

# IMPROVING STRATEGIC TRANSPORT FOR DINAS POWYS

WelTAG Stage One: Strategic Outline Case

14<sup>th</sup> September 2017

18:00 Civic Offices, Barry

Incorporating

**EC HARRIS**  
BUILT ASSET  
CONSULTANCY

Hyder 

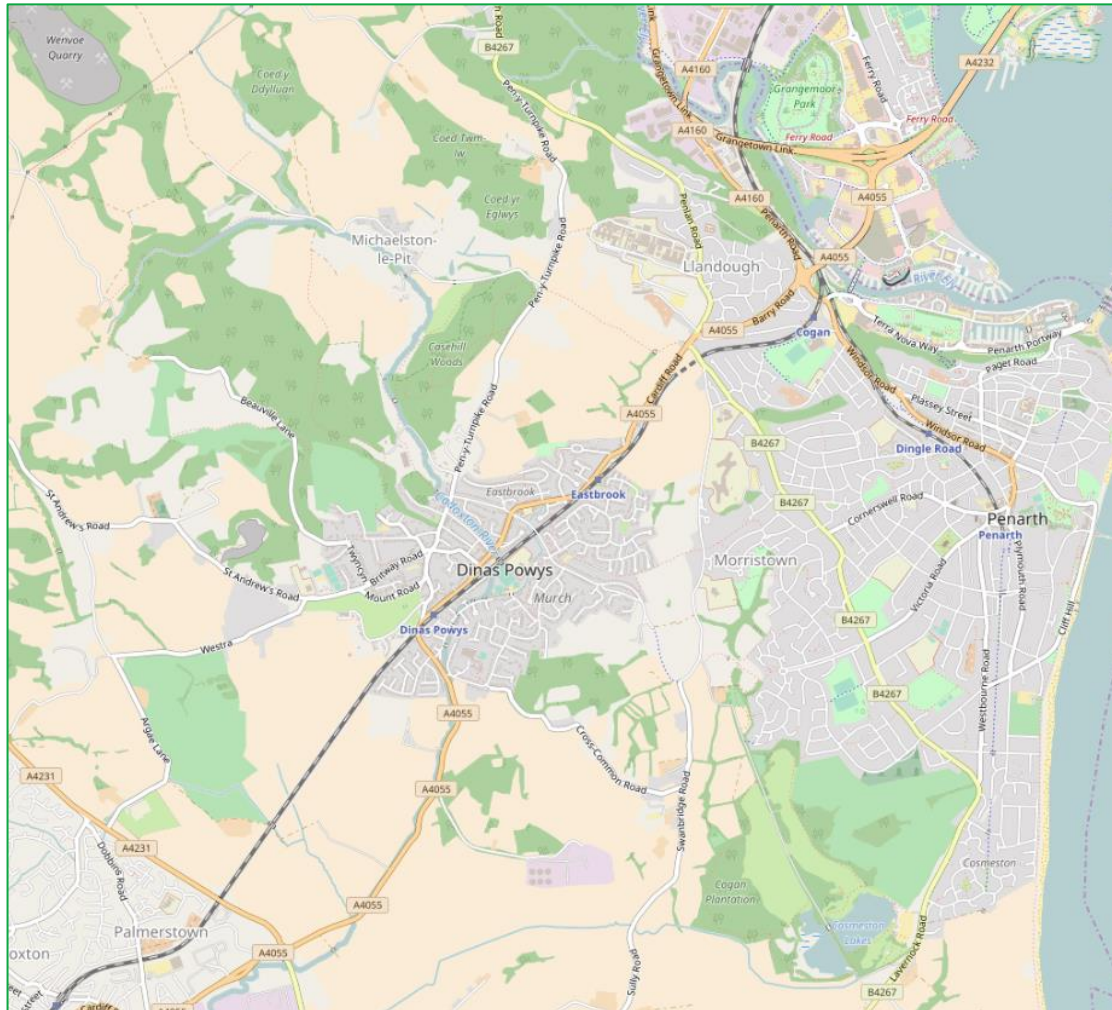
# Study Brief

- Commissioned to **develop and appraise potential options for improving strategic transport connections in Dinas Powys.**
- Undertaken in accordance with the Welsh Government's latest version of the **Welsh Transport Planning and Appraisal Guidance** (WelTAG) (draft version, June 2016)
- Schemes need to come through this process to be put forward for Welsh Government funding

# Need for the Study

- High traffic flows with frequent traffic congestion, delay and poor journey time reliability. **LDP residential proposals** are anticipated to increase pressure further.
- Public transport services at capacity **during peak periods of travel.**
- Restricted walking and cycling connectivity.
- Study represents an opportunity to improve the quality of connections by all modes between Dinas Powys and the surrounding area.
- A need to demonstrate **value for money** through the Welsh Government process.

# Study Area



# What is WeITAG Stage 1?

## (Welsh Transport Appraisal Guidance)

*‘To understand the issue of concern, explore its context and to present a wide list of possible solutions...to decide whether there are any possible solutions within the transport sector that are worth pursuing and to select a short list of options for more detailed consideration’.*

- Essential for gaining funding for transport investment
- Identifies the issue that needs addressing supported by evidence
- Establishes objectives
- Develops a long list of possible solutions, including non-transport interventions
- Assesses a long list of options against the objectives
- Assesses a long list of options against the impacts criteria
- **Selects a short list of options to take forward to the next stage**

WeITAG Seven-Point Assessment Scale

Large beneficial	+++
Moderate beneficial	++
Slight beneficial	+
Neutral	0
Slight adverse	-
Moderate adverse	--
Large adverse	---

# Consultation

## Stakeholder

- **Tuesday 7<sup>th</sup> March 2017** (Parish Hall, Britway Road, Dinas Powys)
- Key employers, public organisations, transport providers and local authority
- Discussed and identified problems, opportunities and constraints, set objectives and identified and discussed potential transport options.

## Public

- **Monday 13<sup>th</sup> March 2017** (Parish Hall, Britway Road, Dinas Powys)
- Public opportunity to provide feedback on identified options, opportunities, and constraints, as well as consideration and suggestions for the objectives and potential transport options.



# Public Consultation Feedback

- A wide range of people and organisations attended both events
- Received 95 feedback forms

Key issues raised by % of respondents:

- Need for a bypass (44%)
- Larger trains with more capacity/ frequency (43%)
- Improve footpaths/ cycle infrastructure (34%)
- Improve road safety for cyclists and pedestrians (21%)
- More reliable/ frequent bus services (19%)



# Problems, Opportunities & Constraints

## Identification of Problems

- P01** Poor quality bus stops with limited facilities
- P02** Poor interchange facilities at railway stations (including poor parking opportunities)
- P03** Overcrowding on peak rail services
- P04** Overcrowding on peak bus services
- P05** Poor infrastructure and local connectivity by walking and cycling
- P06** A4055 creating severance within the community (e.g. access to schools and other facilities/ services)
- P07** High local traffic flows leading to congestion, capacity issues at junctions, environmental impacts (air quality and noise pollution) and unreliable journey times
- P08** High use of the car for local and regional trips (e.g. journeys to work)
- P09** Occurrence of accidents along key strategic routes, especially the A4055
- P10** Residential land use development within Vale of Glamorgan will compound existing traffic issues and increase pressure on public transport services



# Problems, Opportunities & Constraints

## Identification of Opportunities

- O1 Proximity to major employment and services means large volume of transport movements to and from Cardiff, from Dinas Powys and Barry and Vale
- O2 Significant facilities and services in close proximity with potential for access by sustainable modes
- O3 Dinas Powys has good potential accessibility by non car means
- O4 Metro improvements, including more frequent rail services
- O5 Bus priority and service enhancements
- O6 Walking and cycling improvements
- O7 Highway junction/ off line capacity improvements
- O8 Road safety improvements
- O9 Interchange improvements in services and facilities
- O10 New Wales rail franchise
- O11 Park & Ride facilities
- O12 Promotion and marketing of all modes
- O13 Reduce the adverse environmental impacts of the transport system
- O14 New development to be accessible by sustainable modes

# Problems, Opportunities & Constraints

## Identification of **Constraints**

- C01** Traffic issues related to being on strategic corridor and difficult to solve alone from measures in Dinas Powys
- C02** Policy context (which is also an opportunity)
- C03** Potential need for third party land to deliver improvements
- C04** Funding availability
- C05** Location of existing services and facilities within Dinas Powys (which is also an opportunity)

# Transport Objectives

## Objective 1

- **Support Sustainable Connectivity in Cardiff City Region**

## Objective 2

- **Facilitate and Support Economic Growth**

## Objective 3

- **Improving Health & Wellbeing**

## Objective 4

- **Improved Safety & Security**

## Objective 5

- **Benefits and Minimised Impacts on the Environment**

# Developing & Appraising Options

## OPTIONS IDENTIFIED

- A Do-minimum
- B Enhanced Rail Services and Interchange
- C Improved Bus Services and Infrastructure
- D Enhanced Walking and Cycling Connectivity
- E On-line Highway Improvements
- F By-pass
- G Multi-Modal Option

## OPTION APPRAISAL

- How the option tackles the problems identified
- How the option meets the objectives
- Risk analysis
- Adverse impacts
- Constraints
- Dependencies

# Transport Case

## The Assessment of Impacts

- Social**

*E.g. (Journey Quality, Access to Employment)*

- Environmental**

*E.g. (Noise, Air Quality, Landscape, Water)*

- Economic**

*E.g. (Journey Time Reliability, Local Economy)*

- Financial & Commercial Case**

Option B: Enhanced Rail Services and Interchange		
	Impacts	Scale
<b>Social</b>		
Physical Activity	It is expected that Option B would have a slight beneficial impact on physical activity.	+
Journey Quality	The highway network forms the backbone of the transport network and although Dinas Powys is served by two railway stations with up to four services per hour, surveys have illustrated that standing is at levels above train capacity during the AM and PM peak periods (Vale of Glamorgan Local Development Plan 2011-2026: Sustainable Transport Assessment).  The introduction of enhanced services and infrastructure has the potential to improve journey quality for existing passengers as well as increase the likelihood of achieving modal shift towards rail travel.	++
Accidents	It is expected that Option B would have a slight beneficial impact on accidents through the mode shift to rail.	+
Security	The enhancement of station infrastructure and facilities has the potential to improve the perception of passenger personal security, including the implementation of improved lighting and CCTV.	++
Access to Employment	Existing rail services already interconnect with key employment centres within the Cardiff City Region however Option B could improve access to employment further as the number of services would be increased and improved facilities could also establish increased travel by rail.	+++
Access to Services	Existing rail services already interconnect to key urban centres within the Cardiff City Region. However Option B could improve access to services further as the number of rail services would be increased and improved facilities could also establish increased travel by rail.	+++
Affordability	Rising cost of transport is resulting in many households struggling to afford to own and run a car. The provision of an enhanced public transport option has the potential to make travel more affordable for some sections of society, most notable the young and elderly. However, it should be noted that public transport services can be unaffordable for some groups within society.	+

# Recommended options to be taken forward to WeITAG Stage 2

Option A: Do-Minimum

Option F: By-Pass

Option G: Multi-Modal Option

# Option A: Do Minimum

- Assume continued delivery of transport enhancements via the Local Transport Grant and utilising existing sources of funding
- Assumes the continuation of rail services, local bus services and community transport at a similar level as present utilising funding at similar levels to existing.
- Assumes continued work by local authorities and stakeholders to deliver improvements to the transport network, with the overall aim of addressing the identified problems and the outcomes of the relevant transport policies.

# Option A: Do Minimum

## Main Impacts

- Adverse effect at meeting the objectives, due to the modest levels of funding currently able to be invested in transport infrastructure and public transport services.
- Background increases in population and traffic growth exceed investment provision to mitigate increasing impacts and pressure on the existing transport network.
- A negative impact on the environment is forecast as the traffic levels through Dinas Powys would continue to increase.



# Option F: By-Pass

- Assumed to be on alignment previously in UDP, south and east of Dinas Powys connecting to Merrie Harrier junction.
- Single carriageway link (although this would require further work to determine) with walking and cycling connections.
- Junction improvements at key junctions would also be required as part of proposals.

# Option F: By-Pass

## Main Impacts

- Could improve local journey times for drivers and public transport, depending on time savings on the route compared to existing. Given that route would still be subject to delays at key junctions to the east, this may not be significant.
- Improved air quality and noise benefits for residents along Cardiff Road and potentially road safety benefits, depending on level of traffic that uses the new link.
- Environmental impacts on landscape, ecology, heritage etc of new link through countryside.
- Very high cost and delivery issues.
- Requires traffic analysis and further consideration of environmental issues.

# Option G: Multi-Modal

- Package of short, medium and long term improvements.
- Enhancements to bus and rail services and infrastructure, including station access and parking.
- Robust walking and cycling measures.
- Local highway improvements to key junctions and road safety measures.

# Option G: Multi-Modal

## Main Impacts

- Potential to improve accessibility.
- Improved road safety and journey time reliability.
- Benefits for health and well being of walking and cycling measures.
- Neutral environmental impact.
- Moderate to high cost and deliverability issues if need third party land.
- Need for further analysis on options and impacts.

# Next Steps

- Stage 2 study to further consider recommended options
- Requires additional evidence and consultation to support decision making

**Any Questions**

# ARCADIS CONSULTING (UK) LTD

DESIGN & CONSULTANCY FOR NATURAL AND BUILT ASSETS

Thank you for your time

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