

A483/A489 NEWTOWN STUDY

**A483/A489 HEALTH IMPACT ASSESSMENT (HIA)  
SCREENING REPORT**

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FINAL

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**A483/A489 NEWTOWN STUDY  
HIA SCREENING REPORT**



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## **ABBREVIATIONS**

<b>AST</b>	<b>Appraisal Summary Table</b>
<b>HIA</b>	<b>Health Impact Assessment</b>
<b>WAG</b>	<b>Welsh Assembly Government</b>
<b>WeITAG</b>	<b>Welsh Transport Planning and Appraisal Guidance</b>
<b>WHIASU</b>	<b>Welsh Health Impact Assessment Support Unit</b>

**A483/A489 NEWTOWN STUDY  
HIA SCREENING REPORT**



## 1 INTRODUCTION

### 1.1 Purpose of Report

This report details the methodology and results of the screening stage of the Health Impact Assessment (HIA) for the A483 / A489 Newtown Study.

The HIA was undertaken as part of the WAG's Public Health Strategic Framework for Wales: 'A Healthy Future'. The framework has two main goals:

- To improve the quality and length of life
- To promote equity in health and wellbeing

To help meet these goals, the published Welsh Transport Planning and Appraisal Guidance (WelTAG), June 2008 includes the requirement for a mandatory Health Impact Assessment. There are a number of cross cutting themes within the Economic, Environmental and Social Impacts and it is anticipated that the information gathered as part of the HIA will further the understanding of the social impact sections of the WelTAG appraisal. It will, however, be important not to duplicate impacts and care will be taken in the use of data and mechanisms for reporting.

The Welsh Health Impact Assessment Support Unit (WHIASU) defines HIA as:

'A combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population. In other words it is a process that considers the wider effects of local and national policies or initiatives and how they, in turn, may affect people's health'.

### 1.2 Report Structure

The structure of this report is as follows:

- Section 1: Introduction
- Section 2: Background Information about the Workshop
- Section 3: HIA Screening Workshop
- Section 4: Results from the Workshop
- Section 5: Conclusions

### 1.3 Study Background

Historically much work was undertaken in identifying problems in Newtown Powys, dating back to 1969 when a study to investigate possible bypass routes was commissioned because of the proposed expansion of the town. The result of this study led to a Preferred Route being announced and protected in 1973, refer to figure 1. The protection of the Preferred Route was relaxed in 1989 and since then certain developments have encroached onto the protected route at the south western end.

Newtown is identified as a pinch point on the network and improvements to the traffic situation within the town are seen to be of strategic importance. Industrial developments in Newtown are believed to be hampered by transport issues.

Transport Wales commissioned Jacobs (formerly Jacobs Baktie) to carry out an independent study to examine the transport problems associated with the A483 and A489 through Newtown. The purpose of the commission was to identify the transport problems within the area and develop a set of Draft Planning Objectives against which broad based solution options could be assessed and to carry out a pre-appraisal sift of options generated.

The resulting report concluded it was unlikely that further traffic management measures, improvements in public transport or a combination of such measures, will have a significant impact on the problems. A road improvement or bypass option, which removes the low headroom restrictions and reduces congestion within the town, was likely to be the only acceptable solution.

Transport Wales broadly accepted the conclusions and emphasised that the Stage 1 study needed to be progressed by completing the wider options appraisal using the WeITAG methodology. It was considered that options should include a package of lesser road building options together with traffic management and public transport measures compared to a bypass.

Parsons Brinckerhoff was formally appointed by the Welsh Assembly Government to undertake the A483/A489 Newtown Study on 21 November 2007. The study will investigate ways of relieving the congestion on the A483 and A489 through Newtown, building on previous work by Jacobs.

#### 1.4 WeITAG

WeITAG provides guidance on the planning and appraisal of transport interventions. WeITAG has been developed as *“overarching guidance whose principles and practices are to be applied to all modes, to all types of transport investment proposals, at a strategic or scheme level.”* It further states that: *“All transport proposals requiring public funding and/or approval of the Welsh Assembly Government need to be planned and appraised to ensure that the resultant schemes are ‘fit for purpose’ and achieve the expected and required outcomes.”*

Health Impact Assessment (HIA) forms an integral part of the WeITAG appraisal process and follows the principles of WeITAG, which are that the process should be objective led and subject to participation.

## 2 METHODOLOGY FOR HIA SCREENING

The HIA screening was undertaken by way of a participatory workshop, whereby the different transportation options that were developed through the WelTAG Stage 1 process were appraised. Stakeholders from the Welsh Assembly Government, Powys County Council, National Public Health Service Wales, Powys Local Health Board, Powys Association of Voluntary Organisations and the Wales Health Impact Assessment Support Unit (WHIASU) were invited to attend.

The transportation options were appraised against criteria taken from WelTAG Tables 9.2 (Template for HIA Screening or Appraisal Tool) and 10.3 (Health Impact Assessment Summary Table). These criteria were used to create a HIA Appraisal Summary Table (AST) for each transportation option, which were completed at the workshop (refer to Table 1.0 below).

**Table 1.0: Health Impact Assessment Summary Table (Based on WelTAG Tables 9.2 and 10.3)**

<b>Option Description:</b>			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and health eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education			:
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.			
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.			
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology			
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate			
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate			
<b>Others</b>			

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The methodology outlined in WelTAG was used when completing the HIA ASTs together with guidance from the WHIASU. The appraisal considered the following vulnerable groups, (this list is not exhaustive):

- Those on low income
- Older people
- General population
- Minority ethnic groups
- Children and young people

Criteria for the appraisal are as follows:

- What positive effect(s) is the proposal likely to have for people's health and well being, and for which groups within the population?
- What negative effect(s) is the proposal likely to have for people's health and well being, and for which groups within the population?
- If negative impacts were identified for one or more group within the population, are there ways in which these can be removed or mitigated?
- Is further investigation, information and evidence collection needed to find potential solutions?
- Are there opportunities to build in more actions to improve people's health as a part of the proposal. Are there sources of information or experience elsewhere that may help explore this question more fully?

For the purposes of the workshop, nine different transportation options were appraised in accordance with the appraisal process undertaken for the WelTAG Stage 1 workshop. These were:

- Option 1 – Northern Bypass
- Option 2a - Southern Bypass (purple and blue corridors)
- Option 2b - Southern Bypass (purple and green corridors)
- Option 2c - Southern Bypass (purple and red corridors)

- 
- Option 3 - Link to Llanllwchaiarn via new river bridge (part of Northern Bypass option), combined with raise / lower A483 / A489 railway bridges
  
  - Option 4 – Trunk Road on-line improvements only (raise / lower A483 / A489 railway bridges) + traffic signals / right turn improvements
  
  - Option 5 – (Any bypass option) + local transport measures
  
  - Option 6 – Trunk Road online improvement only + local transport measures
  
  - Option 7 – (Any Bypass option) + Trunk Road on-line improvements only + local transport measures

The elements of the Transportation Options are shown in Figure 1.

Having completed these appraisals for the nine options listed above at the workshop, the information was used to complete further detailed ASTs following the approach used for the WelTAG Stage 1 ASTs. These ASTs comprised:

- a) The four bypass options in conjunction with local transport measures (Options 5.1, 5.2a – 5.2c),
- b) The four bypass options (Options 1 and 2a-2c) in conjunction with Trunk Road online improvements and local transport measures (Options 7.1, 7.2a – 7.2c)
- c) The three southern bypass options (Options 2a-c) in conjunction with the link to Llanllwchaiarn via new river bridge (Options 8a – 8c).

### 3 HIA SCREENING WORKSHOP

The HIA screening workshop was undertaken on 11 December 2008 at Ladywell House in Newtown, Powys. A copy of the agenda and briefing information sent to invitees is included in Appendix 1.

The workshop attendees were as follows:

<b>Attendee</b>	<b>Role</b>	<b>Organisation</b>
Mike Gilbert	Project Director	Welsh Assembly Government
Peris Jones	Project Engineer	Welsh Assembly Government
David Hern	Regional Transport Planner	Welsh Assembly Government
Liz Jones	Route Manager (NE)	Mid Wales Trunk Road Agency
Marie Grannell	Senior Health Promotion Practitioner	National Public Health Service, Wales
Liz Green	Health Impact Assessment Development Officer	WHIASU
Keith Palmer	Design Manager	Parsons Brinckerhoff
Jason Collins	Transport Planner	Parsons Brinckerhoff
Sean Bermingham	Graduate Engineer	Parsons Brinckerhoff
Jo Wall	Environmental Coordinator	TACP
Max Burrell	Environmental Technical Support	TACP

The workshop took the form of informal discussions whereby the group worked through the HIA AST for each option and agreed on the likely impact in relation to:

- Individual's lifestyles / capacities affecting health,
- Social and community influences affecting health,
- Living conditions,
- Working conditions,
- Services (access and quality),
- Socio-economic, cultural and environmental and sustainability factors,
- Macro-economic factors,
- Other.

Baseline information from the Initial Environmental Assessment Report and Addendum was used where relevant. The results were entered into the ASTs for each option.

The workshop was facilitated by Liz Green of the WHIASU, who ensured the appraisal progressed smoothly and that assessments for each option were carried out in line with current best practice and guidance.

Following the workshop, the completed HIA ASTs were sent electronically to each attendee to ensure the results were a true representation of the appraisals agreed at the workshop.

The workshop appraisals were then expanded to include the different bypass options in conjunction with local transport measure, online improvements and the Llanllwchaiarn Link (Options 5.1, 5.2a – c, Options 7.1, 7.2a – c and Options 8a – c respectively).

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## 4 RESULTS FROM THE WORKSHOP

The results of the HIA Screening are summarised below, with a full record of the completed ASTs for each option available in Appendix 2.

### *Option 1 – Northern Bypass*

Option 1 is of neutral significance in terms of Individuals: Lifestyle/capacities affecting Health; Social and Community Influences affecting Health and Services (access and quality). It is of slight beneficial significance in terms of Living Conditions; Working Conditions; Socio-economic, Cultural, Environmental and Sustainability factors and Macro-economic factors. It is therefore considered of **slight beneficial** significance overall in terms of Health Impact.

### *Options 2a - Southern Bypass (purple and blue corridors)*

Option 2a is of slight beneficial significance in terms of all the Health Impact Assessment criteria. It is therefore considered of **slight beneficial** significance overall in terms of Health Impact.

### *Options 2b - Southern Bypass (purple and green corridors)*

Option 2b is of slight beneficial significance in terms of Individuals: Lifestyle/capacities affecting Health; Social and Community Influences affecting Health; Living Conditions; Services (access and quality); Socio-economic, Cultural, Environmental and Sustainability factors and Macro-economic factors. The significance is slight adverse in terms of Working Conditions. It is therefore considered to be of **slight beneficial** significance overall in terms of Health Impact.

### *Options 2c - Southern Bypass (purple and red corridors)*

Option 2c is of slight adverse significance in terms of Individuals: Lifestyle/capacities affecting health; Social and Community Influences affecting Health; Living Conditions and Working Conditions, it is of neutral significance in terms of Socio-economic, Cultural, Environmental and Sustainability factors and Macro-economic factors. The significance is slight beneficial in terms of Services (access and quality). This option is therefore considered to be of **slight adverse** significance overall in terms of Health Impact.

### *Option 3 - Link to Llanllwchaiarn*

Option 3 is of slight adverse significance in terms of Social and Community Influences affecting Health; Living Conditions and Socio-economic, Cultural, Environmental and Sustainability factors. It is of neutral significance in terms of Individuals: Lifestyle/capacities affecting Health; Working Conditions; Services (access and quality) and Macro-economic factors. It is therefore considered to be of **slight adverse** significance overall in terms of Health Impact.

### *Option 4 – Online Improvements only*

Option 4 is of no significance for all the health Impact Assessment criteria. It is therefore considered to be of **neutral** significance overall in terms of Health Impact.

*Option 5.1 – Northern Bypass and Local Transport Measures*

Option 5.1 is of major beneficial significance in terms of Macro-economic factors. It is of moderate beneficial significance in terms of Individuals: Lifestyle/capacities affecting Health; Social and Community Influences affecting Health; Living Conditions; Services (access and quality) and Socio-economic, Cultural, Environmental and Sustainability factors. It is of slight beneficial significance in terms of Working Conditions. It is therefore considered of **moderate beneficial** significance overall in terms of Health Impact.

*Option 5.2a – Southern Bypass Option 2a and Local Transport Measures*

Option 5.2a is of major beneficial significance in terms of Macro-economic factors. It is of moderate beneficial significance in terms of Individuals: Lifestyle/capacities affecting health; Social and Community Influences affecting Health; Living Conditions; Services (access and quality) and Socio-economic, Cultural, Environmental and Sustainability factors. The significance is slight beneficial in terms of Working Conditions. It is therefore considered to be of **moderate beneficial** significance overall in terms of Health Impact.

*Option 5.2b – Southern Bypass Option 2b and local transport measures*

Option 5.2b is of major beneficial significance in terms of Macro-economic factors. It is of moderate beneficial significance in terms of Individuals: Lifestyle/capacities affecting health; Social and Community Influences affecting Health; Living Conditions; Services (access and quality) and Socio-economic, Cultural, Environmental and Sustainability factors. The significance is neutral in terms of Working Conditions. It is therefore considered to be of **moderate beneficial** significance overall in terms of Health Impact.

*Option 5.2c – Southern Bypass Option 2c and local transport measures*

Option 5.2c is of major beneficial significance in terms of Macro-economic factors. It is of moderate beneficial significance in terms of Services (access and quality). It is of slight beneficial significance in terms of Individuals: Lifestyle/capacities affecting health; Social and Community Influences affecting Health and Socio-economic, Cultural, Environmental and Sustainability factors. The significance is neutral in terms of Living Conditions and Working Conditions. It is therefore considered to be of **slight beneficial** significance overall in terms of Health Impact.

*Option 6 – Trunk Road Online Improvements and Local Transport Measures*

Option 6 is of slight beneficial significance in terms of Services (access and quality). It is of neutral significance in terms of Social and Community Influences affecting Health; Working Conditions and Socio-economic, Cultural, Environmental and Sustainability factors. It is of slight adverse significance in terms of Individuals: Lifestyle/capacities affecting health; Social and Community Influences affecting Health; Living Conditions and Macro-economic factors. It is therefore considered to be of **neutral** significance overall in terms of Health Impact.

*Option 7.1 – Northern Bypass, Trunk Road Online Improvements and Local Transport Measures*

Option 7.1 is of slight beneficial significance in terms of Working Conditions; Services (access and quality) and Socio-economic, Cultural, Environmental and Sustainability factors. It is of neutral significance in terms of Social and Community Influences affecting Health; Living Conditions and Macro-economic factors. It is of slight adverse

significance in terms of Individuals: Lifestyle/capacities affecting Health. This option is therefore considered of **neutral** significance overall in terms of Health Impact.

*Option 7.2a – Southern Bypass Option 2a, Trunk Road Online Improvements and Local Transport Measures*

Option 7.2a is of moderate beneficial significance in terms of Services (access and quality). It is of slight beneficial significance in terms of Social and Community Influences affecting Health; Working Conditions; Socio-economic, Cultural, Environmental and Sustainability factors. It is of neutral significance in terms of Individuals: Lifestyle/capacities affecting Health; Living Conditions and Macro-economic factors. It is therefore considered to be of **slight beneficial** significance overall in terms of Health Impact.

*Option 7.2b – Southern Bypass Option 2b, Trunk Road Online Improvements and Local Transport Measures*

Option 7.2b is of moderate beneficial significance in terms of Services (access and quality). It is of slight beneficial significance in terms of Social and Community Influences affecting Health and Socio-economic, Cultural, Environmental and Sustainability factors. It is of neutral significance in terms of Individuals: Lifestyle/capacities affecting health; Living Conditions and Macro-economic factors. It is of slight adverse significance in terms of Working Conditions. This option is therefore considered to be of **slight beneficial** significance overall in terms of Health Impact.

*Option 7.2c – Southern Bypass Option 2c, Trunk Road online improvements and local transport measures*

Option 7.2c is of moderate beneficial significance in terms of Services (access and quality). It is of neutral significance in terms of Socio-economic, Cultural, Environmental and Sustainability factors. It is of slight adverse significance in terms of Social and Community Influences affecting Health; Working Conditions and Macro-economic factors. It is of moderate adverse significance in terms of Individuals: Lifestyle/capacities affecting health and Living Conditions. This option is therefore considered to be of **slight adverse** significance overall in terms of Health Impact.

*Option 8a – Southern bypass Option 2a + Llanllwchaiarn Link*

Option 8a is of slight beneficial significance in terms of Individuals: Lifestyle/capacities affecting Health; Working Conditions; Services (access and quality) and Macro-economic factors. It is of neutral significance in terms of Social and Community Influences affecting Health; Living Conditions and Socio-economic, Cultural, Environmental and Sustainability factors. It is therefore considered to be of **slight beneficial** significance overall in terms of Health Impact.

*Option 8b – Southern bypass Option 2b + Llanllwchaiarn Link*

Option 8b is of slight beneficial significance in terms of Individuals: Lifestyle/capacities affecting Health; Services (access and quality) and Macro-economic factors. It is of neutral significance in terms of Social and Community Influences affecting Health; Living Conditions and Socio-economic, Cultural, Environmental and Sustainability factors. It is of slight adverse significance in terms of Working Conditions. This option is therefore considered to be of **neutral** significance overall in terms of Health Impact.

*Option 8c – Southern bypass Option 2c + Llanllwchaiarn Link*

Option 8c is of slight beneficial significance in terms of Services (access and quality). It is of neutral significance in terms of Macro-economic factors. It is of slight adverse significance in terms of Individuals: Lifestyle/capacities affecting health; Social and Community Influences affecting Health; Living Conditions; Working Conditions and Socio-economic, Cultural, Environmental and Sustainability factors. This option is therefore considered to be of **slight adverse** significance overall in terms of Health Impact.

*Option 9a, 9b and 9c - New highway link to B4568 at Aberbechan via existing river bridge with bypass option 2a, 2b and 2c respectively*

Option 9a, 9b and 9c are considered to have similar significance to options 8a, 8b and 8c respectively.

## 5 CONCLUSIONS

As the results show, in terms of health and well being the majority of the bypass options (Options 1 – 2b) will have slight beneficial effects, with southern bypass Option 2c being the only stand-alone bypass option having an adverse impact (slight adverse). This is largely due to the proximity that the bypass will be to local schools and residents, having adverse impacts in relation to lifestyle/capacities affecting health, social and community influences affecting health; living conditions and working conditions. These adverse impacts are also reflected in some other options that incorporate bypass Option 2c (e.g. 7.2c, 8.c).

The impacts of bypass Options 1 – 2b are enhanced to moderate beneficial if they are implemented in conjunction with local transport measures which may include improvements to public transport, cycling, non-motorised user provision, bus priority, public transport connectivity and safe routes to schools/college (refer to Options 5.1 – 5.2b). However if these bypass options are viewed in conjunction with local transport measures as well as Trunk Road online improvements (such as linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses) the overall impacts in relation to health and well being are not necessarily of great benefit.

This is partly due to the possible conflicts between local transport measures and online improvements. For example, improving traffic signals in the town and making traffic flow faster and more smoothly may be detrimental to cyclists and pedestrians and may make residents less likely to get out of their cars and use more healthy modes of transport.

Impacts of the southern bypass options in conjunction with the Llanllwchaiarn Link are varied: Option 8a is slight beneficial, Option 8b is neutral and Option 8c being slight adverse.

Overall, in terms of health and well being, the most favourable options are the first three bypass options in conjunction with local transport measures (5.1, 5.2a and 5.2b), which have been assessed as having a moderate beneficial effect overall. The least favourable options in terms of health and well being are Option 2c (Southern Bypass – purple and red corridors), Option 3 (Llanllwchaiarn Link), Option 7.2c (Southern Bypass Option 2c, Trunk Road online improvements and local transport measures) Option 8c (Southern Bypass Option 2c + Llanllwchaiarn Link). These have all been assessed as having a slight adverse impact overall.







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**FIGURES**

Figure 1 HIA Screening Study Area





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**APPENDICES**





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**Appendix A Workshop Agenda and Briefing Information**



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**HIA Screening Workshop**

**11<sup>th</sup> December 2008**

**Ladywell House, Newtown**

Proposed Agenda

- Introductions
- Overview of Study
- HIA Screening of Options
- Close

Invitees:

Mike Gilbert Project Director, WAG  
Peris Jones Project Engineer, WAG  
David Hern Transportation Planner, WAG  
Mike Steward MWTRA  
Liz Green WHIASU  
Julie Bishop Director, Powys Public Health Team  
Chris Evans, Powys County Council  
Trish Buchan, PAVO  
Richard Goddard Project Co-ordinator, PB  
Keith Palmer Design Manager, PB  
Jo Wall Environmental Co-ordinator, TACP  
Max Burrell Environmental Assistant, TACP



## A483/A489 HEALTH IMPACT ASSESSMENT (HIA) SCREENING WORKSHOP

### HIA APPRAISAL SUMMARY TABLE

#### 1.0 Introduction

WAG is developing a Public Health Strategic Framework for Wales: 'A Healthy Future'. The framework has two main goals:

- To improve the quality and length of life
- To promote equity in health and wellbeing

To help meet these goals, the 2008 published WelTAG guidance includes the requirement of a mandatory Health Impact Assessment. There are a number of cross cutting themes within the Economic, Environmental and Social Impacts and it is anticipated that the information gathered as part of the HIA will further the understanding of the social impact sections of the WelTAG appraisal. It will, however, be important not to duplicate impacts and care will be taken in the use of data and mechanisms for reporting.

#### 2.0 HIA Screening

The results of the HIA Screening for each option will be undertaken using WelTAG methodology and will be reported using the WelTAG Appraisal Summary Table overleaf.

Consideration will be given to the following vulnerable groups, (this list is not exhaustive):

- Those on low income
- Older people
- General population
- Minority ethnic groups
- Children and young people

Criteria for the appraisal are as follows:

- What positive effect(s) is the proposal likely to have for people's health and well being, and for which groups within the population?
- What negative effect(s) is the proposal likely to have for people's health and well being, and for which groups within the population?
- If negative impacts were identified for one or more group within the population, are there ways in which these can be removed or mitigated?
- Is further investigation, information and evidence collection needed to find potential solutions?
- Are there opportunities to build in more actions to improve people's health as a part of the proposal. Are there sources of information or experience elsewhere that may help explore this question more fully?



**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

<b>Option Description:</b>			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and health eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education			
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.			
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.			
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.			
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate			
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate			
<b>Others</b>			





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**Appendix B HIA Screening ASTs**



**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 1 – Northern Bypass**

<b>Option Description – New highway bypass north of Newtown, linking the A489 with A483</b>			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	Takes traffic out of the town, but provides no better access to health care. Better access to supermarkets and nutritional foods (+). No incentive for increases in physical activity (-).	General population of Newtown.	Neutral (0)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	No real change overall but if access along roads to the north is affected, this may impact those geographically isolated.		Neutral (0)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waste disposal, road hazards, injury hazards, Safe play spaces.	Improve noise and air quality in Newtown for most. Will remove HGVs and reduce accidents in town.	General population of Newtown.	Slight beneficial (+)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	Possibly create development and employment opportunities, leading to possible jobs and increases in pay for workers and other benefits.	Working population of Newtown and dependants.	Slight beneficial (+)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	No real change, possible better access to college from the east	Young people accessing the college from the east	Neutral (0)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	Improvements in relation to environmental impacts which impact humans (especially noise and air quality)	General population of Newtown.	Slight beneficial (+)



<b>Option Description</b> – New highway bypass north of Newtown, linking the A489 with A483			
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	Improved access to the wider area (e.g. Shrewsbury to the east and Aberystwyth to the west) which could lead to economic development	Working population of Newtown and dependants. Possible benefits to people on low incomes.	Slight beneficial (+)
<b>Others</b>	N/A		

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 2a - Southern Bypass (purple and blue corridors)**

<b>Option Description</b> – New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	Better links to Newtown. High-sided HGVs taken out of the town which may encourage residents to use more active transport modes.	General population of Newtown.	Slight beneficial (+)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	Removal of through traffic may reduce severance along A483 north and south of Newtown, lessening community divisions and isolation.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen.	Slight beneficial (+)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	Improves noise and air quality for most. Will remove HGVs and may reduce accidents within the town	General population of Newtown.	Slight beneficial (+)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	Improves access to Mochdre Industrial Estate for vehicles and pedestrians.	West of Newtown	Slight beneficial (+)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	Less traffic within the town may facilitate better access to services etc.	General population of Newtown.	Slight beneficial (+)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	Improvements in relation to environmental impacts, which impact humans (e.g. noise and air quality).	General population of Newtown, especially those living and working within the town centre.	Slight beneficial (+)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	Better linkage to A483 and wider area.	Working population of Newtown and dependants.	Slight beneficial (+)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 2b - Southern Bypass (purple and green corridors)**

<b>Option Description</b> – New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	Improved access to training facilities (i.e. Powys College) but issues with possible traffic congestion on College roundabout.	Young persons and the wider population.	Slight beneficial (+)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	Removal of through traffic may reduce severance along A483 north and south of the town and lessening community divisions and isolation. Improved access to the Hafren Theatre but issues with possible traffic congestion on the College roundabout.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen.	Slight beneficial (+)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	Hazards associated with turning to access Mochdre Industrial Estate. Improves noise and air quality for most. Will remove HGVs and reduce accidents in town.	General population of Newtown.	Slight beneficial (+)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	Facilitates ease of access but impacts on the Mochdre Industrial Estate.	People working within the Mochdre Industrial Estate.	Slight adverse (-)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	Better access to College and Hafren Theatre. Generally improved access throughout the town with removal of through traffic.	Young persons, wider population and residents of Newtown.	Slight beneficial (+)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	Improvements in relation to environmental impacts, which impact humans (especially. noise and air quality).	General population of Newtown.	Slight beneficial (+)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	Better linkage to A483 and wider area but potential disruption in Mochdre Industrial Estate.	Working population of Newtown and dependants.	Slight beneficial (+)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)  
Option 2c - Southern Bypass (purple and red corridors)**

<b>Option Description</b> – New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	Impact in relation to proximity of road to Ysgol Cedewain and Maesyrrhandir Primary Schools and impact on areas used for physical exercise (Garth Owen Community woodland)	School children and wider population.	Minor adverse (-)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	Severance between Mochdre Industrial Estate and urban areas of Garth Owen and Maesyrdail Possible impact on historic identity of Newtown.	Residents and workers to the west of Newtown.	Minor adverse (-)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	Impacts on the settings of houses in residential areas of Garth Owen and Maesyrdail. Issues with public safety associated with the road. Noise and air quality issues associated with close proximity of the road to residential areas.	Residents and workers to the west of Newtown. School children and young people.	Minor adverse (-)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	Possible negative impacts for school workers and those working within the Mochdre Industrial estate.	People of working age and dependants (working within schools and Mochdre Industrial estate)	Minor adverse (-)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	Congestion on College Roundabout could inhibit access to services but better access to College and Hafren Theatre and generally improved access throughout the town with removal of through traffic.	Young persons, wider population and residents of Newtown.	Minor beneficial (+)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	Benefits in town centre (+), but poor in the west of town (-).	Throughout Newtown and in the west of Newtown.	Neutral (0)



**Option Description** – New highway bypass south of Newtown, passing between Maesyhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate

<p><b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate</p>	<p>No real change. No extra land available to develop compared with other southern bypass options.</p>		<p>Neutral (0)</p>
<p><b>Others</b></p>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**  
**Option 3 - Link to Llanllwchaiarn via new river bridge (yellow corridor on its own), combined with raise / lower A483 / A489 railway bridges**

**Option Description:** – New highway link to B4568 at Llanllwchaiarn via new river bridge (part of Northern Bypass option), combined with raising or lowering of the Nant Oer and Dolfor Road railway bridges.

Appraisal Criteria	Assessment	Distribution	Significance
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	No real promotion of better access to skills, training and education or healthy foods. Could remove HGVs from 'rat runs', but overall no significant change from existing situation.		Neutral (0)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	Does provide better access to new housing and planned development to the northeast of Newtown, but this is a new community and benefits associated with community connectivity are therefore not as significant. Could remove HGVs from 'rat runs', but more traffic within the town is likely to have negative impacts.	General population of Newtown. Residents, workers and school children along Plantation Lane and Heol Treowen.	Slight adverse (-)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	More traffic is likely within the town with associated negative impacts in relation to noise and air quality. Despite benefits associated with HGV removal from rat runs, impacts on living conditions are slight adverse overall.	General population of Newtown.	Slight adverse (-)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	No significant change.		Neutral (0)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	No significant change.		Neutral (0)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	Environmental impacts associated with crossing the Severn. Short term solution, moving congestion elsewhere	General population of Newtown.	Slight adverse (-)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	No significant change. Some political gain for Powys County Council.		Neutral (0)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**  
**Option 4 – Trunk Road on-line improvements only (raise / lower A483 / A489 railway bridges) + traffic signals / right turn improvements**

**Option Description** – Improvements to the existing trunk road A483 and A489 only, including raising or lowering of the Nant Oer and Dolfor Road railway bridges, linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses.

Appraisal Criteria	Assessment	Distribution	Significance
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	No significant change, does not actively encourage active modes of transport. Short-term access improvements for motorised users.		Neutral (0)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	No significant change, local benefits by removing high-sided HGVs from rat runs.	Workers and school children along Plantation Lane and Heol Treowen.	Neutral (0)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	Improvements in air quality along the A483 through town, with freer flowing traffic (+). Faster traffic flow could be more hazardous to pedestrians and cyclists. Problems in one part of town being moved elsewhere (-). Overall, no significant change.	General population of Newtown.	Neutral (0)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	No change.		Neutral (0)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	Better access through town for motorised transport users (+). Poorer access for non-motorised transport users, due to freer and faster flowing traffic (-). Overall, no significant change.	General population of Newtown.	Neutral (0)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	No significant change. Short term solutions to congestion and associated problems. Problems being moves elsewhere.	General population of Newtown.	Neutral (0)



**Option Description** – Improvements to the existing trunk road A483 and A489 only, including raising or lowering of the Nant Oer and Dolfor Road railway bridges, linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison’s junction, and improvements to right turn facilities at existing industrial estate accesses.

<p><b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate</p>	<p>No significant change. Short term solutions to congestion and associated problems. Problems being moves elsewhere.</p>	<p>General population of Newtown.</p>	<p>Neutral (0)</p>
<p><b>Others</b></p>			



**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)  
Option 5.1 – Northern Bypass + local transport measures**

<b>Option Description:</b> – New highway bypass north of Newtown, linking the A489 with A483+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<p><b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education</p>	<p>The bypass will takes traffic out of the town, but no better access to health care. Better access to supermarkets and nutritional foods but provides no incentive for increases in physical activity (0). Local transportation measures encourage healthier modes of travel such as walking and cycling. Bus and train interchange provides better access to training and education (++) . Overall, this will have a moderate beneficial effect.</p>	<p>General population of Newtown. Young people.</p>	<p>Moderate beneficial (++)</p>
<p><b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.</p>	<p>The bypass will result in no real change overall but if access along roads to the north is affected, this may impact those geographically isolated (0). However, local transportation measures will result in better access within Newtown itself and to communities outside Newtown via bus and rail. Increased safety and creation of community hub, with regeneration of bus station (++) . Overall, this will have a moderate beneficial effect.</p>	<p>General population of Newtown.</p>	<p>Moderate beneficial (++)</p>
<p><b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.</p>	<p>The bypass will result in improved noise and air quality in Newtown for most and will remove some HGVs and reduce accidents in town (+). Additionally, local transport measures will encourage walking and cycling with increased pedestrian and cyclist safety (+). Overall, this is likely to have a moderate beneficial impact</p>	<p>General population of Newtown.</p>	<p>Moderate beneficial (++)</p>



<b>Option Description:</b> – New highway bypass north of Newtown, linking the A489 with A483+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The northern bypass will possibly create development and employment opportunities, leading to possible jobs and increases in pay for workers and other benefits (+). Local transport measures may result in possible better working conditions with schemes to link active modes of transport with places of employment (e.g. cycle racks at work, work travel plans etc.) (+). Overall, this is likely to have a slight beneficial impact.	People of working age and dependants.	Slight beneficial (+)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass will result in no real change, but possible better access to the college from the east and access opportunities to the wider area (0). Local transportation measures are however likely to improve access with improved bus interchange and initiatives such as 'safe routes to schools' (++) Overall, this is likely to have a moderate beneficial effect.	General population of Newtown, school children and wider population.	Moderate beneficial (++)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass is likely to result in improvements to environmental impacts, which affect humans (especially noise and air quality) (+). Local transportation measures such as bus interchange and other proposals promote community interaction and distinctiveness and promote recourse sustainability (+). This is likely to have a moderate beneficial impact overall.	General population of Newtown	Moderate beneficial (++)



**Option Description:** – New highway bypass north of Newtown, linking the A489 with A483+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.

<p><b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate</p>	<p>The bypass is likely to improved access to the wider area (e.g. Shrewsbury to the east), which could lead to economic development (+). Local transportation measures are compliant with WAG policies in relation to sustainability, CO<sub>2</sub> emissions and also in relation to economic development (+++). This is likely to have a major beneficial effect overall.</p>	<p>Working population of Newtown and dependants. Possible benefits to people on low incomes.</p>	<p>Major beneficial (+++)</p>
<p><b>Others</b></p>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 5.2a – Southern Bypass Option 2a + local transport measures**

<b>Option Description:</b> – New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass will provide better links to Newtown with more traffic including high-sided HGVs taken out of the town than option 1, which may encourage residents to use more active transport modes. However there will still be issues with low rail bridges (+). Local transportation measures will encourage healthier modes of travel such as walking and cycling. Bus and train interchange provides better access to training and education (++) . Overall, this is likely to have a moderate beneficial impact.	General population of Newtown. Young people.	Moderate beneficial (++)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass will result in the removal of through traffic, which may reduce severance along A483 north and south of Newtown, lessening community divisions and isolation (+). Local transport measures are likely to result in better access within Newtown itself and to communities outside Newtown via bus and rail. Increased safety and creation of community hub, with regeneration of bus station (++) . Overall, this is likely to have a moderate beneficial impact.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen. General population of Newtown.	Moderate beneficial (++)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass is likely to improve noise and air quality for most and will remove HGVs and may reduce accidents within the town (+). Local transport measures will encourage people to walk and cycle with increased pedestrian and cyclist safety (+). Overall the impact is likely to be moderate beneficial.	General population of Newtown.	Moderate beneficial (++)

<b>Option Description:</b> – New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass will provide improved access to Mochdre Industrial Estate (+). Local transport measures may provide better working conditions with schemes to link active modes of transport with places of employment (e.g. cycle racks at work, work travel plans etc.) (+). This is likely to have a slight beneficial impact overall.	Better access to Mochdre Industrial Estate in the west of Newtown. People of working age and dependants.	Slight beneficial (+)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass will result in less traffic within the town and may facilitate better access to services etc (+). Local transportation measures will result in an improvement in access with improved bus interchange and initiatives such as 'safe routes to schools'. Bypass options give access opportunities to the wider area (++). Overall, this is likely to have a moderate beneficial impact.	General population of Newtown, school children and wider population.	Moderate beneficial (++)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass will result in improvements to environmental impacts, which affect humans (especially. noise and air quality) (+). Local transport measures such as bus interchange and other proposals promote community interaction and distinctiveness and promote recourse sustainability (+). Overall this is likely to have a moderate beneficial impact.	General population of Newtown	Moderate beneficial (++)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	The bypass will provide better linkage to A483 and wider area (+). Local transport measures are compliant with WAG policies in relation to sustainability, CO <sub>2</sub> emissions and also in relation to economic development (+++). The overall the impact is therefore major beneficial.	Working population of Newtown and dependants.	Major beneficial (++++)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 5.2b – Southern Bypass Option 2b + local transport measures**

<b>Option Description:</b> – New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass is likely to improve access to training facilities (i.e. Powys College) but there could be possible traffic congestion on College roundabout. Local transport measures encourage healthier modes of travel such as walking and cycling (+). Bus and train interchange provides better access to training and education (++) . Overall, this is likely to have a moderate beneficial impact.	General population of Newtown. Young people.	Moderate beneficial (++)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass is likely to remove through traffic and may reduce severance along A483 north and south of the town which will help lessen community divisions and isolation and improve access to the Hafren Theatre but there may be possible traffic congestion on College roundabout (+). Local transport measures will create better access within Newtown itself and to communities outside Newtown via bus and rail. Increased safety and creation of community hub, with regeneration of bus station (++) . Overall, this is likely to have a moderate beneficial impact.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen. General population of Newtown.	Moderate beneficial (++)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass may have hazards associated with access into Mochdre Industrial Estate but improves noise and air quality for most and will remove HGVs and reduce accidents in town. Beneficial impacts associated with improvements in air quality and reductions in noise (+). Local transport measures will encourage people to walk and cycle with increased pedestrian and cyclist safety (+). Overall this is likely to have a moderate beneficial impact.	General population of Newtown.	Moderate beneficial (++)

<b>Option Description:</b> – New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass will facilitate ease of access but impacts on the Mochdre Industrial Estate, which is likely to have a slight adverse impact (-). However, local transport measures may provide possible better working conditions with schemes to link active modes of transport with places of employment (e.g. cycle racks at work, work travel plans etc.) (+). The impact overall, is therefore likely to be neutral.	People working within the Mochdre Industrial Estate and elsewhere along with their dependants.	Neutral (0)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass will provide better access to College and theatre and will provide generally improved access throughout the town with removal of through traffic as well as providing access to the wider area (+). Local transport measures will improve access with improved bus interchange and initiatives such as 'safe routes to schools' (++) . Overall, these impacts are likely to have a moderate beneficial impact.	General population of Newtown, school children and wider population.	Moderate beneficial (++)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass is likely to result in improvements in environmental impacts, which affect humans (e.g. noise and air quality) (+). Local transport measures such as the bus interchange and other proposals promote community interaction and distinctiveness and the promotion of recourse sustainability (+). Overall this is likely to have a moderate beneficial impact.	General population of Newtown	Moderate beneficial (++)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	The bypass will provide better linkage to A483 and wider area (+). Local transport measures are compliant with WAG policies in relation to sustainability, CO <sub>2</sub> emissions and also in relation to economic development (+++). Overall the impact is major beneficial.	Working population of Newtown and dependants.	Major beneficial (+++)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 5.2c – Southern Bypass Option 2c + local transport measures**

**Option Description:** – New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.

Appraisal Criteria	Assessment	Distribution	Significance
<b>Health Impact Assessment</b>			
<p><b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education</p>	<p>The bypass location will have impacts due to its proximity to Ysgol Cedewain and Maesyrrhandir Primary Schools and impact on areas used for physical exercise (Garth Owen Community woodland) (-). However, local transport measures encourage healthier modes of travel such as walking and cycling and bus and train interchange provides better access to training and education (++) . The overall impact is therefore likely to be slight beneficial.</p>	<p>General population of Newtown. Young people. School children.</p>	<p>Slight beneficial (+)</p>
<p><b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.</p>	<p>The bypass is likely to have an impact on historic identity of Newtown and cause severance between Mochdre Industrial Estate and urban areas of Garth Owen and Maesyddail (-). Local transport measures will however provide better access within Newtown itself and to communities outside Newtown via bus and rail as well as increasing safety and creation of community hub, with regeneration of bus station (++) . The overall impact is therefore likely to be slight beneficial (+).</p>	<p>General population of Newtown.</p>	<p>Slight beneficial (+)</p>

<b>Option Description:</b> – New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.			
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass will impact on the settings of houses in residential areas of Garth Owen and Maesyddail and will cause issues with public safety associated with the road. There will also be noise and air quality issues associated with close proximity of the road to residential areas, but there will be noise and air quality improvements in other areas (-). Local transport measures will provide encouragement to walk and cycle with increased pedestrian and cyclist safety (+). The overall impact is therefore likely to be neutral.	Residents and workers to the west of Newtown. School children and young people. General population of Newtown.	Neutral (0)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass is likely to have possible negative impacts for school workers and those working within the Mochdre Industrial estate (-). However, local transport measures are likely to provide possible better working conditions with schemes to link active modes of transport with places of employment (e.g. cycle racks at work, work travel plans etc.) (+). The overall impact is therefore likely to be neutral.	People of working age and dependants (working within schools and Mochdre Industrial estate and elsewhere)	Neutral (0)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass could cause congestion on College Roundabout, could inhibit access to services but better access to College and theatre and generally improved access throughout the town with removal of through traffic as well as giving access opportunities to the wider area (+). Local transport measures will ensure improvement in access with improved bus interchange and initiatives such as 'safe routes to schools' (++) . The overall impact is therefore likely to be moderate beneficial.	General population of Newtown, school children, young people and wider population.	Moderate beneficial (++)



<p><b>Option Description:</b> – New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.</p>			
<p><b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate</p>	<p>The bypass is likely to have benefits in the town centre, but poor in the west of town (0). Local transport measures such as bus interchange and other proposals promote community interaction and distinctiveness as well as promotion of recourse sustainability (+). This is likely to have a slight beneficial impact overall.</p>	<p>General population of Newtown</p>	<p>Slight beneficial (+)</p>
<p><b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate</p>	<p>The bypass will have no real change as no extra land available to develop compared with other southern bypass options (0). Local transport measures are however compliant with WAG policies in relation to sustainability, CO<sub>2</sub> emissions and also in relation to economic development (+++). The overall impact is therefore major beneficial.</p>		<p>Major beneficial (+++)</p>
<p><b>Others</b></p>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 6 – Trunk Road online improvement only + local transport measures**

<b>Option Description</b> – Improvements to the existing trunk road A483 and A489 only, including raising or lowering of the Nant Oer and Dolfor Road railway bridges, linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	Potential for conflict between online improvements and local transport measures in terms of encouraging active modes of transport.	General population of Newtown.	Slight adverse (-)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	No overall change, but the potential of community divisions and moving congestion problems to other parts of the town.	General population of Newtown.	Neutral (0)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	Conflicts with traffic and non-motorised users and potential for more accidents.	General population of Newtown.	Slight adverse (-)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	No change		Neutral (0)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	Improvement in access with improved interchange and other methods of public transport, also through initiatives such as 'safe routes to schools'.	General population of Newtown, people of working age, school children.	Minor beneficial (+)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	No overall significant change, however there will be environmental impacts from disruption during construction.	General population of Newtown.	Neutral (0)



**Option Description** – Improvements to the existing trunk road A483 and A489 only, including raising or lowering of the Nant Oer and Dolfor Road railway bridges, linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison’s junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.

<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	Short term solutions, no long-term gain. Not efficient use of resources.	General population of Newtown	Minor adverse (-)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 7.1 – Northern Bypass + Trunk Road on-line improvements only + local transport measures**

**Option Description:** New highway bypass north of Newtown, linking the A489 with A483 + Improvements to the existing trunk road A483 and A489 only, including linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.

Appraisal Criteria	Assessment	Distribution	Significance
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass removes traffic from the town, but allows no better access to health care. The bypass provides better access to supermarkets and nutritional foods but provides no incentive for increases in physical activity (0). Potential for conflict between online improvements and local transport measures in terms of encouraging active modes of transport (-). Impact overall is slight adverse.	General population of Newtown.	Slight adverse (-)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass has no real change overall but if access along roads to the north is affected, this may impact those geographically isolated (0). In relation to online improvements and local transport measures no overall change, but the potential of community divisions and moving congestion problems to other parts of the town (0). Impact overall is neutral.	General population of Newtown.	Neutral (0)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass will improve noise and air quality in Newtown for most and will remove HGVs and reduce accidents in town (+). In relation to online improvements and local transport measures there will be conflicts with traffic and non-motorised users and potential for more accidents (-). Overall impact is therefore neutral.	General population of Newtown.	Neutral (0)

<p><b>Option Description:</b> New highway bypass north of Newtown, linking the A489 with A483 + Improvements to the existing trunk road A483 and A489 only, including linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.</p>			
<p><b>Working conditions:</b> Employment, workplace conditions, occupation income.</p>	<p>The bypass will possibly create development and employment opportunities, leading to possible jobs and increases in pay for workers and other benefits (+). There will be no change with online improvements and local transport measures (0). Overall impact is therefore slight beneficial.</p>	<p>Working population of Newtown and dependants.</p>	<p>Slight beneficial (+)</p>
<p><b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.</p>	<p>The bypass will cause no real change, but possible better access to college from the east (0). Online improvements and local transport measures will improve access with improved interchange and other methods of public transport, also through initiatives such as 'safe routes to schools' (+). The overall impact is therefore minor beneficial.</p>	<p>Young people accessing the college from the east, general population of Newtown, people of working age, school children.</p>	<p>Slight beneficial (+)</p>
<p><b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate</p>	<p>The bypass will ensure improvements to environmental impacts, which affect humans (e.g. noise and air quality) (+). Online improvements and local transport measures will have no overall significant change, however there will be environmental impacts from disruption during construction (0). The overall impact will therefore be slight beneficial.</p>	<p>General population of Newtown.</p>	<p>Slight beneficial (+)</p>



**Option Description:** New highway bypass north of Newtown, linking the A489 with A483 + Improvements to the existing trunk road A483 and A489 only, including linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.

<p><b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate</p>	<p>The bypass will improve access to the wider area (e.g. Shrewsbury to the east and Aberystwyth to the west), which could lead to economic development (+). Online improvements and local transport measures will only produce short-term solutions, with little long-term gain and no efficient use of resources (-). The overall impact is therefore considered to be neutral.</p>	<p>Working and general population of Newtown and dependants. Possible benefits to people on low incomes.</p>	<p>Neutral (0).</p>
<p><b>Others</b></p>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 7.2a – Southern Bypass Option 2a + Trunk Road on-line improvements only + local transport measures**

<p><b>Option Description:</b> New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + Improvements to the existing trunk road A483 and A489 only, including linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison’s junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.</p>			
Appraisal Criteria	Assessment	Distribution	Significance
<p><b>Health Impact Assessment</b></p>			
<p><b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education</p>	<p>The bypass will provide better links to Newtown with more traffic including high-sided HGVs taken out of the town than option 1, which may encourage residents to use more active transport modes. However there will still be issues with low rail bridges (+). There will be potential for conflict between online improvements and local transport measures in terms of encouraging active modes of transport (-). The overall impact is therefore considered to be neutral.</p>	<p>General population of Newtown.</p>	<p>Neutral (0)</p>
<p><b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.</p>	<p>The bypass will remove through traffic and may reduce severance along A483 north and south of Newtown, lessening community divisions and isolation (+). In relation to online improvements and local transport measures there will be no overall change, but the potential of community divisions and moving congestion problems to other parts of the town (0). The overall impact is therefore considered to be slight beneficial.</p>	<p>Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen.</p>	<p>Slight beneficial (+)</p>

<p><b>Option Description:</b> New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + Improvements to the existing trunk road A483 and A489 only, including linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.</p>			
<p><b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waste disposal, road hazards, injury hazards, Safe play spaces.</p>	<p>The bypass will improve noise and air quality for most and will remove HGVs and may reduce accidents within the town (+). However online improvements and local transport measures will cause conflicts with traffic and non-motorised users and have the potential for more accidents (-). The overall impact is therefore considered to be neutral.</p>	<p>General population of Newtown.</p>	<p>Neutral (0)</p>
<p><b>Working conditions:</b> Employment, workplace conditions, occupation income.</p>	<p>The bypass will improve access to Mochdre Industrial Estate (+), with no change expected in relation to online improvements and local transport measures (0). The overall impact is therefore expected to be slight beneficial.</p>	<p>West of Newtown</p>	<p>Slight beneficial (+)</p>
<p><b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.</p>	<p>The bypass will cause less traffic within the town and may facilitate better access to services etc (+). In relation to online improvements and local transport measures there will be improvement in access with improved interchange and other methods of public transport, also through initiatives such as 'safe routes to schools' (+). Overall this is likely to have a moderate beneficial impact.</p>	<p>General population of Newtown, people of working age, school children.</p>	<p>Moderate beneficial (++)</p>
<p><b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate</p>	<p>The bypass will have improvements to environmental impacts, which affect humans (e.g. noise and air quality) (+). Online improvements and local transport measures will have no overall significant change, however there will be environmental impacts from disruption during construction (0). The overall impact will therefore be slight beneficial.</p>	<p>General population of Newtown, especially those living and working within the town centre.</p>	<p>Slight beneficial (+)</p>



**Option Description:** New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + Improvements to the existing trunk road A483 and A489 only, including linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.

<p><b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate</p>	<p>The bypass will make better linkage to A483 and wider area (+) but online improvements and local transport measures will only be short-term solutions, with no long-term gain and no efficient use of resources (-).The overall impact will therefore be neutral.</p>	<p>Working and general population of Newtown and dependants.</p>	<p>Neutral (0)</p>
<p><b>Others</b></p>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 7.2b – Southern Bypass Option 2b + Trunk Road on-line improvements only + local transport measures**

**Option Description:** New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + Improvements to the existing trunk road A483 and A489 only, including linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.

Appraisal Criteria	Assessment	Distribution	Significance
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass will improve access to training facilities (i.e. Powys College) but issues with possible traffic congestion on College roundabout (+). Potential for conflict between online improvements and local transport measures in terms of encouraging active modes of transport (-). The overall impact will therefore be neutral.	Young persons and the wider population.	Neutral (0)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass will remove through traffic and may reduce severance along A483 north and south of the town and lessening community divisions and isolation. Additionally it will improve access to the Theatre but issues with possible traffic congestion on College roundabout (+). No overall change in relation to online improvements and local transport measures, but the potential of community divisions and moving congestion problems to other parts of the town (0). The overall impact will therefore be slight beneficial.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen. General population of Newtown.	Slight beneficial (+)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass will cause hazards associated with turning to access Mochdre Industrial Estate but improves noise and air quality for most and will remove HGVs and reduce accidents in town (+). Online improvements will cause conflicts with traffic and non-motorised users and will have potential for more accidents (-). Overall the impact will therefore be neutral.	General population of Newtown.	Neutral (0)

<b>Option Description:</b> New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + Improvements to the existing trunk road A483 and A489 only, including linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	Facilitates ease of access but impacts on the Mochdre Industrial Estate (-). No change in relation to online improvements and local transport measures (0). The overall impact will therefore be slight adverse.	People working within the Mochdre Industrial Estate.	Slight adverse (-)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass will provide better access to the College and theatre and will generally improve access throughout the town with removal of through traffic (+). Online improvements and local transport measures will have an improvement in access with improved interchange and other methods of public transport, also through initiatives such as 'safe routes to schools' (+). The overall impact will therefore be moderate beneficial (++).	Young persons, wider population and residents of Newtown.	Moderate beneficial (++)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass will have improvements to environmental impacts, which affect humans (e.g. noise and air quality) (+). There will be no change associated with online improvements and local transport measures other than disruption during construction (0). The overall impact will therefore be slight beneficial.	General population of Newtown.	Slight beneficial (+)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	The bypass will provide better linkage to A483 and wider area but potential disruption to Mochdre Industrial Estate (+) but online improvements and local transport measures will only be short-term solutions, with no long-term gain and no efficient use of resources (-). The overall impact will therefore be neutral.	Working and general population of Newtown and dependants.	Neutral (0)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 7.2c – Southern Bypass Option 2c + Trunk Road on-line improvements only + local transport measures**

**Option Description:** New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + Improvements to the existing trunk road A483 and A489 only, including linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.

Appraisal Criteria	Assessment	Distribution	Significance
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The impacts of the bypass will have impacts in proximity of road to Ysgol Cedewain and Maesyrrhandir Primary Schools and impact on areas used for physical exercise (Garth Owen Community woodland) (-). Potential for conflict between online improvements and local transport measures in terms of encouraging active modes of transport. The overall impact will therefore be moderate adverse	School children and wider population.	Moderate adverse (--)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass will have possible impacts on historic identity of Newtown as well as causing severance between Mochdre Industrial Estate and urban areas of Garth Owen and Maesyrdail (-). Online improvements and local transport measures will have no overall change, but the potential of community divisions and moving congestion problems to other parts of the town (0). The overall impact will therefore be minor adverse.	Residents and workers to the west of Newtown and general population.	Slight adverse (-)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass will have impacts on the settings of houses in residential areas of Garth Owen and Maesyrdail as well as causing issues with public safety associated with the road and noise and air quality issues associated with close proximity of the road to residential areas (-). In relation to online improvements and local transport measures there will be conflicts with traffic and non-motorised users and potential for more accidents (-). The overall impact will therefore be moderate adverse (--)	Residents and workers to the west of Newtown. School children and young people.	Moderate adverse (--)

<b>Option Description:</b> New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + Improvements to the existing trunk road A483 and A489 only, including linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction, and improvements to right turn facilities at existing industrial estate accesses+ improvements to public transport, cycling, NMU provision, bus priority, public transport connectivity and safe routes to schools/college.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass will have possible negative impacts for school workers and those working within the Mochdre Industrial estate (-). There will be no change associated with online improvements and local transport measures (0). The overall impact will therefore be slight adverse.	People of working age and dependants (working within schools and Mochdre Industrial estate)	slight adverse (-)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass is likely to cause congestion on College Roundabout, which could inhibit access to services but better access to College and theatre and generally improved access throughout the town with removal of through traffic (+). Online improvements and local transport measures will improve access with improved interchange and other methods of public transport, also through initiatives such as 'safe routes to schools' (+). The overall impact will therefore be moderate beneficial.	Young persons, wider population, residents of Newtown and school children.	Moderate beneficial (++)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass will have benefits in town centre but poor in the west of town (0). In relation to online improvements and local transport measures, no overall significant change, however there will be environmental impacts from disruption during construction (0). The overall impact will therefore be neutral.	Throughout Newtown and in the west of Newtown. General population.	Neutral (0)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	There will be no real change in relation to the bypass with no extra land available to develop compared with other southern bypass options (0). Online improvements and local transport measures will only be short-term solutions, with no long-term gain and no efficient use of resources (-). The overall impact will therefore be slight adverse.	General population of Newtown.	Slight adverse (-)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 8a – Southern bypass Option 2a + Llanllwchaiarn Link**

<b>Option Description:</b> New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + New highway link to B4568 at Llanllwchaiarn via new river bridge.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass will provide better links to Newtown with more traffic including high-sided HGVs taken out of the town than option 1, which may encourage residents to use more active transport modes, but still issues with low rail bridges (+). The Llanllwchaiarn Link does not promote better access to skills, training and education or healthy foods and does remove HGVs from 'rat runs', but overall no significant change from existing situation (0). The overall impact is therefore slight beneficial.	General population of Newtown.	Slight beneficial (+)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass will remove through traffic, which may reduce severance along A483 north and south of Newtown, lessening community divisions and isolation (+). The Llanllwchaiarn Link provides better access to new housing and planned development to the northeast of Newtown, but this is a new community and benefits associated with community connectivity are therefore not as significant. The links removes HGVs from 'rat runs', but more traffic within the town are likely to have negative impacts (-). The overall impact is therefore neutral.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen.	Neutral (0)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass will improve noise and air quality for most and will remove HGVs and may reduce accidents within the town (+). The Llanllwchaiarn Link is likely to cause more traffic within the town with associated negative impacts in relation to noise and air quality. Despite benefits associated with HGV removal from rat runs, impacts on living conditions are slight adverse (-). The overall impact is therefore considered to be neutral.	General population of Newtown.	Neutral (0)

<b>Option Description:</b> New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + New highway link to B4568 at Llanllwchaiarn via new river bridge.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass improves access to Mochdre Industrial Estate (+) with the Llanllwchaiarn Link having no significant effect (0). The overall impact is therefore slight beneficial.	West of Newtown	Slight beneficial (+)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass reduces traffic within the town and may facilitate better access to services etc (+) with the Llanllwchaiarn Link having no significant effect (0). The overall impact is therefore slight beneficial.	General population of Newtown.	Slight beneficial (+)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass will have improvements in relation to environmental impacts, which impact humans (e.g. noise and air quality) (+). However, the Llanllwchaiarn Link will have environmental impacts associated with crossing the Severn. Short term solution, moving the problems elsewhere (-). The overall impact is therefore neutral.	General population of Newtown, especially those living and working within the town centre.	Neutral (0)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	The bypass will provide better linkage to A483 and wider area (+) with the Llanllwchaiarn Link having no significant impact other than having some political gain for Powys County Council. (0). The overall impact is therefore slight beneficial.	Working population of Newtown and dependants.	Slight beneficial (+)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 8b – Southern bypass Option 2b + Llanllwchaiarn Link**

<b>Option Description:</b> New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + New highway link to B4568 at Llanllwchaiarn via new river bridge.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass will improve access to training facilities (i.e. Powys College) but issues with possible traffic congestion on College roundabout (+). The Llanllwchaiarn Link does not promote better access to skills, training and education or healthy foods. It does remove HGVs from 'rat runs', but overall no significant change from existing situation (0). The overall impact is therefore slight beneficial (+).	Young persons and the wider population.	Slight beneficial (+)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass will remove through traffic and may reduce severance along A483 north and south of the town and lessening community divisions and isolation. It may also improved access to the Theatre but issues with possible traffic congestion on College roundabout (+). The Llanllwchaiarn Link provides better access to new housing and planned development to the northeast of Newtown, but this is a new community and benefits associated with community connectivity are therefore not as significant. The links removes HGVs from 'rat runs', but more traffic within the town are likely to have negative impacts (-). The overall impact is therefore likely to be neutral.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen.	Neutral (0)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass has hazards associated with turning to access Mochdre Industrial Estate but Improves noise and air quality for most. It will also remove HGVs and reduce accidents in town (+). The Llanllwchaiarn Link is likely to cause more traffic within the town with associated negative impacts in relation to noise and air quality. Despite benefits associated with HGV removal from rat runs, impacts on living conditions are slight adverse (-). The overall impact is therefore considered to be neutral.	General population of Newtown.	Neutral (0)

<b>Option Description:</b> New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + New highway link to B4568 at Llanllwchaiarn via new river bridge.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass facilitates ease of access but impacts on the Mochdre Industrial Estate (-). The Llanllwchaiarn Link has no significant impact (0). The overall impact is therefore slight adverse.	People working within the Mochdre Industrial Estate.	Slight adverse (-)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass will provide better access to the College and theatre and will Generally improve access throughout the town with removal of through traffic (+). The Llanllwchaiarn Link has no significant impact (0). The overall impact is therefore slight beneficial.	Young persons, wider population and residents of Newtown.	Slight beneficial (+)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass will reduce environmental impacts, which impact humans (e.g. noise and air quality) (+). However, the Llanllwchaiarn Link will have environmental impacts associated with crossing the Severn. Short term solution, moving the problems elsewhere (-). The overall impact will therefore be neutral.	General population of Newtown.	Neutral (0)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	The bypass will provide better linkage to A483 and wider area but potential disruption to Mochdre Industrial Estate (+) with the Llanllwchaiarn Link having no significant impact other than having some political gain for Powys County Council (0). The overall impact is therefore slight beneficial.	Working population of Newtown and dependants.	Slight beneficial (+)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 8c – Southern bypass Option 2c + Llanllwchaiarn Link**

<b>Option Description:</b> New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + New highway link to B4568 at Llanllwchaiarn via new river bridge.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass option is poor in relation to proximity of road to Ysgol Cedewain and Maesyrrhandir Primary Schools and impact on areas used for physical exercise (Garth Owen Community woodland (-). The Llanllwchaiarn Link does not promote better access to skills, training and education or healthy foods. It does remove HGVs from 'rat runs', but overall no significant change from existing situation (0). The overall impact is therefore minor adverse.	School children and wider population.	Minor adverse (-)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass has a possible impact on the historic identity of Newtown and causes severance between the Mochdre Industrial Estate and urban areas of Garth Owen and Maesyddail (-). The Llanllwchaiarn Link provides better access to new housing and planned development to the northeast of Newtown, but this is a new community and benefits associated with community connectivity are therefore not as significant. (0). The overall impact is therefore considered to be slight adverse.	Residents and workers to the west of Newtown.	Minor adverse (-)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass will have impacts on the settings of houses in residential areas of Garth Owen and Maesyddail. There will also be issues with public safety associated with the road and noise and air quality issues associated with close proximity of the road to residential areas (-). The Llanllwchaiarn Link has no significant impact (0). The overall impact is considered to be minor adverse.	Residents and workers to the west of Newtown. School children along Plantation Lane and Heol Treowen and young people. General population.	Minor adverse (-)

<b>Option Description:</b> New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + New highway link to B4568 at Llanllwchaiarn via new river bridge.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass will have possible negative impacts for school workers and those working within the Mochdre Industrial estate (-). The Llanllwchaiarn Link has no significant impact (0). The overall impact is therefore minor adverse.	People of working age and dependants (working within schools and Mochdre Industrial estate)	Minor adverse (-)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass is likely to cause congestion on College Roundabout could inhibit access to services but better access to College and theatre and generally improved access throughout the town with removal of through traffic. (+). The Llanllwchaiarn Link has no significant impact (0). The overall impact is therefore slight beneficial.	Young persons, wider population and residents of Newtown.	Slight beneficial (+)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass will have benefits in town centre, but there are impacts in the west of town (0). The Llanllwchaiarn Link will have environmental impacts associated with crossing the Severn. (-). The overall impact is therefore likely to be minor adverse.	Throughout Newtown, general population and in the west of Newtown.	Minor adverse (-)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	The bypass will not cause any real change with no extra land available to develop compared with other southern bypass options (0). The Llanllwchaiarn Link will also have no significant impact other than having some political gain for Powys County Council (0). The overall impact is therefore neutral.		Neutral (0)
<b>Others</b>			





**AUTHORISATION SHEET**

<b>Authorisation sheet</b>	
<b>Document No. HHC91371A/24– HIA Screening Report</b>	
Client:	Welsh Assembly Government
Project:	A483/A489 Newtown Study
Address:	Cathays Park, Cardiff, CF10 3NQ

<b>Revision Status and Description of Changes</b>					
Date	Revision	Description of Change	Authorisation		
			Prepared	Checked	Approved
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01/05/09	Final	Minor adjustment to formatting	MB	JW	JW

A483/A489 NEWTOWN STUDY

**A483/A489 HEALTH IMPACT ASSESSMENT (HIA)  
WELTAG STAGE 2 REPORT**

July 2009

FINAL

Report Number HHC 91371A/31

**Prepared by**  
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**ABBREVIATIONS**

<b>AST</b>	<b>Appraisal Summary Table</b>
<b>HIA</b>	<b>Health Impact Assessment</b>
<b>WAG</b>	<b>Welsh Assembly Government</b>
<b>WelTAG</b>	<b>Welsh Transport Planning and Appraisal Guidance</b>
<b>WHIASU</b>	<b>Welsh Health Impact Assessment Support Unit</b>

## 1 INTRODUCTION

### 1.1 Purpose of Report

This report details the methodology and results of the WeITAG Stage 2 Health Impact Assessment (HIA) for the A483 / A489 Newtown Study.

The HIA was undertaken as part of the Welsh Assembly Government's (WAG) Public Health Strategic Framework for Wales: 'A Healthy Future'. The framework has two main goals:

- To improve the quality and length of life
- To promote equity in health and wellbeing

To help meet these goals, the published Welsh Transport Planning and Appraisal Guidance (WeITAG), June 2008 includes the requirement for a mandatory Health Impact Assessment.

The Welsh Health Impact Assessment Support Unit (WHIASU) defines HIA as:

*'A combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population. In other words it is a process that considers the wider effects of local and national policies or initiatives and how they, in turn, may affect people's health.'*

### 1.2 Report Structure

This report comprises an A4 volume of the main HIA report text followed by relevant figures of the options. The Appraisal Summary Tables and workshop information form appendices to the report.

The structure of this report is as follows:

Section 1	Introduction
Section 2	Methodology for WeITAG Stage 2 HIA
Section 3	WeITAG Stage 2 HIA Workshop
Section 4	Results from Workshop
Section 5	Conclusion

### 1.3 Study Background

The A483/A489 trunk roads provide important links between north, south and mid Wales. Newtown is identified as a pinch point on the network and improvements to the traffic situation in the town is seen as of strategic importance. Refer to Figure 1.1.

Congestion along Llanidloes Road, Pool Road and New Road frequently occurs and problems arise from the low headroom and reduced road width on the Dolfor Road and Nantoer railway bridges. Subsequently, HGVs and high-sided vehicles sometimes divert through residential areas, especially Garth Owen and Treowen. This in turn compromises the safety of local residents, and in particular, school children attending the Treowen and Cedewain Schools and other vulnerable road users.

Work on investigating a potential bypass of Newtown dates back to 1969, which resulted in a preferred route announcement in 1973. The protection of the route was relaxed in 1989 and some developments have now encroached into the protected route corridor to the south west of Newtown.

## **1.4 Study Progress**

Parsons Brinckerhoff was formally appointed by the Welsh Assembly Government to undertake the A483/A489 Newtown Study in November 2007. The aim of the study is to investigate ways of relieving the congestion on the A483 and A489 through Newtown, building on previous work.

An HIA screening workshop was held in December 2008 to assess the health impacts of the transportation options which resulted from the WeITAG planning stage of the study. This was reported in the HIA Screening Report and formed part of the WeITAG Stage 1 appraisal.

Following the WeITAG Stage 1 appraisal the options were sifted and summarised in the Alternative Options Report. Six options performed well against the Welsh Impact Areas and fully met the Transport Planning Objectives. The six options were developed further and have been taken forward for detailed consideration at WeITAG Stage 2 and form the subject of this report. These options comprise the following:

- Option 5.2a Southern bypass to the south of Mochdre Industrial Estate and local transport measures
- Options 5.2b Southern bypass through Mochdre Industrial Estate and local transport measures
- Option 5.2c Southern bypass between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route and local transport measures
- Option 7.2a Southern bypass to the south of Mochdre Industrial Estate and online improvements and local transport measures
- Option 7.2b Southern bypass through Mochdre Industrial Estate and online improvements and local transport measures
- Option 7.2c Southern bypass between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route and online improvements and local transport measures

These are illustrated in the figures listed below:

- Figure 1.2 Bypass Options
- Figure 1.3 a Online improvements Sheet 1 of 2
- Figure 1.3 b Online improvements Sheet 2 of 2
- Figure 1.4 Local Transport Measures

## **1.5 WeITAG**

WeITAG is the core document to be used in the planning and appraisal of transport proposals in Wales. As such it is overarching guidance whose principles and practices are to be applied to all types of transport investment proposals at a strategic or scheme level.

The Welsh Planning and Appraisal Guidance aims:

- To assist in the development of proposals to enable the most appropriate scheme to be identified and progressed – one that is focussed on objectives, maximises the benefits and minimises the impacts; and
- To allow the comparison of competing schemes on a like-for-like basis, so decision-makers can make difficult funding decisions.

All transport proposals requiring public funding and/or approval of the Welsh Assembly Government need to be planned and appraised to ensure that the resultant schemes are 'fit for purpose' and achieve the expected and required outcomes. The appraisal criteria are focussed on the overarching impact areas relevant to Wales eg Economy, Society and Environment. In addition to these Welsh Impact Areas WeITAG requires an assessment of health and equality impacts as part of the appraisal process.

Therefore Health Impact Assessment (HIA) forms an integral part of the WeITAG appraisal process and follows the principles of WeITAG, which are that the process should be objective led and subject to participation.

There are a number of cross cutting themes within the Economic, Environmental and Social impacts and it is anticipated that the information gathered as part of the HIA will further the understanding of the society impact sections of the WeITAG appraisal. It will, however, be important not to duplicate impacts and care will be taken in the use of data and mechanisms for reporting.

## 2 METHODOLOGY FOR HIA WELTAG STAGE 2

The WelTAG Stage 2 HIA was undertaken by way of a participatory workshop, in which the six transportation options taken forward from the WelTAG Stage 1 process were reviewed. Stakeholders from the Welsh Assembly Government, Powys County Council, National Public Health Service Wales, Powys Local Health Board, Powys Association of Voluntary Organisations (PAVO), Mid Wales Trunk Road Agency, the Town Clerk, Mid Wales Economic Forum and the Wales Health Impact Assessment Support Unit (WHIASU) were invited to attend. (Refer to Appendix 1)

The six transportation options were appraised against criteria taken from WelTAG Tables 9.2 (Template for HIA Screening or Appraisal Tool) and 10.3 (Health Impact Assessment Summary Table). These criteria were used to create a HIA Appraisal Summary Table (AST) for each transportation option, which were completed at the workshop (refer to Table 1.0 below).

**Table 1.0: HIA Summary Table (Based on WelTAG Tables 9.2 and 10.3)**

<b>Option Description:</b>			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and health eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education			:
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.			
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.			
<b>Working conditions:</b> Employment, workplace conditions, occupation income.			
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology			
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate			
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate			
<b>Others</b>			

The methodology outlined in WelTAG was used when completing the HIA ASTs together with guidance from the WHIASU. The appraisal considered the following vulnerable groups, (this list is not exhaustive):

- Those on low income
- Older people
- General population
- Minority ethnic groups
- Children and young people

Criteria for the appraisal are as follows:

- What positive effect(s) is the proposal likely to have for people's health and well being, and for which groups within the population?
- What negative effect(s) is the proposal likely to have for people's health and well being, and for which groups within the population?
- If negative impacts were identified for one or more group within the population, are there ways in which these can be removed or mitigated?
- Is further investigation, information and evidence collection needed to find potential solutions?
- Are there opportunities to build in more actions to improve people's health as a part of the proposal. Are there sources of information or experience elsewhere that may help explore this question more fully?

The participants of the workshop assessed the six transportation options as follows:

- Option 5.2a southern bypass option 2a + local transport measures
- Option 5.2b southern bypass option 2b + local transport measures
- Option 5.2c southern bypass option 2c + local transport measures
- Option 7.2a southern bypass option 2a + online improvements + local transport measures
- Option 7.2b southern bypass option 2b + online improvements + local transport measures
- Option 7.2c southern bypass option 2c + online improvements + local transport measures

The following paragraphs provide a brief description of each of the option components which are the subject of the assessments described in this report.

#### *Option 2a*

Options 2a is a southern bypass to the south of Mochdre Industrial Estate. It would provide a complete southern bypass of Newtown passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate.

The southern bypass would re-direct all through traffic around the south of Newtown and provide two new links to the town centre at Dolfor Road and Kerry Road. It is anticipated that such provision would remove a significant amount of through traffic from the town.

The route of the bypass would also impact on several public rights of way to the south of Newtown and require a new crossing of the Mochdre Brook.

### *Option 2b*

Option 2b is a southern bypass through Mochdre Industrial Estate.

Options 2b would be identical to Option 2a east of Dolfor Road. This option would however require an online improvement for the section passing through the Mochdre Industrial Estate on the approximate line of Heol Ashley, before rejoining the A489(T) at the College roundabout.

The route would impact on the industrial estate and would require remodelling of the existing industrial estate accesses, providing ghost island junctions for right turns.

### *Option 2c*

Option 2c is a southern bypass on the approximate line of the original TR111 route.

Option 2c has the same eastern section as both 2a and 2b, however the western section linking Dolfor Road passes between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route.

The route of the bypass would consume land set aside for future development and is likely to cause severance of public rights of way and loss of open space. To link this option with the existing road network a new arm would be created at the Mochdre Industrial Estate roundabout.

### *Local Transport Measures*

The local transport measures include the following:

- Improve the access from New Road to the Railway Station by installing dedicated footway, adequate lighting and crossing facilities across New Church Road;
- Install a bus gate to link Lon Cerddyn and Park Lane, allowing the 86 services to complete a complete circuit of Newtown; and
- Increase funding to develop the Newtown Riverside path which runs along the A483.
- New Combined Footpath/Cycleway over/under Cambrian Railway
- New Combined Footpath/Cycleway over the River Severn.

### *On-line improvements*

On-line improvements to the existing trunk roads A483 and A489 through Newtown comprise linking of all existing traffic signals in Newtown, provision of new traffic signals at the Kerry Road roundabout and Morrison's junction and improvements to right turn facilities at a number of existing industrial and housing estate accesses. A section of 2.4m wide combined footway and cycleway is also proposed.

The elements of the transportation options are shown in Figures 1.2, 1.3a and b and 1.4.

### 3 WELTAG STAGE 2 HIA WORKSHOP

The Stage 2 HIA workshop was held on 2<sup>nd</sup> June 2009 at Ladywell House in Newtown, Powys. A copy of the agenda and invitees is included in Appendix 1.

The workshop attendees were as follows:

<b>Attendee</b>	<b>Role</b>	<b>Organisation</b>
Mike Gilbert	Project Director	Welsh Assembly Government
Peris Jones	Project Engineer	Welsh Assembly Government
David Hern	Regional Transport Planner	Welsh Assembly Government
Liz Jones	Route Manager (NE)	Mid Wales Trunk Road Agency
Sarah Leyland-Jones	County Cycling Officer	Powys County Council
Doug Wellstead	Head of Service Planning	PCC Local Health Board
Steve Geary	Clerk to Town Council	Newtown Town Council
Liz Green	Health Impact Assessment Development Officer	WHIASU
Richard Goddard	Project Co-ordinator	Parsons Brinckerhoff
Jo Wall	Environmental Coordinator	TACP
Max Burrell	Environmental Technical Support	TACP

The workshop took the form of a presentation to inform and update the participants about the study to date, refer to Appendix 1. This was followed by informal discussions in which the group worked through the HIA AST for each option and agreed on the likely impact in relation to:

- Individual's lifestyles / capacities affecting health,
- Social and community influences affecting health,
- Living conditions,
- Working conditions,
- Services (access and quality),
- Socio-economic, cultural and environmental and sustainability factors,
- Macro-economic factors,
- Other.

Baseline information from the Initial Environmental Assessment and Design Manual for Roads and Bridges (DMRB) Stage 2 Environmental Impact Assessment was used where relevant. The results were entered into the ASTs for each option and were agreed at the workshop.

The workshop was facilitated by Liz Green of the WHIASU, who ensured the appraisal progressed smoothly and that assessments for each option were carried out in line with current best practice and guidance.

## 4 RESULTS FROM THE WORKSHOP

The results of the WeTAG Stage 2 HIA are summarised below, with a full record of the completed ASTs for each option included in Appendix 2.

### *Option 5.2a – Southern Bypass Option 2a and Local Transport Measures*

For Option 5.2a, six of the seven criteria are of moderate beneficial significance. Social and Community Influences affecting health is of minor beneficial significance. It is therefore considered to be of **moderate beneficial** significance overall in terms of Health Impact.

### *Option 5.2b – Southern Bypass Option 2b and Local Transport Measures*

Option 5.2b is of moderate beneficial significance in terms of Individuals: Lifestyle/capacities affecting health; Services (access and quality) and Macro-economic factors. The option is of minor beneficial significance in terms of Social and Community Influences affecting Health; Living Conditions; Working Conditions; and Socio-economic, Cultural, Environmental and Sustainability factors. It is therefore considered to be of **moderate beneficial** significance overall in terms of Health Impact.

### *Option 5.2c – Southern Bypass Option 2c and Local Transport Measures*

Option 5.2c is of moderate beneficial significance in terms of Services (access and quality). It is of minor beneficial significance in terms of Working Conditions and Macro-economic factors. The option is neutral in terms of Social and Community Influences affecting Health and it is of minor adverse significance in terms of Individuals: Lifestyle/capacities affecting health; Living Conditions; and Socio-economic, Cultural, Environmental and Sustainability factors. It is therefore considered to be of **neutral** significance overall in terms of Health Impact.

### *Option 7.2a – Southern Bypass Option 2a, Trunk Road Online Improvements and Local Transport Measures*

For Option 7.2a six of the seven criteria are of moderate beneficial significance. It is of minor beneficial significance in terms of Social and Community Influences affecting Health. It is therefore considered to be of **moderate beneficial** significance overall in terms of Health Impact.

### *Option 7.2b – Southern Bypass Option 2b, Trunk Road Online Improvements and Local Transport Measures*

Option 7.2b is of moderate beneficial significance in terms of Individuals: Lifestyle/capacities affecting health; Services (access and quality) and Macro-economic factors. It is of slight beneficial significance in terms of Social and Community Influences affecting Health; Living Conditions; Working Conditions and Socio-economic, Cultural, Environmental and Sustainability factors. This option is therefore considered to be of **moderate beneficial** significance overall in terms of Health Impact.

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Option 7.2c – Southern Bypass Option 2c, Trunk Road online improvements and local transport measures

Option 7.2c is of moderate beneficial significance in terms of Services (access and quality). It is of minor beneficial significance in terms of Working Conditions; and Macro-economic factors and of neutral significance in terms of Social and Community Influences affecting Health. It is of minor adverse significance in terms of Individuals: Lifestyle/capacities affecting health; Living Conditions; and Socio-economic, Cultural, Environmental and Sustainability factors. This option is therefore considered to be of **neutral** significance overall in terms of Health Impact.

## 5 CONCLUSIONS

As the results indicate, in terms of health and well being Options 5.2a and 7.2a and Options 5.2b and 7.2b all have a moderate beneficial impact. Options 5.2c and 7.2c both have a neutral impact. There is little obvious difference between the options 5.2a-c and options 7.2a-c although there are slight improvements associated with the online improvements especially due to air quality improvements within Newtown and better pedestrian and cycle provision along New Road and Llanidloes Road. These improvements are not enough to provide an increase in the overall scoring.

Each of the options was considered to benefit Newtown in terms of improving access and journey reliability within and to Newtown especially for work and employment and for access to services. All of the options were considered to be beneficial in terms of macro economic issues through improving air quality, sustainability and creating opportunities for economic development. Each option allows for the movement of wind turbines which is important for economic development in the wider area around Newtown.

Overall, the option that performed best through the assessment was Option 7.2a which was very slightly better than option 5.2a. These options performed well because they provided access and environmental benefits to the people living in Newtown and they do not have the severance and more localised environmental disbenefits of a route through the built up area. Routes along the Mochdre Industrial Estate road (options 5.2b and 7.2b) performed well but slightly less well than options 7.2a and 5.2a.

The assessments indicate some adverse impacts along the 2c bypass corridor as it passes between the Mochdre Industrial Estate to the south and Maesyrrhandir to the north. The adverse impacts were identified especially in terms of the loss of amenity land and the proximity of the road to residential dwelling reducing air quality and increasing noise disturbance in the local area. It should be noted that whilst the loss of amenity land was noted for options 5.2c and 7.2c, it is possible that this land is made available for economic or residential development should the other options be taken forward. Strict planning controls may be required to ensure that this amenity land is not lost completely.

## **APPENDICES**



**Appendix 1 HIA Stage 2 Workshop Agenda and Invitees and Presentation**



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**Date:** Tuesday 2<sup>nd</sup> June 2009 (09:30 to 13:30 approx)  
**Venue:** Ladywell House (Board Room, third floor), Newtown, Powys  
**Contract Title:** A483/A489 Newtown Study  
**Contract No:** HHC91371A  
**Purpose:** WelTAG Stage 2 HIA Workshop

### **AGENDA**

- Welcome and introductions
- Brief Overview of the Study to date
- HIA Stage 2 Option Appraisal
- Concluding Remarks
- Close

<b>Invitee</b>	<b>Role</b>	<b>Organisation</b>
Mike Gilbert	Project Director	Welsh Assembly Government
Peris Jones	Project Engineer	Welsh Assembly Government
David Hern	Regional Transport Planner	Welsh Assembly Government
Russell Bennett	Head of Roads Unit	Welsh Assembly Government
Bethan Jones	Health Improvement Division	Welsh Assembly Government
Natalie Avery	Dept of Public Health and Health Professionals	Welsh Assembly Government
Mike Steward	Trunk Road Manager	Mid Wales Trunk Road Agency
Liz Jones	Route Manager (NE)	Mid Wales Trunk Road Agency
Ruth Treharne	Director of Planning	Powys Local Health Board
Doug Wellstead	Head of Planning Services	Powys Local Health Board
Julie Bishop	Director of Health	National Public Health Services Wales
Marie Grannell	Senior Health Promotion Manager	National Public Health Services Wales
Chris Evans	Health and Wellbeing Strategy Manager	Powys County Council
Anthea Jones	Cycling Officer	Powys County Council
John Forsey	Passenger Transport Officer	Powys County Council
Trish Buchan	Director	Powys Association of Voluntary Organisations
Sarah Leyland – Jones	Senior Officer for Community Transport	Powys Association of Voluntary Organisations
Steve Geary	Newtown Council Chair	Town Council Clerk
Jim Grafton	Health Impact Assessment Development Officer	Mid Wales Economic Forum
Liz Green		WHIASU
Richard Goddard	Project Coordinator	Parsons Brinckerhoff
Jo Wall	Environmental Coordinator	TACP
Max Burrell	Land Use Specialist	TACP



## **Appendix 2 A Picture of Health Powys**





# A Picture of Health in Powys



Powys has a profile of health largely better than the average for Wales. The majority of small areas in Powys are less deprived than the average for Wales however, there are some pockets of relative deprivation. There is a growing older population that will influence the demand on health services in the future.

### Positives for health:

- Education and Unemployment, key determinants of overall health, are significantly better than the average for Wales. Powys also has better life expectancy and lower premature death rates than the Welsh average for cancer and heart disease.

### Challenges for the community:

- Powys has a worse rate for Road Traffic Accidents (but this is not significantly different to Wales), this may be a reflection of the rural nature of the area. There are also slightly worse death rates for suicides than the Wales average.

This local picture of health is a first attempt at raising awareness of general health with the public by the Wales Centre for Health. As such we welcome feedback and discussion about how best to engage and inform the public about general health issues.



### Notes:

The spine chart shows the relative position of an area between the best and worst results in Wales. **Green bars** show a result that is significantly better than the Wales Average. **Red bars** show a result significantly worse than the Wales average. **Yellow bars** show results within the average range.

For more information please see the Wales Centre for health website [www.wch.wales.nhs.uk](http://www.wch.wales.nhs.uk), or contact 029 2022 7744.





**Appendix 3 HIA WeITAG Stage 2 Appraisal Summary Tables**



**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 5.2a – Southern Bypass Option 2a + local transport measures**

<b>Option Description:</b> – New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass will provide better links to Newtown with more traffic including high-sided HGVs taken out of the town which may encourage residents to use more active transport modes. Facilitate use of health care services (++) . Local transportation measures are neutral (0). Overall, this is likely to have a moderate beneficial impact.	General population of Newtown. Young people, older people.	Moderate beneficial (++)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass will result in the removal of through traffic, which may reduce severance along A483 north and south of Newtown, “rat running”, lessening community divisions and isolation (+). Local transport measures are likely to result in better access within Newtown itself and to communities outside Newtown via bus and rail (+). Overall, this is likely to have a minor beneficial impact.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen. General population of Newtown.	Slight beneficial (+)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass is likely to improve noise and air quality for most and will remove HGVs and may reduce accidents within the town (++) . Local transport measures have neutral impact (0). Overall the impact is likely to be moderate beneficial.	General population of Newtown.	Moderate beneficial (++)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass will provide improved access to all of Newtown especially Industrial Estates (++) . Local transport measures improve access to employment and consistency of bus service (+). This is likely to have a moderate beneficial impact overall.	Better access to Newtown especially Industrial Estates. People of working age and dependants.	Moderate beneficial (++)

<b>Option Description:</b> – New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn.			
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass will result in less HGV traffic and better movement within the town and may facilitate better access to services and emergency services, emergency response times etc Improvement (in safety) for walk to schools with reduction of HGVs in Newtown. Option gives access opportunities to the wider area (++) . Local transportation measures will result in an improvement in bus reliability (+). Overall, this is likely to have a moderate beneficial impact.	General population of Newtown and environs, school children and wider population.	Moderate beneficial (++)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass will result in improvements to environmental impacts, (especially. noise and air quality). Improvement to general quality of life especially to people along the existing trunk roads. Possibility of increased traffic movement due to bypass (++) . Local transport measures will result in greater bus reliability (0). Overall this is likely to have a moderate beneficial impact.	General population of Newtown	Moderate beneficial (++)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	The bypass will provide better linkage to A483 and A489 and wider area. Economic development benefits. Compliant with WAG policies in relation to sustainability, CO <sub>2</sub> emissions and also in relation to economic development. Opportunities for economic land use development (++) . Local transport measures are neutral (0). The overall impact is therefore moderate beneficial.	Working population of Newtown, employers and dependants.	Moderate beneficial (++)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 5.2b – Southern Bypass Option 2b + local transport measures**

<b>Option Description:</b> – New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass will provide better links to Newtown with more traffic including high-sided HGVs taken out of the town which may encourage residents to use more active transport modes. Facilitate use of health care services. The bypass is likely to improve access to training facilities (i.e. Powys College) (++) Local transportation measures are neutral (0). Overall, this is likely to have a moderate beneficial impact.	General population of Newtown. Young people. Older people	Moderate beneficial (++)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass is likely to remove through traffic and may reduce severance along A483 north and south of the town which will help lessen community divisions and isolation and improve access to the Hafren Theatre. Increase in severance along Mochdre Industrial Estate (+). Local transport measures are neutral (0). Overall, this is likely to have a minor beneficial impact.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen. General population of Newtown.	Slight beneficial (+)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass may have hazards associated with access into Mochdre Industrial Estate but improves noise and air quality for most and will remove HGVs and reduce accidents in town. Possible increase in noise and reduction in air quality within Mochdre Industrial Estate. Beneficial impacts associated with improvements in air quality and reductions in noise for most (+). Local transport measures neutral (0). Overall this is likely to have a minor beneficial impact.	General population of Newtown. Employees in Mochdre Industrial Estate.	Slight beneficial (+)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass will provide improved access to all of Newtown especially Vastre Industrial Estate but adverse impacts on the Mochdre Industrial Estate (+). Local transport measures improve access to employment and consistency of bus service (+). The impact overall, is therefore likely to be minor beneficial.	Better access to Newtown especially Vastre Industrial Estate. People of working age and dependants. Adverse impact on Mochdre Industrial Estate	Slight beneficial (+)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities,	The bypass will result in less HGV traffic and better movement within the town and may facilitate better access to services and emergency services, emergency response times etc Improvement (in safety) for walk to schools with reduction of HGVs in	General population of Newtown, school children, students and wider population.	Moderate beneficial (++)

<p><b>Option Description:</b> – New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn.</p>			
<p>transport, education and other services. Access to information technology.</p>	<p>Newtown. Better access to college and theatre. Option gives access opportunities to the wider area (++) . Local transportation measures will result in improved in bus reliability (+). Overall, these impacts are likely to have a moderate beneficial impact.</p>		
<p><b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate</p>	<p>The bypass will result in improvements to environmental impacts, (especially noise and air quality). Improvement to general quality of life especially to people along the existing trunk roads. Possibility of increased traffic movement due to bypass. Adverse impacts in air quality and noise/pollution in Mochdre Industrial Estate. Efficient use of resources – route is existing road. (+). Local transport measures will result in greater bus reliability (0). Overall this is likely to have a minor beneficial impact.</p>	<p>General population of Newtown. Adverse impact on people using Mochdre Industrial Estate</p>	<p>Slight beneficial (+)</p>
<p><b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate</p>	<p>The bypass will provide better linkage to A483 and wider area. Compliant with WAG policies in relation to sustainability, CO<sub>2</sub> emissions and also in relation to economic development. There will be adverse impact on CO<sub>2</sub> in Mochdre Industrial Estate. Opportunities for associated service improvements. (++) . Local transport measures (0). Overall the impact is moderate beneficial.</p>	<p>Working population of Newtown and dependants. Adverse impact on CO<sub>2</sub> in Mochdre Industrial Estate</p>	<p>Moderate beneficial (++)</p>
<p><b>Others</b></p>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 5.2c – Southern Bypass Option 2c + local transport measures**

<b>Option Description:</b> – New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn.			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass will provide better links to Newtown. Traffic including high-sided HGVs taken out of the town may encourage residents to use more active transport modes. The bypass is likely to facilitate use of health care services and improve access to training facilities (i.e. Powys College) (++) The bypass will have adverse impacts due to its proximity to Ysgol Cedewain and Maesyrrhandir Primary Schools and loss of amenity space including Garth Owen Community woodland (---). Local transportation measures neutral (0). The overall impact is therefore likely to be minor adverse.	General population of Newtown. Young people. School children.	Slight adverse (-)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass is likely to cause severance between Mochdre Industrial Estate and urban areas of Garth Owen and Maesyrrhandir (0). Local transport measures will result in greater bus reliability (0). The overall impact is therefore likely to be neutral (0).	General population of Newtown.	Neutral (-)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	Beneficial impacts associated with improvements in air quality and reductions in noise for parts of Newtown. (++) Route 2c will impact on the settings of houses in residential areas of Garth Owen and Maesyrrhandir and will cause issues with public safety associated with the road. There will also be noise and air quality issues associated with close proximity of the road to residential areas, but there will be noise and air quality improvements in other areas (---). Local transport measures are neutral (0). The overall impact is therefore likely to be minor adverse.	Residents and workers to the west of Newtown. School children and young people. General population of Newtown.	Slight adverse (-)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass will provide improved access to all of Newtown. (++) The route is likely to have negative impacts for school workers and those working within	People of working age and dependants (working within schools and Mochdre Industrial estate and	Slight Beneficial (+)

<b>Option Description:</b> – New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn.			
	the Mochdre Industrial estate (-). Local transportation measures will result in an improvement in bus reliability (+). The overall impact is therefore likely to be Slight beneficial.	elsewhere)	
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass will result in less HGV traffic and better movement within the town and may facilitate better access to services and emergency services, emergency response times etc Improvement (in safety) for walk to schools with reduction of HGVs in Newtown. Better access to College and theatre as well as giving access opportunities to the wider area (++) . Local transportation measures will result in an improvement in bus reliability (+). The overall impact is therefore likely to be moderate beneficial.	General population of Newtown, school children, young people, older people and wider population.	Moderate beneficial (++)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass is likely to have benefits in the town centre, but loss of amenity space. Pollution in proximity to schools and dwellings (--). Local transport measures will result in greater bus reliability (0). This is likely to have a minor adverse impact overall.	General population of Newtown, school children	Slight adverse (-)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	Compliant with WAG policies in relation to sustainability, CO <sub>2</sub> emissions and also in relation to economic development. The bypass will have no real change as no extra land is available along the route. (++) . Adverse impact on CO <sub>2</sub> impact for schools and dwellings (-). Local transport measures (0). The overall impact is therefore minor beneficial.	Adverse impact on CO <sub>2</sub> impact for schools and dwellings	Slight beneficial (+)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 7.2a – Southern Bypass Option 2a + local transport measures + online Improvements**

<b>Option Description:</b> – New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn + on-line improvements to the existing trunk roads A483 and A489 through Newtown comprising traffic signals, improved right turn facilities and a 2.4m wide footpath/cycleway			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass will provide better links to Newtown with more traffic including high-sided HGVs taken out of the town which may encourage residents to use more active transport modes. Facilitate use of health care services (++) . Local transportation measures are neutral (0). Online improvements will encourage walking and cycling. Greater linkage into walking and cycling networks (+). Overall, this is likely to have a moderate beneficial impact.	General population of Newtown. Young people, older people.	Moderate beneficial (++)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass will result in the removal of through traffic, which may reduce severance along A483 north and south of Newtown, “rat running”, lessening community divisions and isolation (+). Local transport measures are likely to result in better access within Newtown itself and to communities outside Newtown via bus and rail. (+). Online improvements will encourage walking and cycling and social networking (+). Overall, this is likely to have a minor beneficial impact.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen. General population of Newtown.	Slight beneficial (+)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass is likely to improve noise and air quality for most and will remove HGVs and may reduce accidents within the town (++) . Local transport measures have neutral impact (0). Online improvements will improve air quality, reduction of accidents, reduction of congestion, improve safety for pedestrians and cyclists. (++) Overall the impact is likely to be moderate beneficial.	General population of Newtown.	Moderate beneficial (++)
<b>Working conditions:</b> Employment, workplace conditions, occupation income.	The bypass will provide improved access to all of Newtown especially Industrial Estates (++) . Local transport measures improve access to employment and consistency of bus service (+). Online improvements will reduce congestion etc. More incentive to cycle and walk to work. Potential for more use of cars within Newtown due to freer flowing traffic. (+) This is likely to have a moderate beneficial impact overall.	Better access to Newtown especially Industrial Estates. People of working age and dependants.	Moderate beneficial (++)

<b>Option Description:</b> – New highway bypass south of Newtown, passing south of Mochdre Industrial Estate and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn + on-line improvements to the existing trunk roads A483 and A489 through Newtown comprising traffic signals, improved right turn facilities and a 2.4m wide footpath/cycleway			
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass will result in less HGV traffic and better movement within the town and may facilitate better access to services and emergency services, emergency response times etc Improvement (in safety) for walk to schools with reduction of HGVs in Newtown. Option gives access opportunities to the wider area (++) . Local transportation measures will result in an improvement in bus reliability (+). Online improvements will improve access to services due to freer flowing traffic. Community Transport providers have easier access to client base. (+) Overall, this is likely to have a moderate beneficial impact.	General population of Newtown and environs, school children and wider population.	Moderate beneficial (++)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass will result in improvements to environmental impacts, (especially. noise and air quality). Improvement to general quality of life especially to people along the existing trunk roads. Possibility of increased traffic movement due to bypass (++) . Local transport measures will result in greater bus reliability (0). Online improvements will reduce pollution through better running of vehicles and more walking/cycling. (+) Overall this is likely to have a moderate beneficial impact.	General population of Newtown	Moderate beneficial (++)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	The bypass will provide better linkage to A483 and A489 and wider area. Economic development benefits. Compliant with WAG policies in relation to sustainability, CO <sub>2</sub> emissions and also in relation to economic development. Opportunities for economic land use development (++) . Local transport measures (0). Online improvements will support physical activity strategies and sustainability and health improvement agenda. (++) The overall impact is therefore moderate beneficial.	Working population of Newtown, employers and dependants.	Moderate beneficial (++)
<b>Others</b>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 7.2b – Southern Bypass Option 2b + local transport measures + online Improvements**

<b>Option Description:</b> – New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn + on-line improvements to the existing trunk roads A483 and A489 through Newtown comprising traffic signals, improved right turn facilities and a 2.4m wide footpath/cycleway			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass will provide better links to Newtown with more traffic including high-sided HGVs taken out of the town which may encourage residents to use more active transport modes. Facilitate use of health care services. The bypass is likely to improve access to training facilities (i.e. Powys College) (++) Local transportation measures are neutral (0). Online improvements will encourage walking and cycling. Greater linkage into walking and cycling networks (+). Overall, this is likely to have a moderate beneficial impact.	General population of Newtown. Young people. Older people	Moderate beneficial (++)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass is likely to remove through traffic and may reduce severance along A483 north and south of the town which will help lessen community divisions and isolation and improve access to the Hafren Theatre. Increase in severance along Mochdre Industrial Estate (+). Local transport measures are neutral (0). Online improvements will encourage walking and cycling and social networking (+). Overall, this is likely to have a minor beneficial impact.	Takes traffic away from residential home for older people and high-sided HGVs away from schools along Plantation Lane and Heol Treowen. General population of Newtown.	Slight beneficial (+)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	The bypass may have hazards associated with access into Mochdre Industrial Estate but improves noise and air quality for most and will remove HGVs and reduce accidents in town. Possible increase in noise and reduction in air quality within Mochdre Industrial Estate. Beneficial impacts associated with improvements in air quality and reductions in noise for most (+). Local transport measures are neutral (0). Online improvements will improve air quality, reduction of accidents, reduction of congestion, improve safety for pedestrians and cyclists. (++) Overall this is likely to have a minor beneficial impact.	General population of Newtown. Employees in Mochdre Industrial Estate.	Slight beneficial (+)

<p><b>Option Description:</b> – New highway bypass south of Newtown, passing through Mochdre Industrial Estate on the approximate line of Heol Ashley and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn + on-line improvements to the existing trunk roads A483 and A489 through Newtown comprising traffic signals, improved right turn facilities and a 2.4m wide footpath/cycleway</p>			
<p><b>Working conditions:</b> Employment, workplace conditions, occupation income.</p>	<p>The bypass will provide improved access to all of Newtown especially Vastre Industrial Estate but adverse impacts on the Mochdre Industrial Estate (+). Local transport measures improve access to employment and consistency of bus service (+). Online improvements will reduce congestion etc. More incentive to cycle and walk to work. Potential for more use of cars within Newtown due to freer flowing traffic. (+) The impact overall, is therefore likely to be minor beneficial.</p>	<p>Better access to Newtown especially Vastre Industrial Estate. People of working age and dependants. Adverse impact on Mochdre Industrial Estate</p>	<p>Slight beneficial (+)</p>
<p><b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.</p>	<p>The bypass will result in less HGV traffic and better movement within the town and may facilitate better access to services and emergency services, emergency response times etc Improvement (in safety) for walk to schools with reduction of HGVs in Newtown. Better access to college and theatre. Option gives access opportunities to the wider area (++). Local transportation measures will result in an improvement in bus reliability (+). Online improvements will improve access to services due to freer flowing traffic. Community Transport providers have easier access to client base. (+) Overall, these impacts are likely to have a moderate beneficial impact.</p>	<p>General population of Newtown, school children, students and wider population.</p>	<p>Moderate beneficial (++)</p>
<p><b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate</p>	<p>The bypass will result in improvements to environmental impacts, (especially noise and air quality). Improvement to general quality of life especially to people along the existing trunk roads. Possibility of increased traffic movement due to bypass. Adverse impacts in air quality and noise/pollution in Mochdre Industrial Estate. Efficient use of resources – route is existing road. (+). Local transport measures will result in greater bus reliability (0). Online improvements will reduce pollution through better running of vehicles and more walking/cycling. (+) Overall this is likely to have a minor beneficial impact.</p>	<p>General population of Newtown. Adverse impact on people using Mochdre Industrial Estate</p>	<p>Slight beneficial (+)</p>
<p><b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate</p>	<p>The bypass will provide better linkage to A483 and wider area. Compliant with WAG policies in relation to sustainability, CO<sub>2</sub> emissions and also in relation to economic development. There will be adverse impact on CO<sub>2</sub> in Mochdre Industrial Estate. Opportunities for associated service improvements. (++) Local transport measures are neutral (0). Overall the impact is moderate beneficial.</p>	<p>Working population of Newtown and dependants. Adverse impact on CO<sub>2</sub> in Mochdre Industrial Estate</p>	<p>Moderate beneficial (++)</p>
<p><b>Others</b></p>			

**Health Impact Assessment Summary Table (Based on WeITAG Tables 9.2 and 10.3)**

**Option 7.2c – Southern Bypass Option 2c + local transport measures + online Improvements**

<b>Option Description:</b> – New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn + on-line improvements to the existing trunk roads A483 and A489 through Newtown comprising traffic signals, improved right turn facilities and a 2.4m wide footpath/cycleway			
<b>Appraisal Criteria</b>	<b>Assessment</b>	<b>Distribution</b>	<b>Significance</b>
<b>Health Impact Assessment</b>			
<b>Individuals: Lifestyle / capacities affecting health:</b> Smoking, nutrition and healthy eating, physical activity, alcohol/drug misuse, sexual health, Propensity to use health and care services Skills and knowledge, training and education	The bypass will provide better links to Newtown. Reduction in traffic including high-sided HGVs may encourage residents to use more active transport modes and facilitate use of health care services. The bypass is likely to improve access to training facilities (i.e. Powys College) (++) The bypass location will have adverse impacts due to its proximity to Ysgol Cedewain and Maesyrrhandir Primary Schools and loss of amenity space including Garth Owen Community woodland. (---). Overall (-). Local transportation measures neutral (0). Online improvements will encourage walking and cycling. Greater linkage into walking and cycling networks (+). The overall impact is therefore likely to be minor adverse.	General population of Newtown. Young people. School children.	Minor adverse (-)
<b>Social and Community Influences affecting health:</b> Family: Structure and function, Parenting Community: Social support mechanisms, social networks, neighbourliness. Peer pressure. Community divisions, degree of isolation. Historical identity, Cultural and spiritual ethos.	The bypass is likely to cause severance between Mochdre Industrial Estate and urban areas of Garth Owen and Maesyrrhandir (0). Local transport measures will result in greater bus reliability (0). Online improvements will encourage walking and cycling and social networking (+). The overall impact is therefore likely to be neutral (0).	General population of Newtown.	Neutral (-)
<b>Living conditions:</b> Built environment, civic design and planning, housing, noise, smell, air and water quality, physical view and outlook, public safety, waster disposal, road hazards, injury hazards, Safe play spaces.	Beneficial impacts associated with improvements in air quality and reductions in noise for parts of Newtown. (++) Along route 2c the bypass will impact on the settings of houses in residential areas of Garth Owen and Maesyrrhandir and will cause issues with public safety associated with the road. There will also be noise and air quality issues associated with close proximity of the road to residential areas, but there will be noise and air quality improvements in other areas (---). Local transport measures neutral (0). Online improvements will improve air quality, reduction of accidents, reduction of congestion, improve safety for pedestrians and cyclists. (++) The overall impact is therefore likely to be minor adverse.	Residents and workers to the west of Newtown. School children and young people. General population of Newtown.	Slight adverse (-)
<b>Working conditions:</b>	The bypass will provide improved access to	People of working	Slight

<b>Option Description:</b> – New highway bypass south of Newtown, passing between Maesyrrhandir and Mochdre Industrial Estate on the approximate line of the original TR111 route, and crossing the main Cambrian railway line east of Dyffryn Industrial Estate + improvements to pedestrian access from New Road to the Railway station, installation of bus gates and new combined footpath/cycleways over Cambrian Railway and River Severn + on-line improvements to the existing trunk roads A483 and A489 through Newtown comprising traffic signals, improved right turn facilities and a 2.4m wide footpath/cycleway			
Employment, workplace conditions, occupation income.	all of Newtown. (++) . Route 2c is likely to have negative impacts for school workers and those working within the Mochdre Industrial estate (-).Local transportation measures will result in an improvement in bus reliability (+). Online improvements will reduce congestion etc. More incentive to cycle and walk to work. Potential for more use of cars within Newtown due to freer flowing traffic. (+) The overall impact is therefore likely to be minor beneficial.	age and dependants (working within schools and Mochdre Industrial estate and elsewhere)	Beneficial (+)
<b>Services (access and quality):</b> Medical services, caring services, careers advice and counselling, shops and commercial services, public amenities, transport, education and other services. Access to information technology.	The bypass will result in less HGV traffic and better movement within the town and may facilitate better access to services and emergency services, emergency response times etc Improvement (in safety) for walk to schools with reduction of HGVs in Newtown. Better access to College and theatre as well as giving access opportunities to the wider area (++) . Local transportation measures will result in an improvement in bus reliability (+). Online improvements will improve access to services due to freer flowing traffic. Community Transport providers have easier access to client base. (+) The overall impact is therefore likely to be moderate beneficial.	General population of Newtown, school children, young people, older people and wider population.	Moderate beneficial (++)
<b>Socio-economic, cultural and environmental and sustainability factors:</b> Biological diversity, efficient use of resources, pollution, diversity/local distinctiveness, climate	The bypass is likely to have benefits in the town centre, but loss of amenity space. Pollution in proximity to schools and dwellings (--). Local transport measures will result in greater bus reliability (0). This is likely to have a minor adverse impact overall.	General population of Newtown, school children	Slight adverse (-)
<b>Macro-economic factors:</b> Political climate, GDP, economic development, policy climate	Compliant with WAG policies in relation to sustainability, CO <sub>2</sub> emissions and also in relation to economic development. The bypass will have no real change as no extra land available along purple route. (++) . Adverse impact on CO <sub>2</sub> impact for schools and dwellings (-). Local transport measures (0). Online improvements will reduce pollution through better running of vehicles and more walking/cycling. (+) The overall impact is therefore minor beneficial.	Adverse impact on CO <sub>2</sub> impact for schools and dwellings	Slight beneficial (+)
<b>Others</b>			

## AUTHORISATION SHEET

<b>Authorisation sheet</b>	
<b>Document No. HHC91371A/31– HIA WeITAG Stage 2 Report</b>	
Client:	Welsh Assembly Government
Project:	A483/A489 Newtown Study
Address:	Cathays Park, Cardiff, CF10 3NQ

<b>Revision Status and Description of Changes</b>					
Date	Revision	Description of Change	Authorisation		
			Prepared	Checked	Approved
17/07/09	Draft	-	MB	JW	RG