to what the final M4 CEM Programme will be?

A: A final decision from WG on the scheme as a whole is expected a month or two after the close of the formal consultation at the end of March 2012.

Q: As our options dwindle through the process, will we be able to go into these in much greater detail?

A: Yes.

Actions agreed

- Forum Members will log onto a new site connected to the M4 CEM website (www.m4cem.com) , and are encouraged to continue their deliberative exchanges there: www.m4cemforum.co.uk
- Proforma will be available there for Forum Members to download and use to describe undertake some initial analyses of any new measures or sub-measures they feel are worthy of consideration by the M4 CEM team
- Forum members will be alerted when new postings are added to the Forum web site

Closing remarks

Mr Russell Bennett, Head of Infrastructure Projects Unit, Welsh Government thanked everyone for their contributions and urged them to continue working on their ideas, feeding news and developments through to the team and Forum Members by using the Forum site and also connecting directly by mailing: m4cem@arup.com

Russell Bennett also urged Forum Members to talk to members of their organisations and colleagues to keep them informed of the M4 CEM Programme in advance of the Formal Consultation, to begin in December.

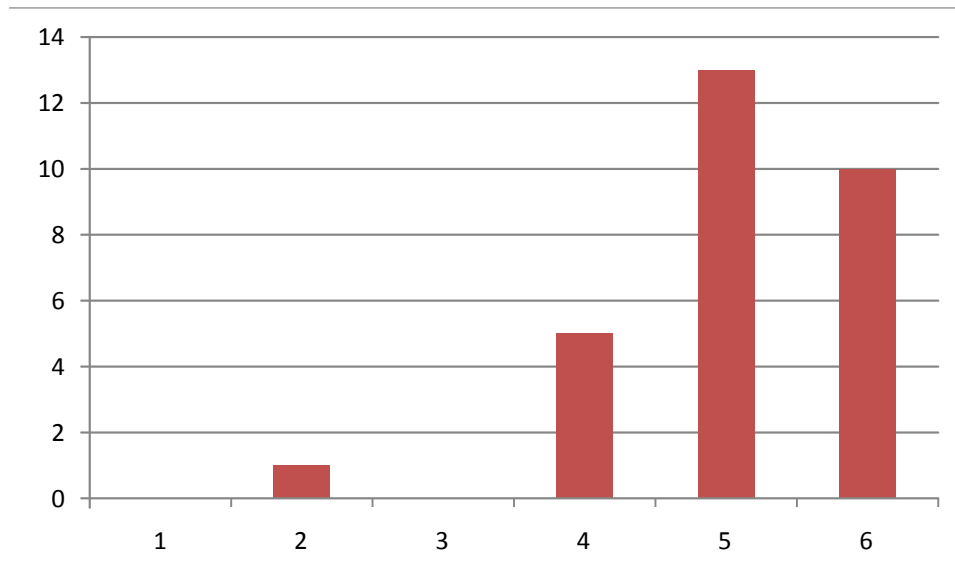
Participants

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Evaluation

1. How helpful did you find the information about M4 CEM that you were sent in advance, in terms of enabling your participation today?

Participants were asked to score their answers from 1 (not helpful at all) to 6 (very helpful indeed).

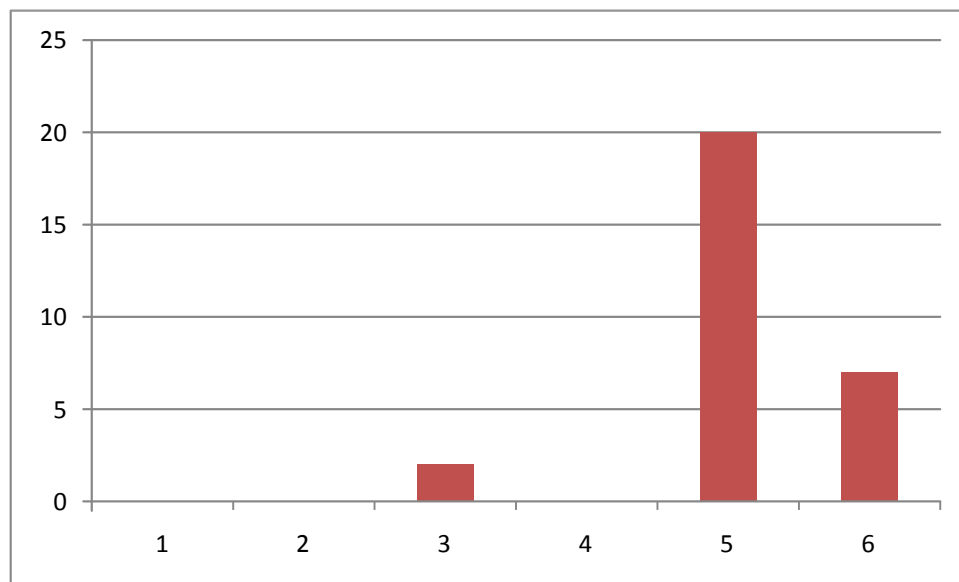


Comments:

- Larger maps to help understand the detail.
- Larger plans, or at least access to them
- Pack could have been briefer; more details could have been made available on-line for those interested
- Some proposals (notably bus re-regulation) are not in consultation anyway!
- Perhaps more on bus/public transport options and more explicit information on economic aspects
- It could have been improved in getting more consistency in the level and quality of information for each workstream
- Pictures, maps and diagrams could have been clearer. It was quite difficult to perceive the detail in some of the maps
- Better quality maps
- Bit of information overload; additional help in navigating would have helped. Too much printed material- different attendees needed different things – could have been electronic to allow personal decisions on what needed
- Little reference back to top-level strategic issues in detailed sections beyond very subjective “goals” traffic lights
- In view of the relatively high level of consideration, perhaps something a little less detailed would have [been] sufficient
- Great – and wish I’d had more time to go through it
- Would have liked to a xbit more on the background and how the goals were arrived at
- Many of the options involving taking traffic away from motorway were insufficiently detailed to allow serious discussion
- However, that is not to say it was positive. The goals did not include “impacts on environment”. Also, it raised significant environmental concerns
- Many of the options involving taking traffic away from motorway were insufficiently detailed to allow serious discussion

2. How valuable overall did you find this event?

Participants were asked to score their answers from 1 (not valuable at all) to 6 (very valuable indeed).

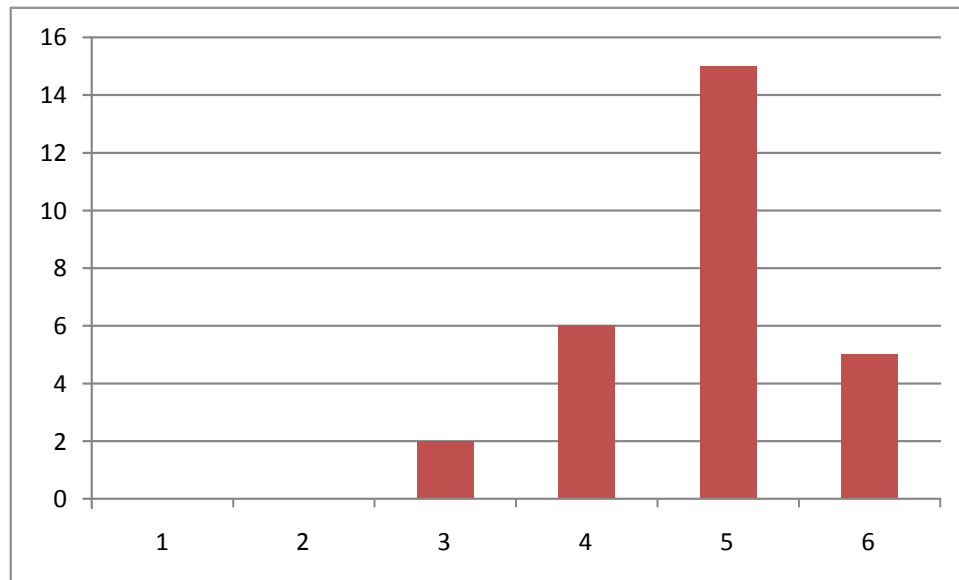


Comments:

- Better representation required from Newport Council.
- Some key stakeholders missing..
- Good idea to look at the “long list”.
- A good discussion, although long.
- I found it a exercise personally and I hope WG found it useful.
- It was interesting to listen to others’ viewpoints and perspectives.
- Given the varied agenda, I would have liked to spend more time exploring options I am conversant in, whilst recognizing the need to see the “big picture”.
- Great to be involved early, useful to link with interested parties
- Opportunity to air constructive and different views.
- Informative and hopefully able to rule out some of the “wider” politically based options in the worksheet.
- There as contributor not to gain – but made some useful contacts.
- To find out current thinking and input into current thinking – needs more input from CCW at a high level, as they are statutory nature conservation organisation.

3. How well did the workshop format enable you to address the issues?

Participants were asked to score their answers from 1 (not well at all) to 6 (very well indeed).



Comments:

- Not enough time to discuss the options.
- Focused, but documents could be made clearer.
- Plenty of discussion – very useful to hear other people's views.
- Not so sure about following on from previous group. Ideas already set out!
- Sometimes spent too much time on less strategic issues
- The “carousel” approach good. Not sure whether “self selection” or “.... all action” best – on group (3) all seemed to be primarily interested in “workstream 3” topics.
- Within the constraints of a large group, disparate opinions and timescale, I think the workshop worked very well.
- Again, I would have liked more time.
- Appraisal process.
- Too much emphasis on consensus reaching rather than capturing all issues from all parties.
- Greater participant balance on environmental and social sides of sustainability would have helped.
- Very well run.
- Perhaps it may have been beneficial to reduce the number of proposals (by grouping similar ones) to allow better discussion of each.
- Good – chance to address majority of the issues. Group sizes good.

4. What would you have liked more time for?

- To discuss the options.
- Discussion on process for appraisal rather than details on the workstreams themselves.
- Time slots were OK.
- Biscuits? Healthier food – what about fruit?
- Open, plenary discussions.
- To explore more circumspect issues not covered in the main agenda.
- The physical measures.
- Infrastructure.
- Other means of transport.
- Discussion of sustainable development principles at start – it is the central organizing principle, but now relegated to a minor category of discussion.
- Time was adequate for all options.
- Understanding basic/fundamental objectives/goals and how these have been arrived at/evidenced.
- Slightly more time on the 4 workshop sessions, but in general worked well.
- Discussing smarter choices.
- **All** of the measures – kept running out of time!
- Very large topic – perhaps more time for everything or guidance on what was felt more important to WG, so we could concentrate on that if we agreed.
- Consideration of the economic value of the M4 as a tool to encourage inward investment in Wales.
- An hour at the start for dedicated pack reading!
- The workshop is well organized – well done.
- I wish there are more opportunities to comment outside the pre-arranged format. This is not a criticism on the format. There could be valuable inputs that can be made, but not quite fit in to the format.
- Environmental/ecology issues.
- Sustainability issues.

5. What would you have liked to spend less time on?

- Time slots were OK.
- Talks around table at start.
- The softer measures – these are often beyond the scope of this study.
- Possibly could have gone into the 4 workshop questions a bit quicker.
- All relevant.
- Occasionally over-focused on one topic/measure – could have paced it better.
- Nothing.
- Public transport issues; without Newport in attendance how far will these plans go?
- The 2 initial sessions around the table – revisited stuff out of scope.
- Not much.
- Options that have significant impacts on the environment (SSSI) – as they should be scoped out early.

6. What would help the Stakeholder Forum to engage more effectively with the WG, and or to ensure the widest possible range of perspectives are considered during pre-consultation development of the M4 CEM programme?

- Senior WG policy/ministerial advisor attendance.
- Need to be open to views on how the process could be changed to deliver the best solution.
- Good quality, early information.
- ICT
- Ensuring that some key stakeholders (eg Network Rail, and train companies) are engaged in this pre-consultation phase.
- Direct contact with WG thinking and established thinking patterns.
- Greater engagement with planning policy at a WG level.
- Closer engagement with rail industry and with regional consortia.
- I believe the forum is an adequate platform as there is WG member attendance within the group.
- One to one sessions with **major** stakeholders, eg Newport City Council, Sewta, etc.
- Seems fairly comprehensive – use of various media should help access information.
- Meeting with individual organizations.
- NR and TDC/FOC to be present.
- Perhaps earlier guidance on the detailed contents and grounds of the workshop to enable greater thought to be given prior to workshop.
- Interesting question, perhaps a commitment from WG that funding will be available to carry out recommendations.
- Young people's engagement? Through Green Dragon's SD groups perhaps?
- A focus group among those without vested interest might be useful as an extension. In the presence of industry representatives, it is sometimes difficult to confront with different views (some issues are too sensitive).
- Engagement with CCW at a high level.

7. What message would like to give the WG, as they go forward with the M4 CEM?

- Look at building capacity for the future of Wales. Economic prosperity must take priority over social and environmental issues.
- Need to ensure consideration to wider implications/benefit of schemes and ensure environmental concerns are taken seriously.
- Carry on, and identify budget streams for the respective improvements that will follow.
- Don't build more roads but improve integrated transport such as and interchanges.
- Think SD!!
- The priority **must** be the **economy**!
- Keep thinking strategically and taking account of the full suite of social economic and environmental opportunities.
- Essential to engage more widely – especially with Industry.
- To move as quickly as possible for strategy publication to implementation of schemes.
- The need for a more joined-up approach.
- Please try and do a little, even if money is tight.
- Continue wide engagement.
- Integrate with other Welsh Government transport planning activity.
- Think it through sustainably from the start. Sustainable Development is not just environmental considerations, it is an approach which would help this project be better.
- Don't go for soft options!!! Sometimes the harder options are more cost beneficial in the long term!!!
- Keep people informed.
- Evidence/justify your proposals.
- Consider finding related/linked proposals/initiatives not directly under WG remit.
- Really concentrate on m4 CEM issues and not get caught up with national and wider regional issues.
- Focus on smarter choices and less on building new road infrastructure.
- Invest now and the benefits will come.
- Take a wider viewpoint on the benefits to the region/Wales as a whole, rather than the immediate local benefits.
- The do nothing option is NOT an option!
- Make sure the social and environmental pillars of SD are just as much a part of the analysis as the economic/transport. I am sure it is – but doesn't come across presentationally at the moment.
- This is wider than merely a transport link – not sure all involved today appreciated this.
- Prioritise ecological issues.
- Be sensitive in terms of environment – not just prioritise economics.

A18 Second Stakeholder Meeting Report



Catrin Ellis **Associates**
Stakeholder Engagement Specialists

M4 Corridor Enhancement Measures Programme

Second deliberative meeting of the M4 CEM Stakeholder Forum

November 15th, 2011

Transcribed Report



Llywodraeth Cymru
Welsh Government

ARUP

About the facilitators

The M4 CEM Engagement Programme is designed and delivered by Catrin Ellis Jones, of Catrin Ellis Associates (CEA) in line with the needs of the M4 CEM Management Team, comprising staff from the Welsh Government and Arup. CEA is an independent business with many years experience in facilitation, training, partnership working and consensus building in Wales, the UK and internationally. Part of the facilitation team at this event were James Martin-Jones (CEA) and M4 CEM team members from Arup.

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About this Report

The workshop used plenary and small group working. This report produced by Catrin Ellis Jones of Catrin Ellis Associates, is a full transcript of all written notes made to record participants' contributions throughout the day. Each section starts with an explanation of the task (in the grey box).

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Summary of key points and questions for WG to consider

The study area – should it be enlarged?

- A valid point was made in general discussion about the need to consider the wider issues along the rest of the M4, how surrounding communities can benefit from any investment (make this clear in the public consultation) and the cost benefit of the M4 CEM programme in this context.
- Look at the wider area i.e. A472 and impact of A4042.
- The M4/M4 corridor is an international link, vital to several regions/countries not just Wales
- Take a wider view than just M4 corridor, particularly when looking at effects of proposals on surrounding area, and also when considering public transport.

Communicating the aims, evidence, issues and options during Formal Consultation

- Be as clear as is possible on some of the key factors and considerations e.g. affordability, deliverability.
- Value for money?
- Clarification on funding: why does Welsh Government have to fund 100%?
- Need to be assured that it is affordable and we are not raising false hope.
- Make sure that the packages are clearly linked back to the objectives in an understandable way.
- Consider better the strategic role of M4 (A55 did not benefit N Wales as expected).
- Be realistic.
- Aims of project need to be clearer.
- Who is the M4 for – Newport or South Wales! STRATEGIC VS LOCAL?
- Needs to be clear for public consumption. Show traffic growth over time, including forecasting, show how free capacity is reduced over time. For each package, show the effect of package measures on capacity over time (as phased development is progressed).

Local travel and access issues

- Lack of understanding of local network and operation of key traffic and SDR of Junction 28.
- Describe the impact of increasing traffic in local areas and communities.
- Need for better identification of operation and funding consequences of proposals on local bus services and traffic.
- Need for better understanding of local movements.
- Insufficient understanding of effect on local population - e.g. J25 alterations and the effect on residents of Caerleon.
- A high volume of traffic using the M4 travels from Cardiff – Develop J29a to full access to relieve J28.

Public Transport, and Package 4

- Public transport must not be allowed to suffer because funding is going into new/improved roads.
- Package 4 needs much more work; personalised travel planning must be included!
- Ensure proper representation for public transport across all Packages.
- Alternative for M4 route required – a rail option has potential.
- Too many measures in package 4 and too little evaluation of them!
- Lack of public transport provision and strategic travel planning.
- Contribution from public transport to reducing M4 problems not fully considered.

- The value of public transport improvements needs further consideration given the positive trends in the region. Marginal benefits are significant.
- Concern that additional capacity will be used up quickly if perceived to be easier journey. Risk of reverse modal shift. Therefore need to consider enhancement of public transport in parallel with highways and new infrastructure development.
- M4 CEM should not be just a highways improvement, it needs to entertain wider issues of sustainability / integrated transport design.

Baseline / Do minimum: Short term relief – measures which ease the flow

- The need to identify and implement short term schemes that feature in all packages.
- Include the 'do-minimum' schemes as 'quick wins'.
- Need to collaborate with others to gain understanding of full complement of baseline measures – not just measures committed and planned by WG.
- Need to describe these measures in greater detail, as part of the FC.

The need to consider and address issues of short to medium term disruption, as M4 CEM is implemented and delivered

- Online widening - Package 3 – concern over impact on Welsh economy over 15 years during construction.

Environmental and sustainability issues – particularly relevant to Package 1

- Value ecosystems services and the environment in Wales more.
- The Gwent Levels is a unique place – part of a national biodiversity network of protected habitats – it should be protected and ecosystem services and biodiversity (a la NEF/NER) recognised.
- Package 1 will have seriously negative biodiversity impacts.
- Package 1: is new M4 by stealth an issue? Consider lobby groups adverse reaction.
- Need to show where the environmentally sensitive areas are and how they relate to the proposals.

Does a new option need to be developed and appraised?

- Consider scaled-down approach.
- Can Package 2 plus Steelworks Access Road provide the Bryngals Tunnel by-pass with grade separated junctions at a lower cost than package 1 (scaled-up version of Package 2)?

Involvement & engagement

- Keep up the same approach which feels like genuine consultation.
- Display relevant data on the web pages, evidencing the various contributing causes of the present difficulties, to impart the facts to a wider audience for thought, and to better understand the significance of various problem areas.

Decision making and delivery

- Online widening – dealing with concomitant disruption?
- Make appropriate decisions in a timely and specific manner. Too long to reach decisions results in continued negativities.
- Focus on using individual roads for their prime purpose and encourage lower diverse purpose traffic on the M4.

- Badger Westminster, Dublin and Brussels for some cash! Please don't forget to consider the likely impacts on local communities when you make your decisions.
- The final scheme must be a balanced package of measures, with sufficient emphasis placed on addressing local traffic / access issues.
- There is a need for improved planning policy at motorway junctions to avoid intensified development and traffic generation.

Introduction

Mr Russell Bennett, Head of Infrastructure Projects Unit, Transport Division, Department of Local Government and Communities, Welsh Government, welcomed the assembled group. He expressed the Welsh Government's commitment to working with participants during the day, and beyond, to enable Forum Members to gain a thorough understanding of the political and policy context and the drivers for strategic M4 Corridor Enhancement Measures, and to contribute their knowledge and experience as they see fit.

He thanked Forum Members for taking part in the important dialogue, continuing at this second meeting, which helps to ensure that the alternative strategies proposed for the consideration of the Welsh People during the Formal Consultation on the M4 CEM Programme are robust, well tested, and have been formulated following the widest consideration of all possible interventions to resolve problems within the corridor area (Magor to Castleton) associated with the sub-standard design of this stretch of the M4 and increasing demands on the transport network.

Aims of the Second Deliberative Meeting of the M4 CEM Stakeholder Forum

This meeting brought together Key Stakeholders – individuals selected on the basis of their expert knowledge and understanding – covering a broad range of interests and experience around travel related issues affecting the M4 Corridor area, Magor to Castleton. Among Forum members are local authority officers, people from organisations with statutory responsibility and non-statutory interests in social, environmental and economic factors affecting the area as well as staff from the Welsh Government Departments.

The overarching aims of the second meeting of the Stakeholder Forum were to ensure that participants:-

- **Understand the process**, building upon their contributions to the appraisal and sifting of the Long List of measures (Forum meeting 1), leading to the packaging of measures and development of alternative Strategic approaches to problem solving: Options 1-4, plus “Do minimum”.
- **Understand what will happen to the “Alternatives Considered” measures**, and have an opportunity to comment on whether they merit further action (over and above / rather than that noted in the Alternatives considered workbook).
- Explore the five (package) options, to **ensure that all/ the best possible viable core measures will be presented during the Formal Consultation** process (or if not, identify what is missing), and that all supporting measures associated with each package or option are the most appropriate / best in terms of the overall aims & goals of the M4 CEM programme (again, if not, identify necessary change and why).
- **Understand (in outline) how each option might be delivered** (phasing etc.)
- **Understand what happens next** : type up & feed-back report to Stakeholder Forum; make appropriate improvements to packages; develop three tiers of materials for FC – entry-level info, detailed info & evidence base; run Formal Consultation (FC) – and following the FC, reporting back to the Stakeholder Forum (probably around end April), before WG announce strategy to be adopted – May / June 2012

Programme

09.30	Registration & coffee/tea	
10.00	Welcome and Introduction to the Stakeholder Forum, and to workshop 2	
10.15	The M4 CEM Programme: Context & scene setting Russell Bennett Head of Infrastructure Projects Unit Local Government and Communities, Welsh Government	Overview and update of the M4 CEM Programme, particularly the WG perspective on: • Why the M4 CEM Programme is required, and what it does and does not seek to address, • Why a future-proof solution is required, • What strategic options are being considered, and why WG want to engage with people to ensure the best solution will be delivered There will be time for questions of clarification.
10.35	Development of Strategic Approaches to lasting solutions: M4 Corridor Enhancement Measures Options Dan Saville Director Arup	A description of how the process of developing the M4 CEM has progressed, building on your contributions during Stakeholder Forum meeting 1 (July 2011), including: • How we have moved from the “Long list” to packages of measures that work in different ways to address the problems identified by the M4 CEM study. • An outline of the “Alternatives considered – measures discarded from the M4CEM” and the “Do minimum” option. There will be time for questions of clarification.
10.50	M4 CEM Options: what are they? Dan Saville	Outlining the different new package options proposed to provide lasting solutions to the problems identified during the earlier stages of the M4 CEM study. Looking at each option 1 - 4 in turn, we'll describe: • Core measures • Supporting measures • Main benefits and challenges to be overcome There will be time for questions of clarification.

11.30	Coffee break	
11.45	Identifying issues and opportunities for improving the options presented	During this session, participants will be asked to act as critical friends, considering the big picture, and reviewing the options to solve M4 CEM, as well as the detail of individual packages, in order to highlight where they have any concerns, explore whether anything important has been missed, or equally to highlight issues they feel particularly positive about. Plenary review of the issues identified, any problems, concerns, areas of agreement the Stakeholder Forum highlight as positive and opportunities for improving the options presented during the Formal Consultation process.
12.50	Lunch	
13.35	Exploring in detail the issues and opportunities identified before lunch, and developing ideas to resolve issues and improve the M4 CEM options to be presented during the Formal Consultation process	During this session, participants will develop their ideas for resolving the issues they feel require attention, and for making improvements to the options that will be presented to the wider public during the Formal Consultation process. Feedback and plenary review of the ideas that emerge. Consideration of any outstanding issues.
15.05	Next Steps: an outline of plans for the Formal Consultation Process, and proposals for further involvement with the Stakeholder Forum	We will run through our plans of the Formal Consultation Process, paying attention to the role of Stakeholder Forum members and their networks, and inviting continued involvement, following the close of the Formal Consultation process Time for questions and short plenary deliberation.
15.40	Reflections on the second Stakeholder Forum meeting Thanks Russell Bennett	Final review and wrapping up of any outstanding issues Evaluation forms will be distributed to enable participants to help us improve the way we work together.
By 1600	Close	

The M4 CEM Programme: context & scene setting

[10.15 am] Presentation 1: The M4 CEM Programme: context and scene setting, including updates on development of the programme to date

Mr Russell Bennett, Head of Infrastructure Projects Unit, Transport Division, Department of Local Government and Communities, Welsh Government, briefly outlined the background to the M4CEM and the value of the work of the Stakeholder Forum in helping develop a well-rounded set of options for the upcoming Formal Consultation.

The presentation was followed by a few minutes for participants to reflect together at their tables and to identify together key comments and questions, which were then shared in plenary.

Q = Question; A = Answer; C = Comment

Q: **Package 1** (referring to the plan showing the proposed phased delivery of this package – illustrated on cover page of workbook): Why is there an added section up to Junction (J) 23 when the Welsh Government (WG) has already purchased the Steelworks Access Road (SAR)?

A: This package aims to deliver significant new highway infrastructure to improve the capacity, resilience and safety of travel within the M4 corridor area. The improvement of the SAR itself to highways standard is part of our “Do minimum” plan, however, it will eventually service the considerable developments planned for the area to the north of the SAR. In order to create a more free-flowing, strategic route, the additional section you refer to is required.

Q: The section from J29 to the beginning of the access road looks like a different option – is it a cheaper option?

A: The purpose of the green and red sections is ultimately to provide free flow to the yellow section to J29 and westwards, so that by 2031 there should be a free-flowing strategic alternative route.

Q: Could you clarify where the M4 CEM formal consultation (FC) process sits in relation to the **prioritisation process for the National Transport Plan (NTP)**?

A: The M4 CEM is a key component of the NTP, and it will be linked to its outcomes. East/west travel is an NTP priority. However, the NTP is working to a shorter-term timescale, whereas M4 CEM is a longer term strategy.

Q: In the **Alternatives Considered** document, what is clear is that 2 categories have been considered: (1) schemes not seen as valuable; and (2) schemes that are valuable, but are outside the scope of the M4 CEM and which are worthy of being taken forward through other initiatives. Presented in the way they are at the moment, the alternatives in category (2) could easily be seen as no longer being part of the picture, because not including them in the FC gives the impression that these are of lesser importance.

A: Good point: important to make it clear in the FC that these other measures should not be lost as the M4 CEM strategy goes forward.

C: Agree – but if they are not included in package for FC, they will get lost

A: In the FC we want to offer people the most complete information possible; but we want to guard against overwhelming people with too much of it. We are therefore aiming for a tiered approach, which aims to enable people to delve as deeply into the information base as they want to. This forum has shown how valuable a more deliberative approach can be, and WG is keen to continue this kind of engagement in future.

Q: What is the selling point for the M4 **CEM compared with the New M4** considered before?

A: The New M4 proposal was a “big bang” approach, whereas the M4 CEM is a phased approach which aims to enable us to respond to demand.

C: So, the thinking is something like “we have a problem with congestion on the present M4 – so the first stage could be improvement of the SDR while we consider any subsequent work that needs to take place.

A: Yes, the approach is to move in a phased way.

Development of the M4 CEM – a strategic approach

[10.35 am] Presentation 2: Developing Strategic Approaches to addressing the problems of the M4 Corridor, Magor to Castleton: M4 Corridor Enhancement Measures – combining measures into options that represent lasting solutions

Dan Saville, Director, Arup summarised the process to date – moving from the long list of potential measures to a series of 4 packages. His presentation was followed by a few minutes of questions in plenary.

Q: (Referring to the Do Minimum Scenario workbook) No diagrams/plans for the measures listed in the baseline or “**Do Minimum Scenario**” appear to be available, so it is difficult to make a judgement on how these relate to the packages. Are these plans available?

A: These measures are in the **Do Minimum** baseline, so they will happen anyway.

C: Yes, but in order to understand their implications in relation to the packages, we need to see how the baseline measures will work with them.

A: I accept your point – we will endeavour to provide a summary of the current status of each element of the baseline to provide additional detail and understanding. Where the Do Minimum proposal directly influences an element of a Package, we have tried to set out how in the description and in places, have shown a plan – i.e. J28 Improvements.

Q: There are quite a lot of references to linking to the Heads of the Valleys route; but not to the A472 (the mid-valleys route).

A: There is a measure intended to make use of alternative routes – but it does not currently include the A472, where there are currently no plans for improvements. This looks like an omission, and we will incorporate the use of/improvements to the A472 following this workshop.

M4 CEM Options: what are they?

[10.35 am] Presentation 3: Description of the Options: Packages 1, 2, 3 and 4

Dan Saville gave an overview of each of the packages, stressing that the purpose of all the packages is the same: to alleviate traffic congestion on the existing motorway, between Castleton and Magor. His presentation was interspersed with questions and discussion in plenary. The discussion is summarised below.

Package 1

Q: The southern route looks a bit like the M4 relief road.

A: It may look similar at a high level there are fundamental differences in the detail (phasing and a low level crossing of the River Usk) – this is the major road building proposal contained within the packages.

Q: **J28** – why are the proposed measures happening so late?

A: The major works at J28 are in the baseline (they are already scheduled over the next couple of years – we recognise the existing problems here need to be dealt with sooner rather than later). The measure in Package 1 goes beyond what has already been agreed in relation to J28, which is shown in both the description and plan in your workbooks.

Q: The majority of the public will see the southern route as the **alternative M4**, even though it is not described as such. Why is this now seen as affordable, given that the previous New M4 proposal was judged to be unaffordable?

A: The main difference is that this is a phased solution. As investment is phased, it is affordable within ongoing annual transport budgets over the next 20 years. Also this approach is demand-led; each of the phases will deliver improvements in their own right, and if it turns out that demand is not there, and there is after all no requirement for subsequent phases, we will be able to decide not to go ahead with the later phases.

Q: I was surprised at the **landscape and biodiversity assessment of the southern route**: I couldn't see how this could not be seen as red (i.e. in the most negative category).

A: Yes there is a debate on this. We considered that delivering mitigating measures would avoid the most negative (red) assessment in this respect. We will review this in light of your comments.

Q: In relation to the **Duffryn Link**: there is a SEWTA aspiration for a train station in Coedkernew, but the current route for the link runs to the north, so it is not clear how access to the station could be provided.

A: Good point: we should investigate the options for this. We also need to assess how many junctions to have on this route. Station developments are not proposed in Package 1, but are in Package 4.

Q: At the intersection between Phases 1 and 2, how will the measure tie in to the **A48**? There is a tip there which is problematic.

A: Yes, we are aware of this, and are considering the options.

C: Avoiding damage to the lining of the tip is likely to be the main challenge.

Q: Is there a particular reason not to **split Phase 3** into 2 phases of work, i.e. treating the section from J23 to link in with the new Usk crossing, and the westernmost section to J29 as two discrete phases? This would help further with the affordability of the scheme.

A: No, there is no reason not to do this – though note that the section between J28 and J29 is most heavily trafficked.

C: Yes - maybe it would make sense to do that section first.

Q: It looks as though there will be **junction closures on the southern route**, with the new Usk crossing scheduled as M4 CEM gets to the end of Phase 3.

A: Yes - the philosophy at present is that this will eventually become the strategic route.

Q: If this effectively becomes the new M4, how would it meet the EU criteria?

A: This would meet with the criteria. Further west, much of the existing E-W European route is dual carriageway.

Q: At the eastern end of the proposed new southern route there is a **large residential development planned**. This might require an upgrade of the route – possibly to 3 dual lanes?

A: Yes, this factor has been noted.

Package 2

C: There is no recognition of the impact of Package 2 on **bus services**.

A: Point taken – there is a measure for improved bus services, but we also need to consider the impacts of the package itself.

Q: Given all the stresses that the M4 is subject to already, isn't it inevitable that some of Package 2 will have to be **implemented in the short to medium term** in order to keep the route running?

A: Yes – some decisions of this sort may well be needed. We should aim to clarify this in the FC.

Package 3

Q: Is there a **timeline** for the existing M4 **identifying when and where** [specific locations] **critical measures need to be implemented**, to ease and enable flow?

A: There is a whole range of assessments of traffic information.

C: Yes but these are not linked up. It would be helpful and instructive for people to be able to see where the critical points are, and how the problems are relieved by phased delivery of the M4 CEM, how new critical areas might ensue, and how then, these in turn are relieved by subsequent phases of M4 CEM delivery.

A: We do have that information between every junction, which helps to identify where the major stresses are. We'll look at how to present that for FC.

Q: If one of the core measures here, namely **closure of J25** is implemented (phase 2), how would local residents get on to the eastbound carriageway?

A: It would be possible, by u-turning at J25a.

C: You would have to go all the way out and all the way back again – it makes no sense at all.

A: We recognise that there is concern over the proposed closure of J25 [this issue was discussed in more detail between technical staff and the concerned forum member later in the day, which led to the confusion over access arrangements being resolved].

Q: It would be good to **clarify implications of junction closures on bus routes**.

A: Yes, we should review this and make the implications more explicit.

Package 4

C: Data on **modal shift** is available.

C: The proposals for **new railway stations at Coedkernew and Caerleon** have the potential to get quite a lot of traffic off the road.

Q: There are measures relating to the lines from Cardiff to Bristol and Cheltenham – but no mention of the **Abergavenny line**. Is there a reason why that rail line, and the A465 + the A404 seem to have dropped out of the package?

A: If there are omissions here, we need to look at this Package again.

Q: Some well-known **studies of public transport options** (notably the SEWTA report) do not appear to have been referenced in the package. It would not look good if they are not referred to in the FC.

A: We have reviewed the SEWTA report and tried to correlate this work with what we propose in the packages; but we agree, this should be done explicitly in terms of what the SEWTA proposals can do to ease demand on the M4 between Magor and Castleton. Many of the rail measures will have validity in their own right – but at present it looks as though they will not help significantly in the context of the M4 CEM's key priority of relieving congestion in the M4 corridor.

C: We need to review all other planned and committed programmes (owned by others) in terms of their potential contribution to M4 CEM, and ensure that the SEWTA plan is included.

Q: Has a **BCR** been done **for the rail schemes**?

A: No overall BCR has been done.

Q: Package 4 has a high CAPEX [capital expenditure] requirement and a heavy revenue tail. The starting point is that resources are strained, so there are concerns about unduly raising expectations. Shouldn't we be clear in the FC that we won't be able to fund all of this?

A: We have agreed that we should not be constrained by affordability at this stage of the process, as we want to explore all of the options fully first. But we should definitely put an affordability health warning onto the FC.

C: In order to capture all of the public transport options, Package 4 should **include the key regional bus corridors coming in from regions**. There are potentially significant investments in these.



Identifying issues and opportunities for improving the M4 CEM Options presented today, prior to Formal Consultation

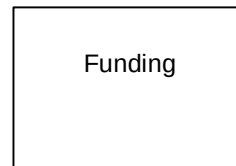
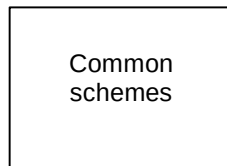
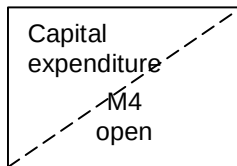
[11.45] Working Session 1a: Working at their tables, the participants were asked to record onto worksheets a full list of all the key issues they identify in relation to any or all of the options presented. They were invited to take a strategic view, regarding all the packages to identify whether anything important is missing, make comments about core or supporting measures, consider the assessment of the measure, identify any aspect of the work undertaken that they felt worked particularly well, and should be expanded upon etc.

The following long lists of issues were recorded by the groups:

- Reopening of the Carleon Station is not included in the packages
- Other potential stations need to be included in Package 4
- Scale of costs – caution regarding raising expectations vs. delivery
- Political: need to be seen to be making progress
- Timeline including electrification needs to be clarified – DFT funds and linkages to other public transport measures (complementary)
- A465 – Govt commitment needs highways agency support to sign it in England
- A472 – Demand between Usk & Pontypool needs to be considered
- Package 1 – develop west link to M4 ahead of East link (final phase)
- Split Duffryn and Queensway
- Package 3 – disruption over 15 years could adversely impact on economy
- Brynglas Tunnel £300m c.f. cut & compensation for residents
- Closure of east slips at J25 consider feasibility of alternative routes & impact of U-turning, especially is the alternative is to divert via M4 west
- New M4 by stealth? Consider environmental impact and interests of stakeholders
- Package 4 – what value does light rail offer compared with rail improvements and bus rapid transit – affordability?

- The packages are very comprehensive, however it is evident that key proposals are missing e.g. Carleon station.
- The group believes the packages need to be condensed for public consultation
- The need for a planning policy at motorway junctions to avoid intensified development.
- Are the more costly packages affordable?
- Funding consequences of proposals that are not identified in the packages, eg closing junctions on the M4 will increase congestion in Newport and therefore have a knock-on effect on bus services, local traffic, etc.
- Too many measures in Package 4 and too little evaluation of them!

- All Packages – cut off points of relevance:
- Clarify the sequence of measures in each package.
- Tolls – should they be part of the mechanism to influence behaviour?
- Funding – EU funding?
- Aims of the project – not particularly clear.
- Consider a change of presentation – not packages. Which measures are dependent upon each other, which measures are independent of each other:



- SDR improvements part of do-minimum.
- Rail – what is currently committed – is this a new measure?
- What is the patronage/passenger movement?
- Package 1 is M4 Relief Road in disguise – if not new strategic route is it already constrained
- Train link to Cwmbran – additional stations / more services

- Biodiversity loss not addressed adequately (Package 1).
 - o Biodiversity loss of nationally important areas.
 - o Contrary to Natural Environmental Framework (NR), sustainable development duty of WG, planning policy (TAN5, PPW) → halting loss of biodiversity.
- Funding – does it include EU trans-network?
- What is it for – most traffic on M4 is local (70%) – deal with it and deal with congestion.
- 9 junctions rather than fewer, more strategic junctions.
- More sustainable transport in Newport and surrounding area.
- Local and long distance / business demand on M4 does not mix, causing congestion.
- Junction 28 – lynchpin to congestion.
 - o East Cardiff access needs improving J28 & J29

- Lack of prioritisation acknowledgement.
- Lack of bus provision.
- Resilience to Trunk Road Network and not local network.
- Lack of appreciation of local networks.
- Closure of east bound slips J26 essential.
- Phasing of Duffryn (into J29 provision).
- Bassaleg road dedicated westbound slip.
- Bus and rail provision – little prioritisation.
- Lack of do-minimum information on detail – KEY.
- Lack of strategic cycle provision.
- Lack of appreciation of SEWTA aspirations.
- Some proposals subject to S106 planning gain.
- Nash Road roundabout.
- Gaer Junction essential – not possible.
- No collaboration but WG going forward in isolation.
- Personal travel planning not mentioned.

Concerns:

- High-speed road through residential areas (J23A).
- Traffic safety on Junctions (28 westbound).
- Impact on local traffic and local communities by proposed measures.
- Need to look at alternative routes for east-west movement (e.g. A472) and north-south (e.g. A4042).
- Need clarification on what is meant by affordable.
- Issue – consultation needs to be clear on what is being proposed, not just one package but a combination of measures.
- Information for individual measure needs to be consisting across packages and in consultation.
- Need to make reference to external studies already completed (e.g. SEWTA rail strategy review, various other studies by SEWTA and local authorities).

- Concern about over-existing expectations.
- Urgently for action – to avoid gridlock. Consensus – can't afford “do nothing”.
- Do-minimum – schemes and **outcomes** need to be explained in same depth as Packages 1 – 4. Has to be assessed prior to moving beyond it – it is the baseline, e.g. how does Newport City redevelopment help the M4?
e.g. How do valleys rail increments help the M4?
- Package 1 – we are starting on the east, building 2 parallel roads, but the capacity issue is on the west.
What is the minimum requirement for “Brynglas Tunnels Bypass”?
- Can Package 2 and Steelworks Road provide the “Brynglas Tunnels Bypass” with e.g. grade-separated junctions at a lower cost than package 1?
- Is this “just a highways improvement”?
Shouldn't the wider/alternative/sustainable approach be the top priority?
- Focus also on Junction 27 on and off – slip changes.
- The biodiversity layer needs to be on the map.

Package 1

- M4 Relief ~Road by stealth? What happens until 2022
- Concern over estimated cost?
- Does not allow for growth between now and 2031.
- An alternative route (Package 2) to the M4 – other measures alone will not be enough.
- Early measures needed to provide improvement to existing infrastructure **now** not in 10 years, etc.
- Use existing Steelworks Road rather than build Phase 3.

Package 2

- Seen as a stopgap – trying to put right a poorly designed SDR.

Package 3

- Does not factor in an M4 alternative route when measured (resilience).
- Cost of engineering solutions for new tunnel.
- Disruption during construction (new tunnel) and lanes.
- Increased noise and pollution in existing receptor locations.

Package 4

- The new proposed rail stations should include facilities for Park & Ride for wider area not just locals (e.g. Llanwern) to reduce M4 use.
- Doesn't reflect all initiatives underway (Network Rail).
- More focus on rail alternatives and not so much M4 focus (not a side issue).

Key concerns, issues and areas of consensus

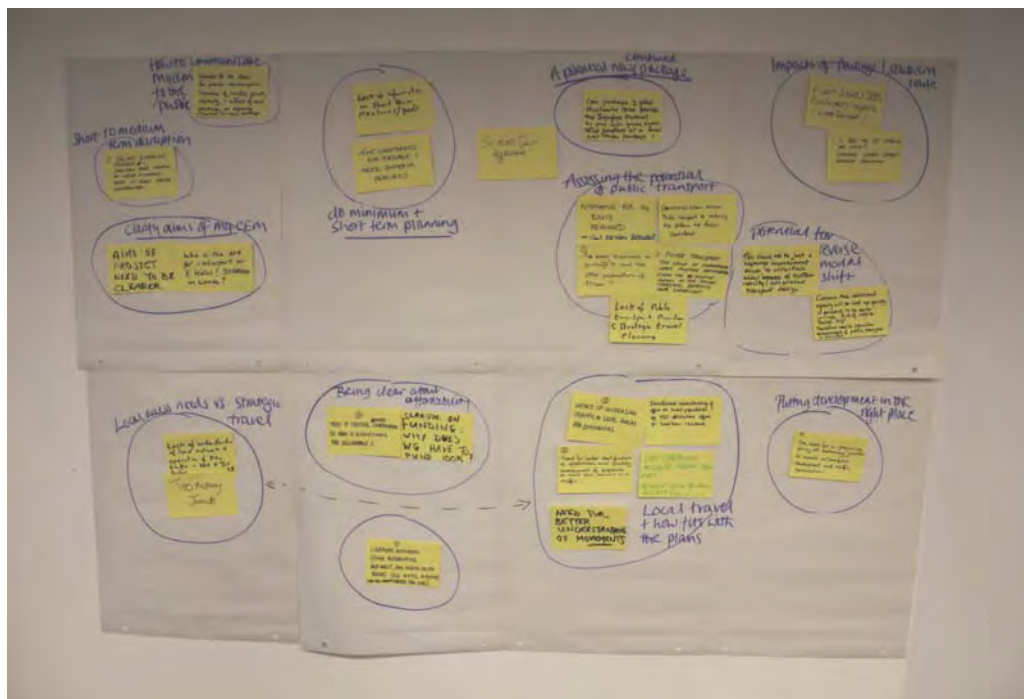
- Recognition that something needs to be done.
- Concern that there is insufficient understanding of effects on public transport, and also on local populations, e.g. closure of J25 on-slips.
- Plan to future-proof Package1 route from 2 to 3 lanes.
- Define benefit for each package in terms of capacity improvements and years until capacity reached vs. delivery plan.
- Concern that additional capacity will “fill up” i.e. reverse modal shift if road journey becomes easier than alternatives on public transport.
→ therefore need to consider enhancement of public transport in parallel.

[12.10] Working Session 1b:

During the final 10 minutes of this session, participants were set the task of select from their list, up to 3 issues the groups consider most important to look at in more detail with Forum Members today, and which offer the most compelling opportunities for improving the options presented during FC. These prioritised issues were summarised on post-it notes, and fed-back in plenary.

With participants' guidance, the points were then grouped into “clusters” of related issues in order to produce a set of overarching themes for more in-depth deliberation and discussion.. See photograph – and list of emerging themes for further discussion (below).

Note, only those themes with ticks were eventually deliberated by forum members.



Emerging themes for further discussion

./ Assessing potential of public transport
• Alternative for M4 route required – rail option potential • Too many measures in package 4 and too little evaluation of them!!! • Lack of public transport provision and strategic travel planning • Contribution from public transport to reducing M4 problems not fully considered • Public transport the value of improvements needs further consideration given the positive trends in the region. Marginal benefits are significant.
./ Are we creating potential for reverse modal shift – approach is too demand-led
• Concern that additional capacity will be used up quickly if perceived to be easier journey. Risk of reverse modal shift. Therefore need to consider enhancement of public transport in parallel. • This should not be just a highways improvement, need to entertain wider issues of sustainability / integrated transport design
./ Exploring the impacts of Package 1 – southern route
• Gwent Levels SSSI biodiversity impacts → lose package 1 • Is new M4 by stealth an issue? Consider lobby groups adverse reaction
./ Putting development in the right place
• The need for a planning policy at motorway junctions to avoid intensified development and traffic generation.
./ A potential new package is needed – Brynglas By-pass – up-scaled package 2
• Can package 2 plus steelworks access road provide the Brynglas Tunnel by-pass with grade separated junctions at a lower cost than package 1
Explore a scaled down approach
Local access needs – vs – strategic travel
• Lack of understanding of local network and operation of key traffic and SDR of Junction 28 • Too many junctions
Local travel and how fits with the plans
• Impact of increasing traffic in local areas and communities • Need for better identification of operation and funding consequences of proposals on local bus services and traffic. • Need for better understanding of local <u>movements</u> • Insufficient understanding of effect on local population? e.g. J25 alterations effect on Caerleon residents. • East Cardiff access from M4 east – Develop J29a to full access to relieve J28
Linkages between other alternative East–West and North–South routes (e.g. A472, A4042, Ebb Vale, New Marches Rail lines)
./ Collaborating with others to improve the “Do minimum” scenario and short term transport planning – and also to improve [public] understanding of my this is necessary
• Lack of information on short term measures / goals • Time constraints for package 1 need interim measures

Short to medium term disruption
• Online widening • Package 3 – concern over impact on Welsh economy over 15 year during construction
How to Communicate M4 CEM to the public
• Needs to be clear for public consumption. Timeline of traffic growth, capacity and effect of each package on capacity and timeline for each package
Clarify aims of M4CEM
• Aims of project need to be clearer • Who is the M4 for – Newport or South Wales! STRATEGIC VS LOCAL?
Being clear about affordability
• Clarification on funding: why does Welsh Government have to fund 100%? • Need to provide better clarification on what is affordable and deliverable?

As a result of the feed-back and grouping session, a list of emerging themes was drawn up. Participants were invited to look at these themes during the lunch break and to decide which of these themes they felt most important for them to explore with others.



Developing ideas to resolve issues and improve the M4 CEM options to be presented during the Formal Consultation process

[13.35] Exploring in more detail the issues and opportunities identified before lunch, to improve the options to be presented during Formal Consultation

Participants who had signed up to a theme during the lunch break were invited to step forward to act as “convenor” for each of the issues. Other participants selected the issue they had most energy / interest for and joined the relevant group.

Each group shared the same brief: to describe the issue and concomitant opportunity for improvement. Pro-forma sheets were provided at each table to note down key points agreed.

Describe the issue/opportunity to improve an aspect of current M4 CEM (eg change/add a measure)	Idea for realising the opportunity/resolving the issue
Assessing the potential of public transport to address problems identified by the M4 CEM study	
• Too much emphasis on highway infrastructure and not public transport alternatives. • Wider consideration of M4 Corridor rather than Newport Junctions 24 – 28 (public transport in under geographical area), and broader objectives. • Some measures within package 4 not cost effective (light rail?) – needs more work? • Development of a strategic bus network?	• Revision of package 4 – open discussions between WG/Arup/SEWTA and public transport representatives. • Develop a mechanism for introduction of strategic bus network, promote an integrated approach?
How to present timing and ‘need’ at point of critical level of demand?	
• Target : offset future increased use of M4.	• Sustainable travel centre? (Newport designation). • More thorough ticketing (integrated tickets) – Wales Oyster Card? • Behavioural change – personalised travel planning e.g. Cardiff 60,000 households £4m investment over 3 years = 10% less traffic.

Are we creating potential for reverse modal-shift – too demand-led.	
• The easier you make it for people to drive, the less they will walk and cycle from Malpas Road to Newport, or catch a train from Caerleon to Cardiff. • Acknowledge that some new road capacity may be of some benefit to sustainable modes (eg walking, cycling and particularly buses).	• New roads should have a compulsory walking and cycling provision. • Personalised travel/school planning should be re-included as a potential, this is very affordable - relative to other measures. • Better promotion. • Opportunities during build process to build in/provide walking and cycling. • If M4 is detrunked, offers opportunities to provide for other modes. • If you're going to build new roads, make sure you provide for all road users (e.g. buses - lanes, taxis – lanes, walking, cycling). • Personalised travel planning and promotion of existing walking and cycling and buses and trains. • Could spent the £800m in a 20 mile radius on highway MBU, walking and cycling, rail and bus, which would likely benefit the same, if not greater, number of people.
Brynglas Tunnel by-pass: a modified package 2	
• Brynglas Tunnel: - o Congested peak periods. - o Incidents. • Package 1 is a major highway M4 “by stealth” and at £800m is expensive. BT bypass near £120-£150m. • Money saved – transfer to public transport.	• Steelworks Access Road – dual 2-lane (with grade separated junctions). - o End of Steelworks to Junction 23a. • Upgrade existing A48: - o Steelworks access road – Usk bridge – halfway to Junction 28 from Great Western Mail Line (GWML) Crossing to Junction 28/29. • Option 1: Package 1 (orange and green/red (west)) to Junction 29. • Option 2: Package 2 to Junction 28. • Compare cost Phase 3 (Package 1) to steelworks access (Package 1). • Package 1 should be 4 phases (Phase 3 split into east and west).

Collaborating with others to improve the “Do minimum” scenario and short term transport planning – and also to improve [public] understanding of my this is necessary	
• Many schemes need to be done anyway. • Identify and perhaps group the “top up” schemes common to each package. • Need understandable description of the effects. • How much will this be a mixture of schemes “pick and mix”? Will they be seen as stand-alone? • How to get as much out of the do-minimum schemes as possible. • Identify measures in Package 2 that should be in the “do-minimum”. • All stations, eg Caerleon, not listed should be considered for listing in do-minimum or package if they meet the project aims. • Need to distil the key points for the public but need to get that distillation right – programme aims. Less detail than given out today. • Present a diagram of movements for public consumption. • Ensuring that those measures that will not be delivered by CES team but still necessary should be described/noted.	• Prioritise and timetable the do-minimum schemes - making sure the benefit of those schemes are clearly identified. Role of: SEWTA, Newport and WG. Sooner the better. • Presentation issue – make the core schemes readily identifiable for the public. Unique number for a scheme (so can appear in more than one scheme). • Better explanation that the packages are intended to meet the programme aims. • Short term stop gaps so it becomes “do-minimums” should be done. • Self explanatory – how can the problems be presented graphically, traffic flow trips, capacity, how can the benefits similarly be presented graphically?
Linkage between alternative routes	
• Improvements on A465 make it an issue on A4042. • Traffic in mid-Valley area (Pontlanfraith) more likely to follow A472. • Weather problem A465? • Accidents, etc, Newport area – M4.	• Improve A4042 Pontypool – Abergavenny. • Improve A472 mid-valley to Pontypool. • VMS. • Park & Ride Parkway, Abergavenny and Pontypool.

Addressing impacts of Southern Road. Using planning policy – put development in right place.	
• Are we encouraging unsustainable development? • Growth vs. sustainability. • Dealing with short term immediate impacts and long term. • Biodiversity impacts on Gwent Levels SSSI and Usk SAC. • Cost of ecosystem services [Natural Environment Framework] built into costs of each scheme. • Not translating into “real world” • Strategic traffic vs. local traffic • Package 1 – more information is required. • Biodiversity appraisal is wrong • Questionable delivery on Package 1. • Environmental limits.	• More baseline measures – make better use of “do-minimum” measures. • Direct works on existing infrastructure – retrofit. • Full cost analysis needs to be undertaken. (Fully internalised costs). →e.g. Carbon impact of concrete road (embedded energy) • Gwent Levels – not mentioned in Package 1 – environmental impact. • Too much local traffic – close junctions. • Utilise the SDR more effectively • Biodiversity appraisal – needs to be red – to maintain confidence in approach. CCW/EAW need fully signed up on traffic light systems - carbon issues. • Planning policy considerations are not taken into consideration. • Fragmentation. • Isolation. • Special and unique places need to stay special and unique. • NEF – PPW. • NER – sustainable development bill! • NERC • TAN5 and environmental bill. • Combination of 1/2/3.

**Separate local traffic from (strategic) through traffic.
(How to achieve long distance traffic only on M4?)**

• Still have issue of local traffic J24 to J28. • J28 “wears too many hats” →local/strategic traffic conflict: Celtic Springs, local residents and statistics office, A467 Forge Lane, etc. • J24 – J25 westbound lane use/discipline. • Drivers move to L2 too early. • Keep local traffic off motorway.	• J26 eastbound closure will help – but not whole solution. • Shut down motorway access and promote cross-city routes. • Make A48(M) J29(A) full movement to cater for east Cardiff trips (that currently use A48 and J28). • Traffic separation similar to SAR/Phase 3 to east of Newport (Southern Bypass). • Need to achieve steady, stable traffic flow. • Signs, driver education. • Don’t adopt “keep left” policy on M4. Put through traffic in L3 and local traffic in L1/L2. • Improve east-west local routes, therefore SDR upgrade is key measures.

The session concluded with a plenary discussion of key points/insights arising from the group work

Acknowledging the possibility of a new energy source for road vehicles, if the decision is to build new roads, let’s be sure to put additional infrastructure alongside it when it is built (bike lanes, rail/tram lines etc.)

The WG Sustainable Travel City programme should be included in the M4 CEM.

The full cost and value of ecosystem services has not been included in Package 1. This should include foregone carbon sequestration. Also, the concrete involved in the construction has a huge CO2 footprint.

The “traffic light” classification system in Package 1 does not include the full value of biodiversity.

We must get input on the M4 CEM before the FC from the statutory and non-statutory conservation/environment consultants.

The FC needs to make clear the measures that are going to happen anyway; and also some things that are not yet in the Do Minimum baseline – e.g. the Souter strategy. And these should be included in the overall timeline if they are inevitably going to be included within one of the packages.

Quite a lot of the argument ultimately comes down to traffic flows. For the purposes of the FC, some simple graphics would help a lot. The congestion peak may be spreading, but there is still

a peak problem. It would be good to identify and prioritise the criticality of improvements – perhaps a traffic light classification system would be useful for this purpose. A capacity utilisation chart of some sort, showing also the mix of vehicles on the road would be really useful. A mapping presentation/visualisation which shows where we are now, and the main points of each package (including Gant charts, costs etc.) would also be very helpful to participants. The core elements of each package are clear, but it would be good to draw attention to common and/or unique features – clarifying these for each on the summary page. Many of us are clear about the hotspots – the places where there is overheating – this would also be valuable information for participants to have.

Package 4 needs quite a lot of work to bring it up to speed - the relationship between rail and road, costs, etc.

The London to Swansea rail franchise comes up next year – this is an opportunity to confirm what Wales needs from that franchise so that it can help with M4 traffic alleviation.

We need to find ways of making the mix of long haul with local traffic within the M4 CEM area work as well as possible. This is challenging, as the existing M4 really has two functions – it was originally designed as the Newport bypass.

East-West and North-South links: the M4 has had lots of money spent on it. But there is a lack of North-South linkages. We have banded figures like £800m around in the context of the M4 CEM. Spreading this funding around the other routes would give a range of benefits, not least to locals. The mid-valley links (e.g. A442) can take traffic beyond the Brynglas tunnels. Optimising the interactions between these networks could benefit the M4.

Other issues identified but not discussed at tables

It was noted that several topics originally prioritised by the Forum (during working session 1) had not been selected by a group for further exploration – participants were invited to comment on these themes in plenary.

C: Local traffic – proposals for junction closures will lead to opposition unless alternatives are carefully designed. This is a glaring omission from Package 3.

C: It may make political sense to get on with some of the “Do Minimum” options – i.e. identify the quick wins that need doing anyway.

C: “Make better use” is a phrase which should be applied much more widely than in the context of transport.

C: We must ensure that the aims of M4 CEM are clear, and that in the FC, the packages are:

- 1) aligned to strategic aims; and
- 2) not perceived as requiring people to choose of one of them – i.e. the task and the packages need to be clearly framed.

C: The Brynglas tunnels are seen as the cause of much of the angst over this part of the M4. But the key issues overall here are congestion and resilience – and we must be careful not to let the risks of fire in the tunnels influence our decision-making unduly.

C: Package 1 is “the new M4 by stealth” – it risks a return to PFI and other funding fixes that should be avoided. A bypass would be more affordable. Comparing Package 1 and Package 2: the Package 1 steelworks access road is intended for Stage 1 implementation – from Junction 23A westwards. I would question the parallel road at J23 – we understand that this is a late stage implementation; but the reason for it is to avoid lots of junctions on the original carriageway - so how about a service road to the steel works access instead? Moving west, I suggest taking the section of green road up to the Usk – that takes you almost to J28. This would be a cheaper option. The issue then is how to connect to the M4 – via J28 or Duffryn Link? I would suggest comparing the costs of the alternatives and choosing the cheaper option if it does the job. Would this make existing M4 a better strategic route? Finally, the scheme should ensure integration with public transport.

C: From the presentation point of view, it is important to stress as a fundamental principle the need to divide M4 traffic from Newport traffic – a major challenge is to stop Newport traffic coming on to the M4.

C: But everything has to come off and join a motorway at some point or other.

C: There is a real problem with commuter traffic here. This stretch of road is doing 2 jobs at once (it is both a motorway and a bypass).

Q: Why are no changes proposed at High Cross?

A: The whole issue of junction closures is very emotive – we shall be doing more localised consultation, including on High Cross.

C: The M4 doesn't end at J29. At certain times of day, it is possible to get around fast in the M4 CEM focal area; but around J33, congestion can be bad (e.g Cardiff West, around Swansea, Correton, Bridgend). Are problems elsewhere such that if we succeed with the CEM, but do not take the necessary steps elsewhere, we will fail to address the problem?

A: Yes, good point. The brief was to address the CEM focal area; but agree that it would have been better if the original brief had been broader.

Next Steps - including an outline of plans for the Formal Consultation Process, and proposals for further involvement with the Stakeholder Forum

[15.05] Next Steps and Final Plenary:

The plan for the Formal Consultation was outlined. Questions of clarification were invited. WG requested that participants list on sheets any further networks that should be invited to participate in the Formal Consultation, suggestions for how best to involve people, as well as to indicate how they might like to stay involved in the process.

After a final opportunity to raise additional questions or issues, the participants were thanked for their time and contributions, and the meeting closed early, at 3.25pm.

Thanks and Closing Remarks – Russell Bennett

There will be a report of today's meeting. We shall as before, place this on the Forum website, and inform you when it is posted there. Please continue to use the website, to add any further thoughts and insights you may like to contribute, after today.

We have to try and communicate as much of the complexity as possible in the FC. During the FC, we intend to offer a tiered approach, allowing people to choose how deeply they want to delve into the complexity. There will also be some face to face workshops and exhibitions.

After the FC, there will be a mulling period before Ministerial decision. Following this, we shall communicate with you again, and hope to enlist your valuable in-put, expertise and experience further.

This meeting has provided invaluable feedback on all of the packages. Package 4 in particular needs revisiting – we would like to discuss rail and bus in more depth. The project team will decide how best to do this. There is also some more work to be done on Package 3 to ensure that it fully reflects expert views, and some more thinking on the others.

Many thanks again, for all your suggestions.

Participants

[Removed for privacy reasons]

People / organisations whose participation in the Formal Consultation process, WG can support / encourage

Participants were invited to help WG identify any relevant group or network who should participate in the Formal Consultation Process, and suggest ways in which their participation can be supported and encouraged.

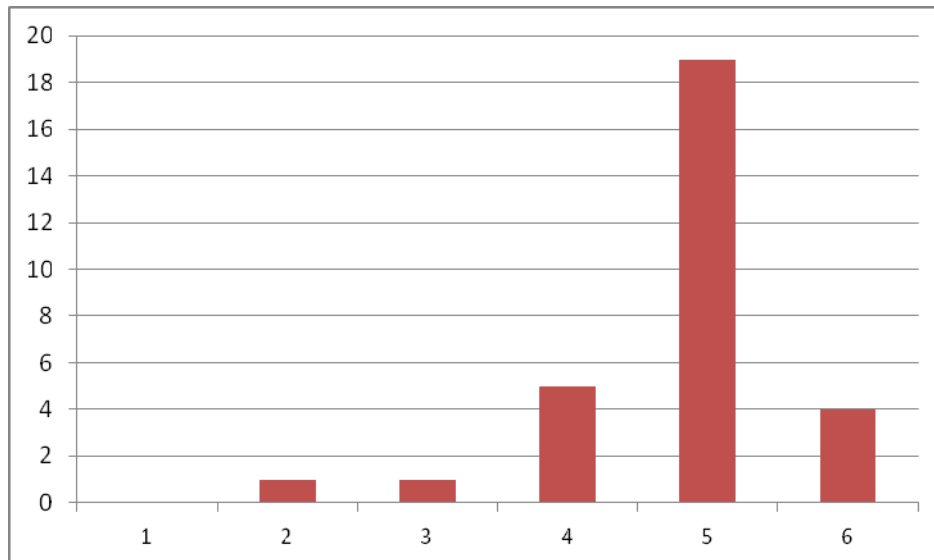
The results are summarised here:

Organisation Name	Key contact (plus tel. / e-mail please)	Idea for how to support their participation
Monmouthshire CC	Town and Community Councils within Monmouthshire Area Committees and local Members Sewta – already but better fit with Regional Plans Planning – keep out of town developments to a minimum	Update and opportunity to involve/seek views of these various groups Already involved but invite specific individuals from various groups Place/give more funding from LA's to adopt from site development with LDP [??]
Monmouthshire County Council		Presentation to one of our programmed meetings
All equality and diversity interests: • Guide Dogs, LUBF groups, access groups etc		
Network Rail		Public Transport issues
SDR NCC Members		SDR is a PFI Scheme Package 2 Local Network investigation required
Cardiff County Council		Capital Times
SWWITCH		Transport Consortium for SW Wales – will be sure to have good professional comments
Caerphilly County Borough Council (CCBC)		Contact details for CCBC resident focus groups, town and community councils near the M4 (eg Caerphilly town, Bedwas, Trethomas and Machen) and community partnerships.
Wildlife Trust – Gwent		Inform them on potential impact on Biodiversity and SSSI's Sustainability issues

Friends of Earth Cymru CCW		Usk SAC and Gwent Levels SSSI's
Marshfield Community Council		Feed in information & constructive thought
University of Wales, Newport	Director of CES	Put information on University website
Associated British Ports (ABP)		Embrace the local ports (Newport, Cardiff) in the debate – ports are major generators of freight movements hence of traffic (light and heavy)
Campaign for the Protection of Rural Wales		I can report to CPRW members in S.Wales branches. FOE / GWT CCW MUST participate
Institute of Civil Engineers (ICE)		Give a talk at an evening meeting
Sustrans		Consultation with Sustrans team especially with regards to personalised transport planning
Cynnal Cymru & network of members		Input into discussions around Ecosystems valuation etc. prior to FC Enabling wider consultation with sustainable development practitioners
SEWTA		Presentation to Members workshop 10/02/12 Clydach Vale
SEWTA Monmouthshire County Council		Presentation to future Sewta board meeting Local area committees, public meetings – presentation, public discussion forum

Evaluation

1. How helpful did you find the information about M4 CEM that you were sent in advance, in terms of enabling your participation today?



Score from 1 – 6

1 = not at all helpful

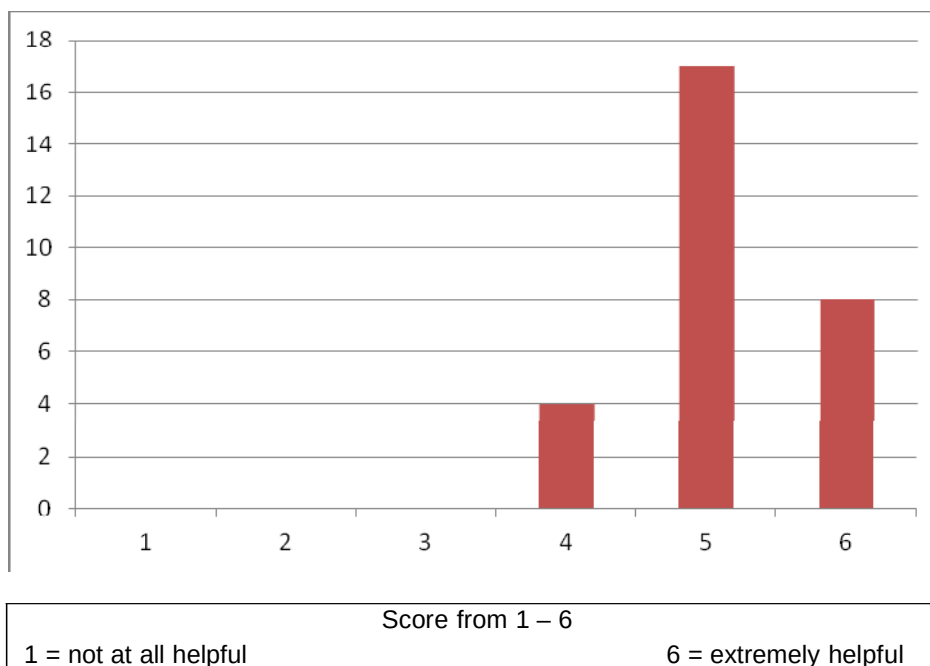
6 = extremely helpful

Comments:

A lot of detailed information that is difficult to fully assess given the other demands on us.
It would have been useful to have some key messages/themes/summaries to get across the most essential points.
This links to the public consultation, develop graphical presentations that can be readily understood e.g. objectives, issues, benefits
There were some inconsistencies in the detail, and level of information provided for individual measures and across each package.
Information about existing traffic flows and projections of growth on M4 and local key routes.
Useful, however a bit “busy”. Would have helped to have them electronically (probably <u>as well</u> as hardcopy) to enable searching, identifying individual sections of interest etc.
Could have had more time to review material.
Receive pack earlier
Very good/detailed information.
Too much to consider pre meeting.
Would have been nice to have had electronic copies and a few hard copies provided to be shared by groups on the day? May have helped cost and practicality considerations?

Note highlighting common measures, so that they can be picked out at a glance (asterisks could have done this beneath each list).
A summary of the main points in each document would have been very useful.
Lots of info well presented but A3 was challenging to read without upsetting fellow passengers on the train! Would have liked more details on the 'do min' to allow comparison with packages 1 – 4.
I would have valued additional background data on the problems from a dynamic and statistical viewpoint to gain deeper insight in areas that are less obvious but equally important.
Good to enable conversation but not heeding comments from last consultation i.e. impacts on Gwent Levels should be Red as biodiversity issues are <u>significant</u> and of national/international importance (see package 1) but these are not addressed adequately (given Amber rating).
Very good package, however more graphical/pictorial presentation would aid assimilation of the key points, particularly for public consultation.
More details including programme on the short term measures.
A bit too <u>much</u> ! A simplified version would have encouraged more interest!
Not on mailing list.
Very heavy and a lot to take in. May have been better to have had a summary sheet and then during the presentation to elaborate.

2. How valuable overall did you find this event?



Comments:

Addressing comments in 1 above would have led to a higher score
Very rapid to consider all packages in the round.
Good to identify contracts/opportunities for further work
Useful to know that's been considered
Broad coverage catching virtually all the major dimensions/issues.
Enjoyed the event, the best yet.
Best you could, given the vast area of subject coverage.
It is only valuable if comments are listened to (see above)
Very informative, gives better appreciation of wider issues and informs decision making.
It would have been useful to have more information on the 'timeline' and costs and benefits. How much money is needed to keep the network going until 2021 (core scheme introduction).
Valuable discussions/topics to benefit the scheme.
Good, open discussion
Yes but workbook might have focused on strategic issues[?] and not so much a mixed bag as I personally would like to have seen; i.e. look to enhance alternative Southern route [?] but also and perhaps more focus on [public] transport/trains and bus/cycle/walking [?]

3. What would you have liked more time for?

Understanding what benefits the schemes will have, how they deliver the strategic aims and prioritising them.
The balance was right
Options
About right
Separating "core" from "other" measures.
Specific time to discuss individual projects rather than overall principles.
Factual analysis
The wider (international) implications.
More time on environmental matters – biodiversity/climate change/policy NEF, NER, PPW, TAW5
The number of packages – more detail required.
Proposed consultation programmes methodology
Developing ideas to resolve issues.
Look at issues raised by others.

4. What would you have liked to spend less time on?

The balance was right
About right
Balance of the workshop was very good
Lunch

5. What message would you like to give the Welsh Government as they go forward with M4 CEM?

A valid point was made in general discussion about the need to consider the wider issues along the rest of the M4, how surrounding communities can benefit for any investment (make this clear in the public consultation) and the cost benefit of the M4 CEM programme in this context.
Be as clear as is possible on some of the key factors and considerations e.g. affordability, deliverability
Public transport must not be allowed to suffer because funding is going into new/improved roads.
Package 4 needs much more work; personalised travel planning must be included!
Consider sustainability as a higher priority objective particularly for ensuring that the needs of future generations are not sacrificed.
Public transport Value for money?
Look at the wider area i.e. A472 and impact of A4042
The need to identify and implement short term schemes that feature in all packages.
Make sure that the packages are clearly linked back to the objectives in an understandable way.
Need to be assured that it is affordable and we are not raising false hope.
1 – Consider better the strategic role of M4 (A55 did not benefit N Wales as expected) 2 – Value eco/env in Wales more.
Good luck! Badger Westminster, Dublin and Brussels for some cash! The M4/M4 corridor is an international link, vital to several regions/countries not just Wales. A big capital project...it could be just what we need!
Take a wider view than just M4 corridor, particularly when looking at effects of proposals on surrounding area, and also when considering public transport.
Keep up the same approach which feels like genuine consultation.
Focus on using individual roads for their prime purpose and encourage lower diverse purpose traffic on the M4. I would be pleased to see relevant data on the web pages on the various contributing causes of the present difficulties to impart the facts to a wider audience for thought, and to better understand the significance of various problem areas.
The Gwent Levels is a unique place – part of a <u>national</u> biodiversity network of <u>protected</u> habitats – it should be protected and ecosystem services and biodiversity (a la NEF/NER) recognised.
Very difficult project – all the best
To ensure proper representation for public transport
Make appropriate decisions in a timely and specific manner. Too long to reach decisions results in continued negativities.
Include the 'do-minimum' schemes as 'quick wins'
Be realistic
Please don't forget to help the local community when you make your decisions.
[Hope?] the final scheme is a balanced package of measures. Like the [???] approach but think more [emphasis?] needs to be given to addressing local traffic.

A19 Drop-ins Exhibitions Summary Report

M4 CEM Engagement Team
**M4 (Magor to Castleton) -
Corridor Enhancement Measures**
Drop-ins Summary Report

April 2011



Llywodraeth Cymru
Welsh Government



ARUP

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1 Introduction

First of all, the Welsh Assembly Government thanks everyone who came to the drop-in exhibitions to find out more about the M4 Corridor Enhancement Measures Programme: Magor to Castleton. The time participants spent reflecting on the material presented, and giving feedback has provided many tens of pages of useful views and comments, which will feed into the plans for the programme in the next stage of its development.

1.1 Who came to the Drop-in exhibitions?

Nearly 90 people came, of whom about half came to the exhibition in Magor; others came to exhibitions in Newport City Centre, Lliswerry and Duffryn. On average people spent 45 minutes reading, talking to the team and other people and writing their comments.

1.2 Why did the Welsh Assembly Government run them?

The Welsh Assembly Government is engaging with people who live and work along this stretch of the M4, to hear what they see as the main problems on this transport corridor and to hear what people think the Welsh Assembly Government should be trying to achieve.

The comments received at the exhibitions are now being studied to help ensure that any possible solutions, or measures, proposed by the Welsh Assembly Government within the scope of the programme, address as far as is possible the travel related problems experienced in the M4 corridor: Castleton to Magor, and help achieve the goals set.

1.3 How did people hear about the exhibitions?

Invitations were sent to local elected representatives and to social, business and environmental groups whose members the Welsh Assembly Government think could have an interest in travel related issues between Magor and Castleton. Posters were also displayed in local libraries, community centres, Newport University Campus and other public places. The events were advertised on the Welsh Assembly Government website and on Newport CC website business pages. Press releases were sent to local media.

1.4 How did participants rate the drop-in exhibitions?

9 out of 10 people attending the exhibitions indicated they found it easy to give their views. Some comments indicated that the exhibitions had not been advertised widely enough – greater publicity would have enabled more people to give their views.

Two thirds of participants said just the right amount of material was presented at the exhibitions. A third of participants indicated they would have liked to see more information. Of these, a number of people said they would have liked more technical information and evidence to have been presented; others said that they would have liked to comment on possible solutions. One person commented: “there was more than I had expected”.

Everyone who commented said that the material presented was quite easy or very easy to understand.

1.5 Participants’ views in full

A full transcription of every comment made at the drop-in exhibitions is available as a download from: www.wales.gov.uk/transport.

Reports from other events convened by the Welsh Assembly Government in order to open the dialogue about travel related issues within the M4 Corridor area: Magor to Castleton, are also available on this website. As are the full list of aims, problems and goals on which views were sought.

1.6 Participants’ views in summary

The comments received suggest that the Welsh Assembly Government have identified the most significant traffic related problems within the M4 Corridor: Castleton to Magor.

A small minority of participants expressed the opinion that the problems identified by the Welsh Assembly Government are too general, and not all are unique to this stretch of the M4 corridor. Rather, it was suggested that they are problems common to most transport corridors around UK cities.

Participants gave detailed descriptions of several specific local problems. Several of these specific problems were raised repeatedly, e.g. problems with J23A; problems with J28; the Brynglas tunnels are a bottleneck; planning (of different types) by Welsh Assembly Government and the local authorities is not joined-up enough; there is not enough investment in public transport, walking and cycling.

1.7 Participants’ views on the problems:

Of the 14 problems presented by the Welsh Assembly Government, those attracting most comment and most responses expressing agreement relate to:

- difficulties maintaining adequate traffic flows on the M4 at times of temporary disruption,
- the design of the M4 results in regular congestion at peak times,
- that both these problems (above) will worsen in the future,
- WAG’s aim for an improved gateway into Wales is not currently met by the M4 corridor.

Also agreeing with the problem expressed overall, but with fewer numbers of responses, participants indicated their concern about:

- pollution and greenhouse gas emissions problems, resulting from slow-moving traffic and congestion on the M4, and
- Essential major maintenance over the next five – ten years leading to lane and speed restrictions adding to congestion problems

There was a less clear response from participants about whether an increasing risk of disruption due to extreme weather events within the corridor is a problem. About half those who commented, said they had not experienced problems caused by flooding on the M4, suggested this problem is not significant compared to other causes of disruption, and stated “All road and rail systems are at risk of disruption due to extreme weather events. This is not a problem specific to the M4”.

Your views on whether noise is a serious problem varied and at least two causes of problem noise were identified: motorway traffic, and maintenance and improvement works at night. Many people said they did not experience any problems resulting from traffic noise on the M4.

1.7.1 Additional problems described by participants

- There are specific problem areas and times, and there is a knock-on effect of congestion on the motorway resulting in problems on local roads e.g. “the bottleneck is the Brynglas tunnels, not the motorways leading to and from them”; “Congestion at J28 is a problem – it affects both M4 and SDR traffic flows”.
- Bus and Rail alternatives to this stretch of the M4 are inadequate and expensive
- Mixed use of the motorway by local and long distance traffic is a problem, e.g. “M4 is being used for cross town commuting”; “The M4 at Newport is a convenient cross town road and attracts excess traffic which makes the temporary disruption found on all the motorway even worse”.
- Through traffic using local roads is a problem, especially during times of congestion and / or temporary disruption on the M4.
- There were suggestions that these last two problems are linked to “inadequate infrastructure in Newport” or “no alternative to the M4”.
- In addition to congestion on the M4, a lack of effective alternatives, including other modes of transport and the effect of the Toll crossing at the Severn Bridge were linked to the hampering aspirations for a better gateway into Wales.

1.7.2 Participants’ views on the Goals to be achieved

Of the 12 Goals identified by the Welsh Assembly Government, most comments participants made, expressing broad support were about:

- making best use of the existing M4 and local road network,

- promoting more effective use of alternatives to the M4, including other parts of the transport network and other modes of transport for local journeys around Newport
- making it quicker and easier to travel E-W in South Wales
- increasing the level of choice for journeys, in the corridor: Magor to Castleton, and
- making journey times in the corridor more reliable
- goals to reduce greenhouse gas emissions levels per journey and to reduce pollution were widely supported

1.7.3 Additional Goals described by participants

- Improve traffic management, especially following incidents. A number of people suggested seamless traffic management integrating the motorway and wider travel network should be strived for, and this would lead to measures like “better signage of problems before motorway entry so alternative route could be selected”.
- Positively encourage people to use forms of transport other than their car
- Change attitudes and behavior so we increasingly make more sustainable travel choices. Your suggestions included: “raise awareness of alternatives to the car, or of deciding not to make single journeys”; “greater investment in public transport”; “make greater use of capacity on rail” and “convincing people to use public transport”.
- Develop a transport plan for the M4 corridor: Castleton to Magor which is part of a unified local and national plan.

1.8 Aims

Having asked participants for the views on problems and goals to be achieved, they were asked to consider the bigger picture, by giving their comments on the Social, Economic and Environmental Aims identified for the M4 Corridor Enhancement Measures Programme.

While there was broad agreement expressed with all three aims, the aims relating to environmental and economic outcomes attracted most responses. Several people disagreed or wanted to modify the environmental aim – for very different reasons. Comments ranged from “Don’t do it – build New M4 instead”, to “Why not make the environment better?”.

For some, encouraging economic prosperity across SE Wales by delivering a more efficient transport network was their top priority. In response to this aim, others suggested that there are “other ways of investing to support and encourage prosperity in Newport”.

There were many responses to the invitation to suggest Aims for the longer term – 2020 and beyond. Many suggested a particular direction for policy: “Improve the M4 as much as possible”; many were in fact suggestions of possible solutions “built for the future” e.g. “high-speed rail link: London to Swansea”; “new road

built on top of barrage (think outside the box!)”; “light-rail Severn Tunnel Junction – Cardiff Airport”; and some of these aims are beyond the scope of the Welsh Assembly Government’s direct powers, e.g. “improve CO2 emissions from cars”.

1.8.1 **What additional messages did participants send the Welsh Assembly Government about the M4 Corridor Enhancement Measures Programme?**

Many participants responded to questions about the problems they experienced or to goals by offering specific solutions to problems. Many also used the final comment section to offer several, or more commonly, their one preferred solution. Overall, a very wide range of solutions were suggested by participants at the exhibitions. These will be considered during the next phase of the work, and are not described further here.

A number of participants indicated a real sense of urgency about finding solutions to the problems being experienced.

Several people said they hoped and expected the views gathered at the exhibitions would be listened to by the Welsh Assembly Government, and indicated their interest in commenting further on possible solutions, or measures, when these are presented.

1.9 **Where can I find out more and what happens next?**

The Welsh Assembly Government sincerely hope participants at the exhibitions will continue to help shape this project, and encourage new people to do so too. The website will be regularly updated with news of the M4 CEM engagement opportunities and developments.

Many thanks to all who took part and gave their views.

Appendix A: The material participants were asked to consider and to give their views on - the Welsh Assembly Government defined Problems, Goals and Aims of the M4 Corridor Enhancement Measures Programme: Magor to Castleton

After being greeted on arrival, and being asked to tell the staff where they had come from or where they lived (placing a dot on a map of the area), participants were given an introduction to what was at the exhibition, and how to get involved in the discussion by giving their views, either directly onto large paper sheets on display, or in feedback forms, which could be taken to tables, to complete more privately.

The first material displayed some context to the M4 Corridor Enhancement Measures Programme: Castleton to Magor. There was information about what was already being done to address some of the travel related issues in the M4 Corridor.

The boards then displayed the problems identified by the Welsh Assembly Government. Participants were asked to consider the problems identified and feed back their views. Next, the goals set in order to address one or more of the problems identified were presented. Participants in turn commented on these goals. Finally after having looked at problems and goals in detail, participants were asked to give some thought to the bigger picture and consider the M4 Corridor Enhancement Measures Programme's aims.

The full set of Problems, Goals and Aims are listed here:

1 Main problems surrounding the M4 Corridor: Magor to Castleton

This material is taken from the report: 'Addendum to Welsh Transport Planning and Appraisal Guidance (WelTAG) Planning Stage Report, Draft 1 Working Document May 2009'. It has been turned into 'plain English'.

The WelTAG process identified key problems as:

1. Difficulties maintaining adequate traffic flows on the M4 at times of temporary disruption (for example, following accidents, problems caused by severe weather, or during major events).
2. A greater volume of traffic uses the M4 around Newport than it was designed to accommodate, resulting in regular congestion at peak times.

3. Traffic levels are forecast to continue to increase, therefore problems 1 and 2 will worsen over time.
4. The existing transport network acts as a constraint to economic growth (for example, as freight companies see increasing delays in deliveries, they may decide not to invest in South Wales).
5. The M4 requires essential major maintenance within the next 5-10 years; this will involve prolonged lane and speed restrictions, thus increasing congestion problems.
6. HGVs cope badly with congestion as they take longer to get going again once they've stopped, thus adding to the congestion.
7. The congested, slow moving traffic on the motorway around Newport adds to air pollution problems.
8. Stop-start traffic movement on the M4 results in greater greenhouse gas emissions than free-flowing traffic.
9. The road and rail transport system in and around the M4 corridor is at increasing risk of disruption due to extreme weather events (for example flooding).
10. Traffic noise from the motorway is a problem for local residents.
11. WAG's aim for an improved gateway into Wales is not currently met by the M4 corridor.
12. The existing transport system limits what local Councils can do to develop their areas.
13. The current accident rates on the M4 between Magor and Castleton are higher than average for UK motorways.
14. The current problems on the M4 between Magor and Castleton at times have a significant knock-on effect, severely disrupting travel within South Wales.

2. WAG Transport Goals for the M4 CEM Programme

This material is taken from the report: 'Magor to Castleton. Addendum to Welsh Transport Planning and Appraisal Guidance (WelTAG) Planning Stage Report, Draft 1 Working Document May 2009'. It has been turned into plain English. The 'goals' (formally known as 'transport planning objectives') set out the kind of results that the M4 CEM programme should try to achieve.

1. Make it easier and quicker to travel East-West in South Wales,
2. Improve transport connections to England, the Republic of Ireland and the rest of Europe on the international transport network.
3. Promote more effective use of alternatives to the M4, including other parts of the transport network and other modes of transport for local journeys around Newport.
4. Make best possible use of the existing M4 and local road network.
5. Make journey times along the M4 corridor more reliable.
6. Increase the level of choice for all people making journeys within the transport corridor between Magor and Castleton.
7. Make it easier for people to access key services as well as residential and commercial centres.
8. Improve safety on the M4 between Magor and Castleton.
9. Improve air quality in areas next to the M4 around Newport.
10. Reduce the disturbance to people of high noise levels, from M4 traffic between Magor and Castleton.
11. Reduce greenhouse gas emissions per vehicle and/or person kilometre.
12. Improve the travel experience into South Wales along the M4 Corridor.

3. Overall aims of the M4 CEM programme, 2011 - 2020

As a part of South East Wales' transport strategy, the M4 CEM programme focuses on the M4 and the immediately surrounding area, known as the M4 corridor. The programme is looking at how to improve the ability of the corridor to cope with current journey levels in an efficient way and enable more journeys to be made than are now.

There are 3 overall aims

Social: to make it easier for people to reach services such as shops, hospitals, leisure service [and places of work, by road, public transport, walking or cycling....

Economic: to support and encourage prosperity in the region and across Wales by delivering a more efficient transport network on this important economic gateway to South Wales

Environmental: to prevent and reduce negative effects of the M4 CEM programme on people and the environment and, where practicable, provide improvements to balance against them.

**A20 Stakeholder Evaluation Questionnaire
Responses**

Questionnaire Responses

At the start of the M4 CEM Programme, the Welsh Government identified key individuals and organisations, who it was felt could help shape the M4 CEM project and the Engagement Process up to formal consultation and beyond. Many of these key stakeholders made valuable and committed contributions to the process, particularly through participation in Key Stakeholder Workshops (Stage 1), the Stakeholder Forum Workshops (Stage 2) and also responded to the Consultation (Stage 3).

We also requested their feedback on whether Welsh Government took the right approach to engagement, in order to learn lessons that feed into the improvement of future Welsh Government engagement processes.

Total number of returned questionnaires: 7

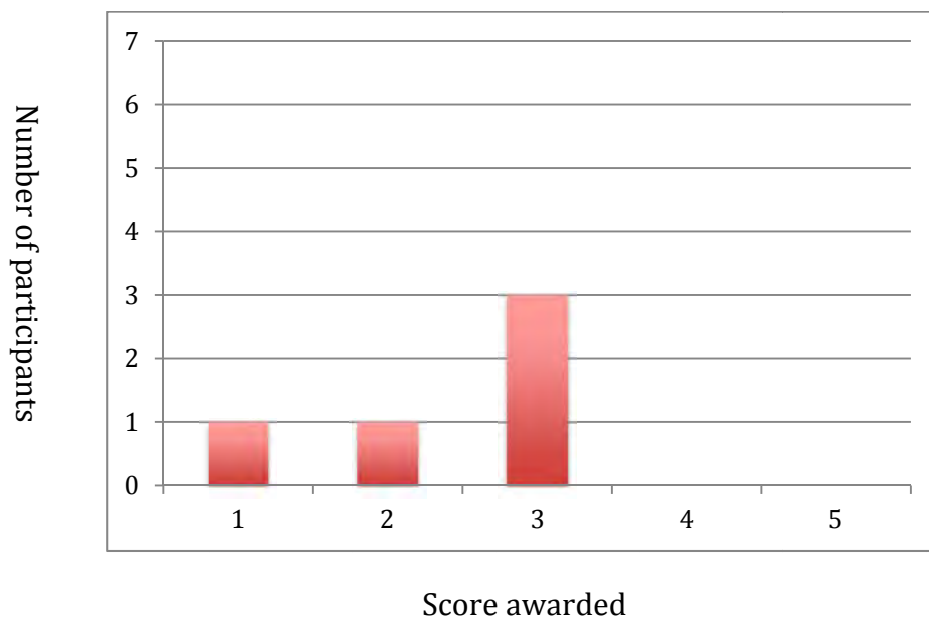
Below is a full transcript of all responses received.

Pre-Consultation Engagement

Background information: Engagement began with key stakeholder and councils workshops and participatory public exhibitions in January - March 2011. These events attempted to clarify the need for the M4 CEM, establish the problems and begin to understand people's views on goals that would lead to real improvements. We also asked people about the aims of the M4 CEM Programme. Subsequent stages of the engagement process, built on the results of this initial dialogue, and focussed on possible measures and how they might be combined into packages of measures in order to produce the best possible solutions to the transport related problems on the M4 Corridor, Magor to Castleton. The Stakeholder Forum met twice, in July and November 2011. Other stakeholders and the public were kept informed of developments via the www.m4cem.com website and Newsletters – 'Easing the Flow'.

- 1) What do you think about the extent to which Welsh Government have engaged with the public and with stakeholders **prior to the M4 CEM Consultation** period (March - July 2012)?

a) The extent to which Welsh Government engaged / attempted to engage with the public has been:				
insufficient		just right		too much
1	2	3	4	5

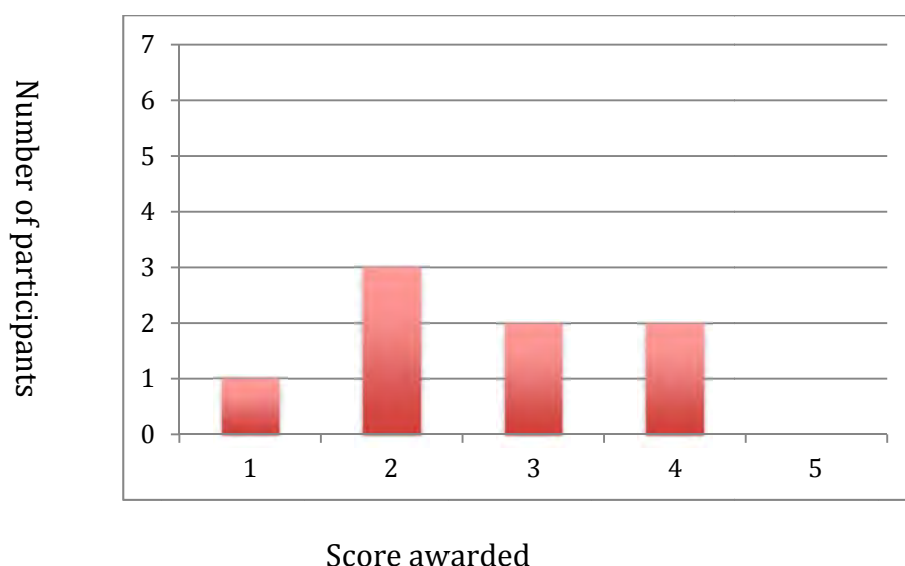


Comment:

- When I attended the first meeting there was very little representation from Newport. Many organisations that I spoke to were unaware that the process was happening.
- I understand there were some very well attended events around the Brynglas Tunnels although my guess is this was because residents thought work might be imminent in that location (?). Other than that I don't think the public have been very interested.
- I attended exhibitions where the plans have been shown. People were able to view and comment easily

b) The extent to which Welsh Government engaged / attempted to engage with stakeholders has been:

insufficient		just right		too much
1	2	3	4	5



Comment:

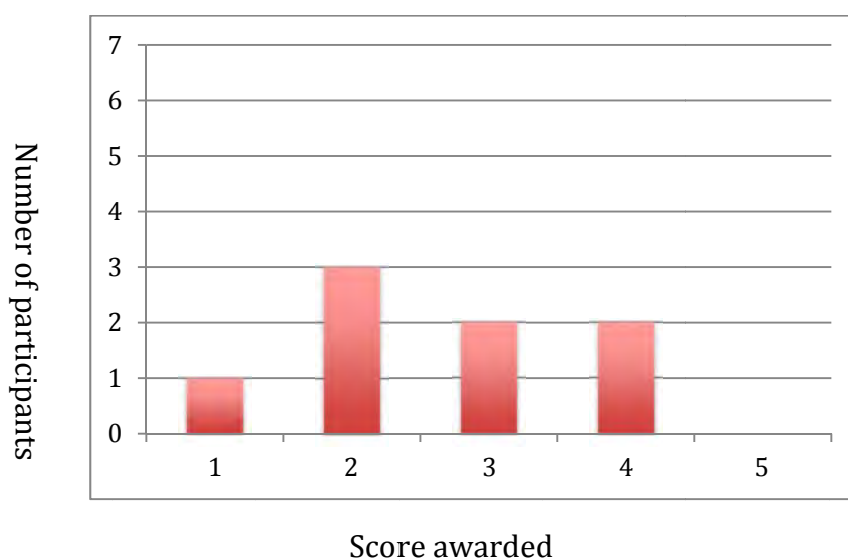
- When I attended the first meeting there was very little representation from Newport.
- Many organisations that I spoke to were unaware that the process was happening. This meant that many comments were made by people who were unaware of the Newport perspective or why things had happened in the past – for example, that the M4 round Newport was originally the bi-pass
- My experience of stakeholder events was pretty positive and I don't think this was over-done
- There were a lot of events, but at the ones I attended businesses weren't well represented, and I am not clear that any users who are not based in Newport were

really engaged. If I am wrong then that is good.

- While stakeholders were engaged – it appears no/little notice was taken of the comments supplied. Many organisations and stakeholders including EAW, RSPB, Cynnel Cymru and Prof Stuart Cole were all, ultimately ignored.
It was pointed out by several stakeholders that there was no crossover or compliance in Welsh Government policy (e.g. the emerging Living Wales agenda, or utilisation or reference to Welsh Government funded, UK Natural Environmental Assessment (UK NEA) assessment. This would have shown that the Gwent Levels option – was immediately unsustainable (loss of ecosystem services) and WelTag figures were inaccurate.
When I queried why greenhouse gas emissions of constructing a 28mile dual carriageway across 5 SSSIs and an SAC was ‘green’ for good – I was told that less congestion = less emissions and that ‘future cars’ would solve the problem anyway. Plus, the massive embedded carbon in the construction of the road (e.g. concrete, steel, etc) was not included!
I also had to continually argue that putting a dual carriageway across 5 SSSI and an SAC was ‘red’ and not ‘green’ within the system – this was eventually listened too but only after 4 sessions
Therefore, while I was listened too....I was not heard. Therefore, for engagement, I give an ‘insufficient’.
- There has been a lot of contact with the stakeholders. We have been given the chance to comment and be involved via workshops

- 2) Overall, how would you rate **your experience** of being involved in shaping the M4 CEM strategy options in preparation for the formal Consultation (e.g. through stakeholder Forum meetings 1 and 2, other communications etc.)

Not at all satisfied		Satisfied		Surpassed expectation
1	2	3	4	5



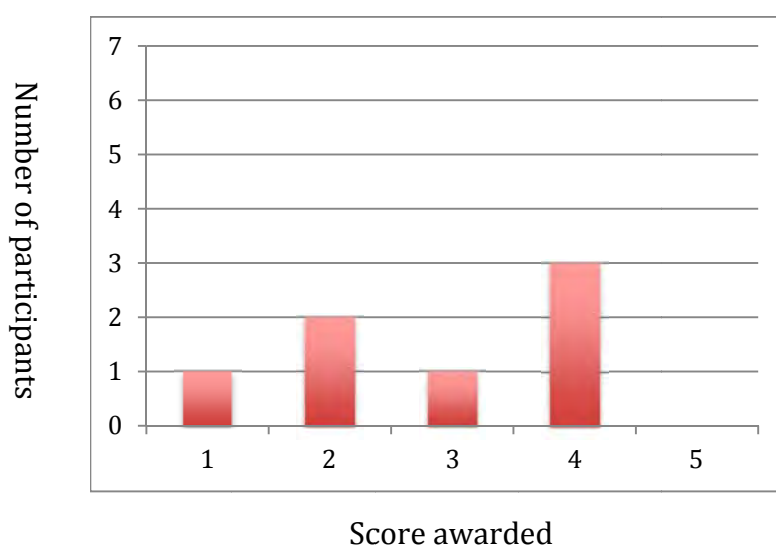
Comment:

- For the reasons given below I was generally satisfied with the experience
- I was involved, and with the aid of colleagues, particularly SEWTA, I was able to represent the key issues and options to the Newport Unlimited Board to facilitate a contribution from them. Although the events were independently delivered and all comments were welcomed and recorded (so that I didn't feel old fashioned for bringing them up) I still had a personal concern that in fact the decision over where and how to spend funding will ultimately be made that will not reflect my personal concerns about transport, pollution and local opportunities for sustainable travel.
- See Above for comments - Not at all satisfied
- The contact has been good; however, there will be no point to any of it if positive action isn't taken to make a difference to the M4 corridor.

Consultation

- 3) Do you think that the **Consultation Document** (along with supporting documents) balanced the need to explain the issues thoroughly while making the consultation as accessible as possible to all?

Not at all satisfied that a good balance was achieved		Satisfied that a good balance was achieved		An excellent balance was achieved
1	2	3	4	5

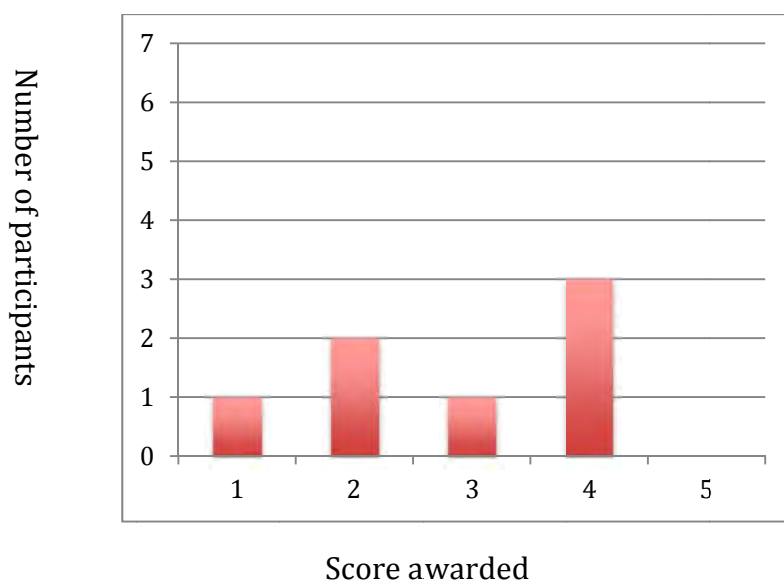


Comment:

- The documents were too long, and not all the maps were clear, so in some cases it was difficult to gauge what was being suggested. With modern technology, more use could have been made of the web, with maps that could be enlarged if necessary.
- My recollection is (and this may be incorrect given the time which has passed) that the extent to which innovative solutions requiring integrated transport plans with support for behaviour change were underplayed.
- I thought the documents were long. They probably needed to be to satisfy the transport professional and transport engineering people, but I found I was suffering from engagement fatigue and did not attend a couple of events as a result. It is good that others didn't.
- Not at all satisfied that a good balance was achieved – see above comments
- I felt the consultation document a little long

4) How appropriate were the **consultation questions** (listed in the Response Form) to enable and encourage meaningful participation?

Not at all		Good		Excellent
1	2	3	4	5



Comment:

- I cannot remember in detail but do recall that the response was easy to make suggesting they were adequate.
- With regard specifically to the Board of Directors at Newport Unlimited, the

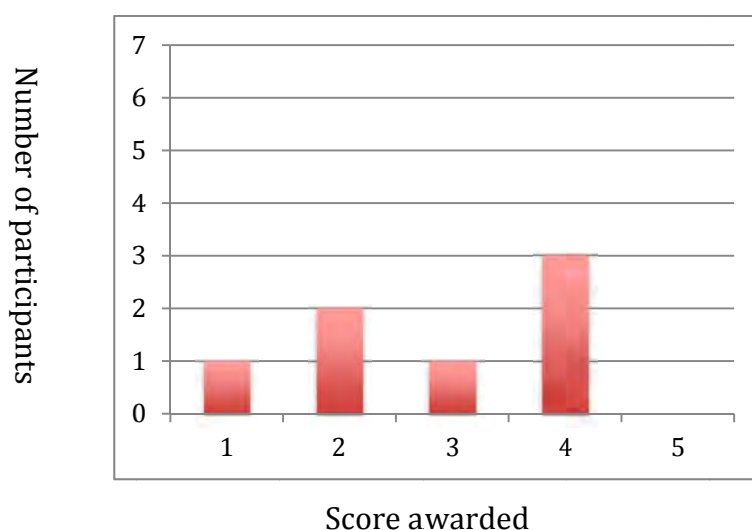
consultation questions were not directly applicable and did not encourage meaningful participation. It was therefore very useful to be able to contribute in the form of a letter covering the main points which the Board believed to be most important in the knowledge that they would be considered in the analysis and development of the final consultation report.

- Not at All – no meaningful questions were asked about the Sustainability of the routes or indeed how accurate WelTag was on capturing complexity of arguments.
- The questions were relevant and gave the opportunity to respond fully.

5) How would you rate the way in which Welsh Government **promoted** the opportunity to shape the M4 CEM strategy by participating in the consultation, and handled media coverage etc.?

Background information: We used adverts in newspapers, and in Local Authority free papers, on the bus fleet in Newport, on local radio, on the big screen in Cardiff, and an 80,000 leaflet drop in and around Newport to highlight the opportunity to contribute to shaping the M4 CEM. We arranged participative workshops and 7 staffed exhibitions for the public. We wrote to everyone on our database (over 1,000 people), including elected representatives to tell them about the consultation.

Not at all well		Well		Excellent
1	2	3	4	5



Comment:

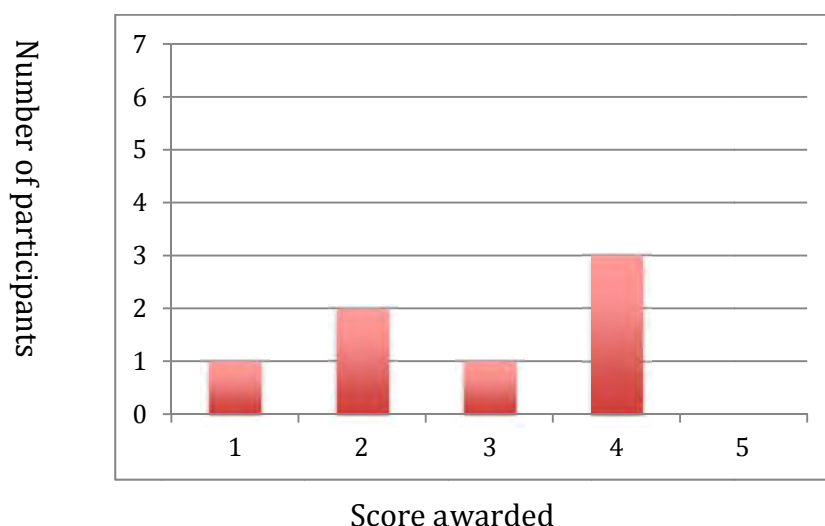
- It's always a difficult balance between promoting debate at consultation events and restricting the opportunity for innovative thinking. I think WG organised this pretty well but was probably helped by the strong views held by various stakeholders. I feel the process did allow for these views to be voiced.
- Reading the background information it is clear that the engagement approach involved a great deal of work, and the last article in the Argus definitely got more people interested, but my impression is that people on the whole didn't seem interested to engage unless there was actually something proposed to get built. I

also raised concerns at events that the consultation should get views for M4 users, i.e. people who just pass around Newport to get to Cardiff or Bristol or beyond. Did the consultation manage to get many of those responses?

- I thought the opportunity well promoted and the events were available to all.

6) To what extent do you think that the participative events that took place during the Consultation period, including **workshops** and **drop-in exhibitions**, enhanced the Consultation process, and encouraged participation? How could they have been more effective?

Not at all effective		Effective		Highly effective
1	2	3	4	5



Comment:

- See my earlier comments about a lack of representation from Newport at the workshops. This lead to a bias towards Cardiff and their needs rather than those of the population of Newport
- Workshops: I was impressed by the way the consultation sessions were run and facilitated. I did feel able to state my organizations views fully and the wide representation made for interesting discussions and I think produced some powerful conclusions.
Drop-in sessions: I cannot comment on these
- The workshops were well facilitated and it was useful to have face to face time with members of the project team. The events were relatively informal which encouraged participation and interaction.
- It is important to have the opportunity for people to drop-in, and I think it was

really valuable to invite specific stakeholders directly so they feel they have to attend and contribute. The workshops were useful but I don't think enough people attended who ran businesses. Were there more at the events I did not attend? I did find at the drop-in sessions I was writing the same comment on a number of occasions on the different boards. I persevered, I wonder if other people did? The events were always friendly, but did they engage with a wide range of people (age, gender, etc)?

- I attended a workshop and thought it well run. People were encouraged to comment and give views.

7) Please use this opportunity to feed-back **any additional comments / suggestions** to help improve future engagement processes

Comment:

- Feedback would probably have been more complete if the request was made closer to the process.
- It would be useful if when the corridor enhancement measures are chosen and implemented a working group with relevant stakeholders could be assembled to ensure they can make a positive contribution to the delivery of the various aspects of the enhancement measures? In addition to being kept informed of at the planning and implementation stage?
- I was not clear over the full consultation process what new information was gleaned from my comments at each of the different events I attended. I felt I just said the same things, made the same points and left not sure what the purpose of attending had been. Yes, it was good to meet and chat with officers from the Welsh Government and Arup undertaking the work, but I didn't see how my input actually changed anything – or indeed that my views were changing as a result of attending the workshops.
- Good consultation exercise