

# COEDELY: STRATEGIC OUTLINE CASE REPORT (WELTAG STAGE 1)

## FINAL REPORT | JANUARY 2018



Project No: CS/092493

Doc Ref: CS/092493

Rev:

CLIENT: Rhondda Cynon Taf County Borough Council ISSUE DATE: January 2018

Coedely: Strategic Outline Case Report (WeITAG Stage 1) Final Report

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#### **ISSUE RECORD**

REV	DATE	DESCRIPTION/COMMENTS	AUTHOR/ PREPARED BY:	APPROVED FOR ISSUE BY:

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# Background Information

Impacts Assessment Report



## 1. Introduction

### 1.1 Context

Coedely is a small community within the Ely Valley in the County Borough of Rhondda Cynon Taf (RCT), in South Wales. It lies at the southern edge of a number of larger communities including Tonyrefail. Both communities lie to the immediate east of the A4119, which gives access to the Rhondda Valleys from the M4 at Junction 34.

The main access to Coedely from the A4119 is via a roundabout. This roundabout also gives access to a minor road that leads to Llantrisant Forest and, further south, the western part of Talbot Green. It also leads to Ynysmaerdy to the south east. Talbot Green lies approximately 3.5 kilometres to the south of Coedely with Tonyrefail approximately 2.5 kilometres to the north. The M4 motorway lies 5 kilometres to the south and the centre of Cardiff lies approximately 19 kilometres to the south east.

The A4119 is a single carriageway road in the Coedely area with a 50mph speed limit and only becomes a dual carriageway approximately 1.3 kilometres to the south west. This is at the roundabout that provides access to the South Wales Fire and Rescue Service headquarters. From here, the dual carriageway extends all the way south to the M4.

As well as Coedely, and locations to the south, the roundabout also gives access to a proposed development site, which lies on the western side of the A4119. This was the former Coedely Colliery and Coking Works and is identified in the Rhondda Cynon Taf County Borough Council (RCT CBC) Local Development Plan (LDP) as Strategic Development Site SSA 14.1. This is a large site with an area of 14.32 hectares and extends some distance to the north. The former colliery/coking works was the subject of a land reclamation scheme in the early 2000s. The site is currently for sale.

The roundabout currently suffers from a degree of traffic congestion during peak periods, which impact on the A4119 to the south. In combination, these were the subject of a feasibility report in September 2016. As well as considering highway improvements, the report included a high level transportation assessment, which considered the existing and future traffic flows at the roundabout, the latter of which took into account the SSA 14.1 development site. The feasibility report is included in the Strategic Outline Case section of the Impacts Assessment Report as Appendix 1.1. Information on other problems in the local area is included in Appendix 1.3.

The feasibility report is the sole investigative work that has been undertaken to address transport issues in the Coedely area.

Neither the LDP nor the South East Wales Valleys Local Transport Plan 2015 contain references to a scheme to improve the A4119 in the Coedely area.

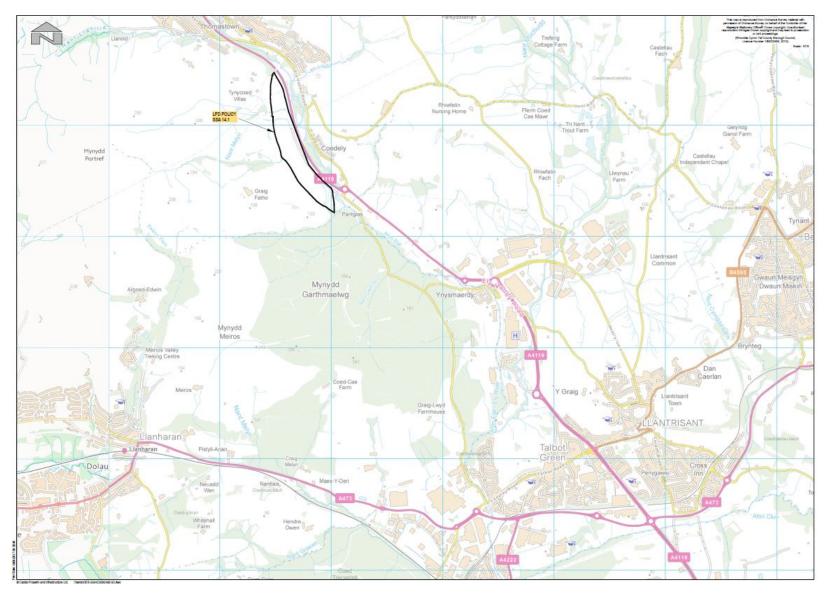
Figure 1.1 shows a plan of the Study Area. The plan also shows the development area that is contained in the LDP that is outlined above. Within the Study Area, the length of A4119 corridor has been taken as between Thomastown in the north and the A4119/A473 roundabout in the south. In addition, the length of A473 corridor between this roundabout, and west of Talbot Green has also been included.



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Commercial in Confidence 1/ Introduction

#### Figure 1.1: Study Area





## 1.2 WeITAG Process

In January 2017 the Welsh Government issued a draft version of updated Welsh Transport Appraisal Guidance, which is used to appraise all transport schemes. The original guidance was issued in 2008. Although the 2017 guidance is still in draft form following a consultation period during the early months of 2017, it has been indicated by the Welsh Government that it is to be used in its current form until the final version is published.

The guidance has been used to appraise options for addressing identified problems in Coedely to ensure that:

- As part of the Strategic Outline Case (WeITAG Stage 1), the appraisal process to produce a long list of options is compliant within current guidance; and
- An 'evidence' led approach has been adopted in selecting a short-list of options for consideration at the Outline Business Case (WeITAG Stage 2).

Throughout the WeITAG process, appraisal is based on the Five Cases approach, which is used by the Welsh Government and HM Treasury in business cases for projects requiring public sector funding. The Five Cases are as follows:

- The Strategic Case;
- The Transport Case;
- The Delivery Case;
- The Financial Case; and
- The Commercial Case.

The level of detail that is contained within each Case is dependent upon the WeITAG stage that is being undertaken. At the Strategic Outline Case (WeITAG Stage 1), which is the subject of this report, the Strategic Case has been almost fully developed and the Transport Case is an initial assessment only. The other Cases are in preliminary form only.

### 1.3 Report Structure

Following the Introduction (Chapter 1), the rest of the Strategic Outline Case (WeITAG Stage 1) chapters are listed below. It should be noted that although a Stakeholders' Workshop marked the commencement of the Strategic Outline Case, it is only summarised in Chapter 2, the Strategic Case with the output contained in subsequent chapters. A fuller account of the Stakeholders' Workshop is included in the Impacts Assessment report, which is a Background Document.



- Chapter 2: The Strategic Case;
- Chapter 3: The Transport Case;
- Chapter 4: The Delivery Case;
- Chapter 5: The Financial Case;
- Chapter 6: The Commercial Case; and
- Chapter 7: Recommendations for WeITAG Stage 2.

## 2. The Strategic Case

## 2.1 Introduction

This is where the Coedely area is described in terms of transport, development and access, employment and society, environment, public transport, and active travel. It outlines the case for change and the strategic fit of the transport interventions that have been proposed. It appraises these against a range of national, regional, and local policy documents that has determined the type of interventions that are best placed strategically, as well as more locally, to address the transport and other issues that have been highlighted in the Coedely area.

## 2.2 The Case for Change

### Transport (existing)

The A4119 performs a strategic role as it provides an important link between the M4 at Junction 34, and the Rhondda Valleys. In addition, its link with the east/west A473 provides good connectivity to Bridgend in the west and the A470 corridor in the east.

The A4119 is a generally good standard road over its whole length and includes a considerable length of dual carriageway to the south of Ynysmaerdy, which reflects where the majority of development has been concentrated in the past.

To the north of Ynysmaerdy, the A4119 is wholly single carriageway and has benefited from a new alignment, which means that it does not pass directly through residential areas. The general impression is of a less urbanised road with residential areas a short distance to each side.

The change between dual and single carriageway standards occurs at the South Wales Fire and Rescue Service headquarters in Ynysmaerdy. The first 1.3 kilometres of single carriageway are characterised by a number of accesses directly onto the road, including a scrapyard, sewage works and farms. Although it has a relatively straight alignment, overtaking is limited due to double white lines. The speed limit is 50mph.

At the northern end of this section of single carriageway is Coedely roundabout and the A4119 continues north with the same standard but with a derestricted speed limit of 60mph. As well as the north/south A4119, Coedely roundabout also gives access to the community of Coedely to the north and a large development area, SSA 14.1 to the north west, which remains a brownfield site.

Although the standard of the A4119 in the area is good, the volume of north/south traffic flow gives problems on both the single carriageway section to the south of Coedely roundabout and at the roundabout itself. As part of the feasibility report in September 2016 (Appendix 1.1 in the Impacts Assessment Report), a transport assessment was undertaken, which indicated that there are congestion and capacity issues, which extend to the north and south.

The assessment determined that in the existing situation (2016), the Coedely roundabout is close to capacity in the AM peak hour and marginally over capacity in the PM peak hour. This is on the southern A4119 arm.



#### Transport (future), including Development

To better understand the situation when the SSA 14.1 site is developed, the transport assessment included an analysis of the trip generation, distribution and growth. This was based on the identified use (B1 and B2), development of the full 14.32 hectares, and a single access point onto the A4119 at Coedely roundabout. Scenarios for the years 2018 and 2033 were analysed with and without development traffic. In 2018, without development traffic, the northern A4119 arm will be close to capacity in the AM peak period with the southern arm over capacity in the PM peak period. With development traffic added, the northern A4119 arm will be at capacity in the AM peak period with the southern arm marginally worse than the situation without additional traffic, in the PM peak period.

In 2033, without development traffic, the northern A4119 arm will be over capacity in the AM peak period with the southern arm well over capacity in the PM peak period. With development traffic added, the northern A4119 arm will be well over capacity in the AM peak period with the southern arm over capacity to a marginally greater degree than without it, in the PM peak period. In addition, the site access road arm will be over capacity as well with the northern A4119 arm approaching capacity. Queue lengths in the PM overcapacity scenario will be long (up to approximately 111 vehicles), which translate into delays of up to almost three minutes.

Analyses were also undertaken in the same future year scenarios (2018 and 2033) to determine the performance of the Coedely roundabout with the A4119 to the south upgraded to a dual carriageway standard. In 2018, performance will be improved with and without development with only the southern A4119 arm approaching capacity in the PM peak period. However, in the 2033 scenario, with and without development, the southern arm will be well over capacity in the AM peak period. With development, the site access road will also be well over capacity in the PM peak period. The overcapacity scenarios will result in queue lengths up to 12 vehicles and delays of up to almost ninety seconds.

Even though the provision of a dual carriageway standard for the A4119 between the Coedely roundabout and the South Wales Fire and Rescue Service headquarters roundabout will be of considerable benefit in the area, the work undertaken recommended that further assessment is required based on the VISSIM microsimulation program. This will consider the A4119 over a greater length. It will help refine the performance results of the Coedely roundabout as well as consider the additional issue of slow moving northbound and southbound traffic on various sections of the A4119. In addition, further work on traffic distribution for the proposed development site is proposed.

It should be noted that, in relation to the above, an A4119 corridor study has been commissioned by Rhondda Cynon Taf CBC to consider all the junctions between the M4 at Junction 34 and Tonyrefail. This includes those in the Coedely area. Although this work will have no bearing on this WeITAG Stage 1 report, it will, where appropriate, be taken into account at Stage 2 when the short-list of options are considered in greater detail.

#### Rhondda Cynon Taf Local Development Plan (to 2020)

The SSA 14.1 site is the only large site in the Coedely area and is shown in the RCT Local Development Plan (LDP) as well as on Figure 1.1 in Chapter 1. The LDP identifies the SSA 14.1 site in a number of locations.



- Southern Strategy Area Employment Allocations: Coed Ely, Tonyrefail This reclaimed brownfield site of a colliery and coking works comprises 3 vacant development plateaus and a spine road connecting to a roundabout on the A4119 Ely Valley Road;
- Transport Highways and transportation provision will be sought from developers in accordance with the Planning Obligations SPG and the Delivering Design and Placement SPG;
- Employment Allocations Coed Ely, Tonyrefail, B1, B2 use (business and general industrial respectively), with an area of 14.32 hectares.

Other than SSA 14.1, the only other development site in the general Coedely area is at Gwern Heulog, which lies between Coedely and Tonyrefail to the north. This is within SSA 10, Housing Allocation and the site is identified for 150 dwellings. It is described below:

The site and neighbouring development will form an extension of the established settlement of Coed Ely to the south of Tonyrefail. Access to the 4.63 hectare residential allocation will also be achieved from the Gwern Heulog development.

It is likely that access to the A4119 from the site will be via Coedely roundabout.

As stated in Chapter 1, the LDP does not contain references to the improvement of the A4119 in the Coedely area. However, it does reference one of the long list of options that was put forward at the Stakeholders' Workshop – CS 8(a) (2), the Ynysmaerdy to Talbot Green Relief Road.

#### South East Wales Valleys Local Transport Plan

This document gives references to the outstanding sections of the Pontypridd to Tonyrefail Community Route in the Coedely area. It also references the A4119 to A473 Ynysmaerdy to Talbot Green Relief Road.

#### Employment and Society (existing)

The labour market briefing issued by the National Assembly for Wales in October 2016 provided the following statistics shown in Table 2.1 relating to unemployment, employment rates and economic activity for the Pontypridd Assembly Constituency (within which Coedely is located). Also provided is the best performing and worst performing recorded results across other Welsh constituencies for comparison.

Area	ILO unemployment rate 16+ (%)	Unofficial claimant count rate (Sept 2016) (%)	Employment rate 16-64 (%)	Economic Inactivity rate 16-64 (%)
Pontypridd	4.6	2.3	72.5	23.9
Best Performance in Welsh Constituency	2.8	1.1	78.7	17.7
Worst Performance in Welsh Constituency	8.6	5.3	61.4	36.1

## Table 2.1: Labour Market Statistics for Pontypridd Assembly Constituency (Source: Labour Market Briefing, National Assembly for Wales, October 2016)



Pontypridd has an International Labour Organisation (ILO) unemployment rate<sup>1</sup> for ages 16+ across constituencies in Wales of 4.6%, which lies within the lower middle range. All the other constituencies in the RCT area have rates that are considerably higher (6.8% to 8.5%). There is still a need for interventions across the Pontypridd Assembly Constituency to help tackle unemployment and help support sustainable economic development. Although the proposed development site described earlier in Chapter 2 will be part of this, the provision of good access will be equally important.

In terms of other information for Pontypridd, the National Assembly for Wales paper *Key Statistics for Pontypridd, May 2010* (Paper No. 10/042), included the following:

- In February 2010, around 3.8% of the working age population were claiming Jobseeker's Allowance. The equivalent figure for Wales was 4.6%. In 2008, around 74% of working age adults were in employment compared with 71% in Wales.
- The Welsh Index of Multiple Deprivation 2008 ranks small areas in Wales in terms of deprivation. In Pontypridd, 6% of areas fell in the 10% most deprived areas in Wales and overall the majority of its areas were more deprived than the Wales average.<sup>2</sup>

#### Employment and Society (future)

It has already been stated that there is a large proposed development site (SSA 14.1) to the west of the A4119 at Coedely, and is covered in the LDP. The proposals are for business and general industrial (B1 and B2) only although no job numbers are stated. However, the take up of the development site has the potential to create many jobs within Rhondda Cynon Taf and the Cardiff Capital Region.

There are currently no housing or social facilities proposed within the SSA 14.1 development site.

The provision of a transport intervention along this section of the A4119 will benefit the attractiveness of the site to developers.

#### Environment (existing and future)

The A4119 is a north/south route linking the M4 motorway to the Rhondda Valleys. It is recognised that, in general, the road does not pass close to existing large scale residential areas and there is no real requirement of a transport intervention to reduce noise and air quality impacts. However, any transport intervention within the A4119 corridor will have the potential to physically impact on the area that it passes through and this will have to be balanced against the benefits to be gained from addressing the identified issues.

<sup>&</sup>lt;sup>1</sup> Those aged 16 and over who are without a job, have been actively seeking work in the past four weeks and are available to start work in the next two weeks, or are out of work and are waiting to start a new job in the next two weeks.

<sup>&</sup>lt;sup>2</sup> Key Statistics for Pontypridd, National Assembly for Wales, May 2010



#### Public Transport and Active Travel (existing)

As the A4119 is the only north/south link into the Rhondda Valleys from the Talbot Green area, all existing bus services use this road to the south of Coedely. Services then transfer to local roads to serve the communities to the north. Delays in public transport (bus) services were highlighted at the Stakeholders' Workshop and are referenced in Appendix 1.3 in the Impacts Assessment Report. These are seen as a direct result of congestion on the A4119, between Coedely and Talbot Green, and beyond.

In terms of bus stop provision, there are two bus stops (one northbound and one southbound) on the A4119 between the Coedely roundabout and the South Wales Fire and Rescue Service roundabout. Three services are advertised as using these stops (122, 124, and 131) but their remoteness suggests that they may get little use.

There is no rail infrastructure in this part of the Ely Valley with the closest being the South Wales to Paddington line, which passes through Llanharan to the south west and Pontyclun to the south.

A shared use facility (walking and cycling) route runs along the former Llantrisant and Taff Vale Junction railway line to the west of the A4119. This is not part of the National Cycle Network. Although not an official route north of the Coedely roundabout, a facility passes through the SSA 14.1 development site. No usage details are available.

#### Public Transport and Active Travel (future)

There will be the potential to introduce public transport (bus) routes into the proposed SSA 14.1 site when it is developed, if its size is seen as attractive to bus companies. Bus services could be through a re-routing of existing services or through provision specifically for the development, possibly as a partnership between bus companies and occupiers, and which linked up with local railway stations at Llanharan and Pontyclun.

RCT has long term proposals to provide Active Travel routes within the Talbot Green area and the A4119 corridor. In relation to Coedely, this will be the upgrading of the route that passes through the SSA 14.1 site. To the north of this, the route will pass through Thomastown and Tonyrefail. This addition to the local Active Travel network will directly benefit commuting to and from the SSA 14.1 site.

### 2.3 Stakeholders' Workshop

Although 2.2 outlines the importance of a transport intervention at Coedely, the Strategic Case is also based on the output of the Stakeholders' Workshop, which was held on 20 September 2017 with officers from Rhondda Cynon Taf County Borough Council and facilitated by engineers from Redstart.

The workshop was designed to gather the following information:



- Problems, Opportunities and Constraints within the Study Area (Task 1);
- Objectives against which proposed solutions to the identified problems could be appraised (Task 2); and
- A long list of proposed solutions or options (Task 3).

The tables (2.2 and 2.3) below summarise the problems, opportunities and constraints, and the objectives that emerged from the workshop. The long list of options is included in Chapter 2.4 below. A full account of the workshop, including the Worksheets that contain all the information that was gathered, is contained within the Appendix of the Strategic Outline Case Section of the Impacts Assessment Report (Appendix 1.2 to 1.15). However, the main themes that came out of the workshop are shown in subsequent chapters of this Strategic Outline Case.

Theme	Description
Traffic flow/Congestion	Traffic congestion tails back to Coedely roundabout
Safety/Accidents	Accidents - severity
Traffic flow/Congestion	Impact of J34 congestion tails back to A473
Active Travel	Gap in Active Travel provision between hospital and Talbot Green
Future Development	Impact of future committed development on traffic levels
Public Transport	Delays to public transport services
Traffic flow/Congestion	Delays to emergency services
Traffic flow/Congestion	Stifles development (poor accessibility)
Traffic flow/Congestion	Shift traffic problem elsewhere
Route Efficiency	Diversion route difficulties
Traffic flow/Congestion	Existing speed limit (40mph)
Safety/Accidents	Accident problems
Traffic flow/Congestion	Traffic congestion at Talbot Green
Traffic flow/Congestion	Traffic signals
Future Development	House building
Traffic flow/Congestion	Congestion (A4119)
Standards	Road width
Route Efficiency	Number of junctions – too many, roundabouts
Traffic flow/Congestion	Poor journey times
Future Development	Additional development traffic
Traffic flow/Congestion	One of two main routes into Rhondda Fawr
Social	Social economic issues
Safety/Accidents	Collisions
Public Transport	Bus frequency increasing from 3/hour to 4/hour from November 2017 on Service 122
Future Development	Unlock development/ employment opportunities
Funding	Funding targeted at A4119 corridor – LTF, LTNF, MBU
Access	Improved access to hospital
Future Development	Development of Strategic Opportunity Area to deliver economic growth
Route Efficiency	Lose lower roundabout (SWFRS)
Future Development	Housing expansion
Public Transport	Metro – north west corridor
Active Travel	Improve Active Travel
New Highways	Talbot Green Bypass (Ynysmaerdy to Coedcae Lane)

#### Table 2.2: List of Problems, Opportunities and Constraints



Route Efficiency	Additional capacity to A4119 south
Public Transport	Investigation of bus lane provision
Funding	City deal
Funding	WG funding
Funding	RCT funding
Funding	CIL
Future Development	Development
Traffic flow/Congestion	One of two main routes into Rhondda Fawr
Social	Social economic issues
Safety/Accidents	Collisions
Public Transport	Bus frequency increasing from 3/hour to 4/hour from November 2017 on Service 122
Future Development	Unlock development/ employment opportunities
Funding	Funding targeted at A4119 corridor – LTF, LTNF, MBU
Access	Improved access to hospital
Future Development	Development of Strategic Opportunity Area to deliver economic growth
Route Efficiency	Lose lower roundabout (SWFRS)
Future Development	Housing expansion
Land	Land
Physical/Topography	Topography
Physical/Topography	Existing uses (farms, sewage works)
Funding	Funding
Environment/Ecology	Ecology (bats)
Traffic flow/Congestion	Construction and keeping traffic flowing
Utilities	Utilities (especially water and sewage)
Physical/Topography	Scrap yard
Physical/Topography	Sewerage plant
Physical/Topography	Retaining wall
Land	Land ownership
Environment/Ecology	Ecology
Public Transport	Existing bus stops
Land	Land
Environment/Ecology	Environmental
Funding	Funding
Traffic flow/Congestion	Maintain traffic flow
Public Transport	No rail access
Public Transport	Public transport limited

#### Table 2.3: List of Objectives

Theme	Description
Public transport	Improve public transport usage/reliability
Economy	Improve economic growth/employment opportunities
Efficiency	Reduce congestion/improve access
Safety/Health	Improve safety
Environment	Improve air quality/minimises impact on the environment
Active travel	Increase Active Travel provision/journeys
Value for Money	Provide a value for money solution
Efficiency	Rationalise junctions
Environment	Improve air quality
Active travel	Improve Active Travel/public transport



Economy	Make area developable
Economy	Employment opportunities
Efficiency	Network more resilient/road safety
Economy	Economic regeneration of Ely Valley
Public transport	Facilitate provision for Park & Ride/Park & Share
Efficiency	Emergency vehicle response times
Efficiency	Journey time improvements
Public transport	Improve public transport provision
Efficiency	Reduction in queue lengths
Environment	Pollution reduction air quality and noise
Safety/Health	Collision reduction
Economy	Increasing social/economic developments
Economy	Increasing investment
Efficiency	Social inclusion (better access to social facilities, jobs and leisure)
Public transport	Modal shift and increase in public transport
Active travel	Improve Active Travel - walking and cycling for commuting
Public Transport	Modal shift and increase in public transport
Health	Improve the health and well-being of the local community

## 2.4 Strategic Fit

At the Stakeholders' Workshop, the problems, opportunities and constraints in the Coedely area led to the production of the long list of options shown in Table 2.4 as well as in the Impacts Assessment Report as Appendix 1.7. Table 2.4 also includes a brief description of each option, based on the best available information. Those that can be defined are shown on Figure 2.1 in diagrammatic form. The option descriptions are also part of the Impacts Assessment Report (Appendix 1.9). Options have been appraised against the national policy documents that follow Table 2.4. They have also been appraised against the Transport Planning Objectives (Table 2.8).

Opt. No.	Option	Description
1	Dual single carriageway A4119 (Stink Pot Hill)	This will be the dualling of the 1.3 kilometre section of A4119 between Coedely roundabout and the South Wales Fire and Rescue Headquarters roundabout. Also included will be alterations at the two roundabouts to improve traffic capacity.
2	Park & Ride/Park & Share facility within SSA 14.1 development site	Although the site is identified for B1 and B2 use, it could also support a Park & Ride site for either the extensive Talbot Green retail development area or further afield. Ideally this would be at the southern end close to the Coedely roundabout; however, this would also be where development will want to be initially located, for ease of access onto the highway network.
3	Park & Ride/Park & Share facility within the existing Llantrisant and Pontyclun Golf Course.	The identified area is at the northern end of the golf course adjacent to the roundabout on the A4119 that gives access to the Royal Glamorgan Hospital from the south. It was one of the sites considered for a Park & Ride facility when various options were being considered close to the A4119 in 2016.



4	Ynysmaerdy to Talbot Green Relief Road (LDP scheme)	This is Proposal CS 8(a) (2) in the Local Development Plan. The following description is taken from the LDP. The proposed relief road is to provide an alternative route from the Upper Ely Valley, to the west of Talbot Green. The scheme is largely dependent on the scale of new development in the area, and as such will require developers to assist with cost. The alignment shown on the Proposals Map is supported by the Council and is the only route to benefit from a feasibility study. The Council acknowledges that it may be possible to deliver the proposed new road via an alternative alignment. This is particularly the case at the northern end of the scheme where it may be possible to distance the route from the settlement of Ynysmaerdy. Without prejudice to any future planning application, should redevelopment proposals at the former Fire Service Headquarters at Lanelay Hall be supported, alternative routes may be viable at the southern end, including the possibility of agreeing a variation of the route in conjunction with any redevelopment scheme. As such, the Council, whilst continuing to seek to protect the feasible route as indicated on the Proposals Map, fully intends to investigate alternative alignments before it finally adopts a route to take forward to detailed design.
5	Third lane tidal (A4119 to south of Coedely Roundabout)	This will require less widening of the A4119 between Coedely roundabout and the South Wales Fire and Rescue Headquarters roundabout than would be the case with a dual carriageway, Option 1. However, the carriageway width will have to be increased to 10 metres to accommodate a third lane. It is anticipated that the central lane will be used by southbound traffic during the AM peak period and by northbound traffic during the PM peak period. It will have to be determined as to the arrangements for usage of the central lane at other times of the day (if at all) to ensure that this length of the A4119 operated safely.
6	New link from A4119 Ynysmaerdy to Llanharan	This would be a considerably shorter option for A4119/A473 (west) traffic as it would cut out a number of junctions on the A4119 north and east of Talbot Green. It would commence at the South Wales Fire and Rescue Service headquarters roundabout and would pass to the east and south of Llantrisant Forest before meeting the A473 approximately 1.5 kilometres east of Llanharan. As there are no existing roads between these two locations, no upgrading will be possible and all roads will be new.
7	New link - Coedely to Beddau/Gwaun Miskin	This option will improve east/west journeys between Beddau and the Coedely area, including the SSA 14.1 development site. It would cut out a number of junctions on the A4119. It will require the upgrading of minor roads between these two locations. The roads are generally very narrow and the road linking to Coedely roundabout will be steep.
8	Alternative alignment to Stink Pot Hill via Royal Mint and Rhiwfelin	This would commence at the eastern end of the dual carriageway that passes through Llantrisant Business Park. The route would go north following a minor road to the east of the Royal Mint. Between here and Coedely, the road will requiring considerable upgrading as it follows a sinuous alignment. There is a steep approach to Coedely.
9	Improve Talbot Road junction - better access to/from bus station, better throughout, more left turn/right turn capacity	This is a large traffic signal controlled junction with segregated left turn lanes on three of the four arms. No specific improvements have been suggested but they are likely to involve changes to the signal timings as a means to increase capacity.



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10	Improve east/west	This will achieve a similar east/west benefit to Option 7 although
	corridors - new link Royal Mint to Beddau/Gwaun	requiring less upgrading of existing roads and linking to the A4119
		further south. It will pass through the eastern part of Llantrisant Business Park.
11	Miskin Active Travel route adjacent to A4119	There is already a cycle route that can also be used by pedestrians that follows the alignment of part of the former Llantrisant and Taff Vale Junction railway line. Although not adjacent to the A4119, it broadly follows the same corridor but in a more remote location. There are long term plans to extend this through the SSA 14.1 site although a route already exists and is used. There are also plans to extend the route from the Royal Glamorgan Hospital to the roundabout that serves the hospital from the south. South of here and adjacent to the west side of the A4119, short term plans exist to provide a shared use facility to compliment the cycle route that follows Ely Valley Road to the centre of Talbot Green. A route
12	Road bypass (assumed	adjacent to the A4119 will add to this network. This will be the upgrading of the minor road that starts on Lanely
12	as to the west of Ynysmaerdy/Talbot Green)	Road in the western part of Talbot Green. The road continues north, passing through the eastern side of Llantrisant Forest west of Ynysmaerdy to meet Coedely roundabout. This road is generally very narrow with a sinuous alignment throughout. At its northern end, it passes beneath the former railway that is now used as a cycle route (not NCN).
13	Light rail/bus rapid	Although more details of the option do not exist, it is likely that this
	transit/tram/guided bus/heavy rail/Metro link to Tonyrefail/Rhondda	would follow part of the alignment of the former Llantrisant and Taff Vale Junction railway line. It would commence close to Lanelay Road in western Talbot Green and would pass through the eastern side of the SSA 14.1 development site before continuing to Tonyrefail/Rhondda. In places at the southern end, the route has been developed and further north it is a cycle route (not NCN). To be fully integrated with Cardiff Metro, this would have to be provided all the way to Talbot Green from Cardiff.
14	Removal of at-grade	The roundabout on the A4119 north of Talbot Green serves the
	roundabout on the A4119 at the South Wales Fire and Rescue Centre headquarters	South Wales Fire and Rescue Service Centre headquarters is considered unnecessary. Removal would improve the flow of north/south traffic on the A4119. Access could then be via Sterling Avenue to the north east. Horizontal alignment standards will have to be maintained.
15	Park & Ride expansion north of the study area	This is a non-specific proposal having the potential to be attractive to users in the Rhondda Valleys.
16	Flyover/grade separation on A4119	This is a non-specific option but it is assumed that it would involve the grade separation of at least one junction on the A4119. The existing traffic signal junction in Talbot Green would be the most likely candidate. This would improve flow on the A4119 although the impact further north is not known.
17	Platooning traffic	This is a non-specific option. It involves a group of vehicles that travels in close proximity to each other, nose-to-tail, at normal highway speeds. This could be achieved through traffic signals.
18	Boris Bike Parks with electric bike provision	This is a non-specific option. It involves the setting up of a cycle hub to allow hire bikes to be used within a defined area. The only area in which this might be successful is the large retail development in Talbot Green.
19	Provide priority bus routes/bus lanes	This is a non-specific option. The A4119 is the main north/south road between the M4 and the Rhondda Valleys and as such is used by buses. It is therefore already a priority route. The addition of bus lanes will benefit public transport and could ease congestion in the



		Coedely area although they will require carriageway widening. Such a proposal is planned for the A4119 in the Mwyndy area in relation to a proposed Park & Ride site. RCT also has short-term proposals to upgrade bus stops between Tonypandy and Talbot Green (Cardiff Bus Priority Scheme).
20	Reduction in public transport fares	This could have the effect of transferring car trips to public transport. However, consultation with the bus companies that use the A4119 corridor would be required.
21	Car share lanes	As with bus lanes, car share lanes will require carriageway widened wherever they would be proposed. This would have to be in conjunction with a campaign to promote the benefits of car sharing.
22	Do Minimum	Non-specific low cost improvements. Likely to be maintenance based.

#### **National Policy**

#### One Wales: Connecting the Nation (Wales Transport Strategy, 2008)

The goal of One Wales: Connecting the Nation is, to promote sustainable transport networks that safeguard the environment while strengthening the country's economic and social life.

The Wales Transport Strategy (WTS) identifies a series of high-level outcomes which will need to be achieved in order to help deliver *Connecting the Nation*.

Table 2.5 shows the impact of the long list of options contained in Table 2.4 against the outcomes of the Wales Transport Strategy. These are also shown in Appendix 1.10 in the Impacts Assessment Report.

The key that that has been used when assessing impacts throughout this Strategic Outline Case (WeITAG Stage 1) is shown after each appraisal table.



#### Table 2.5: Options appraised against WTS Outcomes

							W	ales Ti	ranspo	rt Strat	egy O	utcome	s					
		Social				Economy				Environment								
Option No.	Option	mprove access to healthcare	Improve access to education, training and lifelong learning	Improve access to shopping and leisure facilities	Encourage healthy lifestyles	Improve the actual and perceived safety of travel	Improve access to employment opportunities	Improve connectivity within Wales and internationally	Improve the efficient, reliable and sustainable movement of people	Improve the efficient, reliable and sustainable movement of freight	Improve access to visitor attractions	Increase the use of more sustainable materials	Reduce the contribution of transport to greenhouse gas emissions	Adapt to the impacts of climate change	Reduce the contribution of transport to air pollution and other harmful emissions	Improve the impact of transport on the local environment	Improve the impact of transport on our heritage	improve the impact of transport on biodiversity
1	Dual single carriageway A4119 (Stink Pot Hill)	+	+	+	0	0	++	+	= ø +	= 0 +	+	+	+	+	0	-	0	-
2	Park & Ride/Park & Share facility within SSA 14.1 development site	0	0	0	+	+	0	0	0	0	0	0	+	+	+	0	0	0
3	Park & Ride/Park & Share facility within the existing Llantrisant and Pontyclun Golf Course.	0	0	0	+	+	0	0	0	0	0	0	+	+	+	-	0	-
4	Ynysmaerdy to Talbot Green Relief Road (LDP scheme)	+	+	+	0	0	++	+	++	++	+	+	0	0	-		-	
5	Third lane tidal (A4119 to south of Coedely Roundabout)	0	0	0	0	-	+	+	0	0	0	+	-	-	0	-	-	-
6	New link from A4119 Ynysmaerdy to Llanharan	+	+	+	0	-	+	+	++	+	+	+	-	-	-		-	
7	New link - Coedely to Beddau/Gwaun Miskin	+	+	+	0	-	+	+	+	+	+	+	-	-	-		-	
8	Alternative alignment to Stink Pot Hill via Royal Mint and Rhiwfelin	0	0	0	0	-	+	+	+	+	0	+	-	-	-		0	
9	Improve Talbot Road junction - better access to/from bus station, better throughput, more left turn/right turn capacity	+	+	+	0	+	+	0	+	+	+	0	0	0	0	0	0	0
10	Improve east/west corridors - new link Royal Mint to Beddau/Gwaun Miskin	0	0	0	0	-	+	+	+	+	0	+	-	-	-		0	



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11	Active Travel route adjacent to A4119	0	0	0	++ +	+	+	+	0	+	0	0	+	+	+	+	0	0
12	Road bypass (assumed as to the west of Ynysmaerdy/Talbot Green)	0	0	0	0	-	++	+	0	+	0	+	-	-	-		-	
13	Light rail/bus rapid transit/tram/guided bus/heavy rail/Metro link to Tonyrefail/Rhondda	+	+	+	+	+	++	+	+	0	+	0	+	+	+	-	-	
14	Removal of at-grade roundabout on the A4119 at the South Wales Fire and Rescue Centre headquarters	+	+	+	0	+	+	0	+	+	+	0	+	+	0	0	0	0
15	Park & Ride expansion north of the study area	0	0	0	+	+	+	0	0	0	0	0	+	+	+	0	0	0
16	Flyover/grade separation on A4119	+	+	+	0	+	+	+	+	+	+	+	+	+	0	0	0	0
17	Platooning traffic	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
18	Boris Bike Parks with electric bike provision	0	0	0	++	0	0	0	0	0	0	0	+	+	+	+	0	0
19	Improve priority bus routes/bus lanes	+	+	+	+	+	+	0	0	0	+	0	+	+	+	0	0	0
20	Reduction in public transport fares	+	+	+	+	0	+	0	0	0	+	0	0	0	+	0	0	0
21	Car share lanes	0	0	0	+	+	+	0	+	0	0	0	+	+	+	0	0	0
22	Do Minimum	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0

#### Key

Large positive	Moderate positive	Slight positive	Neutral
(+ + +)	(+ +)	(+)	(0)
Slight negative	Moderate negative	Large negative	
(-)	()	()	



## Summary of Appraisal of the Long List of Options against the Wales Transport Strategy (WTS) Outcomes

There are a number of highways based options that, overall, align well to a wide range of WTS outcomes. These are as follows:

Option 1	Dual single carriageway A4119 (Stink Pot Hill);
Option 9	Improve Talbot Road junction;
Option 14	Removal of at-grade roundabout on the A4119 at the South Wales Fire and Rescue Centre headquarters; and
Option 16	Flyover/grade separation on A4119.

Other highways based options do not perform well when measured against environmental outcomes of the WTS.

Of the non-highways based options, Option 11 (Active Travel route adjacent to A4119) performs reasonably well. Options promoting public transport improvements are generally neutral when measured against WTS outcomes.

To aid the choice of a short-list of options to take forward to WeITAG Stage 2: Outline Business Case, the appraisal of options against the main headings of the Wales Transport Strategy has been summarised in tabular form below. This has been carried forward to Table 7.1 in Chapter 7.



Table 2.6: Summary	Table of Options	appraised a	gainst WTS Outcomes
--------------------	------------------	-------------	---------------------

Option No.	Option	Social	Economy	Environment
1	Dual single carriageway A4119 (Stink Pot Hill)	+	+	0
2	Park & Ride/Park & Share facility within SSA 14.1 development site	0	0	+
3	Park & Ride/Park & Share facility within the existing Llantrisant and Pontyclun Golf Course.	0	0	0
4	Ynysmaerdy to Talbot Green Relief Road (LDP scheme)	+	++	-
5	Third lane tidal (A4119 to south of Coedely Roundabout)	0	0	-
6	New link from A4119 Ynysmaerdy to Llanharan	+	+	-
7	New link - Coedely to Beddau/Gwaun Miskin	+	+	-
8	Alternative alignment to Stink Pot Hill via Royal Mint and Rhiwfelin	0	+	-
9	Improve Talbot Road junction - better access to/from bus station, better throughout, more left turn/right turn capacity	+	+	0
10	Improve east/west corridors - new link Royal Mint to Beddau/Gwaun Miskin	0	+	-
11	Active Travel route adjacent to A4119	+	+	+
12	Road bypass (assumed as to the west of Ynysmaerdy/Talbot Green)	0	+	-
13	Light rail/bus rapid transit/tram/guided bus/heavy rail/Metro link to Tonyrefail/Rhondda	+	+	0
14	Removal of at-grade roundabout on the A4119 at the South Wales Fire and Rescue Centre headquarters	+	+	0
15	Park & Ride expansion north of the study area	0	0	0
16	Flyover/grade separation on A4119	+	+	0
17	Platooning traffic	0	0	0
18	Boris Bike Parks with electric bike provision	0	0	+
19	Improve priority bus routes/bus lanes	+	0	+
20	Reduction in public transport fares	+	0	0
21	Car share lanes	0	0	0
22	Do Minimum	0	0	0

Key

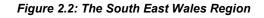
Large positive	Moderate positive	Slight positive	Neutral
(+ + +)	(+ +)	(+)	(0)
Slight negative	Moderate negative	Large negative	
(-)	()	()	

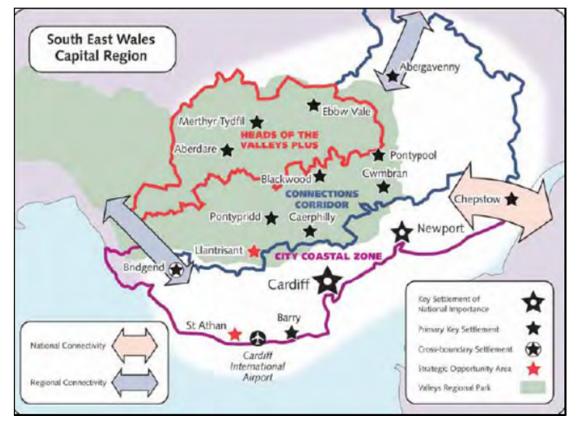
#### Wales Spatial Plan (2008)

The 2008 version of the Wales Spatial Plan provides an update to the document originally adopted in 2004, to bring the documents in line with the Wales Transport Strategy.



The Wales Spatial Plan is the overarching framework for Wales and provides an important context for a range of matters.





The Ely Valley falls into South East Wales (Capital Network), which has the following set vision:

An innovative skilled area offering a high quality of life – international yet distinctly Welsh. It will compete internationally by increasing its global visibility through stronger links between the Valleys and the Coast and with the UK and the rest of Europe, helping to spread prosperity within the area and benefiting other parts of Wales.

There are three priorities for the Capital Network:

- The area will function as a networked city region, on a scale to realise its international potential, its national role and to reduce inequalities;
- A fully integrated high quality transport system is necessary for this to happen. Over the 20 year horizon of the Wales Spatial Plan, all the Area's key settlements should be linked to Cardiff or Newport by suitable high capacity public transport;
- The success of the area relies on Cardiff developing its Capital functions, together with strong and distinctive roles of other towns and cities.

The options have, in varying degrees, the potential in to address the set vision of providing stronger links between the Valleys and the coast by improving access within the Ely Valley and, to a lesser extent, other valley areas. This will assist in spreading prosperity as well as encouraging inward investment into the area.



It is due to the high level nature of the three priorities for the Capital Network that the long list of options have not been appraised individually.

#### National Transport Plan (2010, updated 2011)

The options have, in varying degrees, the potential to be in accordance with the National Transport Plan (NTP). The NTP sits alongside the Local Transport Plan to deliver the aims and outcomes of the Wales Transport Strategy. The NTP sets out Welsh Government interventions to deliver the aspects of transport policy for which it is responsible. It sets out proposals to deliver a transport system as integrated as possible and to ensure the transport system is used efficiently and sustainably. The NTP reflects a balanced approach to the development of the transport network, recognising that it must continue to support economic growth and promote social inclusion, whilst playing its full part in tackling climate change.

It is due to the high level nature of the aims of the NTP that the options comprising the long list have not been appraised individually.

#### Well-being of Future Generations (Wales) Act 2015

The Well-being of Future Generations (Wales) Act is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals:

- 1. A globally responsible Wales;
- 2. A Wales of vibrant culture and thriving Welsh Language;
- 3. A Wales of cohesive Communities;
- 4. A more equal Wales;
- 5. A healthier Wales;
- 6. A resilient Wales;
- 7. A prosperous Wales.

Table 2.7 shows the impact of the long list of options against the goals of the Well-Being of Future Generations (Wales) Act 2015. These are also shown in Appendix 1.11 in the Impacts Assessment Report.



Option No.	Option	A globally responsible Wales	A Wales of vibrant culture and thriving	A Wales of cohesive communities	A more equal Wales	A healthier Wales	A resilient Wales	A prosperous Wales	Overall Summary
1	Dual single carriageway A4119 (Stink Pot Hill)	++	+	+	+	0	+	++	++
2	Park & Ride/Park & Share facility within SSA 14.1 development site	+	0	0	+	+	+	0	+
3	Park & Ride/Park & Share facility within the existing Llantrisant and Pontyclun Golf Course.	+	0	0	+	+	+	0	+
4	Ynysmaerdy to Talbot Green Relief Road (LDP scheme)	0	0	+	0	0	+	+	0
5	Third lane tidal (A4119 to south of Coedely Roundabout)	+	+	+	0	0	+	+	+
6	New link from A4119 Ynysmaerdy to Llanharan	-	0	-	0	0	+	+	0
7	New link - Coedely to Beddau/Gwaun Miskin	-	0	-	0	0	+	0	0
8	Alternative alignment to Stink Pot Hill via Royal Mint and Rhiwfelin	-	0	-	0	0	+	0	0
9	Improve Talbot Road junction - better access to/from bus station, better throughout, more left turn/right turn capacity	+	0	0	0	0	+	+	0
10	Improve east/west corridors - new link Royal Mint to Beddau/Gwaun Miskin	-	0	-	0	0	0	0	0
11	Active Travel route adjacent to A4119	++	+	+	++	++	+	+	++
12	Road bypass (assumed as to the west of Ynysmaerdy/Talbot Green)		0	-	0	0	+	+	0
13	Light rail/bus rapid transit/tram/guided bus/heavy rail/Metro link to Tonyrefail/Rhondda	++	+	+	+	+	+	+	+
14	Removal of at-grade roundabout on the A4119 at the South Wales Fire and Rescue Centre headquarters	-	0	0	0	0	0	0	0
15	Park & Ride expansion north of the study area	+	0	0	+	+	+	+	+
16	Flyover/grade separation on A4119	+	0	0	0	0	+	0	0
17	Platooning traffic	0	0	0	0	0	0	0	0
18	Boris Bike Parks with electric bike provision	+	0	0	+	++	+	+	+
19	Provide priority bus routes/bus lanes	+	0	+	+	0	+	+	+
20	Reduction in public transport fares	0	+	+	+	0	+	0	+
21	Car share lanes	+	0	+	+	0	+	+	+
22	Do Minimum	0	0	0	0	0	0	0	0



Key

Large positive	Moderate positive	Slight positive	Neutral
(+ + +)	(+ +)	(+)	(0)
Slight negative (-)	Moderate negative	Large negative	

## Summary of Appraisal of the Long List of Options against the Well-Being of Future Generations (Wales) Act 2015 Goals

The only highways based option that aligns well with the majority of the goals in the WBOFGA is Option 1, dualling of the single carriageway A4119 (Stink Pot Hill). Others do reasonably well against some of them but are neutral against many others.

Of the non-highways based options, Option 11 (Active Travel Route adjacent to A4119) performs very well with Option 13 (the light rail/bus rapid transit link to Tonyrefail/Rhondda) performing reasonably well. Public transport improvements relate reasonable well to many of the goals.

#### The Active Travel (Wales) Act 2013

The Active Travel (Wales) Act 2013 makes it a requirement of local authorities in Wales to map and plan for suitable routes for active travel, and to build and improve their infrastructure for walking and cycling every year. Rhondda Cynon Taf County Borough Council has mapped its existing network as well as publishing plans of proposals. In the Coedely area, there are long term plans to extend the existing walking and cycling route from Ynysmaerdy through the SSA 14.1 site towards Tonyrefail. There is a clear link between these proposals and Option 11 of the long list of options.

#### **Regional Policy**

#### The South East Wales Valleys Local Transport Plan (2015)

The South East Wales Valleys Local Transport Plan, which includes the Rhondda Cynon Taf area, has been formally approved by the Welsh Government. It is a comprehensive plan, covering the period 2015 - 2020 and builds upon the success of the previous Sewta Regional Transport Plan. The plan sets out the thinking on the area's future transport needs, ways of increasing the transport choice for local residents and ways of improving their access to jobs, education, healthcare and other services.

The only reference to a transport scheme in the more general Coedely area is the A4119 – A473 Ynysmaerdy to Talbot Green Relief Road. The description of this is as follows:

Construction of an alternative route for a significant volume of through traffic that currently travels along the A4119, between the Upper Ely Valley and Talbot Green town centre.

The new road alignment would start at the roundabout at the end of the A4119 at Ynysmaerdy, crossing the River Ely and following the route of the old Coed Ely railway line towards Talbot Green.



The scheme has been identified as one of the medium and long-term term aspirations to 2030. It is also described as having local significance with potential funding from the Community infrastructure Levy and Welsh Government Local Transport Fund sources.

Although this is the only highway scheme listed in the Local Transport Plan for the Coedely/northern Talbot Green area, which could address particular problems as listed above, it is considered that it will not fully address the problems in the Coedely area.

There is one Active Travel/Community Route proposed in the Local Transport Plan that is located in the Coedely area. This is the short term plan for the Pontypridd to Tonyrefail Community Route via Church Village and Llantrisant (Route from the University of South Wales, Treforest to Llantrisant). Although largely complete there are significant gaps, including Thomastown to Coedely. This section is also outlined under the Active Travel (Wales) Act 2015 above but is listed as a long term proposal.

The improvement of public transport also features in the Local Transport Plan. This is in terms of network coverage, quality, and integration (with other modes). There are short-term proposals to upgrade bus stops between Tonypandy and Talbot Green (Cardiff Bus Priority Scheme).

#### Local Policy

#### Rhondda Cynon Taf Local Development Plan (up to 2021)

The Rhondda Cynon Taf Local Development Plan, was adopted in March 2011. Coedely is a settlement within the Southern Strategy Area. Other than this, the only references to the area are in relation to the proposed SSA 14.1 development site/employment allocation, and a proposed 150 dwelling development site at Gwern Heulog between Tonyrefail and Coedely. The description of both sites is in para 2.1: The Case for Change, under the Local Development Plan.

The only highway scheme in the general Coedely area that is referenced in the LDP is the Ynysmaerdy to Talbot Green Relief Road, which is described in Table 2.4. However, it is considered that it will not address the identified problems in the Coedely area.

The term Active Travel does not feature in the RCT Local Development Plan due its publication prior to the Active Travel (Wales) Act in 2015. However, even though walking and cycling feature throughout the document, there are no specific proposals mentioned within the general Coedely area.

Public transport (bus and rail) features throughout the LDP with statements relating to its improvement through the area. However, there are no specific proposals within the general Coedely area.

#### The Way Ahead: Rhondda Cynon Taf Corporate Plan 2016 - 2020

The Corporate Plan sets out the way forward for RCT CBC until 2020. One of the focuses of the plan is to secure jobs and investment into the area, of which improved transport networks and taking advantage of the City Deal is seen as crucial. Although there is no specific mention of transport schemes in the Coedely area, any proposals will form an important part of transport network improvements to aid in economic prosperity.



The vision of the plan is *For a County Borough that has high aspirations, is confident and promotes opportunity for all.* Transport proposals will promote opportunities for all by providing improved access and connectivity throughout the Ely Valley.

A particular focus of the plan is to build a sustainable County Borough. To do this the plan states that there will be a focus on supporting initiatives that stimulate economic growth and create jobs in Rhondda Cynon Taf. Improvements to transport infrastructure such as have been developed as part of the Strategic Outline Case process will stimulate economic growth and therefore support the Corporate Plan.

By addressing traffic congestion, transport infrastructure improvements will also help to achieve one of the direct commitments made in the Plan that *Rhondda Cynon Taf's local environment will* be clean and attractive, with well-maintained roads and pavements and flowing traffic.

Although there are no proposed interventions included in the Corporate Plan that will address the above issues, dualling of the A4119 to the south of Coedely is well placed to do this.

## 2.5 Objectives for Intervention

A long list of objectives against which transport options will be appraised was one of the outcomes of the Stakeholders' Workshop. This is shown in Appendix 1.4 in the Impacts Assessment Report. Appendix 1.5 is a short-list of objectives following their grouping into themes, and Appendix 1.6 is a refined short-list of six objectives. They are shown below and have been renamed Traffic Planning Objectives (TPOs) and relate to a future rather than a present day scenario. In some cases, they have benefited from additional details.

Although all the TPOs are important in their own way, in order that they align with the problems, opportunities and constraints that are shown in Appendix 1.4 of the Impacts Assessment Report, which emerged from the Stakeholders' Workshop, they have been ranked in importance. They are shown below.

- TPO1: To improve highway journey times on the north/south A4119 corridor and improve access to the M4.
- TPO2: To improve the economic and employment opportunities in the Ely Valley and the Rhondda, and provide employment and social benefits.
- TPO3: To improve Active Travel routes along the north/south A4119 corridor with the aim of improving the health and well-being of the local community.
- TPO4: To improve environmental conditions, including air quality and noise and to minimise the overall impact on the environment within the north/south A4119 corridor.
- TPO5: To improve the patronage of public transport and improve public transport reliability within the north/south A4119 corridor.
- TPO6 To improve safety and reduce the number of collisions and KSIs on the A4119 between Talbot Green and Coedely.



Although Transport Planning Objectives should ultimately be SMART (Specific, Measureable, Achievable, Realistic, and Time-based), it is considered that at this WeITAG Stage 1, it will be difficult to apply specifics to them. That is not to say that it cannot be done as most, if not all the TPOs lend themselves to this. It is recommended that in order to appraise the short-list of options at WeITAG Stage 2, the TPOs are made SMART. This will be based on the more detailed appraisal work that will inform this stage.

Table 2.8 shows how the options in the long list (Table 2.4) address the Transport Planning Objectives. These are also shown in Appendix 1.12 in the Impacts Assessment Report.

Option No.	Option	TP01	TPO2	TPO3	TPO4	TPO5	TPO6
1	Dual single carriageway A4119 (Stink Pot Hill)	+++	+++	0	+	+	+
2	Park & Ride/Park & Share facility within SSA 14.1 development site	0	0	0	+	+	0
3	Park & Ride/Park & Share facility within the existing Llantrisant and Pontyclun Golf Course.	0	0	0	+	+	0
4	Ynysmaerdy to Talbot Green Relief Road (LDP scheme)	++	+ +	0	-	+	+
5	Third lane tidal (A4119 to south of Coedely Roundabout)	+	+	+	+	0	0
6	New link from A4119 Ynysmaerdy to Llanharan	+ +	+	0	++	+	+
7	New link - Coedely to Beddau/Gwaun Miskin	+	+	0	+	0	+
8	Alternative alignment to Stink Pot Hill via Royal Mint and Rhiwfelin	+	+	0	+	0	+
9	Improve Talbot Road junction - better access to/from bus station, better throughput, more left turn/right turn capacity	+	+	0	+	+	+
10	Improve east/west corridors - new link Royal Mint to Beddau/Gwaun Miskin	+	+	0	+	0	+
11	Active Travel route adjacent to A4119	0	0	++	+	0	0
12	Road bypass (assumed as to the west of Ynysmaerdy/Talbot Green)	+	+	+		+	+
13	Light rail/bus rapid transit/tram/guided bus/heavy rail/Metro link to Tonyrefail/Rhondda	0	0	0	+	+	0
14	Removal of at-grade roundabout on the A4119 at the South Wales Fire and Rescue Centre headquarters	+	+	0	+	+	+
15	Park & Ride expansion north of the study area	0	0	0	+	+	0
16	Flyover/grade separation on A4119	+	+	0	+	+	+
17	Platooning traffic	0	0	0	+	0	0
18	Boris Bike Parks with electric bike provision	0	0	++	+	0	0
19	Improve priority bus routes/bus lanes	0	0	0	+	+	0
20	Reduction in public transport fares	0	0	+	0	+	0
21	Car share lanes	0	0	0	+	0	0
22	Do Minimum	0	0	0	0	0	0



Key

Large positive	Moderate positive	Slight positive	Neutral
(+ + +)	(+ +)	(+)	(0)
Slight negative (-)	Moderate negative ()	Large negative ()	

## Summary of Appraisal of the Long List of Options against the Transport Planning Objectives (TPOs)

The option to dual the A4119 to the south of Coedely (Option 1) aligns well with the majority of the Transport Planning Objectives. There are no other options (highways based or otherwise) that are as close to Option 1 in this respect. However, it should be noted that Option 4, the Ynysmaerdy to Talbot Green Relief Road, is the only actual new highway proposal in the area and as such does align well with some of the TPOs. Options that promote non-car use (Active Travel and public transport) will never meet such a range of objectives, but in relation to some, they have some benefits such as Options 11, 13, 15, 18, 19, and 20.

## 2.6 Summary of the Strategic Case

Many of the problems raised in the Stakeholders' Workshop, and included in the Impacts Assessment Report as Appendix 1.3 are related to Transport, Development and Access, Employment, Environment, and Active Travel, which are discussed in the above sub sections of this report. It is likely that most, if not all of these, will continue into the future if no transport intervention is provided.

This presents a clear indication that there will be considerable benefits to be gained through a transport intervention in the Coedely area and therefore a strong strategic case exists. Depending of what this intervention will ultimately be, it will benefit the transport network, both locally and more widely and greatly improve access to the identified local development area to the west of the A4119 at Coedely. This will, in turn, benefit employment prospects.

In environmental terms, a transport intervention may give little or no benefit to the local environment and could have a considerable disbenefit although this will ultimately depend upon the options that are taken forward for further appraisal. Options have to be balanced against the possible negative impacts that will result.

Although public transport may not directly benefit from a transport intervention unless it was actually focused on this mode, benefits could be gained through more reliable and frequent services. By the same token, there could be benefits to Active Travel through the ability to provide additional, and safer facilities in the future.

In terms of the performance of the options in the long list (Table 3.2) against the Wales Transport Strategy, Option 1 (dualling of the A4119 to the south of Coedely) aligns with a wide range of outcomes. Road based options based on the existing A4119, such as 9, 14, and 16 are likely to perform reasonably well strategically against some outcomes but against others, will be neutral. Options that promote new roads perform poorly in environmental terms. Non-road based options such as sustainable transport and public transport, align reasonably well against some of the outcomes.



Against the Well-being of Future Generations (Wales) Act 2015, Option 1 aligns with the majority all of the goals in some way with other road based options doing this less so. As with the Wales Transport Strategy, the non-road based options that promote public transport and walking and cycling generally perform well, particularly Option 11 (Active Travel Route adjacent to the A4119), Option 13 (Light rail/bus rapid transit), and 18 (Boris Bike Parks with electric bike provision).

In terms of the South East Wales Valleys Local Transport Plan and the Rhondda Cynon Taf Local Development Plan, there are no highway schemes specific to the Coedely area with only Option 4 (the Ynysmaerdy to Talbot Green Relief Road, the LDP scheme) being in the general area. However, this option will not address the identified problems in the Coedely area. There are Active Travel and public transport schemes in the LTP and although they will offer improved transport choice, they will not address the main problems. There are no transport proposals included in the RCT Corporate Plan.

Although the Transport Planning Objectives that have been developed are generally wide ranging, this is important as they are able to consider a range of topics that a transport intervention should be measured against. However, to align with the main identified issues that have been identified, the TPOs have been ranked. It is due to this that Option 1 (dualling of the A4119) aligns well to the majority. Other non-road based options also align well with a number of TPOs but not so well with others.

The Do Minimum scenario (Option 21) has a generally neutral impact on the WTS outcomes, the WBOFGA goals, and the TPOs.

The assessments summarised above have been carried forward to an overall assessment, Table 7.1 in Chapter 7. This also contains summarised information from the Transport and Delivery Cases (Chapters 3 and 4 respectively).



## 3. The Transport Case

## 3.1 Introduction

No design or appraisal work for ways of improving transport in the Coedely area has been undertaken in the past. However, a traffic assessment has been undertaken of Coedely roundabout and the single carriageway A4119 south to the South Wales Fire and Rescue Centre headquarters. This is included as Appendix 1.1 in the Impacts Assessment Report.

It should be noted that both the South Wales Valleys Local Transport Plan and the Rhondda Cynon Taf Local Development Plan contain references to the Ynysmaerdy to Talbot Green Relief Road, which is described in Table 2.4 in Chapter 2. However, this proposal is not close to Coedely and has never been considered in the past as a means to improve the traffic situation on this part of the A4119. Furthermore, no design or appraisal work has been undertaken.

This Transport Case provides an initial assessment of the expected impacts of the long list of options for tackling the problems that have been identified. It is based on currently available evidence.

### 3.2 Economy

None of the options that comprise the long list have had the benefit of cost estimates carried out and therefore no economic assessment has been undertaken.

### 3.3 Environment

Due to the Strategic Outline Case stage of the study into transport interventions in the Coedely area, appraisal of options has been based on high level environmental information only. This has been taken from readily accessible sources such as the Rhondda Cynon Taf Local Development Plan, internet resources, and local knowledge.

#### 3.4 Social

As with the appraisal of options against environmental topics, the social implications have been high level and information has been taken from similar resources.

### 3.5 High Level Appraisal Summary Table (AST)

A high level appraisal has been undertaken on the long list of options that have been prepared for Coedely. This has been based on the level high information that is available from the sources as outlined above. The appraisal is Table 3.1. The appraisal is also shown in Appendix 1.13 of the Impacts Assessment Report. The options that can be defined are shown on Figure 3.2 in diagrammatic form.

Where impacts have not been analysed, for whatever reason, NYA has been added to the table. All impacts that have been assessed have been given a preliminary rating. All ratings will have the potential to be revised at WeITAG Stage 2, the Outline Business Case.



#### Table 3.1: High Level Appraisal of Options (Appraisal Summary Table)

	Qualitative Assessment																					
	Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt. 5	Opt. 6	Opt. 7	Opt. 8	Opt. 9	Opt. 10	Opt. 11	Opt. 12	Opt. 13	Opt. 14	Opt. 16	Opt. 17	Opt. 18	Opt. 19	Opt. 18	Opt. 20	Opt. 21	Opt. 22 (Do
Criteria																						Min.)
Economy																						
Business Users & Reliability Impact	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA
Regeneration	++	0	0	+	+	0	+	+	0	+	0	+	+	0	0	0	0	0	0	0	0	0
Wider Impacts	++	0	-	+	+	0	+	+	+	+	0	+	+	0	0	0	0	0	0	0	+	0
Environment																						
Noise	0	0	0	+	0	+	+	+	0	+	0	+	-	0	0	0	0	0	0	0	0	0
Air Quality	0	0	0	+	0	+	+	+	0	+	0	+	-	0	0	0	0	0	0	0	0	0
Greenhouse Gases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landscape	0	0	-	-	0				0		0		-	0	0	0	0	0	0	0	0	0
Townscape	0	0	0	-	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0
Historic Landscape	0	0	0	0	0				0		0		0	0	0	0	0	0	0	0	0	0
Biodiversity	-	0	-	-	-				0		0		-	0	0	0	0	0	0	0	0	0
Water Environment	0	0	-	0	0	-	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0
Social																						
Commuting and Other Users	++	+	+	+	+	++	+	+	+	+	+	+	+	0	+	+	+	+	+	++	+	0
Reliability Impact on Commuting and Other Users	++	+	+	-	+	++	+	+	+	+	+	+	-	0	+	+	+	0	+	0	+	0
Physical Activity	0	0	0	0	0	0	0	0	0	0	++ +	0	0	0	0	0	0	++ +	0	+	0	0
Journey Quality	+ +	+	+	++	+	++	++	++	0	++	+	++	++	+	+	0	-	0	+	0	+	0
Accidents	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA
Security	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA
Access to Services	+	0	0	++	+	++	+	+	+	+	0	+	++	0	0	0	0	+	0	+	0	0
Affordability	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA
Severance	0	0	0	-	0				0		0		-	0	0	0	0	0	0	+	0	0
Option Values	+	0	+	+	0	0	+	+	0	+	0	+	+	0	0	0	0	+	0	0	0	0
Public Accounts																						
Cost to Broad Transport Budget	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA
Indirect Tax Revenues	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA	NYA



Kev

,			
Large positive	Moderate positive	Slight positive	Neutral
(+ + +)	(+ +)	(+)	(0)
Slight negative	Moderate negative	Large negative	
(-)	()	()	

## Summary of Appraisal of the Long List of Options against the Criteria of Economy, Environment, Society, and Public Accounts

Option 1, the dualling of the A4119 between Coedely and the South Wales Fire and Rescue Centre headquarters, plus roundabout improvements aligns well with the majority of the main criteria, in particular Regeneration and Wider Impacts (Economic), and Commuting and reliability Impact (Social). Environmental impact may well be fairly neutral. Only Option 6 (a new link between Ynysmaerdy and Llanharan) may provide the same commuting benefits but will likely have a considerable impact of the environment. Some of the other highways based options may have some Economic and varying impacts on the Environmental criteria (benefits and disbenefits). Although Option 4 also has a number of slight benefits.

There are few options that are solely based on sustainable/Active Travel, or public transport. Option 11 (an Active Travel route) will be beneficial in terms of many of the Social sub-criteria whilst avoiding environmental impact. Even though an Active Travel route already exists to the immediate west of the A4119 (along a former railway line), provision of shared use facilities next to the road would be beneficial as well due to its high profile location with natural surveillance. Some of the public transport options will be beneficial to users although they are unlikely to benefit the Economic criteria. A Do Minimum option will be neutral against the three main criteria.

Due to the Strategic Outline Case stage nor requiring economic analyses, no costs have been produced for any of the options.

To aid the choice of a short-list of options to take forward to WeITAG Stage 2: Outline Business Case, the appraisal of options against the criteria of Economy, Environment, Social, and Public Accounts has been summarised in tabular form below. This has been carried forward to Table 7.1 in Chapter 7.



 Table 3.2: Summary Table of Options appraised against Economy, Environment, Social, and Public Accounts (Appraisal Summary Table)

Option No.	Option	Economy	Environment	Social	Public Accounts
1	Dual single carriageway A4119 (Stink Pot Hill)	+ +	0	++	NYA
2	Park & Ride/Park & Share facility within SSA 14.1 development site	0	0	+	NYA
3	Park & Ride/Park & Share facility within the existing Llantrisant and Pontyclun Golf Course.	0	0	+	NYA
4	Ynysmaerdy to Talbot Green Relief Road (LDP scheme)	+	+	+	NYA
5	Third lane tidal (A4119 to south of Coedely Roundabout)	+	0	+	NYA
6	New link from A4119 Ynysmaerdy to Llanharan	0		+	NYA
7	New link - Coedely to Beddau/Gwaun Miskin	+		0	NYA
8	Alternative alignment to Stink Pot Hill via Royal Mint and Rhiwfelin	+		0	NYA
9	Improve Talbot Road junction - better access to/from bus station, better throughout, more left turn/right turn capacity	+	0	0	NYA
10	Improve east/west corridors - new link Royal Mint to Beddau/Gwaun Miskin	+		0	NYA
11	Active Travel route adjacent to A4119	0	0	+	NYA
12	Road bypass (assumed as to the west of Ynysmaerdy/Talbot Green)	+		0	NYA
13	Light rail/bus rapid transit/tram/guided bus/heavy rail/Metro link to Tonyrefail/Rhondda	+	-	+	NYA
14	Removal of at-grade roundabout on the A4119 at the South Wales Fire and Rescue Centre headquarters	0	0	0	NYA
15	Park & Ride expansion north of the study area	0	0	+	NYA
16	Flyover/grade separation on A4119	0	0	0	NYA
17	Platooning traffic	0	0	0	NYA
18	Boris Bike Parks with electric bike provision	0	0	+	NYA
19	Improve priority bus routes/bus lanes	0	0	+	NYA
20	Reduction in public transport fares	0	0	+	NYA
21	Car share lanes	+	0	+	NYA
22	Do Minimum	0	0	0	NYA

#### Key

Large positive	Moderate positive	Slight positive	Neutral
(+ + +)	(+ +)	(+)	(0)
Slight negative	Moderate negative	Large negative	
(-)	()	()	



Table 3.2 includes a brief description as to how each option might tackle the identified problems and lists any other relevant issues that may have a bearing on their viability. The contents of Table 3.2 is also shown in Appendix 1.14 in the Impacts Assessment Report.

Opt. No.	Option	How the Option will Tackle the Identified Problems	Other Comments	Appra.
1	Dual single carriageway A4119 (Stink Pot Hill)	This option will widen the existing A4119 to a dual carriageway standard, which will require alterations to the two terminal roundabouts. The dualling will increase link capacity and the roundabout improvements will increase the capacity through the terminal junctions. The improvements will reduce queuing and congestion on this part of the A4119 and will also accommodation additional traffic from the SSA 14.1 development.	It is considered that the lack of a dual carriageway all the way north to Coedely roundabout is reducing the attractiveness of the SSA 14.1 to developers.	+++
2	Park & Ride/Park & Share facility within SSA 14.1 development site	A Park & Ride would have the potential to reduce the number of vehicles on the A4119 to the south of Coedely and in turn reduce queuing and congestion. It could be used for sustainable access to the Talbot Green retail area.	Other than B1 and B2 use, there are no definite plans for the SSA 14.1 site.	÷
3	Park & Ride/Park & Share facility within the existing Llantrisant and Pontyclun Golf Course.	This option could fulfil the same purpose as Option 2. However, as it lies to the south of the single carriageway A4119, there will be no reduction in traffic flows and queuing and congestion will not change.	This site was one of those identified as a potential Park & Ride in the A4119 corridor improvement study, 2016.	0
4	Ynysmaerdy to Talbot Green Relief Road (LDP scheme)	The intention of this option has always been to bypass Talbot Green. It will reduce the distance for A4119 to A473 (west) traffic and vice versa. And will reduce traffic flows on Talbot Road. Although it will not directly benefit the single carriageway A4119 to the north of Ynysmaerdy, a reduction in traffic flow further south may give some relief. It will require a considerable detour at its southern end. This option will require alterations to the South Wales Fire and Rescue Centre headquarters roundabout.	This option has been in the RCT LDP for some time.	÷
5	Third lane tidal (A4119 to south of Coedely Roundabout)	The introduction of a third lane will increase capacity of the single carriageway A4119. It will effectively provide a two-lane approach to both terminal roundabouts over a distance required to reduce queuing to an acceptable level. Improvements to the roundabout approaches will also be required. It is likely that this option will have a positive effect on queuing and congestion.	The distance between the roundabouts (1.3 kilometres) will also allow 650 metres of overtaking as well.	++
6	New link from A4119 Ynysmaerdy to Llanharan	This will be not dissimilar to Option 4 but over a greater distance. As a result, it will not benefit the single carriageway A4119 to the north of Ynysmaerdy.	Likely considerable environmental impacts.	0
7	New link - Coedely to Beddau/Gwaun Miskin	This option will benefit access to the SSA 14.1 site from the east, which in turn will benefit access from the south through less traffic on the A4119. This may reduce queuing and congestion on this road and at the terminal roundabouts.	Considerable upgrading of minor roads required.	÷
8	Alternative alignment to Stink	Although this will allow north and southbound traffic to avoid the A4119 to the immediate south of	Considerable upgrading of minor roads required.	+



	Pot Hill via Royal Mint and Rhiwfelin	Coedely, it will be a longer, more tortuous route requiring a diversion to reach it. It will still require improvements to Coedely roundabout.		
9	Improve Talbot Road junction - better access to/from bus station, better throughout, more left turn/right turn capacity	Although it may be possible to improve capacity for some movements, this is likely to disbenefit others. The benefits on the A4119 are unlikely to extend to Coedely.	All movements will have to pass through the junction at grade.	0
10	Improve east/west corridors - new link Royal Mint to Beddau/Gwaun Miskin	This option will improve east/west movements only and avoid traffic having to go south through Llantrisant. Although this may benefit the A4119 between the main roundabout at Ynysmaerdy and Talbot Road junction, it will have no effect further north at Coedely.	East/west traffic will have to pass through an industrial area. Considerable upgrading of minor roads required.	+
11	Active Travel route adjacent to A4119	Although this option is unlikely to address the identified problems on the A4119 and Coedely roundabout, it will give greater sustainable travel choice in this part of the Ely Valley, particularly if it can be linked to the completion of the Llantrisant to Tonyrefail Community Route.	There is already an Active Travel Route that follows a former railway to the immediate west of the A4119.	++
12	Road bypass (assumed as to the west of Ynysmaerdy/Talbot Green)	This option is likely to achieve similar benefits to Option 4 but additionally, it will extend further north to Coedely roundabout thus benefiting the SSA 14.1 development. This will give greater relief to the A4119. It will be a longer, more tortuous route requiring a considerable detour at the southern end to reach it.	Passes through Llantrisant Forest as well as through or close to the Lanelay Hall residential development site.	+
13	Light rail/bus rapid transit/tram/guided bus/heavy rail/Metro link to Tonyrefail/Rhondda	Although a public transport system direct from Talbot Green to the Rhondda will also benefit the SSA 14.1 site, without the Cardiff Metro extending from the Capital to Talbot Green, the benefits will be considerably less.	Largely relies on Cardiff Metro extending to Talbot Green. The status of this is not known.	0
14	Removal of at- grade roundabout on the A4119 at the South Wales Fire and Rescue Centre headquarters	It is considered that the access could be taken from Sterling Drive to the north east. This would improve traffic flow.	Roundabouts provide convenient changes in direction, which may make north/south priority difficult to achieve within current design standards.	0
15	Park & Ride expansion north of the study area	Although this option is non-specific in its location, it is considered that a Park & Ride site further north to serve the Rhondda Valleys could be beneficial. If successful, it could reduce north/south traffic flows on the A4119 in the Coedely area.	Locating a suitable site for a more northerly Park & Ride facility may be difficult given land constraints.	0
16	Flyover/grade separation on A4119	With all the junctions on the A4119 being at-grade, there is direct interaction between north/south and east/west traffic. Grade separation of these movements will benefit all users particularly between Talbot Green and the M4. However, with no east/west routes in the Coedely area, benefits will not be realised.	The A4119 is to be the subject of a corridor study to consider all the junctions south of Tonyrefail.	0
17	Platooning traffic	It is difficult to see how this option would work and even if it could, it is unlikely that it would tackle the identified problems. It may create additional, unforeseen problems.	Would likely require additional input to be able to function.	0



18	Boris Bike Parks with electric bike provision	This is not really an option that could address the identified problems.	This option is more about very localised transport issues.	0
19	Improve priority bus routes/bus lanes	Bus lanes would have to be associated with physically providing an additional lane or fitting additional provision within sections of existing highway. The latter would impact upon vehicle capacity and the benefits are likely to be very small.	The A4119 is already a major north/south bus route through Rhondda Cynon Taf.	0
20	Reduction in public transport fares	It is difficult to see how such an option would address the identified problems on the A4119 at Coedely.	Requires outside involvement (bus operators) and agreement, which is unlikely to happen.	0
21	Car share lanes	Car share lanes have the ability to reduce the number of cars on the road but this relies on a number of factors such as car share campaigns, which are unlikely to result in a large take up of car sharing.	Additional traffic lanes required or a reduction in capacity on existing roads (dual carriageways).	0
22	Do Minimum	Other than ensuring that the A4119 continues to be fit for purpose in maintenance terms, this option will not change the way that the A4119 operates. With no improvements, the situation will deteriorate.	Regular maintenance only.	-

## Summary of Appraisal of the Long List of Options against the Ability to Tackle Identified Problems

A highways based solution is best placed to address the identified problems on the A4119 in the Coedely area. Of these, Option 1 focuses on this completely although others do this to a considerably lesser extent. Although Option 4 will benefit Talbot Green (which is its intention), there may be some wider benefits to the A4119 to the north.

Sustainable travel and public transport improvements will do little to address the identified problems although they too have a part to play in improving travel choices in the Ely Valley,

### 3.6 Summary of the Transport Case

With the main issues being related to Transport, Development and Access, Employment, Environment, and Active Travel, it places a large burden on individual options to address all of these topics. The attractiveness of Option 1 is that it is, in effect, making better use of the existing highway network to solve a problem rather than proposing the building of a completely new road. This lessens its overall impact. It also links directly to the SSA 14.1 development.

Other road based options either benefit east/west routes (7, 8, and 10), north/west routes (6), or consider junction improvements (9, 14, and 16), none of which focus solely on the A4119 in the Coedely area. As a result, they do not tackle full-on the identified problems although there may be some slight benefits with some of the options. Although Option 4 (the Ynysmaerdy to Talbot Green Relief Road – the scheme in the LDP) does consider the A4119, it is more aligned to relieving the centre of Talbot Green, plus it commences at Ynysmaerdy well to the south of Coedely. Any benefits would relate to reduced traffic flows in the Ynysmaerdy area, which could benefit the A4119 further north.



Options linked to public transport will have a role to play in giving more choices to travellers although none of the options are likely to address the identified problems in any meaningful way. Although a number of options are related to local Park & Ride (2 and 3), with a site within the SSA 14.1 development area proposed, sites closer to the M4 corridor are likely to be better placed in this respect. Although Option 15 is well outside the Study Area, it could be beneficial to the Rhondda Valleys. Other than this, a light rail/bus rapid transit system (Option 13) may have potential but it is dependent on the provision of similar infrastructure all the way from Cardiff as part of the Cardiff Metro initiative. There are short-term proposals (within the South East Wales Valleys Local Transport Plan) to upgrade bus stops within the Tonypandy and Talbot Green corridor (Cardiff Bus Priority Scheme) although these are seen as largely beneficial to existing public transport users.

Although few in number, options that promotes sustainable transport and Active Travel (11 and 18), will do little or nothing to benefit the north/south corridor in terms of addressing the main problem of traffic congestion. Option 18, in particular, cannot really be considered a realistic choice. The creation of a longer distance sustainable commuter route is a long term aspiration of Rhondda Cynon Taf CBC and sections already exist and the provision of a formal route through the proposed Coedely development site and continuation to the north will help build a network. However, the addition of facilities adjacent to the A4119 will, due to their high profile position, help promote walking and cycling. Although they could be associated with the existing single carriageway road to the south of Coedely, this could also be additional to the dualling of the A4119 (Option 1).

A Do Minimum option (Option 22) would likely include minor improvements on the A4119 but would not address the identified problems, which would likely worsen over time, particularly with the development of SSA 14.1.



## 4. The Delivery Case

### 4.1 Introduction

The Delivery Case assesses whether a proposal is deliverable. It considers the project planning, governance structure, risk management, communications and stakeholder management, benefits realisation and assurance. However, as the project is currently at Stage 1, the Delivery Case is of a very preliminary nature although it considers the key issues that will affect the selection of options that are taken forward for further investigation at Stage 2. Table 4.1 gives a high level assessment of the likely deliverability of each option. This is also shown, with additional comments in Appendix 1.15 in the Impacts Assessment Report.

To aid the choice of a short-list of options to take forward to WeITAG Stage 2: Outline Business Case, the appraisal of options against the collective headings of Deliverability has been summarised in the column at the far right of Table 4.1. This has been carried forward to Table 7.1 in Chapter 7.

#### Table 4.1: Appraisal of Options against Deliverability

Option Ref.	Option	Feasibility	Affordability	Acceptability	Timescale	Risks	Overall Summary
1	Dual single carriageway A4119 (Stink Pot Hill)	++	++	++	+	+	++
2	Park & Ride/Park & Share facility within SSA 14.1 development site	+ +	+ +	+ +	-	0	+
3	Park & Ride/Park & Share facility within the existing Llantrisant and Pontyclun Golf Course.	-	+	-	-		-
4	Ynysmaerdy to Talbot Green Relief Road (LDP scheme)	-		0			
5	Third lane tidal (A4119 to south of Coedely Roundabout)	+ +	+++	+	++	-	+ +
6	New link from A4119 Ynysmaerdy to Llanharan						
7	New link - Coedely to Beddau/Gwaun Miskin		-				
8	Alternative alignment to Stink Pot Hill via Royal Mint and Rhiwfelin		-				
9	Improve Talbot Road junction - better access to/from bus station, better throughput, more left turn/right turn capacity	+	+++	+	+	++	++
10	Improve east/west corridors - new link Royal Mint to Beddau/Gwaun Miskin		+		-		
11	Active Travel route adjacent to A4119	++	+++	+	++	++	++
12	Road bypass (assumed as to the west of Ynysmaerdy/Talbot Green)		-				
13	Light rail/bus rapid transit/tram/guided bus/heavy rail/Metro link to Tonyrefail/Rhondda						
14	Removal of at-grade roundabout on the A4119 at the South Wales Fire and Rescue Centre headquarters		0	0	0	0	0
15	Park & Ride expansion north of the study area	-	+	++	0	0	0
16	Flyover/grade separation on A4119						



17	Platooning traffic	0	0	-	+	0	0
18	Boris Bike Parks with electric bike provision		+		0	-	-
19	Improve priority bus routes/bus lanes	-	0	0	0		-
20	Reduction in public transport fares	0	0	+	-	0	0
21	Car share lanes	-	0	-	-		-
22	Do Minimum	0	0	0	0	0	0

Key

Large positive	Moderate positive	Slight positive	Neutral
(+ + +)	(+ +)	(+)	(0)
Slight negative (-)	Moderate negative	Large negative ()	

### 4.2 Scheme Development and Legal Powers

A Review Group has been appointed comprising officers of Rhondda Cynon Taf County Borough Council. Its role is to review the contents of this Stage 1 report and decide on the actions to be taken prior to the commencement of the Stage 2 WeITAG: Outline Business Case. The members of the Review Group are as follows:

- 1. Jessica Lonergan
- 2. Adrian Morgan
- 3. Rebecca Smith
- 4. Tim Phillips
- 5. Souren Zeinali
- 6. Charlie Nelson
- 7. Dave Afia
- 8. Andrew Stone

The decisions made by the Review Group and the reasons behind these are reported in Chapter 7: Recommendations for WeITAG Stage 2.

This is a WeITAG Stage 1: Strategic Outline Case and is an early-stage appraisal. It has considered a long list of options, which have the ability to address the identified issues in a variety of ways. Therefore, the following should be noted:

- No legislative processes relating to interventions in the transport network in the Coedely area have been carried out to date.
- No legislative processes have to be completed at this Strategic Outline Case stage.
- A governance structure has yet to be put in place.
- A programme exists to take the project through to the end of WeITAG Stage 1 (the current stage). Following the selection of a short-list of options, a programme exists to take the project through to the end of WeITAG Stage 2.
- No consultation has been undertaken on proposals for a transport intervention in the Coedely area. No consultations are proposed at the present time.
- No risk management strategy has been set up.



- A benefits realisation and monitoring and Evaluation Plan has not been produced.
- A Risk Register has not been produced due to the large number of options that exist for a transport intervention in the Coedely area. However, depending upon the options that are considered at Stage 2, risks could include the following:
  - Availability of funding;
  - Change in political governance;
  - Public Inquiry;
  - Statutory Undertakers;
  - Ground investigation; and
  - Local opposition;
  - Impact on the environment.

No Equality Impact Assessment has been undertaken. It is assumed that such an assessment will be undertaken by Rhondda Cynon Taf CBC at an appropriate time in option development.

# 4.3 Recommendations for Methods to Improve the Evidence Base in the Stage 2 Work

Recommendations as to the methods to be used to improve the evidence base in the Stage 2 work are as follows:

- Comprehensive traffic surveys at key locations in the local and wider highway network;
- Local observations of problems to confirm their impact on the local communities;
- Desk-top study into the ecological and other impacts that will be associated with the shortlist of options;
- Preliminary cost estimates;
- Preliminary economic assessment;
- Consideration of other similar studies; and
- Computer modelling.

It should be noted that there are two studies that may have a part to play in improving the evidence base for the Stage 2 work. Both relate to the A4119 and are as follows:

**A4119 Corridor Assessment:** This will be an assessment of the capacity of the A4119 in the Coedely area to accommodate potential future traffic demand from existing and proposed developments. The Study Area will extend from immediately north of the M4 at Junction 34, to the A4119/A4233 roundabout at Tonyrefail. As well as the housing allocations that are contained within the Local Development Plan for Coedely and Tonyrefail, there are large mixed use strategic sites in Talbot Green as well as the employment site at Coedely (SSA 14.1).

Specifically, the study will assess the demand and capacity of junctions along the A4119 corridor within the Study Area. This will include the terminal roundabouts at the northern and southern ends of the single carriageway A4119 to the south of Coedely. It is due to this that the A4119



Corridor Assessment is linked to this Coedely study. As a result, the corridor assessment has the potential to inform the Stage 2 work and, to a lesser extent, vice versa.

**A4119 Castell Mynach Business Case Proposal:** This will be a Business Case for an improvement on the A4119 to the south of Talbot Green. This will include the junction with the B4264 at Mwyndy (Corner Park Garage) and the junction at the continuation of the A4119 at the Castell Mynach public house to the south. It is proposed that the work will require a Strategic Outline Case (Stage 1), An Outline Business Case (Stage 2), and a Full Business Case (Stage 3). A Stage 0, Determination of the Strategic Context may also be required. It is understood that the Business Case is to be expanded to include proposals for a Park & Ride site adjacent to a disused quarry on the northern side of the B4264 at Mwyndy.

#### 4.4 Summary of the Delivery Case

The project will have to go through a number of statutory and other stages as it progresses through the Stage 2 and Stage 3 WeITAG processes. Some of these have been outlined in the Delivery Case as well as other recommendations for further work that needs to be taken into account. It also list the composition of the Review Group for the project.



## 5. The Financial Case

#### 5.1 Introduction

The Financial Case is intended to state the affordability of the proposal, its funding arrangements and technical accounting issues (value for money is scrutinised in the Transport Case). However, due to the very early stage of option development, no costs have been attributed to any of the options and a financial case cannot be prepared. This will be a function of the Stage 2 work.

### 5.2 Potential Funding

Potential funding sources for a transport intervention in the Coedely area are as follows:

- RCT's Capital Funding;
- Developer contributions through Section 106 agreements;
- Welsh Government Grant (LTF [Local Transport Fund], LTN [Local Transport Network]);
- Prudential Borrowing; and
- City Deal Funding.

### 5.3 Summary of the Financial Case

It has only been possible, at Stage 1, to identify potential funding sources for a transport intervention in the Coedely area. More information on this and associated costs will form the Stage 2 work.



## 6. The Commercial Case

#### 6.1 Introduction

Due to the very preliminary nature of option investigation, it cannot be stated as to what methods may be available to procure a preferred option (once selected at the end of WeITAG Stage 2: Outline Business Case), nor the length of a contract. This information will become clearer during the Stage 2 work where the short-list of options will be considered in more detail than has been the case at Stage 1.

### 6.2 Summary of the Commercial Case

No information on the Commercial Case for a transport intervention in the Coedely area is available as part of this Stage 1 work.



## 7. Recommendations for WeITAG Stage 2

#### 7.1 Introduction

The recommendations of the options to take forward to WeITAG Stage 2 for more detailed appraisal in the Outline Business Case has been based on the following:

- Their ability to solve the problem;
- Their ability to meet the objectives set;
- Their short and longer term impacts;
- Their deliverability; and
- Their robustness to uncertainty.

This WeITAG Stage 1 report has assessed a long list of problems in a variety of ways, ranging from their performance against high level national outcomes and goals, regional and local policies, specific Transport Planning Objectives, Economic, Environmental and Social criteria, the ability to solve identified problems, and their deliverability.

Although all the individual assessments can be aggregated together, this will not present a true reflection of the options that are best placed to be taken forward to Stage 2 and a more qualitative approach is considered more appropriate.

#### 7.2 Summary and Recommendations

Throughout the Strategic Case, Transport Case, and Delivery Case, appraisal tables are included, some of which have had their results summarised whilst some, which are considered more important (such as TPOs), have not. The table below (Table 7.1), combines all the appraisals, which gives a convenient way of determining which options will best address the problems that have been identified.

It should be noted that in Table 7.1 the Outcomes of the Wales Transport Strategy have similar headings to those under the Appraisal Summary Table. However, they are taken from different Cases. The WTS is from the Strategy Case and therefore very high level, whilst the AST is based more on local factors, where these are known.



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#### Commercial in Confidence 7/ Recommendations for WeITAG Stage 2

#### Table 7.1: Summary of Appraisal of Options against the Strategic Case, Transport Case, and Delivery Case

Option Ref.		Wales Transport Strategy (Outcomes)			Strategy			Strategy			WBOFGA (Goals)		Transpo	ort Plan	ning Ob	ojectives	5	Appra	aisal Su	mmary	Table	Tackling Problems	/ery
Optio	Option	Soc.	Econ.	Env.		TPO1	TPO2	TPO3	TPO4	TPO5	TPO6	Econ	Env.	Soc.	Pub. Acc.	Tack Prob	Delivery						
1	Dual single carriageway A4119 (Stink Pot Hill)	+	+	0	++	+++	+++	0	+	+	+	++	0	++	NYA	+ + +	++						
2	Park & Ride/Park & Share facility within SSA 14.1 development site	0	0	+	+	0	0	0	+	+	0	0	0	+	NYA	+	+						
3	Park & Ride/Park & Share facility within the existing Llantrisant and Pontyclun Golf Course.	0	0	0	+	0	0	0	+	+	0	0	-	+	NYA	0	-						
4	Ynysmaerdy to Talbot Green Relief Road (LDP scheme)	+	++	-	0	+ +	+ +	0	-	+	+	+	0	-	NYA	+							
5	Third lane tidal (A4119 to south of Coedely Roundabout)	0	0	-	+	+	+	+	+	0	0	+	0	+	NYA	++	+ +						
6	New link from A4119 Ynysmaerdy to Llanharan	+	+	-	0	+ +	+	0	++	+	+	0		+ +	NYA	0							
7	New link - Coedely to Beddau/Gwaun Miskin	+	+	-	0	+	+	0	+	0	+	+		+	NYA	+							
8	Alternative alignment to Stink Pot Hill via Royal Mint and Rhiwfelin	0	+	-	0	+	+	0	+	0	+	+		+	NYA	+							
9	Improve Talbot Road junction - better access to/from bus station, better throughput, more left turn/right turn capacity	+	+	0	0	+	+	0	+	+	+	+	0	0	NYA	0	+ +						
10	Improve east/west corridors - new link Royal Mint to Beddau/Gwaun Miskin	0	+	-	0	+	+	0	+	0	+	+		+	NYA	+							
11	Active Travel route adjacent to A4119	+	+	+	++	0	0	++	+	0	0	0	0	+	NYA	++	+ +						
12	Road bypass (assumed as to the west of Ynysmaerdy/Talbot Green)	0	+	-	0	+	+	+		+	+	+		+	NYA	+							
13	Light rail/bus rapid transit/tram/guided bus/heavy rail/Metro link to Tonyrefail/Rhondda	+	+	0	+	0	0	0	+	+	0	+	-	0	NYA	0							
14	Removal of at-grade roundabout on the A4119 at the South Wales Fire and Rescue Centre headquarters	+	+	0	0	+	+	0	+	+	+	0	0	0	NYA	0	0						



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#### Commercial in Confidence 7/ Recommendations for WeITAG Stage 2

15	Park & Ride expansion north of the study area	0	0	0	+	0	0	0	+	+	0	0	0	+	NYA	0	0
16	Flyover/grade separation on A4119	+	+	0	0	+	+	0	+	+	+	0	0	0	NYA	0	
17	Platooning traffic	0	0	0	0	0	0	0	+	0	0	0	0	0	NYA	0	0
18	Boris Bike Parks with electric bike provision	0	0	+	+	0	0	++	+	0	0	0	0	+	NYA	0	-
19	Improve priority bus routes/bus lanes	+	0	+	+	0	0	0	+	+	0	0	0	+	NYA	0	-
20	Reduction in public transport fares	+	0	0	+	0	0	+	0	+	0	0	0	+	NYA	0	0
21	Car share lanes	0	0	0	+	0	0	0	+	0	0	+	0	+	NYA	0	-
22	Do Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0	NYA	-	0

#### Key

Large positive	Moderate positive	Slight positive	Neutral
(+ + +)	(+ +)	(+)	(0)
Slight negative (-)	Moderate negative ()	Large negative ()	



Due to their high level nature, the national outcomes and goals are met by a number of options in some way although there are considerable disbenefits associated with many of the road based solutions. However, it is considered that Option 1, the dualling of the A4119 to the south of Coedely stands out as the one that meets the outcomes and goals in the strongest way strategically.

There is one public transport option that meets many of the outcomes and goals at a national level, which is a light rail/bus rapid transit system. However, this would be very much dependent upon completion of the Cardiff Metro to Talbot Green as it is unlikely to be achievable on its own. Ultimately, together they could offer a real alternative transport system between the Rhondda area and the capital.

Although there are few options that relate to Active Travel, there is already part of a network in place between Talbot Green and Coedely. Proposals exist to extend this, which would fit it with proposals adjacent to the A4119 with the ability to link up with other facilities. This would be in addition to and parallel with the route to the immediate west that follows a former railway. Although it is likely that facilities adjacent to the A4119 could be easily linked to the proposed Active Travel route through the SSA 14.1 site, it is less obvious how this could be achieved in the vicinity of the South Wales Fire and Rescue Service headquarters roundabout. This is because there are no other facilities in close proximity to the A4119 and the route along the railway lies at a lower elevation.

At a regional and local level, the more specific nature of policies favour particular solutions to address particular problems. In the case of the South East Wales Valleys Local Transport Plan and the Rhondda Cynon Taf Local Development Plan, the only proposed highway scheme in the area (the A4119 – A473 Ynysmaerdy to Talbot Green Relief Road – Option 4) will not directly address the identified traffic problems in the Coedely area due to its location further south. However, it is considered that this scheme will have a role to play in improving the local highway network and giving relief to built-up areas and could form part of the A4119 Corridor Study that will be undertaken in parallel with the WeITAG Stage 2: Outline Business Case for Coedely.

Only the Local Transport Plan features Active Travel schemes, and the Pontypridd to Tonyrefail Community Route, is the only one that is proposed in the Coedely area. It is the same proposal as is outlined above and already partially exists. Completion will give greater travel choices between these two locations. The provision of an Active Travel route (Option 11) alongside an improved A4119 (Option 1) will be an added benefit.

In both the regional and local documents, the promotion of public transport improvements is included, which suggests that it has a role to play in improving transport in the Ely Valley. The improvement of bus stops within this corridor is already proposed in the South East Wales Valleys Local Transport Plan (2015) although this will benefit existing users in the main. The majority of the public transport options are Park & Ride/Park & Share. The one that would be located within SSA 14.1 (Option 2) may have limited capability in reducing A4119 traffic flows further south although the benefits are worth investigating, given the location of the site adjacent to the A4119. Another non-specific site (Option 15) further north could serve the Rhondda Valleys. There is already a proposal for a Park & Ride site further south adjacent to the A4119 at Mwyndy, which is intended to be to serve Cardiff City Centre.



The ability of options to meet objectives is seen as particularly important. The ranking of the Transport Planning Objectives has meant that the focus is on improving journey times on the A4119 corridor as well as improving access to development areas. Option 1 aligns with these objectives very well. Although Option 5 (A4119 third lane tidal) also has some benefits, there is not a great difference between constructing a three lane road and full dualling, and it is considered that Option 1 will achieve considerably more in the way of benefits.

The promotion of more sustainable transport modes is given prominence in the regional and local documents as well and although Option 1 is a highway scheme, the ability to include walking and cycling facilities within its design, such as Option 11) will help meet this objective.

Clearly the options that focus on providing highway based (new road building) solutions to address problems will have the greatest impact on the Coedely area, in both the short and long term. This has to be balanced against the benefits that will result. However, the identification of options that minimise a wide range of impacts will be beneficial for the environment. In terms of addressing traffic related problems, Option 1 benefits from being based on a section of road that already exists, which will require widening to achieve the higher standard dual carriageway. This will minimise short and long term impacts.

Improvements to existing junctions (Options 9, 14, and 16) may well bring about benefits to the A4119 but it is considered that their evaluation will be more worthwhile being carried out as part of the A4119 Corridor Study.

As with the minimising of impacts, larger proposals will always be more difficult to deliver in terms of feasibility, affordability, acceptability, timescale and risks. However, in the case of Coedely, such proposals will not address the identified problems as few are related directly to the A4119 corridor. The smallest of the highway based proposals, Option 1, the dualling of the A4119 is likely to be the one that improves this corridor in the most appropriate way. It is also likely to be the most feasible and affordable within a relative short timescale, with fewest risks. In terms of value for money, Option 1 is also likely to be an acceptable solution due to its limited local impact. Due to the importance of promoting Active Travel, the option that is central to this (11) is also likely to be deliverable, particularly if linked to Option 1. Other than infrastructure improvements, public transport improvements will always involve third party agreement.

Robustness to uncertainty is difficult to assess and relies on a number of factors, some of which are included under Deliverability. At this stage, it is not possible to state which options are best placed in terms of this criteria.

Taking into account all the information that is included in this WeITAG Stage 1 Strategic Outline Case, the appraisal that has been undertaken, and the judgements that have been made, the following options and combination of options have been identified for appraisal at WeITAG Stage 2, Outline Business Case.

In order that the referencing of these options recognises the combinations, they have been rereferenced as shown below. Although WeITAG guidance does not specifically mention Do Minimum options, it is recommended that this (Option 21) is also taken to Stage 2 for appraisal. This will provide a baseline and will be Option D.

Improvements to public transport by way of bus stop upgrades are already proposed and as such do not feature in any of the suggested options for Stage 2 that are listed below.



#### Suggested Options for Stage 2

- A. Dualling of the A4119 with associated roundabout improvements (Option 1);
- B. Dualling of the A4119 with associated roundabout improvements, plus an adjacent Active Travel route, (Option 1 and Option 11);
- C. Dualling of the A4119 with associated roundabout improvements, plus an adjacent Active Travel route, plus a Park & Ride/Park & Share facility within the SSA 14.1 development site, plus Park & Ride expansion north of the study area (Option 1, Option 2, Option 11, and Option 15);
- D. Do Minimum (Option 22).

#### 7.3 Summary and Recommendations

The Review Group has provided the statement below:

The Review Group met on 28 November to consider the Stage 1 WeITAG report and agree the preferred way forward.

The recommendations for Stage 2 align with the suggestions from REDSTART, which are:

- A. Dualling of the A4119 with associated roundabout improvements (Option 1);
- B. Dualling of the A4119 with associated roundabout improvements, plus an adjacent Active Travel route, (Option 1 and Option 11);
- C. Dualling of the A4119 with associated roundabout improvements, plus an adjacent Active Travel route, a Park & Ride/Park & Share facility within the SSA 14.1 development site, plus Park & Ride expansion north of the study area (Option 1, Option 2, Option 11, and Option 15);
- D. Do Minimum (Option 22).

It is clear that the dualling of the A4119 (Option 1) addresses the greatest number of objectives and as such forms the basis of all suggestions, apart from D (Do Minimum) and is recommendation A. However, the dualling does not adequately address objectives regarding Active Travel and public transport. Recommendation B includes Active Travel (Option 11), and Recommendation C includes Active Travel as well as additional Park & Ride/Share provision (Options 2 and 15).

The Review Group are happy for these recommendations to be taken forward to WeITAG Stage 2.





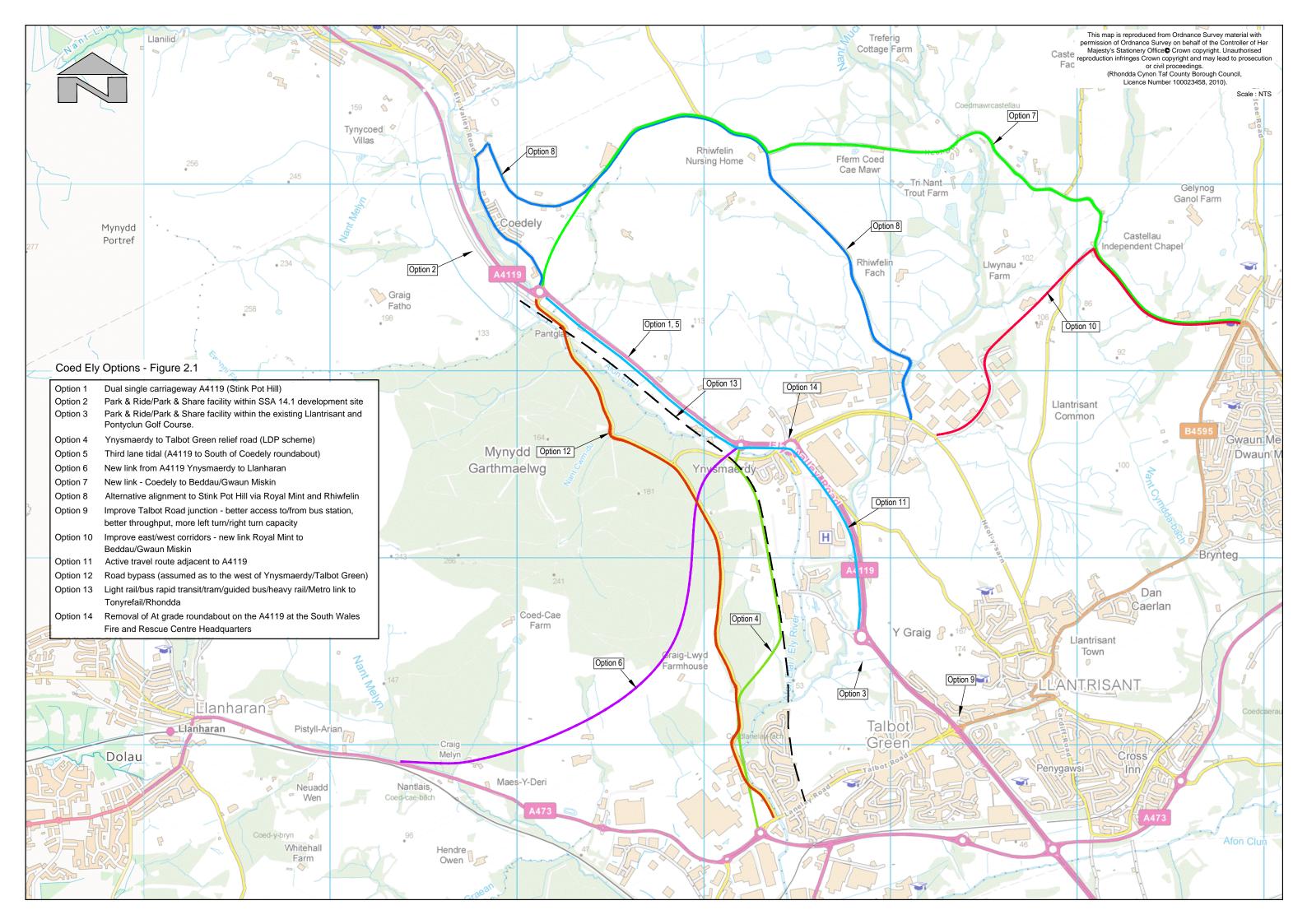
Figure 2.1 – Coedely Options





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Figure 2.1 – Coedely Options



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