



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

Eich cyf/  
Ein cyf/  
Mr Tim Bailey  
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Office of Rail Regulation  
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London  
WC2B 4AN

22<sup>nd</sup> May 2008

Dear Mr Bailey

**RATIFICATION REQUEST FOR CLOSURE OF ABERCYNON NORTH STATION.**

Following the recent consultation in respect of the proposal to close Abercynon North station, Ieuan Wyn Jones Deputy First Minister for Transport and the Economy has agreed that the Office of Rail Regulation be requested to formally ratify the closure. Documents making up the closure submission are:-

CLOSURE PROPOSAL DOCUMENT

ABERCYNON NORTH CLOSURE ASSESSMENT JACOBS

ABERCYNON NEW STATION SCHEME RAIL PASSENGER CONSULTATION

REPORT ON THE OUTCOME OF PUBLIC CONSULTATION UNDER RAILWAYS ACT 2005  
CLOSURE PROCEDURES.

RESPONSE LETTERS FROM SOUTH EAST WALES TRANSPORT ALLIANCE  
RHONDDA CYNON TAFF COUNTY BOROUGH COUNCIL  
PASSENGER FOCUS

QUERY FROM M GEAREY – PRIVATE INDIVIDUAL

RESPONSE LETTERS TO CONSULTEES

If you require any further information, please do not hesitate to contact me

Yours sincerely

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## **Abercynon New Station Project**

### **Proposal to Build a New Station at Abercynon and Close the old Station at Abercynon North**

Currently, the town of Abercynon has two separate stations, 180 metres apart. The separation of the stations is a feature of the existing infrastructure, there being two separate running lines, one for Aberdare and one for Merthyr. At present, two trains per hour serve the travelling public at each separate station.

The Abercynon New Station is a joint project involving Welsh Assembly Government and the South East Wales Transport Alliance (SEWTA). The construction of the New Station will be undertaken by Network Rail.

The Project involves a proposal to build a brand new Station at Abercynon and, when that Station is ready to open, to close the old Station at Abercynon North. The opening of the New Station and the closure of Abercynon North Station will be simultaneous, resulting in no loss of opportunity for passengers. The New Station will be built on the site of the existing Abercynon South Station (next to the Signal Box). Passengers who currently travel to and from Abercynon North Station will then use the New Station, which will be situated 180 metres away.

The Project is part of a wider £18 million investment in modernising the railway infrastructure and train services between Merthyr, Abercynon and Cardiff.

The Project will be completed in February 2008. The main benefits for passengers will be:

### **Improved Train Services**

- Merthyr trains and Aberdare trains will stop at the New Station – this is an improvement over the current situation where Merthyr trains stop at Abercynon South and Aberdare trains stop at Abercynon North
- The frequency of Merthyr trains will improve from every hour to every 30 minutes.
- 4 trains per hour in each direction during the daytime – providing customers with more a more frequent train service and greater choice of journeys will serve the New Station at Abercynon.
- Longer platforms so that longer trains with additional seating capacity can be run.

### **Better Access and Waiting Facilities**

- Closure of the old subway and replacing it with a modern, dry and well lit new subway that is fitted with CCTV.
- 24 hour CCTV coverage.
- Weatherproof canopies, with clear panels to assist with personal security.
- Integrated, clear and coherent signage and information displays, together with signage to station from outside
- For the future, a Park & Ride Car Park with secure car parking.
- Tactile paving throughout the new station platforms to assist visually impaired, currently only available on Abercynon North.

## **New Station Project Appraisal**

The Abercynon New Station Project has been assessed against the five criteria specified within the Railways Closures Guidance:

- Integration
- Economy
- Accessibility
- Safety
- Environment

### **Integration**

The New Station Project will improve integration between train services and other modes by providing one Station at Abercynon, as opposed to the current situation where there are 2 stations situated on different railway lines some 180 metres apart.

The Project will enable delivery of an enhanced service to and from Merthyr (from hourly to every 30 minutes), and will consolidate services into one Station thus providing 4 trains per hour in each direction (as opposed to 3 trains per hour spread over 2 different stations).

Currently, Abercynon North Station is a stand-alone facility and its proposed Closure will therefore not have an adverse affect on integration between modes.

## Economy

The Abercynon New Station Project supports the wider policy objectives of Welsh Assembly Government by improving accessibility between key settlements and concentrated centres of employment, education and leisure. Demand for train services between Cardiff and Abercynon/Merthyr/Abercynon is growing by upwards of 10% per annum, year on year. The construction of a New Station, and the Closure of Abercynon North Station, are important factors in developing a railway infrastructure that has the capacity for meeting growing demand for train services.

The Project is part of a wider investment scheme in modernising the railway infrastructure and train services.

The Project includes modernisation of the railway infrastructure, resulting in replacing the antiquated mechanical signalling system with a modern equivalent form Solid State Interlocking signalling system, thus improving the capability and capacity of the asset and, at the same time, reducing the ongoing Operating & Maintenance Costs for Network Rail.

The New Station Project will reduce waiting times for passengers (by providing greater choice between journeys), improve access to train services (by improving frequencies), reduce journey times (by modernising the signalling system), and will provide provision for additional train capacity by providing longer platforms.

Welsh Assembly Government does not believe the Closure of Abercynon North Station will have a significant disbenefit to economical factors because the facility will be replaced by a far superior New Station at a distance of 180 metres away.

## **Accessibility**

The New Station Project will deliver DDA compliant step-free access for encumbered passengers. This is in comparison to Abercynon North Station, which is currently non-compliant with DDA, and neither does it have scope for adapting to DDA compliance due to limitations on the available land-take footprint.

The New Station will provide step-free interchange between train services, in comparison to the current situation whereby passengers have to walk between Abercynon South Station and Abercynon North Station (both of which are non- DDA compliant) to change trains.

A Park & Ride facility with approximately 250 car parking spaces will provide access to a wider market of rail users. The capacity of the current car park at Abercynon North is 5 spaces.

## **Safety**

The New Station Project will provide a significant improvement in lighting, CCTV surveillance, platform surfacing, waiting areas and weatherproof shelter. In addition, the New Station is within sight and close proximity to a continuously staffed Signal Box (Abercynon) which provides additional assurance for passengers.

In comparison, the existing Abercynon North Station is poorly lit, remote, does not have CCTV surveillance and has a rudimentary waiting shelter.

Welsh Assembly Government believes that closure of Abercynon North Station and transferral of passengers to the New Station will have a positive impact on passenger safety and security.

Once the new station is fully operational, the station at Abercynon North will be decommissioned and made safe.

## Environment

The New Station Project will deliver improved and more frequent train services, as well as a new Park & Ride facility with capacity to transfer n journeys from car to rail.

The New Station Project is part of wider investment project that will deliver additional 3,000 journey opportunities every day between Merthyr, Abercynon and Cardiff (Monday to Saturday).

Delivery of these environmental benefits is contingent upon Closure of Abercynon North Station and the concurrent opening of Abercynon New Station.

<b>Feature</b>	<b>Abercynon North Station</b>	<b>Abercynon New Station Project</b>
Train Frequency	2 per hour	4 per hour
Waiting Times (Interval)	30 minutes	15 minutes
Journey Times	No Change	3 minutes less
Additional Journey Opportunities	Nil	3,000 per day (Monday to Saturday)
DDA Compliant	No	Yes
CCTV Surveillance	No	Yes
Weather-Proof Waiting Facilities	No	Yes
Infrastructure	Antiquated Mechanical Signalling	Modern Solid State Interlocking signalling system
Park & Ride	No	Yes
Car Parking Spaces	5	250

**Sewta Rail Improvement Programme -  
Abercynon North Station Closure Assessment**

**Final Report for Rhondda Cynon Taf Council  
and Arriva Trains Wales**



September 2007

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**DOCUMENT CONTROL SHEET**

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**Project:** Sewta Rail Improvement Programme - Abercynon North Station Closure Assessment  
**Title:** Final Report

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# 1 INTRODUCTION

## 1.1 Background

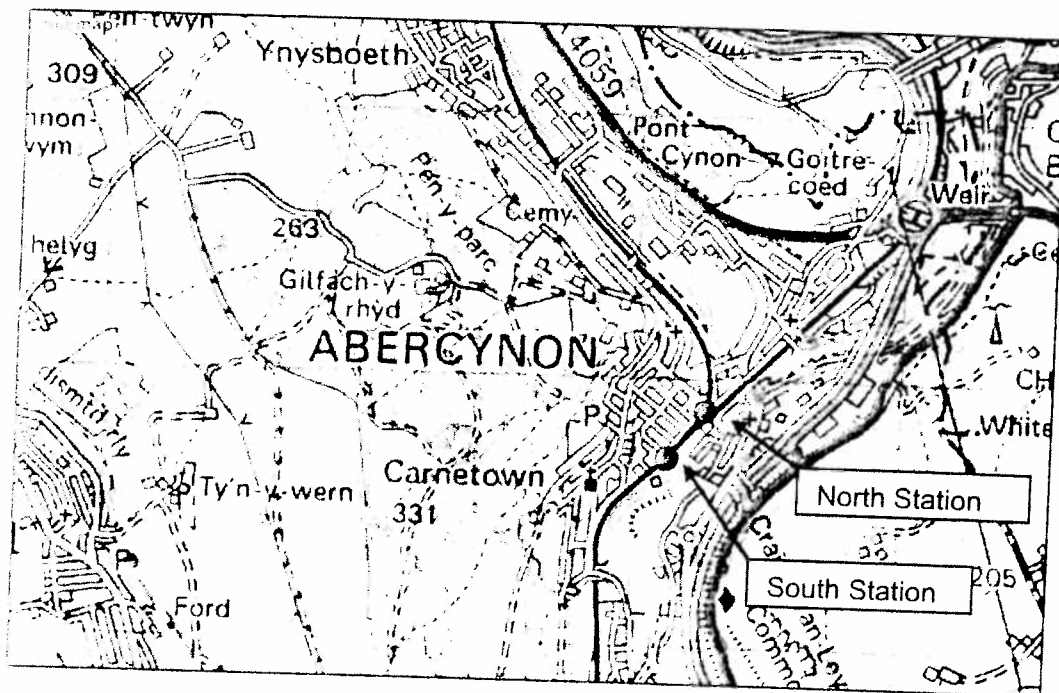
Abercynon is currently served by rail services from the Aberdare and Merthyr Branches, each calling at one of 2 stations in the community;

- Aberdare services call at Abercynon North Station and;
- Merthyr Tydfil services call at Abercynon South Station.

Thus for trips to Cardiff, the primary destination for rail trips from the South Wales Valleys, and also for trips to Pontypridd, Abercynon residents have to decide which of the 2 stations to access.

Figure 1 shows the location of the two stations in relation to the town. The distance between the entrances of the two stations was measured on site and is 165m.

Figure 1 Abercynon Stations



## 1.2 Station Enhancement Scheme

The Pontypridd to Merthyr Frequency Enhancements scheme is part of the Taff Vale North Project promoted by Rhondda Cynon Taf (lead authority). It involves doubling the service frequency to Merthyr Tydfil (to half hourly services) as well as development of a single station at Abercynon: taking advantage of the increased 4 trains per hour service to Cardiff and also providing a strategic park and ride facility to encourage increased rail use.

The single station will be at the Abercynon South Station site with track reinstated to enable an island platform to be served by both routes. The investment includes;

- Provision of 2 platform faces;
- New wider underpass with both stairs and ramps to platform and car park;
- Waiting shelters;
- Passenger information boards;
- Real time passenger information displays;
- CCTV and passenger help points;
- Improved lighting on all approaches;
- New road access (including new river bridge) to car parking for at least 130 vehicles.

However, concentration of the improved rail services at one station site, whilst maximising the benefits to the wider public, involves the closure of Abercynon North station.

### 1.3 Station Closure Assessment Requirements

Closure of rail stations needs to be undertaken according to statutory procedures ensuring that any impacts on existing passengers are identified and taken into account in the decision making process. A formal assessment of the station closure, and consultation needs to be undertaken and an application from the authority proposing the closure referred to the Office of the Rail Regulator (ORR). This report presents the assessment of the station closure to support the consultation and application stages.

Whilst this station closure is proposed within a package incorporating improvement measures to benefit the community, rather than losing the ability to travel by train, the formal procedures have been followed. However, the level of analysis has to be 'appropriate to the scale of the proposed closure'<sup>1</sup> and this assessment includes a simplified appraisal including a qualitative assessment of some factors (e.g. environment).

### 1.4 Report Structure

Following this introduction, section 2 presents the base scenario and station closure option, section 3 presents the assessment of the station closure option and Appendix A presents the results of the technical assessment and cost benefit analysis and Appendix B presents the appraisal summary table (AST).

## 2 BASE SCENARIO AND CLOSURE OPTION

### 2.1 Introduction

The Station Closure Guidance requires the assessment to show that reasonable alternatives to closure have been examined and to define the closure proposal in terms of the 'retention' option for comparison against the 'closure' option. In this case closure is a part of the rail investment programme and therefore will only be implemented as part of a wider scheme of enhancements. Abercynon North Station will not be closed without the introduction of improved passenger facilities at Abercynon South Station and the increased half-hourly passenger service to Merthyr Tydfil. The closure option has been discussed with Network Rail and, whilst it is difficult to separate out the various elements of the investment package, we have sought to define a 'theoretical' scenario for the evaluation of the closure option – without having to assess the whole investment programme.

### 2.2 Policy / Strategy background

In 1988 the rail line to Aberdare was reopened to passenger services with provision of a station at Abercynon North – a cheaper option than remodelling Abercynon South station.

The SWIFT Strategy Study (1999) examined the options for the development of public transport to meet the needs of the South Wales region – within which a particular emphasis was given to improving transport between the South Wales Valleys and Cardiff and Cardiff Bay to improve access to jobs, services and facilities. The study examined multi-modal alternatives concluding that... "Conversion of the existing rail network to Busways was ruled out due to the high capital cost and impact on the operation of rail passenger and freight services, without significant capacity improvements". Also "The conversion of the rail lines to LRT would be expensive and would bring only similar benefits to the lower cost frequency improvements proposed in the rail strategy..... building on the existing infrastructure and, producing 60% of the additional trips for 20% of the costs, it is considered better value for money ..."

The Studies identified that... "The rail network provides an alternative to traffic congested routes into Cardiff. The capacity of the network and the quality of the services and facilities need to be improved to enable the rail network to fulfil its potential." Also, of particular relevance to Abercynon, "...adopting the same frequency standards for rail services as for bus services is appropriate for the rail network. That is, providing a minimum half-hourly service and a higher 15 minute frequency where people need to 'turn up and go' such as strategic park and ride stations, where passengers cannot control the time of their arrivals. This implies the need to improve rail frequencies ..... between Abercynon and Aberdare/ Merthyr Tydfil."

In terms of park and ride the report identified that "many sites for park and ride at existing stations are constrained. The corridor contains some of the best used sites and there are aspirations to develop a strategic level of parking to improve use of the rail services.... The future strategy is heavily reliant on new stations with large park and ride sites at .... Abercynon (combining the existing stations)..."

The recommended strategy for the corridor included "the improvement of rail stations and park and ride ...needs to be developed as a package for maximum impact, involving improving service frequency from key locations and enabling more successful park and ride north of Pontypridd (Abercynon development)."

The subsequent SWIFT Rail Strategy (2002) stated that "... investments will enable the provision of half-hourly minimum service headways throughout the region and the creation of 'turn-up-and-go' service levels at primary stations. The strategy builds on the recent investment in the capacity of the Taff Vale line, through the £16m track renewals and resignalling project. The further investments will also enable a number of other new/ relocated stations to improve access to the network and improve integration of rail lines with developments..... relocated stations are proposed at ... Abercynon".

In September 2003 half hourly services throughout most of the day were introduced on the Aberdare line through investment in a new passing loop at Mountain Ash Station. The half hourly timetable has 2 gaps in each direction to facilitate freight movements to and from Tower Colliery north of Aberdare. The platforms of stations on the branch were extended in 2005 to facilitate longer trains and involved extending the platform at Abercynon North using Corus modular construction which could be salvaged and used elsewhere.

The recommended SWIFT strategy was further developed in Rail and Bus strategy reports and the rail elements were adopted by Sewta within their five year plan "Moving People – Improving Rail, The Next Five Years" (Sewta, July 2005), which states that the Pontypridd to Merthyr Frequency Enhancements project will develop and implement the improvements necessary to facilitate a half hourly passenger rail service between Merthyr Tydfil and Pontypridd. At Abercynon, this will involve the remodelling of the track layout to enable both the Aberdare and Merthyr lines to serve a single station incorporating a major strategic park and ride facility.

The rail strategy has been formerly adopted by the Welsh Assembly Government. The Transport Minister, Andrew Davies stating..... "My ultimate vision is of full half-hourly services of four car trains, and in some cases – the areas of heaviest demand – six car trains across the extent of the Cardiff Valleys network." (Andrew Davies, Minister for Enterprise, Innovation and Networks 'Railways in Wales' Conference, January 2005)

## 2.3 Enhancement Scheme

The overall enhancement scheme involves trackwork and other station access and facility improvements. The trackwork elements comprise;

- Reopening a second platform face at Abercynon South station to the east of the existing platform resulting in an island platform;
- Providing a new track to serve the new platform;
- Providing new cross-overs to the north of the station;
- Blewing and connecting the Aberdare and Merthyr Tydfil branches to enable:
  - All northbound trains to serve the west platform and
  - All southbound trains to serve the east platform
- Removing the cross-overs south of the station;

The other station access and facility improvements comprise;

- Car parking with new access bridge;
- New pedestrian tunnel from Station Road with ramps and stairs to platform and car park;
- Waiting facilities;
- Information facilities;
- Security facilities.

The movement of Aberdare Line trains calling at Abercynon North to instead serve Abercynon South requires a crossover to be located at the site of the existing Abercynon North station in order to reach both of the Abercynon South platforms. The current alignment from Abercynon North involves running past the station on the west side, and then using the crossover to the south of the station to access the double track section. The proposal for Aberdare trains to serve a new enhanced Abercynon South station is therefore not compatible with retaining a station on the current Abercynon North site.

## 2.4 Other Technical Options Assessed

In determining the scheme to deliver additional train services to Merthyr Tydfil and secure a strategic park and ride at Abercynon where the desired 4 trains per hour frequency would be achieved, Network Rail examined a number of alternative technical solutions. Within this work an objective was to provide additional capacity for freight train movements to enable the full half hourly Aberdare service to be provided.

It was determined that "In theory the proposed new passenger train pattern can be accommodated with the existing station layout i.e. separate stations. However this offers very limited flexibility; such that if one train runs late it will seriously affect the service pattern and performance reliability of the train timetable." Also that "Passing loops will be required for freight operations at Stormstown and Penrhiwceiber if the layout at Abercynon is not remodelled to include a loop.." (source Railtrack, Great Western Project Delivery, Taff Vale North report, March 2000).

Simpler options were also examined that involved closure of Abercynon North station but did not provide sufficient flexibility to provide robust timetables.

In addition, the Network Rail Infrastructure Ltd, Merthyr Frequency Enhancements report (March 2005) concluded that the additional Merthyr services could be accommodated only by extending their journey time by 4 minutes and also that the existing layout would not enable the removal of freight paths from the Aberdare service timetable.

In the event, having been subjected to RailSys modelling, additional running time has been allowed in the timetables developed for the Merthyr Tydfil half hourly services. (Source: RWA Rail, Merthyr Vale Frequency Enhancements, Draft Railsys Modelling Report, June 2007). On the basis of these earlier studies, and by comparing the timetable used for this RWA Rail analysis with the 2008 Rules of the Plan, we conclude that the proposed timetable (albeit with some timing adjustments to allow for the station stop at Abercynon South instead of Abercynon North) could be operated using the existing infrastructure at Abercynon, with the exception of the paths required for freight services to Tower-Goitre.



However, although the Railsys modelling did not examine operation of the timetable through the existing layout at Abercynon it is clear that there would be a significant performance risk. The report states that "the largest improvement [in delay minutes] is between Pontypridd and Abercynon (the single line bottlenecks at Abercynon having been removed)". The March 2000 Taff Vale North report noted that the layout in existence at that time "offers very limited flexibility: such that if one train runs late it will seriously affect the service pattern and performance reliability of the train timetable".

In practical terms, therefore, it is apparent that the alterations at Abercynon will be necessary for securing acceptance of the overall investment by the train operator, as it improves rather than worsens service reliability. This implies that together with the additional passing loop at Merthyr Vale, the closure option is a necessary component of the improved service frequency to Merthyr Tydfil, without which we might expect a significantly worsened performance. Nevertheless, for the purposes of the analysis set out in this paper, we have attempted to isolate the station closure proposal from the other components of the Frequency Enhancement Scheme, and have therefore taken this theoretical (and unreliable) scenario as the base. Given the theoretical nature of the base scenario, we have not attempted to quantify the performance benefits within our assessment of the benefit:cost ratio and transport economic efficiency values.

## 2.5 Defined Base Scenario

It is therefore concluded that the base scenario for the evaluation is the provision of;

- Two trains per hour each way to/from Aberdare calling at Abercynon North Station, with 4 gaps (2 paths per day in each direction) in the timetable to allow for freight movements, and;
- Two trains per hour each way to/from Merthyr Tydfil calling at Abercynon South Station.

## 2.6 Defined Closure Scheme

The closure scheme involves;

- Closing Abercynon North Station;
- New line and additional crossover at Abercynon North to access the junction;
- New line through Abercynon South for Merthyr Tydfil and Aberdare southbound services;
- New platform – refurbishment of the east side of the island platform;
- Removal of crossovers south of Abercynon;
- Improved Abercynon South station including enhanced pedestrian access and platform facilities.

This results in all four trains each way per hour calling at Abercynon South station.

The scheme also reduces the key constraint to the operation of a full half-hourly Aberdare Line service, ie the ability to infill the gaps created for freight movements. This is an important benefit of the scheme. However, whilst the passenger services pass at the Mountain Ash loop the freight trains would cross the passenger train at the existing Abercwmboi loop. At this stage it is not clear whether a further improvement is required at Abercwmboi, such as bi-directional signalling. A sensitivity test of the capital costs has therefore been undertaken in the technical analysis (see Appendix A section 4.1).

The scheme assessed here does not include the increased frequency to Merthyr Tydfil (with the passing loop at Merthyr Vale required for this service enhancement), nor the park and ride scheme and new access bridge. These two schemes could in principle be independently provided and are therefore not impacted upon by the closure scheme. However, the attractiveness of the park and ride facility would be adversely affected if the Aberdare services were not diverted to call at Abercynon South Station.

## 3 ASSESSMENT OF CLOSURE OPTION

### 3.1 Introduction

This assessment has been undertaken in accordance with the Railways Closures Guidance in 2006<sup>2</sup> and meets the requirements of the 'objective test' which must be satisfied if closure is to be permitted and includes;

- A quantified Value for Money (VfM) assessment and;
- Presentation of other non-quantified matters that are required to be taken into account.

The basis of the assessment is the same benefit cost ratio (BCR) methodology used in assessing investment proposals, consistent with the New Approach to Appraisal (NATA) embodied within the Green Book, Appraisal and Evaluation in Central Government and Transport Policy, including the 'New Deal for Transport, Better for Everyone' and Welsh Transport Planning and Appraisal Guidance, as well as rail specific guidance provided by the SRA Appraisal Criteria. The assessment covers the five criteria with an appropriate amount of technical evidence;

- **Environment** – 10 sub-objectives including noise, atmospheric pollution, impacts on countryside, wildlife, ancient monuments and historic buildings;
- **Safety** – reducing accidents and improving security;
- **Economy** – economic efficiency, reliability and wider economic impacts;
- **Accessibility** – ability for people to reach different locations and facilities by different modes, and;
- **Integration** – transport interchange and integration with government policies.

As this closure option relates to the relocation of a station rather than a network closure the test to be assessed is defined as per section 2.3 of the guidance;

- 'Retention of the rail service, station or network proposed for closure does not represent good value for money compared with the option of closure.'

In this case this is interpreted as the value for money of the closure option compared with the base scenario.

The assessment has sought to;

- Be independent and objective;
- Highlight any negative aspects of the scheme in comparison to any positive aspects of the scheme; and
- Identify the scale and nature of negative aspects enabling them to be properly taken into the decision making process.

<sup>2</sup> Railways Closures Guidance, 18 October 2006.

The assessment has utilised available data and information as much as possible, including published timetable information, regular passenger surveys and demand data provided by the Train Operating Company. The quantified assessment has made use of 2001 census data for the station catchment areas and the rail industry demand and revenue forecasting model (MOIRA). The qualitative assessment has been informed through a site visit undertaken on the 21<sup>st</sup> June 2007.

The appraisal of the closure option is described below and summarised in the Appraisal Summary Table (AST) in Appendix B.

### **3.2 Environment**

A scoping qualitative assessment of the impact of the closure option on the environment has considered all sub-headings specified in the NATA guidance with some quantified figures included for the main factors;

#### **3.2.1 Noise**

The station closure will lead Aberdare services calling at Abercynon South Station leading to a reduction in noise relating to trains accelerating at the Abercynon North station site. However, directly opposite Abercynon North station is a vacant plot and a community hall and a post office. The nearest residential properties that would benefit from the noise reduction are located further south at the junction of Station Road and Herbert Street.

The noise impact associated with the increase in trains accelerating from Abercynon South station will be offset by the relocation of the Merthyr Tydfil southbound services to the opposite side of the island platform and the relocation of the northbound Merthyr Tydfil and Aberdare services to the line alongside the island platform further away from the receptors identified on Station Road, leading to no identifiable net impact at this location.

In addition the resignalling of the Abercynon area as part of the Merthyr Tydfil frequency improvement scheme will remove the need for trains to accelerate twice to stop at the platform and then to collect / handover the token at the signal box, currently required for single line operation. However, as the Merthyr Tydfil service frequency will double the noise impact remains the same.

Overall there is expected to be a slight improvement in noise levels at potential receptors as a result of the closure.

#### **3.2.2 Local Air Quality / Greenhouse Gasses**

The closure scheme will lead to an increase in rail use, some of which will involve people transferring from car travel, leading to a reduction in vehicle emissions and improvement in local air quality and reduction in greenhouse gasses.

The assessment of the quantity of emissions reduced has been made using the rail demand forecasts and assumed proportion of passengers switched from road, in line with the Rail Closures Guidance and Webtag Unit 3.13 Guidance on Rail Appraisal. The reduction in pollutant emissions is shown in Table 1 and is based on the published data on emissions from UK transport sources 1999 (Source, DMRB Vol 11 section 3) and the average emission rates detailed in Transport Statistics Great Britain (2002 edition) and applied to the forecast reduction in car kilometres of 209,449 kms per annum.

**Table 1 Estimated Reduced Pollutant Emissions**

<b>Pollutant</b>	<b>Reduction Tonnes per annum</b>
Carbon Monoxide	1.62
Nitrogen Dioxide	0.35
Non Methane Hydrocarbons	0.23
Particulates	0.02
Carbon Dioxide	56.28

The important pollutants in local air quality impact assessment are Nitrogen Dioxide and Particulates. The station closure impacts are regarded as slight positive.

The value of the local air quality improvements and reduction in greenhouse gasses is based on the Rail Appraisal Guidance and detailed in Appendix A (section h). The financial benefits included in the non user benefits in the Economic Appraisal are;

- Local Air Quality - £1,145 in 2008 reducing to £1,003 in 2025, and;
- Greenhouse Gasses - £687 in 2008 increasing to £1,003 in 2025.

### 3.2.3 Landscape / townscape

The Station Closure will result in the removal of the platform infrastructure at Abercynon North which will be likely to lead to the return of the embankment to vegetation. Additional infrastructure between Abercynon North Station and Abercynon South Junction will be located within the existing railway boundaries and at the same levels. The signal box at Abercynon South will remain and a Macemain Passenger Waiting shelter will be erected.

There are marginal positive and negative impacts on the Landscape / Townscape.

### 3.2.4 Heritage of Historic Resources

Similarly the lack of infrastructure change outside the railway boundaries means that there is no identifiable impact of the station closure on the heritage of historic resources. Within the railway boundary at Abercynon North there are no significant railway buildings / structures. At Abercynon South there are no listed buildings and the signal box will remain out-of-use. There is no impact on the heritage or historic resources in the area.

### 3.2.5 Biodiversity

The removal of the station platform at Abercynon North will result in the return of a section of trackside embankment to vegetation, which will produce a slight improvement. The station closure results in the reuse of abandoned track and facilities where there could be a slight negative impact on fauna and flora. Overall impacts will be marginal.

### 3.2.6 Water Environment

At Abercynon North the removal of the platform will result in an increase in trackside vegetation and soft ground which will reduce the amount of run-off of rain water potentially producing a slight improvement, though the area affected is relatively small.

Between Abercynon North Station and Abercynon South Junction the track alterations will be made within the existing railway boundary where drainage is already provided. At Abercynon South a Welsh Water Sewer is to be diverted but overall there is no significant impact.

### 3.2.7 Physical Fitness

Relocation of the calling point of Aberdare services to Abercynon South station results in an increased walk distance of approximately 270m to access train services for approximately 38% of Abercynon North station passengers (see Appendix A section e). This has the potential to increase physical fitness for existing passengers. However, this is partly offset by the reduction in people from South of the station walking to Abercynon North and the removal of the need to walk between Abercynon North and Abercynon South stations for passengers interchanging between the Aberdare and Merthyr Tydfil services (see Appendix A section h).

The station closure results in a more frequent service at Abercynon South station and improved interchange between rail services. This is forecast to lead to an increase in rail use by around 50,000 passengers per annum. Some of these passengers will transfer from car (around a third) and is likely to lead to an increase in walking to access stations at either end of the journey. This will have a slight impact on the physical fitness of those travellers.

The key factor in the assessment of physical fitness is encouraging people to walk for 30 minutes per day. Passengers who choose to use rail instead of driving to their destination will walk to and from the stations at both ends of their journeys. From the assessment of new passengers generated and assumed modal split we have estimated that around 25 persons per day would receive this health related benefit. Overall this is a slight benefit.

### 3.2.8 Journey Ambience

The station closure results in a relocation of services to Abercynon South station which will have no impact on the journey ambience for passengers travelling through Abercynon.

The additional walk to access the station for some passengers may lead to a worsening of journey ambience but will be offset by those who currently walk north to access the existing Abercynon North station and interchanging passengers.

Abercynon South station is accessed by an underpass and steps. The closure scheme includes the creation of a new fully accessible underpass with both stairs and ramps to access the platforms and the provision of improved lighting, information and safety features. Whilst passengers might perceive a worsening in journey ambience as a result of having to use an underpass they may perceive an overall improvement through the other measures.

The passenger surveys undertaken revealed 4% of passengers considering the closure proposals less convenient, whilst 30% perceived an overall improvement.

The Transport Appraisal Guidance for the assessment of this objective focuses on measures under the control of network providers and operators;

- Traveller Care
- Travellers' Views, and
- Traveller Stress

**(a) Traveller Care**

The guidance notes that improvement to stations is covered by the Interchange objective and the measure of this objective is therefore on vehicles and covers cleanliness, facilities, information and environment. The station closure will have no impact on the quality of the vehicles.

**(b) Travellers' Views**

This relates to the attractiveness of the general travelling environment. This will be slightly improved though the redevelopment of Abercynon South Station and the removal of Abercynon North Station. However, this will have a small impact on the overall travelling environment.

**(c) Traveller Stress**

This relates to the mental and physiological effects including frustration, fear of potential accidents and route uncertainty. The closure will remove the need to walk between two stations and the associated stress associated with the potential to miss a connection. In addition, passengers will no longer have to decide which station to use when catching a train to Pontypridd / Cardiff, avoiding the frustration of seeing the first service departing from the other station. There will be improved passenger information at Abercynon South which, coupled with the single boarding point and cross platform interchange, will reduce route uncertainty.

Table 2 summarises the journey ambience impacts and coupled with the estimated passenger numbers involved (650 per day) leads to an assessment of the benefit as being moderate (significant).

**Table 2 Journey Ambience Impact Worksheet**

<b>Factor</b>	<b>Sub-factor</b>	<b>Better</b>	<b>Neutral</b>	<b>Worse</b>
Traveller Care	Cleanliness		✓	
	Facilities		✓	
	Information		✓	
	Environment		✓	
Travellers' Views	-	✓		
Traveller Stress	Frustration	✓		
	Fear of potential accidents		✓	
	Route uncertainty	✓		

### 3.3 Safety

There are two sub-headings to consider under this objective, accidents and security;

#### 3.3.1 Accidents

There is no perceived impact on the safety of existing Abercynon North station users as a result of having to walk further to reach Abercynon South station as there is a pavement alongside Station Road between the two stations and no roads to cross.

The increase in total rail use predicted by the scheme will lead to a transfer of trips from the highway network and a consequent reduction in the incidence of road traffic accidents. The value of these is included within the non-user benefits of the economic appraisal but the methodology employed does not produce a quantified value for accidents saved. The assessment also includes for an increase in rail accidents as a result of increased rail use.

#### 3.3.2 Security

The need to access Abercynon station by a subway has the potential to create a security disbenefit but is offset by the station improvement measures proposed, specifically the improved wider subway, with its disabled access, visibility and greater sense of personal security.

Overall there is a slight improvement in safety as a result of the scheme involving the station closure.

### 3.4 Economy

There are three sub-objectives to consider, transport economic efficiency, reliability and wider economic impacts;

#### 3.4.1 Transport Economic Efficiency

The closure of Abercynon North station will cost around £8m – part of a £22m investment on the corridor. The increased frequency at Abercynon South station and improved interchange will lead to increased rail patronage and user and non-user benefits. These are partly offset by the disbenefit of an increased walk for a proportion of Abercynon North passengers, though there will be a slight benefit for current interchange passengers. There will be a cost to Government as a result of less fuel tax income due to the reduced car use associate with mode shift to rail.

The quantified economic appraisal is detailed in section i of Appendix A and reveals a Benefit to Cost Ratio of 2.35 which suggests that the closure option represents good value for money and passes the DfT's requirements for scheme investment.

#### 3.4.2 Reliability

The investment scheme that involves the station closure provides additional track capacity – two tracks through Abercynon Station to a new junction to the North of the Platforms and also a new turn-back facility in the vicinity of the current Abercynon North Station. This will provide a number of capacity benefits;



- Relocating the junction enables trains to pass in Abercynon South Station on the up and down lines.
- The impact of freight movements on the passenger service on the Aberdare Line is reduced, potentially enabling freight movements to be accommodated in every hour with a half-hourly passenger service.
- The turnback facility on the Aberdare branch just north of Abercynon North Junction will enable trains to be turned back towards Cardiff in the event of disruption, such as a train failure, on either the Aberdare or Merthyr Tydfil Lines.

The scheme will produce a substantial improvement in the reliability of rail services and subsequent additional passenger and freight benefits. The RWA Rail analysis showed an overall reduction in train delay minutes for the overall scheme, in spite of the doubled frequency of the Merthyr Tydfil services (hence higher track capacity utilisation). The incremental effects of the Abercynon area changes were not quantified but identified as an important element of the Merthyr Tydfil scheme which overall resulted in at least 13 minutes (8.8%) reduction in total delay minutes compared to the base scenario and improvement in PPM-5 of at least 0.19%.

It should be noted that these figures also include the additional pathing time on the Merthyr loop. In addition the new equipment will be less susceptible to failure.

The reliability benefits of the scheme resulting in the closure of Abercynon North station are considered significantly positive.

### 3.4.3 Wider Economic Impacts

The local and regional policy is to;

- Encourage access to jobs and opportunities occurring in and around Cardiff from the South Wales Valleys where there has been a loss of traditional employment opportunities;
- Encourage investment and regeneration in the Valleys to replace the traditional employment opportunities and;
- Encourage people to live within the Valleys.

The closure option is associated with an improvement in the service frequency at Abercynon South, leading to a significantly improved transport node with 4 trains per hour to Cardiff and more reliable services. This will support all of the identified economic policy objectives including encouraging people to live in Abercynon, encouraging development / regeneration in the vicinity of the improved station and providing a higher quality service between Abercynon and Cardiff, as well as to employment and learning opportunities in Pontypridd, Trefforest and Cathays.

The closure of the Abercynon North station, whilst removing an access point to the rail network, is not likely to result in a loss of economic activity in the vicinity of that station.

### 3.5 Accessibility

There are three aspects to consider – option values, severance and access to the transport system;

#### 3.5.1 Option Values

As the trains serving Abercynon North station will be stopping at Abercynon South station 270m further south, the option to travel by train to and from Abercynon remains. Therefore there is little impact on option values produced by the station closure.

#### 3.5.2 Severance

The railway closures guidance notes that severance is unlikely to be relevant to closure proposals and need not be included in assessments. There is no identified severance impact of the closure option at Abercynon.

#### 3.5.3 Access to the Transport System

The measurement of the change in access to the transport system is defined as non car owning households living within 800m (2km in rural areas) of the station proposed for closure and without alternative public transport provision.

Appendix A, section b shows the catchment analysis and concludes that up to 150 non car owning households currently within 800m of Abercynon North will be more than 800m away from the relocated station. There is therefore a slight negative impact of the station closure against this objective. However, as there are substantial alternative public transport services available to most of the destinations served by the rail services, (see Appendix A section c) the overall impact on the Abercynon and surrounding communities is considered minimal.

The closure of Abercynon North station removes a point of access to the rail network but only relocates access to the services provided to a point approximately 270m further south.

The existing station has level access to the platform from the road and a small car park alongside making it accessible to the mobility impaired. The closure scheme forces passengers to use a sub-way to reach the platform at Abercynon South. At present this involves the use of stairs but the scheme will create a new subway with a ramped access to/from the platform. The design of the ramp, including the decision regarding it's slope, has been undertaken in consultation with mobility impaired user groups.

The complete scheme at Abercynon South Station includes a new car park and access bridge which will improve access to areas on the east side of the River Taff.

There is a similar level of access to the transport system with the station closure.

### 3.6 Integration

This objective has three sub-objectives – interchange; land-use policies and proposals, and; wider Government Policy such as environmental sustainability, health and rural policy.

#### 3.6.1 Interchange

Improving interchange is a major factor in achieving a truly integrated transport system – a key objective of UK transport policy. This qualitative assessment of the Interchange sub-objective has been undertaken in line with the latest transport appraisal guidance (Webtag unit 3.7.1). The guidance lists a series of passenger indicators and standards which are summarised in Table 3 below in terms of the existing situation and that resulting from the Closure of Abercynon North station and improvement of Abercynon South Station. There is an overall improvement on interchange quality especially for passengers wishing to travel between the Aberdare and Merthyr Tydfil branches.

Table 3 Integration – Passenger Interchange Assessment

Passenger Interchange Indicator	Existing situation	With Station Closure
Waiting Environment	Poor	Moderate / high
Level of facilities	Poor	Poor / moderate
Level of Information	Poor / moderate	Moderate/high
Visible staff presence	Poor	Poor
Physical linkage for next stage of journey	Poor	High
Connection time and risk of missing a connection	Moderate	Moderate / high

Whilst there is a significant shift between the indicators in the table the numbers of passengers affected is low (less than 500 per day) and the impact is therefore classified as slightly positive.

#### 3.6.2 Land-use Policy

The qualitative assessment is undertaken against the local, regional and national policies in terms of the number of policies supported compared to those that would be adversely affected.

National policies are;

- Wales Spatial Plan, published in October 2001, the area interim statement for South East Wales highlights that a range of mid and **upper valleys settlements need to be further regenerated as desirable places to live, work and visit**. This policy is **supported** by the station closure as the provision of 4 trains per hour at Abercynon – rather than two trains per hour at two separate stations provides a more attractive service level for trips to/from this part of the upper valleys. The Wales Spatial Plan sets out the vision of development for Wales over the next 20 years and is underpinned by 5 major themes that link to the overall objectives of the proposals which are all **supported** by the Abercynon scheme:

- Building sustainable communities.
  - Promoting a sustainable economy.
  - Valuing our environment.
  - Achieving sustainable accessibility.
  - Respecting distinctiveness.
- "A Plan for Wales 2001", published in October 2001, set out the strategic plan and the vision for the long term. In particular the section on "Where We Live", a sustainable, inclusive and equal Wales means conserving and improving the natural built environment; **developing an integrated effective and accessible transport system that supports a growing economy.** The document states the need to invest in infrastructure to develop a better rail network for Wales ... and ... to deliver a better and more reliable service. **Supported.**
  - "A Winning Wales" sets the Welsh Assembly Government vision for delivering a Welsh **economy that is dynamic, inclusive and sustainable.** The objectives and priorities included improving transport by investing in transport infrastructure and services which support the economy of Wales and improving access to our main markets. **Supported.**
  - The Welsh Assembly Government's strategic plan "A Better Country", has an overall transport target of developing a **better co-ordinated and sustainable transport system** to support local communities and the creation of a prosperous community. **Supported.**
  - The Draft Wales Transport Strategy was published for Consultation on the 13<sup>th</sup> July 2006. The impact of the closure of Abercynon North station is supportive of several of the identified measures to deliver the **economic, environmental, social and 'quality of life' objectives;**
    - **Economic**
      - Improving connectivity (links) within Wales and internationally. **No Impact.**
      - Improving the efficient, reliable and sustainable movement of people. **Supported.**
      - Improving the efficient, reliable and sustainable movement of freight. **Supported.**
      - Improving access to employment opportunities. **Supported.**
      - Improving access to key visitor attractions. **Supported.**
      - Increasing the use of more sustainable materials in the maintenance of Wales' transport assets and in the provision of new transport infrastructure. **No Impact.**
    - **Environmental**
      - Reducing the contribution of transport to greenhouse gas emissions, adapting to the impacts of climate change and reducing the contribution of transport on air pollution and other harmful pollutant emissions. **Supported.**
      - Reducing the negative impact of transport on the local environment – water pollution, land contamination, noise and vibration, air pollution and links between communities. **Supported.**

Reducing the negative impact of transport on our heritage – landscape, townscape, historical environment and Wales' distinctiveness. **No Impact.**

Reducing the negative impacts of transport on biodiversity and increasing positive impacts. **No Impact.**

- **Social**

Improving access to healthcare. **Supported.**

Improving access to education and lifelong learning. **Supported.**

Improving access to shopping and leisure facilities. **Supported.**

Encouraging healthy lifestyles. **Supported.**

Improving the actual and perceived safety of travel. **Supported.**

It should also be noted that the Abercynon station and park and ride improvement scheme forms part of the Welsh Assembly Government's 5-year formal rail improvement programme. The provision of 4 trains per hour at one station in Abercynon is important in providing the frequency desired by park and ride users and therefore the potential success of the overall scheme and corridor investment.

Local Policies include;

- Rhondda Cynon Taf County Borough Council Local Development Plan, The Preferred Strategy (Northern Strategy Area) – The emphasis in the area will be on **building sustainable communities and halting the process of depopulation and decline**. The Council believes that thriving and vibrant town centres are essential if Rhondda Cynon Taf County Borough Council is to achieve its ambition of building a strong and sustainable local economy. This policy is **supported** by the station closure as the improved service level at Abercynon, centred on one station will be more attractive to the community, encouraging people to reside in the upper valleys but enabling them to access employment opportunities elsewhere.
- Rhondda Cynon Taf County Borough Council's 'A Better Life: Our Community Plan 2004-2014' – Action theme, 'A Better Life by Boosting Our Local Economy – a **transport infrastructure that will ensure access to businesses and for employees to travel to work**'. This policy is **supported** through the provision of 4 trains per hour from one station, reducing waiting times for travel to Cardiff. 30% of passengers surveyed stated this would be more convenient compared to 4% who thought the station closure would be less convenient for their journey.
- The UK Government's integrated transport policy was set out in the White Paper 'A New Deal for Transport: Better for Everyone' July 1998. The Welsh Assembly Government embraced the Government's integrated transport policy to be applied in Wales via 'Transporting Wales into the Future – Welsh Transportation Policy Statement – July 1998'. The **key objectives related to integration** are:

- Integration within and between different types of transport. **Supported.**
- Integration with the environment. **Supported.**
- Integration with land use planning. **Supported.**
- Integration with policies for education, health and wealth section. **Supported.**

The closure scheme supports the Regional Transport Plan, which is currently at the outline stage, through contributing to the objectives needed to "achieve seamless interchange within and between modes of transport". The scheme supports the Mid Glamorgan (Rhondda Cynon Taf County Borough) Replacement Structure Plan by contributing to policy T5 which includes "provision of new tracks, stations and signalling" and "improved pedestrian route to stations". Also Policy T9, "Development will be favoured which can be demonstrated to reduce the length of car-borne journeys to work in the area, or increase the range of opportunities for the use of public transport where this is compatible with the conservation of the environment".

The closure scheme supports and is in accord with a number of themes in the Council's 'A Better Life: Our Community Plan 2004-2014'. Including;

- A Better Life in Our Living Space – an accessible community with a transport and communication infrastructure that meets the needs of the whole population.
- A Better Life in Safer Communities by reducing car usage and thus, a reduction in road accident rates.
- A Better Life by Boosting Our Local Economy – a transport infrastructure that will ensure access to businesses and for employees to travel to work.

The Station Closure scheme supports the Council's Economic Regeneration Strategy notably, 'Action 5 – Improving Where We Live'. This sets out five action areas, and states that, 'It is of vital interest to all who live or work in the area, and those we would seek to attract to it, that our towns and villages within the Authority are made pleasant and attractive places to work and live'. The remodelled railway station as part of the larger scheme including Strategic Park and Ride, and the link to Navigation Business Park support Action Area 3: 'Working to Provide Better Transport'. This recognises that these improved transport links will provide Rhondda Cynon Taf businesses with competitive advantages. Transport links enable the flow of people and goods in and out of the area, ensuring that Rhondda Cynon Taf takes full advantage of its location and geography.

The Station Closure scheme is part of the Abercynon Strategic Park and Ride which is contained within the Authority's Local Transport Plan (August 2000). This sets out to assist with the provision of a safe, equitable and efficient integrated transportation system, which supports the economic, environmental and social development of all communities in Rhondda Cynon Taf. The Abercynon station remodelling and the Abercynon Strategic Park and Ride proposals are in accord with the following Action Plan points identified in the Local Transport Plan:

- Action Plan point 5: Contribute to the SWIFT (since replaced by Sewta) objective of improving public transport use by implementing bus and rail projects within its area.

The Strategy for the Cynon Valley Local Plan, which was adopted in January 2004, provides the planning framework within which the plans' objectives, policies and proposals are to be set. It aims:

- To secure the economic regeneration of the Cynon Valley by providing opportunities for new investment through the allocation of land and the control of new development, without prejudice to the conservation and enhancement of the built and natural environment'

The station closure scheme supports the Abercynon Strategic Park and Ride proposals which are included within the Cynon Valley Local Plan. Policy TP8 – Park and Ride facilities will be provided at the following locations defined on the proposals map: Abercynon South 'It is proposed that a major strategic park and ride facility will be developed providing between 100 and 200 spaces, at Abercynon South Station, to serve the main A4059 and A470 traffic routes into Cardiff.... The location of the site is ideal for attracting car borne commuters to travel to work by train, from a very wide catchment area.' This will achieve the following goals:

- To reduce local traffic congestion.
- To improve the safety of the highway network in the area and reduce casualties.
- To improve the environment for people living in and using commercial areas along the road by reducing the levels of traffic.
- To provide an alternative to car use by the provision of public transport.
- To provide a cost effective solution to the above problems.

The station closure proposal is consistent with and supported by the objective to 'Reduce the need to travel and promote more sustainable modes of transport' in the emerging Local Development Plan: 'Preferred Strategy' (2006-2021).

### 3.6.3 Other Government Policies

The station closure scheme has been shown to produce environmental and safety benefits, and will encourage rail travel to key centres in South Wales and the Valleys. It is therefore supportive of Government wider environmental, sustainability and health policies. The scheme has no impact on rural policy.

## 4 CONCLUSIONS

The Abercynon North station closure is part of a strategy to improve rail transport on the Aberdare and Merthyr Branches of the South Wales Valleys network. Closure will occur with the transfer of the Aberdare Line stop to Abercynon South Station, which itself will be improved to include a wider underpass with ramps and stairs, linking to an island platform equipped to a higher standard than Abercynon North station.

A survey of passengers using the two stations revealed that 30% perceived an improvement in convenience and only 5% a reduction in convenience. The economic evaluation encompassing the quantifiable costs and benefits revealed a positive rate of return, suggesting that the closure option represents good value for money and passes the DfT's requirements for scheme investment.

The Appraisal Summary Table (AST) in Appendix B summarises the quantifiable and non quantifiable impacts and reveals slight or significant positive impacts against most of the identified indicators. This supports the case for station closure as part of the Pontypridd to Merthyr Frequency Enhancements scheme.



**APPENDIX A – TECHNICAL ASSESSMENT**

(a) Existing station demands

Table 4 shows the annual station flows for 2004/05 and for 2006/07 (rounded) for Abercynon North and Abercynon South stations. More passengers use Abercynon North station than Abercynon South station, primarily as there are two trains per hour to Cardiff from the north station and only 1 train per hour from the south station. The data suggests a shift in patronage from the south station to the north station between 2004 and 2006. This may be a result of the almost doubling of frequency on the Aberdare Line in September 2003 on the Aberdare Line which serves the North Station.

Overall the demands to / from Abercynon between the two years is similar. We have therefore based our assessments on the 2004/2005 Moira model data which was readily available for the study.

**Table 4 Existing Station Flows**

Station	2004/05	2006/07	Difference
Abercynon North	112,800	124,000	+ 10%
Abercynon South	92,250	70,000	-24%
Total	205,050	194,000	-5.4%

Table 5 shows the top flows from Abercynon North and Abercynon South stations from the 2004/05 Moira data provided by Arriva Trains Wales. Over half of all trips from both stations are destined for Cardiff with significant proportions of trips destined for the other large towns accessed by each line – Pontypridd, Merthyr Tydfil and Aberdare. There are also significant flows from Abercynon North to the other stations on the Aberdare branch line.

**Table 5 Top Flows from Abercynon North and South Stations**

	Abercynon North	Abercynon South
Cardiff	51%	56%
Pontypridd	18%	14%
Aberdare	10%	-
Merthyr Tydfil	1%	17%
Mountain Ash	5%	-
Penrhiwceiber	3%	-
Treforest	3%	2%
Barry Island	1%	1%
Fernhill	1%	-
Treforest Estate	1%	1%
Cwmbach	1%	-
Cathays	-	1%
Cardiff Bay	-	1%
Merthyr Vale	-	1%
Taffs Well	-	1%
Penarth	-	1%
% of Total Flows	95%	96%

(b) Station Catchment Assessment

Table 6 shows the results of the station catchment assessment which used the Mapinfo GIS to assess the 2001 Census information for 800m and 2km radius catchments of the two stations. It is noticeable that the 2km figures for each station are similar around 3,050 households, 7,500 population and 900 non-car owning households. However there is significant difference between the 800m catchments with more non-car owning households and total households and resultant population within 800m of Abercynon North Station. However, the catchment areas of the two stations overlap with almost all of the walk-in catchment for Abercynon South station within 800m of Abercynon North station. It can therefore be concluded that up to 150 non-car owning households currently within 800m of Abercynon North will be more than 800m away from the relocated station.

Table 6 Abercynon North Station Catchment Data

	Abercynon North	Abercynon South
0 car owning households within 800m	457	305
0 car owning households within 2km	933	893
Households within 800m	1,368	844
Households within 2km	3,045	3,053
Population within 800m	3,229	1,980
Population within 2km	7,498	7,580

(c) Existing Bus Network

Abercynon is served by two types of bus service – express services between Aberdare and Cardiff and local services between Aberdare and Pontypridd, all provided by Veolia Transport Cymru.

The X5 and X6 express services operate along Abercynon Road, through Abercynon Centre (Ynysmeurig Road / Walter Street) to the A470. The slower service 26/27 buses operate through Abercynon, travelling north and south along Park View Road, Greenfield Terrace, Lock Street, Glancynon Terrace, Ynysmeurig Road / Walter Street, Mountain Ash Road, Aberdare Road, Park Street, and Abercynon Road providing significant stops within the community.

Both bus services call at The Clock / Walter Street stops in the centre of Abercynon, approximately 2 minutes walk from Abercynon North Station. It can therefore be concluded that rail passengers have a good level of alternative transport available should they be adversely affected by the closure proposal.

(d) Comparison of rail and bus services

Table 7 shows the comparison of journey time and frequency for trips to the main travel demand centres. The journey time range for buses is produced by the express and stopping services. In combination they provide a higher frequency than rail for shorter journeys, though the express services alone operate at a similar frequency. Rail has a significant time advantage for all of the main flows such that an additional 2 minute walk is unlikely to lead to a significant switch to bus, especially for the main flow to Cardiff which will experience a frequency increase which will offset the additional walking time.

Table 7 Existing Bus and Rail Journey Characteristics

Destination	Cardiff	Pontypridd	Aberdare
<b>Peak and Off Peak</b>			
<u>Rail Journey Time</u>	39 mins	9 mins	25 mins
<u>Rail Frequency</u>	2 tph	2 tph	2 tph
<b>Peak Period</b>			
<u>Bus Journey Time</u>	56 – 63 mins	17 – 25 mins	43 – 55 mins
<u>Bus Frequency</u>	3 bph	5 bph	4 bph
<b>Off Peak Period</b>			
<u>Bus Journey Time</u>	59 mins	15 – 25 mins	43 – 55 mins
<u>Bus Frequency</u>	2 bph	4 bph	4 bph

(e) Passenger Survey Results

Rhondda Cynon Taff Council staff undertook passenger interviews at Abercynon North and South stations on Monday 2<sup>nd</sup> July 2007 to establish the local origin / destination of journeys and mode of travel to the station. A total of 134 short interviews were undertaken between 06:22 and 10:21, 93 interviews were undertaken at Abercynon North Station and 41 at Abercynon South. Within the survey respondents were informed of the scheme involving the closure, the improved service frequency, station access improvements and additional parking proposed. They were then asked whether the scheme would make travel more or less convenient.

Table 8 shows that 4 out of 5 passengers walk to the station with the remainder arriving by car.

Table 8 Access Mode of Abercynon North & South Stations Users

	All Passengers	Abercynon North Only
Cycle	1%	1%
Car	21%	19%
Walk	78%	80%

Table 9 shows that around 5% of passengers considered the changes would be less convenient – these were individuals living in the vicinity of Abercynon North Station, in the area of Abercynon north of river and in Ynysboeth and other areas to the north west in the Cynon Valley. Those that considered the scheme as more convenient included at least 7 interchanging from one branch to the other who currently have to walk between the two stations. However, this group also included 3 people in the vicinity of Abercynon North Station, 3 people from Ynysboeth and one person from the area of Abercynon to the north of the river.

Table 9 Passengers Views of Change in Convenience

	All Passengers (except Abercynon South to Merthyr trains)	Abercynon North Only
More Convenient	30%	23%
No Difference	66%	72%
Less Convenient	4%	5%

The postcodes of respondents were further analysed to establish the proportion needing to travel further to make their journeys when the station closed. Table 10 shows that 34% were travelling to / from the zone in the vicinity of Abercynon South Station, 9% to / from the zone in the vicinity of Abercynon North Station and 12% to / from the area of Abercynon north of the Cynon River. A further 17% travelled to / from Ynysboeth, of which 30% drove to the station.

**Table 10 Passengers local Origins and Destinations**

<b>Zone</b>	<b>Description</b>	<b>Passengers</b>
A	Abercynon South, west of the River Taff	17%
B	Abercynon centre, between the 2 stations	9%
C	Abercynon East of the River Taff	8%
D	Abercynon North, south west of the River Cynon	9%
E	Abercynon North, North of the River Cynon	12%
F	Ynysboeth	17%
External West	Penhriwceiber, Mountain Ash and Cynon Valley North	15%
External North	Edwardsville, Quakers Yard, Merthyr Vale, etc	10%
External South	Pontypridd, Coed-y-Cwm, etc.	2%

Zone C will have improved access to Abercynon South station when the new bridge over the River Taff is constructed as part of the scheme. Half of the respondents from external zones accessed by car and a further 19% were interchanging between stations.

Those passengers currently accessing Abercynon North station from zones D, E and F (excluding those that arrive by car) will incur the additional walk to reach Abercynon South station – this equates to 38% of those interviewed at that station.

**(f) Costs, Cost Savings and Residual Liabilities**

As the passenger service will continue to operate with or without the station closure the cost issues relate to the operation and maintenance of the Abercynon North Station. This station is unstaffed and therefore operating cost savings will be marginal. Network Rail has estimated the net station maintenance cost saving (including Long Term Charge) as being between £4,500 and £9,000 per annum (Q1 2007) and the additional asset maintenance costs for the track and signalling as being at least £22,000 per annum (Q1 2007). Network Rail are unable to provide a more precise figure at this time. The lower station maintenance cost saving figure is used in the appraisal, with the higher saving being examined as a sensitivity test.

Residual liabilities depend on the planned treatment of the Abercynon North station site (abandonment / reuse of the platform materials). There is only a simple waiting shelter on the platform and small overall area available for other uses so it is assumed that there are no significant income / cost streams related to the abandoned station site in the evaluation.

The capital costs related to the trackwork and station alterations at Abercynon South station are included in the evaluation. A breakdown of the costs of the total Taff Vale North project is shown in Table 11. The £8.17m costs related to Abercynon (but excluding the park and ride scheme costs) are included within the evaluation.

**Table 11 Taff Vale North Project Capital Cost Breakdown**

<b>Element</b>	<b>Capital Cost</b>
Abercynon station and junction remodelling	£8,170k
Merthyr Vale and Loop	£10,296k
Abercynon Park and Ride	£4,000k
<b>Total</b>	<b>£22,466k</b>

The costs quoted are assumed as Q1 2007 prices, excluding VAT and include a 10% risk factor. A market price adjustment factor of 20.9% is added for the economic evaluation.

A capital cost sensitivity test was undertaken to establish the sensitivity of the economic evaluation to the possible need for additional works to enable the freight trains to be operated at the same time as a full half hourly passenger service on the Aberdare Line (see section j). A cost of £7.5m was used based on the Transport Grant bidding documentation submitted by Rhondda Cynon Taf Council for these works, including bi-directional signalling of the Abercwmboi Loop and treatment of the level crossing and ground frame to the north of Aberdare Station.

The incremental additional operating costs of infilling the gaps in the Aberdare service timetable were estimated using the operating cost model developed in partnership with Arriva Trains Wales within the Sewta Rail Strategy Study. The costs in Q1 2004 prices are shown in Table 12. As the rolling stock and staff are available the incremental costs relate to additional fuel, Network Rail access charges and servicing / maintenance through additional miles operated.

**Table 12 Incremental Annual Train Operating Costs**

<b>Element</b>	<b>Cost (£k)</b>
Servicing and Light Maintenance	40.6
Fuel	12.2
Network Rail Track Access Charges	12.2
<b>Total</b>	<b>65.0</b>

**(g) Passenger and Revenue Demand Forecasts**

To assess the impact on passengers of the station closure scheme the existing and future timetables were input to the MOIRA Passenger Demand Forecasting model with a 2004/05 base demand matrix resulting from ticket sales data and made available through Arriva Trains Wales.

The base timetable incorporates the existing Standard Pattern Timetable with the proposed half-hourly service to Merthyr Tydfil. The future timetable was adjusted to reflect;

- All Trains calling at Abercynon South Station; and
- A complete half hourly Aberdare Line timetable (infilling the 4 gaps).

In adjusting the MOIRA Model to reflect the combined station it was not possible to alter the based demand data to relocate demand from Abercynon North to Abercynon South, so the timetables for the Aberdare and Merthyr Line services were adjusted so that all trains stopped at both stations to reflect the final outcome in terms of passenger journey opportunities both at Abercynon and for those interchanging at Abercynon.

The model forecast for 2004/05 flows was an increase in demand of over 48,000 journeys per annum and increase in revenue of almost £55,000 per annum.

(h) **Cost Benefit Analysis Assumptions**

There are a number of economic benefits calculated for the evaluation;

- User Time Savings – existing and new rail passengers;
- Walking Time costs – for some existing Abercynon North rail passengers;
- Interchange benefits – walking time reductions for passengers interchanging between the Aberdare and Methyr Tydfil Lines;
- External – non-user benefits relating to;
  - Traffic decongestion time saving benefits – as a result of the growth in trips using Abercynon Station South some of which will have transferred from making journeys by private car;
  - Infrastructure maintenance cost savings as a result of the reduction of traffic on the highway network;
  - Accident Savings – resulting from a reduction in trips on the highway as a result of the mode shift to rail, and;
  - Environment benefits attributed to improved local air quality and reduced greenhouse gasses relating to the mode switch to rail.
- Indirect costs to Government as a result of lost revenue from fuel taxes;
- Increase in operating costs and revenues above inflation over the project life.

**Existing and New User Time Saving Benefits**

These benefits were forecast using the MOIRA model which takes account of passenger time savings for existing and new users taking account of frequency and within rail network interchange benefits. The model uses the Rail Industry Passenger Demand Forecasting Handbook (PDFH) values. The model forecast benefits of over £244k per annum in Q3 2004 prices.

*Walking Time / Interchange time benefits / disbenefits*

The disbenefit of some Abercynon North Station Users having to walk further to access rail services was estimated using Rail Closure (and relevant Webtag) Guidance. The calculation utilises the results of the passenger survey described in section (e) above and the results are shown in Table 13.

Table 13 also shows the benefits for passengers currently interchanging between the two Abercynon Stations, which uses the same factors. The numbers interchanging were assessed from the Moira model data and checked against the passenger survey. The 4,878 passenger journeys per annum equates to around 15 passenger journeys per day (applying a weekday factor of 311), the survey observed 7 outbound interchanging passengers in the period 0622 - 1030.

**Table 13 Calculation of Walk Time costs and benefits**

	<b>Abercynon North Passengers</b>	<b>Interchange passengers</b>
Abercynon North Passengers	112,801	-
Proportion Affected	38%	-
Interchange Passengers	-	4,878
Additional Walk Distance	0.27 km	0.27 km
Additional Walk Time	3.24 mins	3.24 mins
Walk Time Factor	2	2
Value of Time	£4.46 / hour	£4.46 / hour
Disbenefits	£20,647	-
Benefits	-	£2,350

#### **Rail Safety Benefits (costs)**

The economic evaluation takes account of the saving in road accidents as a result of reduced highway traffic (see external benefits below) and the increase in rail accidents as a result of increased rail use. Table 14 shows the calculation – utilising the rail accident rates in the Rail Closures Guidance 2006 and the values of fatal and serious accidents from HEN1 2007<sup>3</sup>.

**Table 14 Rail Safety Benefits (costs)**

<b>Element</b>	<b>Values</b>
Cost per fatality (2005 prices)	£1,428,180
Cost per serious injury (2005 Prices)	£160,480
Casualty Rate (Fatalities) Accidents per PassKm	0.0000000005
Casualty Rate (Serious Injury) Accidents per PassKm	0.000000018
2008 New Rail Passenger Miles	520329
2008 Rail Safety Benefits (2005 prices)	-£2.999

#### **External Benefits**

The non-user benefits have been assessed using the DfT Guidance on Rail Appraisal: External Costs of Car Use (Transport Analysis Guidance Unit 3.13.2, April 2007) and associated spreadsheets. This procedure produced recommended values for Congestion, infrastructure, accident, local air quality and greenhouse gases benefits resulting from the assumed transfer of trips from car for 2008 and 2025.

<sup>3</sup> Highways Economics Note 1: 2005 Valuation of the benefits of Prevention of Road Accidents and Casualties, DfT, January 2007.

We adopted the Sewta Rail Strategy assumption for car transfer of 33% of rail demand and a car occupancy factor of 1.2 to derive the net change in car kms, which were derived from passenger surveys of people using specific stations on the Rhymney Line, which asked how passengers would make the journey if the train service was not available. The Moira model forecast of new rail miles was used as the proxy for the journey distance / passenger volume. Moira forecast over 476,000 new rail miles in 2004, and the application of the above factors resulted in an estimated reduction of almost 230,000 kms per annum.

The rates used and values derived for the external impacts are shown in Table 15. It should be noted that this assessment is considered cautious as the weighed average congestion rate assumes the average amount of congested A-roads in Wales, whereas the trips will largely transfer from the A470 between Abercynon and Cardiff which is one of the most congested roads in Wales.

Table 15 External Costs of Car Use (Non-user benefits) rates / values.

Marginal External Cost	Rate p/pass car unit 2008	Rate p/pass car unit 2025	Value (£) 2008	Value (£) 2025
Congestion (weighed Average)	20.6	27.4	£47,163	£91,462
Infrastructure	0.1	0.1	£229	£334
Accident	2.8	3.9	£6,410	£13,034
Local Air Quality	0.5	0.3	£1,145	£1,003
Greenhouse gasses	0.3	0.3	£687	£1,003
<b>Total</b>			<b>£55,634</b>	<b>£106,835</b>

#### Indirect Tax Cost to Government

The transfer of journeys from the private car to rail results in a loss of government revenue as a result of the reduction in fuel sales and the resulting reduction in fuel tax income. For this appraisal the value of this factor was estimated using the DfT Guidance on Rail Appraisal: External Costs of Car Use (Transport Analysis Guidance Unit 3.13.2, April 2007) spreadsheet which suggested values of 3.4p / car km in 2008 and 2.7p / car km in 2025 (which incorporates the DfT's assumption that vehicles become more fuel efficient over time). While the use of this spreadsheet value in this context does not strictly follow TAG guidance, we feel that this represents a suitable simplified approach for this relatively minor scheme. Application of these factors to the reduced car miles given above results in estimated costs of almost £8k in 2008 and over £9k in 2025. The rise being due to the demand growth assumption, see economic appraisal assumptions section below.

#### Operating costs and Revenue Growth

The appraisal takes account of the planned growth in rail fares of RPI +1% and the assumed rise in operating costs of the same level. A revenue elasticity of 0.4 is applied to the fares increase to determine revenue growth.

#### Economic Appraisal Assumptions

The economic appraisal has been undertaken in accordance with the Rail Closure Guidance and the associated Guidance on Rail Appraisal through some simplifications were made in relation to the assessment of taxation implications. Key assumptions were:



- 2002 price base and 2002 prices, deflating values using RPI factors;
- Discounted over 60 years of operation from 2008 to a 2002 base assuming a discount rate of 3.5% from 2002 to 2032 and 3.0% for the remaining years;
- Assuming a rail passenger growth factor of 2.25% per annum from the 2004 base of the Moira Model in line with the recent Sewta Rail Strategy Study;
- Assuming value of time growth from 2002 to 2067 in accordance with appraisal guidance;
- Interpolation of the growth in external costs of car use (non-user benefits) between the forecasts for 2008 and 2025 with only rail passenger and value of time growth thereafter;
- Application of the 20.9% market price adjustment factor to the Capital Costs but no optimism bias was applied.

**(i) Cost Benefit Analysis Results**

The value for money assessment based on the benefit – cost ratio (BCR) as specified in the Guidance on Rail Appraisal (section 3.10.1) and is summarised in Table 16.

The BCR is the Present Value of the Benefits (PVB) divided by the Present Value of the Costs (PVC) where;

- $PVB = \text{Net private revenues} - \text{private costs} + \text{subsidies} + \text{grants} + \text{user benefits} + \text{non user benefits}$  and;
- $PVC = \text{cost to government}$

**Table 16 Benefit – Cost Ratio**

<b>Element</b>	<b>Present Values</b>
Revenues	£2.308m
Net Operating and maintenance costs	-£2.063m
Subsidies / grants	0
Net User Benefits	£13.957m
Non User Benefits	£3.182m
PVB	£17.383m
PVC	£7.395m
<b>BCR</b>	<b>2.35</b>

The Tables summarising the economic efficiency, public accounts and analysis of monetised costs and benefits of provided in Appendix C.

**(j) Sensitivity Analysis**

A number of sensitivity tests were undertaken to establish the sensitivity of the BCR to economic appraisal assumptions. These are summarised in Table 17. This shows that revisions of the value of time assumptions, rate of car diversion assumptions, assumed number of journeys through Abercynon North Station and level of net station maintenance cost savings have a marginal impact on the BCR.

**Table 17 Sensitivity Analysis Results**

<b>Test</b>	<b>BCR</b>
Guidance on Rail Appraisal External Costs of Car Use – National Transport Model average diversion factors - change in rail passenger kms – 26% car driver.	2.33
Commuter Value of time for walk time benefits/ disbenefits (£5.04 / hour)	2.33
Lowest number of passengers inconvenienced by Station Closure (5% from passenger survey)	2.51
Higher assumed number of annual passengers at Abercynon North station (124,000)	2.33
Higher rate of rail passenger growth per annum (3%)	3.12
Highest congestion rate (non-user benefits)	4.10
Plus £7.5m to Capital Costs	1.24
Increase saving in net station maintenance costs to £9,000 per annum	2.36

Assuming a lower number of passengers disbenefit from the station closure raises the BCR slightly. The BCR rises significantly if the rate of passenger growth is raised to 3% per annum from the 2.25% assumed and also if the highest traffic congestion levels on the highway network are assumed instead of the Weighed Average for all A-roads in Wales.

Increasing the capital costs by £7.5m for possible future additional investment on the Aberdare Line to accommodate freight and half hourly passenger services throughout the day reduces the BCR significantly. However, at 1.24 the scheme shows a positive return on investment without any allowance for additional freight benefits or performance improvements.

**APPENDIX B - APPRAISAL SUMMARY TABLE**

Description: Closure of Abercynon North Station and relocation of services to Abercynon South Station

Problems: Train Services to Cardiff split between 2 stations resulting in lower frequency, lack of track capacity results in 4 holes in the otherwise half hourly Aberdare service timetable.

OBJECTIVE	SUB-OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE MEASURE (year 2005)	ASSESSMENT
ENVIRONMENT	Noise	Increase in number of trains at existing station site, though half further from receptors, reduction in trains stopping at north station but few local receptors.	N/A	Slight Positive
	Local Air Quality	Improvements due to Modal Shift		
	Greenhouse Gasses	Reduced CO <sub>2</sub> emission levels due to Modal Shift	0.35 NO <sub>x</sub> tonnes/year 0.02 PM <sub>10</sub> tonnes/year	Slight Positive
	Landscape	No Impact	56 CO <sub>2</sub> tonnes/year	Slight Positive
	Townscape	No Impact	N/A	No Impact
	Heritage of	No Impact		No Impact
	Historic Resources	No Impact		No Impact
	Biodiversity	No Impact		No Impact
	Water Environment	No Impact		No Impact
	Physical Fitness	Slight Increase due to increased Rail use accessing stations by walking and additional walk involved for some users		
SAFETY	Journey Ambience	Improved Travellers views and reduced traveller stress including reduced frustration and route uncertainty		
	Accidents	Road accidents reduced through modal shift		Significant Positive
ECONOMY	Security	Improved station involves access through an underpass (Abercynon north has open level access) but scheme involves security measures		Slight Positive
	Transport Economic Efficiency	Return on investment	NPV = £17.3m	No net impact
	Reliability	Improvement through new turnback facility and ability for trains to pass at Abercynon Station		BCR = 2.35
	Wider Economics Impacts	Improving access to jobs in Cardiff and Pontypridd, Improved interchange between Aberdare and Merthyr Lines improving access to jobs between Valleys		Significant Positive
ACCESSIBILITY	Option Values	Slight positive impact of improved service frequency at combined station		Slight Positive
	Severance	No Impact		Slight Positive
INTEGRATION	Access to the Transport System	Reduced access through removal of one access point to the rail network		No Impact
	Transport Interchange	Improved interchange between Aberdare and Merthyr Line rail services		Slight Negative
	Land-Use Policy	Improved service frequency at Abercynon South Station with improved access to business park. Re-use of former station facilities and yard for transport interchange and park and ride.		Slight Positive
	Other Government Policies	Contributes to objectives to encourage modal split to sustainable travel modes to Cardiff		Slight Positive

**APPENDIX C - TEE TABLE, PUBLIC ACCOUNTS AND AMCB TABLE**

**Table 1: Economic Efficiency of Transport System** (revenues are scored as positives, costs as negatives)

	Total	Dors. LGVs and goods vehicles			Rail	Rail
		Bus & Coach	Bus & Coach	Rail Total	Company A e.g. NR	Other e.g. TOC, FOC
<b>Consumers user benefits</b>						
- travel time saving	16,842,946	2,732,247		14,110,699		14,110,699
- Vehicle opcost	-	-		-		-
- user charges	-	-		-		-
- during construction & maintenance	-	-		-		-
Net (1)	<b>16,842,946</b>	2,732,247		14,110,699		14,110,699
<b>Business</b>						
<b>User benefits</b>						
- Travel time	-	-		-		-
- Vehicle opcost	-	-		-		-
- user charges	-	-		-		-
- during construction & maintenance	-	-		-		-
Net (2)	-	-		-		-
<b>Private sector provider impact</b>						
- revenue	2,308,290			2,308,290		2,308,290
- opcost	- 2,063,184			- 2,063,184		- 2,063,184
- investment cost	-			-		-
- grant/subsidy	-			-		-
- revenue transfer	-			-		-
Sub total (3)	<b>245,106</b>			245,106		245,106
<b>Other impacts</b>						
- Developer contribution (4)	0					
Net business impact (5 = 2+3+4)	<b>245,106</b>			245,106		245,106
<b>Total, PV of transport econ. eff. Benefits (6 = 1+5)</b>	<b>17,088,052</b>					

Note that subtotals (1) and (5) flow into the AMCB table. Subtotal (6) does not.

**Table 2 Public Accounts** (costs should be recorded as a positive number, surpluses as a negative one)

	All Modes			Road	Bus & Coach	Rail
	Total	Infrastructure	Infrastructure	Infrastructure	Infrastructure	Infrastructure
<b>Local Government funding</b>						
- Direct Revenue	-	-		-		-
- Op costs	-	-		-		-
- investment costs	9,984	9,984		9,984		
- Developer and other contributions	-	-		-		-
- Grant/Subsidy (k)*	-	-		-		-
- Revenue transfer	-	-		-		-
Net (7)	<b>- 9,984</b>	9,984		9,984		
<b>Central Government funding</b>						
- Direct Revenue	-	-		-		-
- Op costs	-	-		-		-
- investment costs*	7,169,215	7,169,215		7,169,215		7,169,215
- Developer and other contributions	-	-		-		-
- Grant/Subsidy (k)*	-	-		-		-
- Indirect Tax Revenues	235,454	235,454		235,454		
- Revenue transfer	-	-		-		-
Net (8)	<b>7,404,669</b>	235,454		235,454		7,169,215
<b>Total PV of costs (9 = 7+8)</b>	<b>7,394,685</b>					

\*The public sector costs in these boxes should exclude developer contribution e.g. developer contribution is subtracted from these figures to give Net (8)

**Table 3: Analysis of Monetised Costs and Benefits (AMCB)**

	Total	Road	Bus & Coach	Rail
<b>Noise</b>				
Local air quality	29,951	29,951		
Greenhouse gases	29,951	29,951		
Journey ambience (incl. rolling stock quality, and in-vehicle crowding)	-	-		-
Accidents (incl. safety)	285,276	289,361		-15,085
Consumer users (sub-total 1, Table 1)	16,842,946	2,732,247		14,110,699
Business users and providers (sub-total 5, Table 1)	245,106			245,106
Reliability (incl. performance & reliability)	-	-		-
Option values	-	-		-
Interchange (station quality and crowding)	-	-		-
<b>PVB (a = sum of all benefits)</b>	<b>17,383,230</b>			
<b>PVC (b = sub-total 9, Table 2)</b>	<b>7,394,685</b>			
<b>Overall impact: total</b>				
- NPV (a-b)	10,000,000			
- ICR (a/b)	2.35			

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WALES TRANSPORT RESEARCH CENTRE  
CANOLFAN YMCHWIL TRAFNIDIAETH CYMRU



# ABERCYNON NEW STATION SCHEME RAIL PASSENGER CONSULTATION



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For: **Welsh Assembly Government**



Hwyodraeth Cynulliad Cymru  
Welsh Assembly Government





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## EXECUTIVE SUMMARY

As part of the Merthyr line enhancements being undertaken during 2007 - 08, it is proposed that a new station is built at Abercynon South. The Abercynon new Station is a joint project funded by the Welsh Assembly Government, and will be constructed by Network Rail in partnership with the South East Wales transport Alliance (SEWTA). The project is part of a wider £18 million investment in modernizing the railway infrastructure and train services between Merthyr, Abercynon, and Cardiff.

Abercynon North station will be closed and demolished. The Railways Act 2005 Schedule 7 requires public consultation about a station closure to be undertaken.

The Wales Transport Research Centre, University of Glamorgan, undertook a rail passenger survey at Abercynon between the 10<sup>th</sup> – 16<sup>th</sup> September 2007 to determine the impact the station closure and relocation will have on current rail users.

In total 255 rail station users were surveyed. The key findings of the survey include:

- 4 Many of the existing station facilities were regarded as very good, particularly access to the platform at Abercynon North and the proximity of the station to respondents home location.
- 2 The current station waiting shelters and help points were noted as being poor. Station lighting and parking were also highlighted as concerns.
- 1 The current stepped access to Abercynon South station represents a problem and is reflected in 37% of respondents identifying this as being poor or very poor.
- 3 There were high levels of awareness (71%) regarding the new station scheme.
- 3 There is a good level of support for the new station scheme, 199 respondents (79%) viewed the new station scheme positively. Positive aspects highlighted included the improved step free access, and having just the one station serving both branch lines.
- 1 Only 27 respondents (11%) believed that the scheme would result in a negative impact. The comments highlighted having to walk further, the scheme being a waste of money, and six carriage trains not being needed for this negative view.
- 1 111 respondents (44%) believed that the new station facilities and the enhanced train service would increase the frequency they travelled by train. 13% of respondents also identified that their use of other modes would decrease as a result of the train service improvements.

- 1 All of the new stations improved facilities were viewed very positively. Step free station access (93%) was the most popular feature of the new station. New weather proof shelters and the provision of real time information displays are also highly welcomed by rail station users at Abercynon.

In conclusion, the Abercynon rail passenger survey has shown that there are no major negative impacts associated with the new Abercynon station scheme and resulting closure of Abercynon North station. Rail passengers will greatly benefit from the improved station facilities to include step free access, real time information displays, new weather proof waiting shelters, a new park and ride, and enhanced train service consolidated at just one station. In addition to enhancing the rail users travel experience, the improvements may further encourage greater use of the train service from Abercynon.

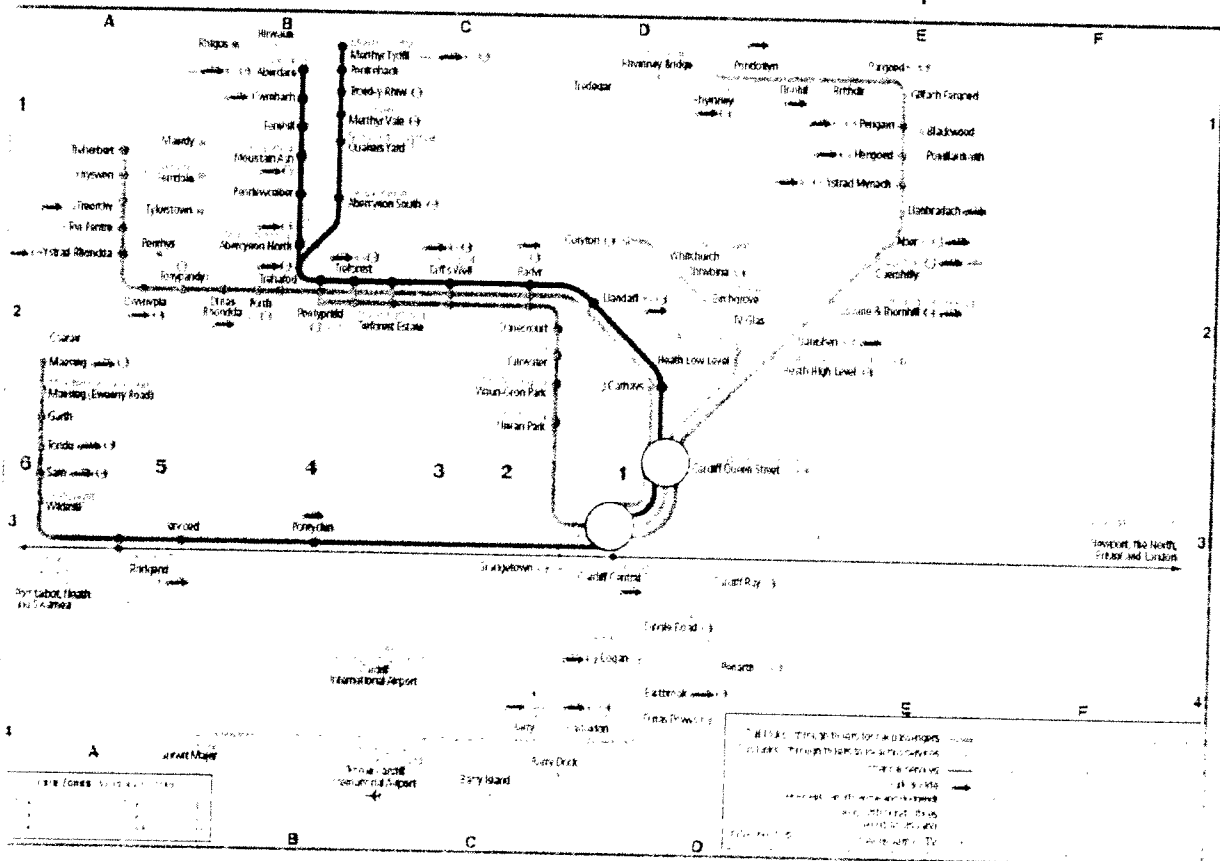
# 1 INTRODUCTION

## 1.1 Background

As part of the Merthyr line enhancements being undertaken during 2007 - 08, a new station will be built at Abercynon South. The Abercynon new Station is a joint project funded by the Welsh Assembly Government, and will be constructed by Network Rail in partnership with the South East Wales transport Alliance (SEWTA). The project is part of a wider £18 million investment in modernizing the railway infrastructure and train services between Merthyr, Abercynon, and Cardiff.

The scheme involves a significant enhancement of the station facilities at Abercynon South and the resulting closure of Abercynon North. At present the two stations are situated on two different railway lines, the Aberdare branch and Merthyr branch, some 180 metres apart. The new station project will enable the delivery of an enhanced half hourly service to Merthyr, and will consolidate services into one station, thus providing 4 trains per hour.

Figure 1.1 – Arriva Trains ‘Valley Lines’ Route Map



Key aspects of the new Abercynon station scheme include:

- 1 Modernisation of signalling system, improving the capability and capacity of the rail network
- 1 Provide lengthened platforms to accommodate 6 car sets

- ‡ Deliver Disability Discrimination Act (DDA) compliant step free station access and interchange between Merthyr and Aberdare services
- ‡ A secure park and ride facility with approximately 250 parking spaces
- ‡ Significantly improved lighting, CCTV, platform surfacing, and weather proof shelters
- ‡ The new station will deliver a more frequent train service (four trains per hour)

Abercynon North station will be closed and demolished. The Railways Act 2005 sets out statutory procedures concerning station closures on the passenger railway. Schedule 7 requires consultation about a closure to be undertaken. The purpose of this study is to conduct a passenger survey at Abercynon North to determine the impact the station closure and relocation will have on current rail users. The survey forms part of the formal consultation process being undertaken by the Welsh Assembly Government.

**Figure 1.2 – Abercynon North Platform & Waiting Shelter**



## **1.2 Study Aims and Objectives**

The aim of the study was to consult rail passenger survey at Abercynon to determine the impact of the closure and relocation of Abercynon North Station. The objectives of the consultation are to:

- 1 Determine passenger satisfaction with current levels of rail service
- 1 Assess satisfaction levels with current station facilities
- 1 Identify the impacts of the station's closure and relocation
- 1 Assess attitudes towards the new stations improved facilities
- 1 Assess attitudes to increased train service levels

### 1.3 Study Methodology

A short bilingual questionnaire was developed and designed to be conducted face-to-face with rail passengers at Abercynon North and South stations. The survey was designed to provide detailed information on:

- 1 Level of train/station usage;
- 1 Journey purpose;
- 1 Satisfaction with current levels of rail service
- 1 Satisfaction levels with current station facilities
- 1 The impacts of the station closure and relocation
- 1 Attitudes towards the new stations improved facilities and improved train frequency
- 1 Information about the respondent (i.e. Gender, age, economic activity, home postcode etc)

The passenger survey was undertaken over a one week period between the 10<sup>th</sup> – 15<sup>th</sup> September 2007. The survey was undertaken during the day and evenings, including weekends. Table 1.1 shows how the period was covered by the fieldworkers. Quotas were set to ensure that the sample was broadly representative by age and gender, and ensure a suitable balance of daytime / evening users and commuter / leisure users. A total of 255 surveys were completed.

**Table 1.1 – Survey Period**

Day	Session 1 <sup>†</sup>	Session 2 <sup>†</sup>
Monday	10:00 – 13:00	
Tuesday	07:00 – 10:00	16:00 – 19:00
Wednesday	10:00 – 13:00	
Thursday	12:00 – 16:00	16:00 – 19:00
Friday	07:00 – 10:00	
Saturday	09:00 – 12:00	
Sunday	-	

<sup>†</sup> Due to engineering work no rail services were running on Sunday 16<sup>th</sup> September. No surveys were undertaken due to this service disruption.

It is worth noting that a rugby world cup game was held in Cardiff on Saturday 15<sup>th</sup> between Wales and Australia. This would have had an impact on the rail passengers using the station on that day, although there is nothing to suggest that this has affected the overall sample.

The survey results were coded within the data analysis software package SPSS. SPSS enables the widest possible variety of cross-tabulations and statistics to be produced as required in a flexible and efficient manner when analysing data. The survey results have been analysed with a focus on identifying:

- 1 Differences by age, gender, economic activity;
- 1 Different views of regular / non-regular users and user types e.g. commuter, leisure traveller etc;
- 1 Satisfaction levels with the current station facilities; and
- 1 Attitudes towards the new station proposals.

## 1.4 Content

The section that follows presents a discussion of the survey results. Section 3 presents the conclusions and recommendations.

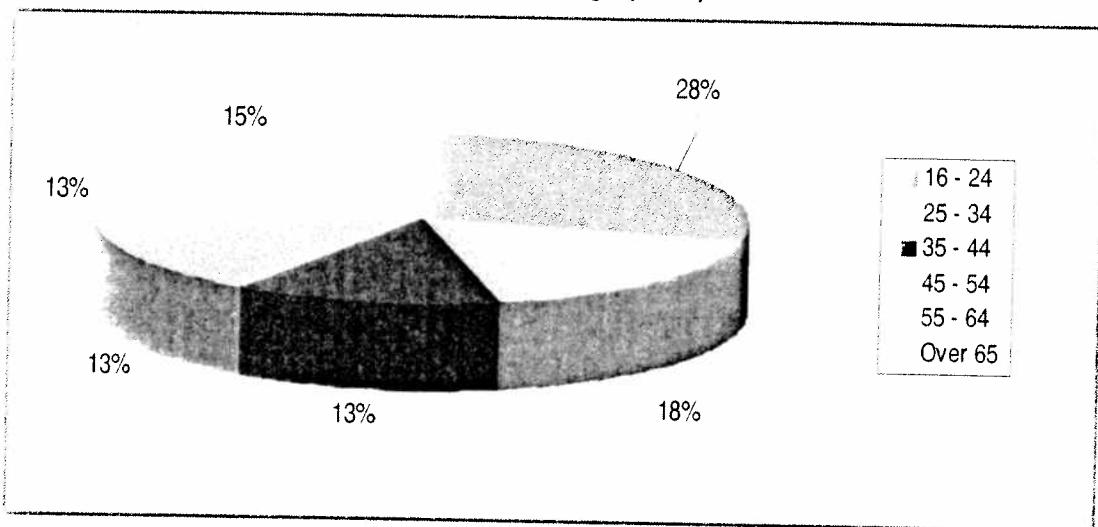
## 3 SURVEY ANALYSIS

### 2.1 The sample

A total of 255 were completed at Abercynon North and South stations. A good gender mix was achieved, with an even 50:50 split.

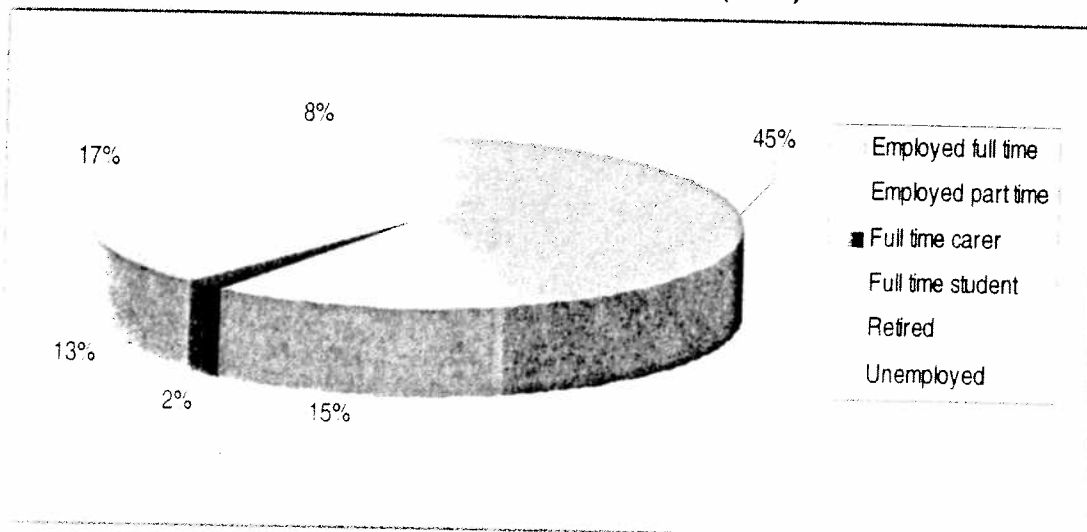
The survey also achieved a representative sample by age, reflecting usage of the stations by a full age range of respondents. There was a slight over sampling of the 16-24 year old category, with this group representing over 25% of the sample.

Figure 2.1 – Age (Q.C2)



The majority of rail users surveyed were in full (45%) or part time (15%) employment. 17% were retired and 8% were unemployed. This is broadly representative of the wider population.

Figure 2.2 – Employment Status (Q.C3)

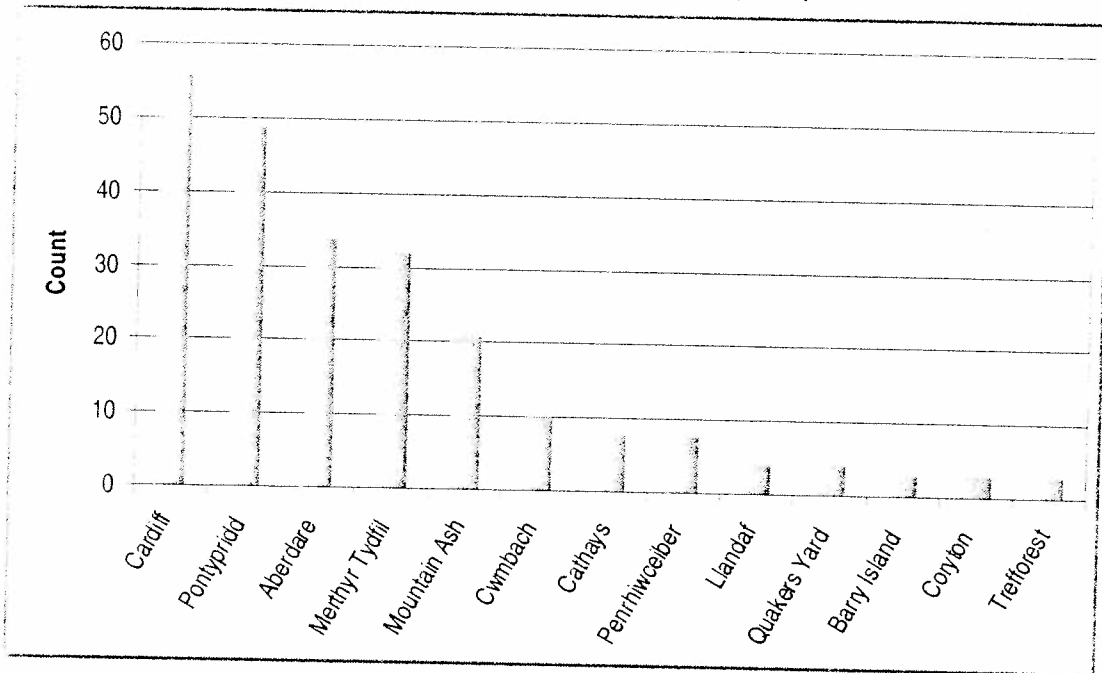




## 2.2 Station & Train Usage

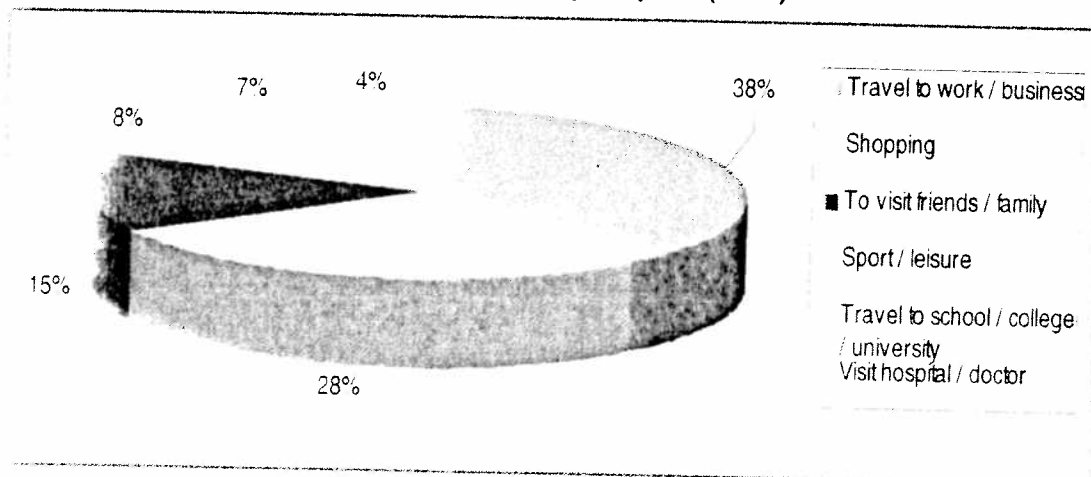
The most common stations travelled to by rail users from Abercynon were Cardiff, Pontypridd, Aberdare, and Merthyr Tydfil. These four destinations represented two-thirds of the total sample, which reflects the importance of access to these locations for employment, shopping, education and cultural / leisure activities. A number of other Valley Lines stations accounted for the remaining third of the sample.

Figure 2.3 – Station travelling to (Q.A1)



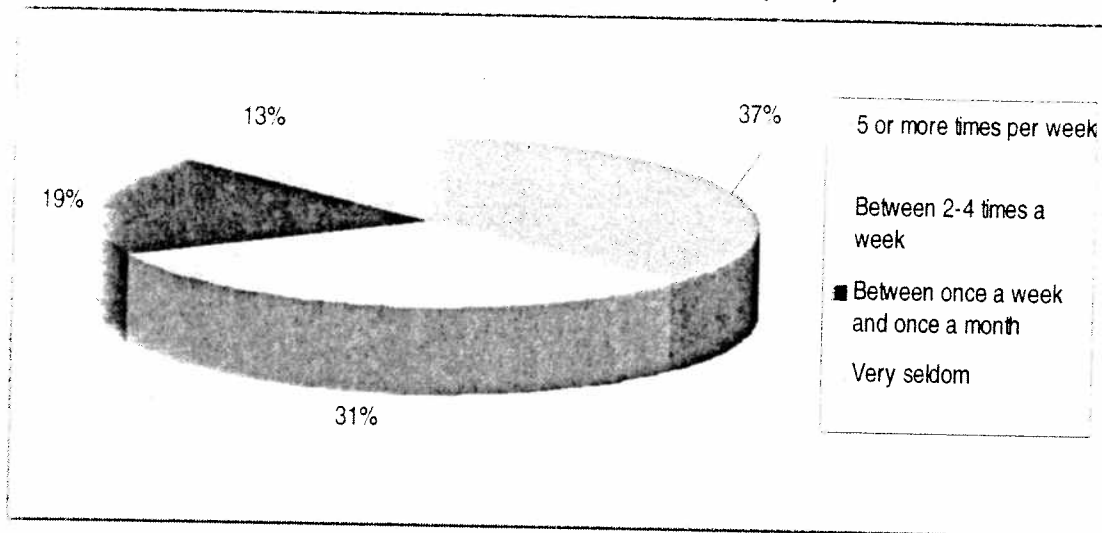
The main journey purposes of respondents were travel to work and shopping. Over a third of rail users surveyed were commuting to / from work, and 28% were using the train service to go shopping. The most popular commuter destination was Cardiff, while the most frequent destination for shopping trips was Pontypridd.

Figure 2.4 – Journey Purpose (Q.A2)



The majority of respondents were frequent rail users. 94 respondents (37%) use the train service from Abercynon 5 or more times per week, while a further 78 (31%) use the train service between 2-4 times a week. Only 13% of those surveyed used the train service on a seldom basis.

Figure 2.5 – Frequency use the train (Q.A3)



Respondents were also very familiar with the stations at Abercynon North and South. 84% had been using the stations for at least the last 6 months, with a number of rail users commenting that they had been using the station for many years. 16 respondents had been using the station for less than one month, and 7 were using Abercynon train stations for the first time.

A good mix of respondents using the rail stations at Abercynon at different times of the day and night was also achieved. 162 rail users surveyed (64%) only used the station during the daytime, while 89 (35%) used the stations at Abercynon both during the day and evening.

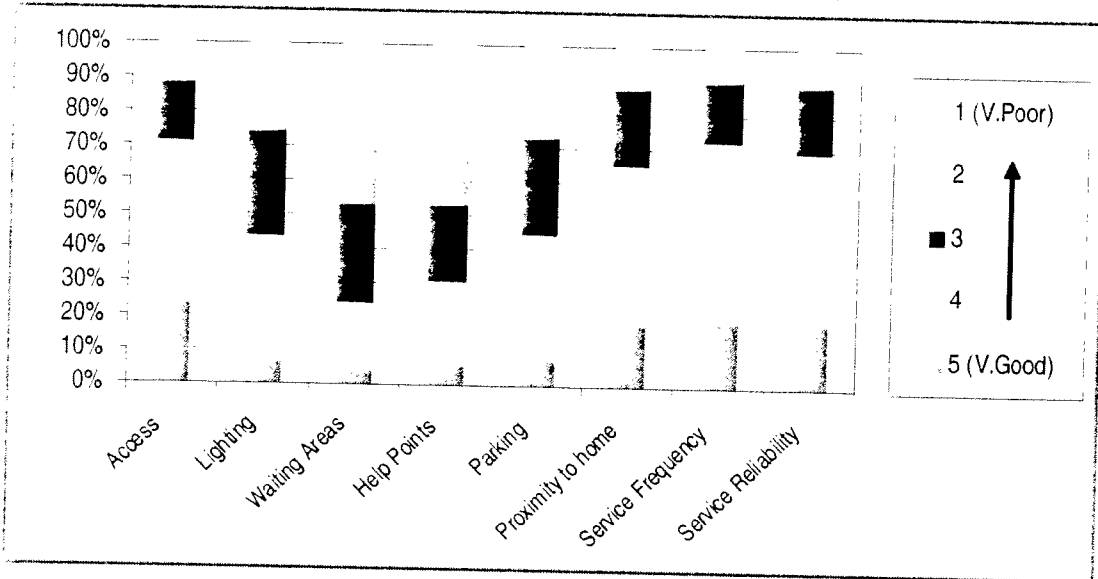
## 2.3 Opinion of Current Station Facilities

Section B of the survey asked rail users their opinions of the existing station facilities. **Many of the existing station facilities were regarded as very good.** At Abercynon North, access to the platform and the proximity of the station to respondents home location are highly rated, with 71% rating access as good or very good. The train service frequency and reliability were also highly rated. **Notably the station waiting areas and help points were noted as being poor.** 47% of respondents considered the waiting shelter and the availability of station help points to be poor or very poor. Station lighting and parking were also highlighted as concerns.

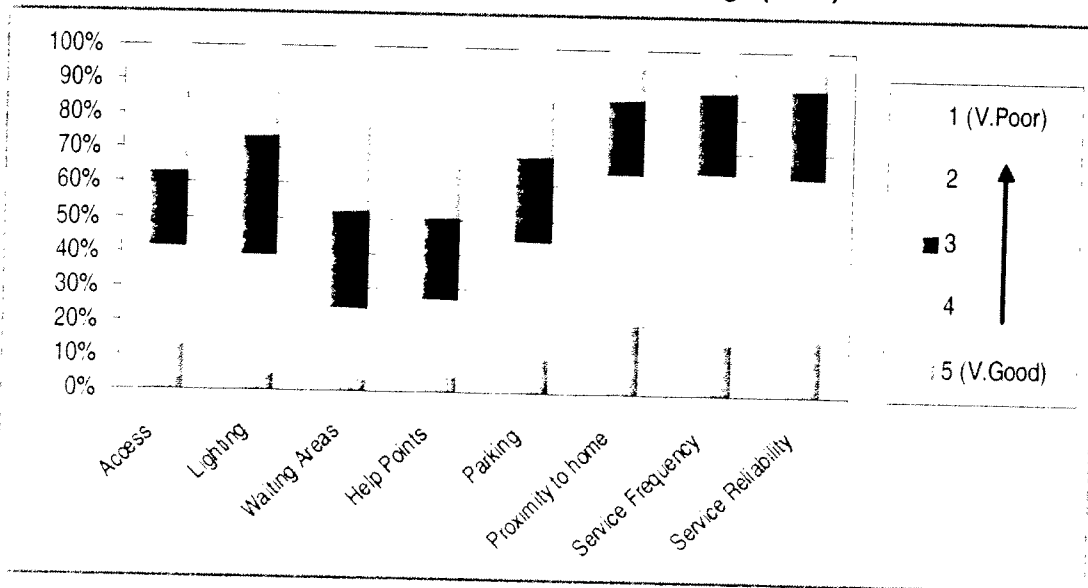
The rating of the station facilities at Abercynon South were broadly similar to those at the North station. **However, it is apparent that access to the platform at the South station does represent**

**a problem.** The current station layout requires a set of steps to be climbed to access the platform, and is reflected in 37% of respondents identifying this as being poor or very poor. This was particularly the case with older respondents, with 47% of over 65 year olds rating access as poor or very poor. A number of train users commented about the steps, including the problem of accessing the station with shopping, pushchairs and wheelchairs. In contrast only 12% rated access at Abercynon north as being poor, which has step free access. **This issue will be addressed at the new station which will be DDA compliant and have step free access.**

**Figure 2.6 – Abercynon North Ratings (Q.B1)**



**Figure 2.7 – Abercynon South Ratings (Q.B2)**



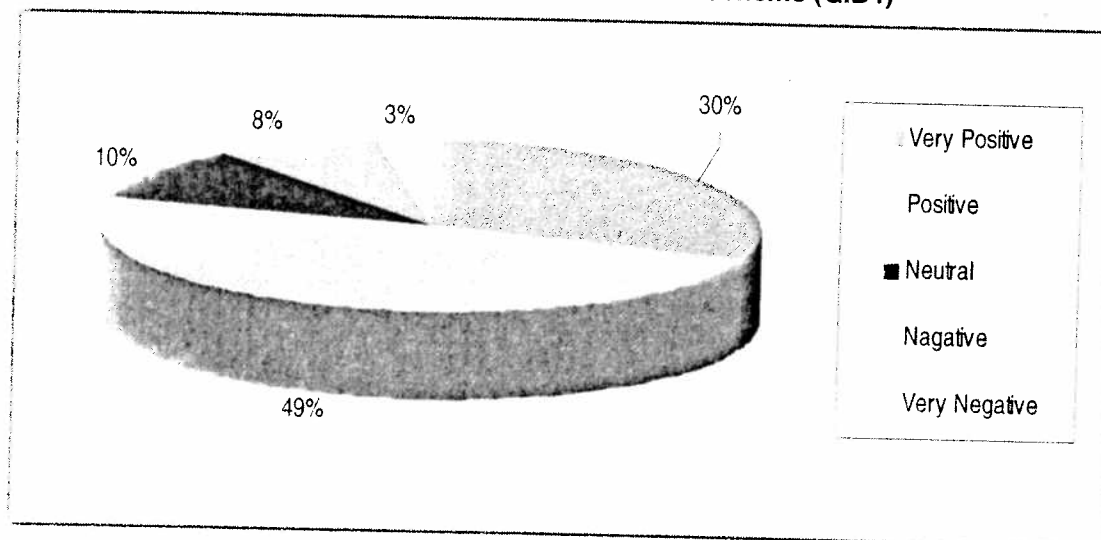
## 2.4 Impacts of New Abercynon Station Scheme

Respondents were also asked a number of key questions to determine the impact the station closure and new station facilities would have on their use of the station and train service.

**182 of those surveyed (71%) were already aware of the station works due to be undertaken at Abercynon**, which will result in the closure of Abercynon North and a new station being built at Abercynon South. This may have been affected by work having already commenced on the Abercynon South station.

**There is a good level of support for the new station scheme and associated station improvements.** 76 respondents (30%) viewed the new station scheme as very positive, while a further 123 rail station users (49%) viewed the scheme positively. **Positive aspects were highlighted as the improved step free access, having just the one station** and one respondent commented that they thought the changes will increase train use from Abercynon. In contrast only 27 respondents (11%) believed that the scheme would result in a negative impact. The comments provided reveal the reasons for this negative viewpoint. Reasons included having to walk further, that the scheme is a waste of money, and that there is no need for six carriage trains.

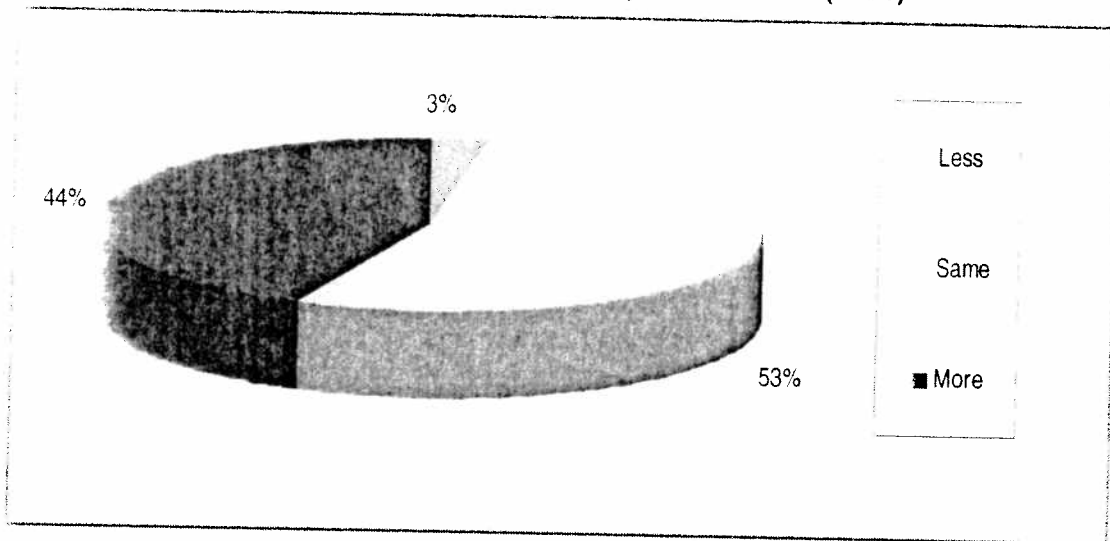
Figure 2.8 – Opinion of New Station Scheme (Q.B4)



**Encouragingly, 111 respondents (44%) believed that the new station facilities and enhancement of services to Merthyr up to two per hour, would increase the frequency they travelled by train.** This is particularly evident in respondents who recorded their journey purpose as being to go shopping and to visit friends and family, suggesting it is for these purposes train travel might increase. 53% would continue to use the train as before and only 3% suggested they would use the train less. 13% of respondents also identified that their use of other modes would decrease as a

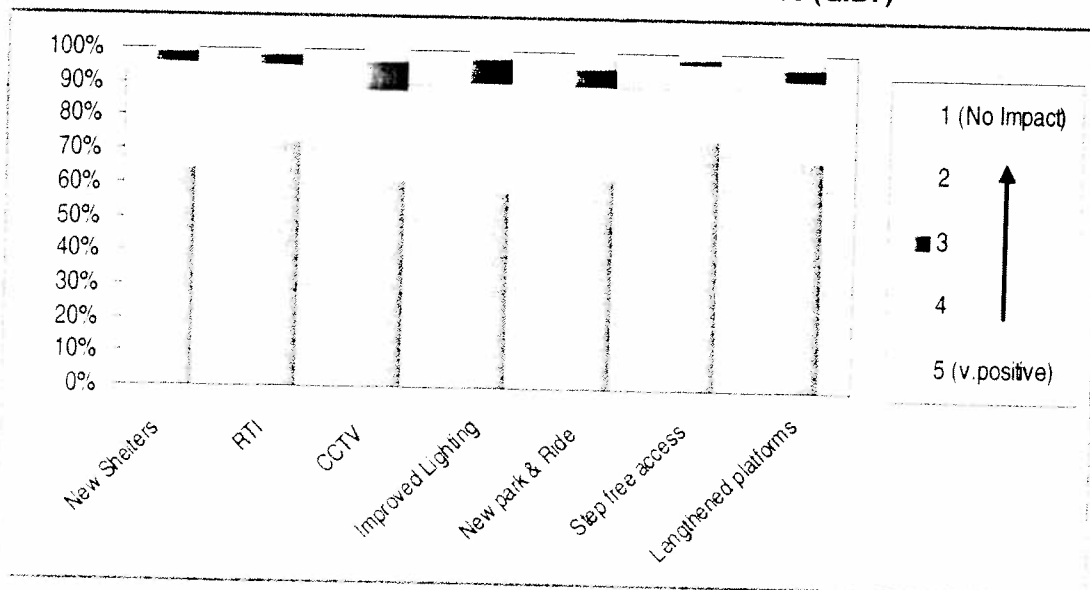
result of the train service improvements. The enhanced train service and facilities may also attract new rail users who currently travel by other modes.

**Figure 2.9 – Effect on frequency of train travel (Q.B6)**



Rail station users were also asked to rate the impact of various new facilities to be provided at the new Abercynon station. **All of the new stations improved facilities were viewed very positively. Step free station access was the most popular feature of the new station**, 238 respondents (93%) rating it as positive or very positive. It was particularly evident that this will be of great benefit to elderly rail passengers who currently struggle with the steps at Abercynon South. Of the other features presented new weather proof shelters and the provision of real time information displays are also highly welcomed by rail station users at Abercynon.

**Figure 2.10 – Opinion of New Station Facilities (Q.B7)**



### 3 CONCLUSIONS & RECOMMENDATIONS

Overall there is a high level of support for the rail improvements being undertaken at Abercynon. At present the existing facilities at Abercynon North and South are relatively poor, although the rail service itself is viewed as being very good. The waiting shelters are particularly poor, and passengers are inconvenienced by the two stations being on separate branch lines. The new station will therefore benefit rail users by providing new weather proof shelters and enabling all services to Merthyr and Aberdare to call at the one station.

The current access arrangements to the South station were also highlighted through the survey as being unsatisfactory. The stepped access is presenting problems for rail users with pushchairs, wheelchairs, anyone with lots of shopping and more generally elderly passengers with mobility problems. The new station will be DDA compliant and will dramatically improve access onto the station platforms.

In light of the Abercynon rail passenger survey results, it is recommended that the Welsh Assembly Government and SEWTA review the need for other station enhancement schemes. In particular the survey draws attention to the need to improve waiting shelters, platform lighting and platform access.

The survey also indicates that the rail enhancements and new station scheme will encourage more frequent use of the train service from Abercynon. This is clearly very positive, and fits well with both SEWTA's and the Assembly's objective of promoting travel by public transport and reducing the number of car trips being undertaken, and therefore road congestion on the A470.

In conclusion, the Abercynon rail passenger survey has shown that there are no major negative impacts associated with the new Abercynon station scheme and resulting closure of Abercynon North station.

APPENDIX 1 – ABERCYNON PASSENGER SURVEY

# ABERCYNON STATION SURVEY

As part of the Merthyr Rail enhancement scheme, a new station is due to be built at Abercynon. The new station scheme involves a significant enhancement of the station facilities at Abercynon South, the closure of Abercynon North, with all train services subsequently serving the new station. This survey is being undertaken by the Wales Transport Research Centre, University of Glamorgan, on behalf of the Welsh Assembly Government, to identify what impact the station works will have on train passengers.

## SECTION A – STATION & TRAIN USAGE

**A1. What station are you travelling to?**

.....

**A2. What is your main journey purpose today?**

- Travel to work / business
- Travel to school / college / university
- Shopping
- Visit hospital / doctor
- Sport / leisure
- To visit friends / family

**A3. How regularly do you use the train service from Abercynon?**

- 5 or more times per week
- Between 2 - 4 times a week
- Between once a week and once a month
- Very seldom

**A4. How long have you been using this station?**

- First occasion
- Less than a month
- 1 – 5 months
- 6 – 12 months
- 12 months +

**A5. When do you use the trains from Abercynon?**

- During the daytime only
- During the night time only
- Both during the day and night

## SECTION B – STATION FACILITIES

**B1. How would you rate the following at ABERCYNON NORTH station?**

(5 point scale: 1 = Very Poor; 5 = Very good)

	1	2	3	4	5	DK
Access on to the platform	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Platform lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Station waiting areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Station help points	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car parking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proximity of station to home location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The frequency of the service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service reliability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



**B2. How would you rate the following at ABERCYNON SOUTH station?**

(5 point scale: 1 = Very Poor; 5 = Very good)

	1	2	3	4	5	DK
Access on to the platform	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Platform lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Station waiting areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Station help points	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Car parking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proximity of station to home location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The frequency of the service (30mins)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service reliability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Significant station works are programmed to be undertaken at Abercynon North & South in 2008, with a new station to be built at Abercynon. The scheme will result in the closure of Abercynon North, with all Merthyr and Aberdare services, in the future, stopping at the new Abercynon Station.*



**Were you already aware that a new station is going to be built on the Abercynon South station site?**

Yes / No

**B4. What is your opinion of a new Abercynon Station being built, serving both Merthyr and Aberdare branch lines?**

- Very Negative
- Negative
- Neutral
- Positive
- Very Positive

**B5. How will you be affected by the closure of Abercynon North station?**

**Comments:**

**B6. Train services will increase to 4 trains per hour to Cardiff / Pontypridd, 2 per hour to Aberdare and 2 per hour to Merthyr. How will the changes effect:**

- |   | -                        | =                        | +                        |
|---|--------------------------|--------------------------|--------------------------|
| a) The frequency you travel by train    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Your use of other modes of transport | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**B7. How would you rate the impact of the following facilities to be provided at the new Abercynon station? (Scale: 1 = No impact 5 = Very Positive)**

	1	2	3	4	5	DK / NA
New weather proof shelters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Real time arrival / departure displays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CCTV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved platform lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New park and ride with 250 spaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Step free station access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lengthened platform for 6 carriages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**B8. Do you have any further comments on the new Abercynon station scheme?**

**Comments:**

## SECTION C – ABOUT THE RESPONDENT

### C1. Gender

Male / Female

### C2. What was your age on your last birthday?

- |         |                          |         |                          |
|---------|--------------------------|---------|--------------------------|
| 16 – 24 | <input type="checkbox"/> | 45 – 54 | <input type="checkbox"/> |
| 25 – 34 | <input type="checkbox"/> | 55 – 64 | <input type="checkbox"/> |
| 35 – 44 | <input type="checkbox"/> | Over 65 | <input type="checkbox"/> |

### C3. What is your current employment status?

- Employed Full time
- Employed Part time
- Unemployed
- Retired
- Full time carer
- Full time student

C4. Home Postcode:

All your answers will be treated in the strictest of confidence and will be used for the purposes of this research only in accordance with the Data Protection Act (1998).

*Thank you for your time*

## **CLOSURE OF ABERCYNON NORTH STATION.**

### **REPORT ON THE OUTCOME OF PUBLIC CONSULTATION UNDER RAILWAYS ACT 2005 CLOSURE PROCEDURES.**

#### **Report on the outcome of the consultation.**

Four responses were received to the consultation.

One was from a private individual querying whether Aberdare station would close, the Welsh Assembly Government has replied with an assurance that this will not happen.

Passenger Focus wrote in support of the proposal and noted that under its own research only 5 % of respondents had a negative reaction in terms of convenience. Passenger Focus enquired whether a full range of modern passenger facilities would be provided at the new station, including :-

- electronic Customer Information Services,
- asked for confirmation of the time-scale for the Park and Ride facility and;
- suggested that the Abercynon North Station should be dismantled in order to prevent vandalism and mischief making

The Welsh Assembly Government noted the expression of support and the out come of the passenger survey and provided assurances on each of those points. The Park and Ride facility is funded under a 2008-09 Transport Grant Allocation progress await the completion of Compulsory Purchase Order Procedures.

The other two responses were letters of support from SEWTA, the South East Wales Transport Alliance, and Rhondda Cynon Taff County Borough Council, the scheme sponsors. The Welsh Assembly Government has noted these expressions of support.

The Welsh Assembly Government has also noted the generally favourable findings of the surveys of the travelling public undertaken by the Wales Transport Research Centre.

Accordingly the Deputy First Minister and Minister for the Economy and Transport has decided that the closure of the station and section of line at Abercynon North should proceed and the ratification of this by the Office of Rail Regulation is being sought. The proposed closure implementation date is May 30<sup>th</sup> 2008, when the new station will be open.

## **Background**

Before any closure may proceed, sections 24 and 41 of the Railways Act 2005 (subsequently referred to as "the Act") requires that the railway funding authority (in this case the Welsh Assembly Government) undertake a consultation exercise in accordance with Schedule 7 of that Act. Once the 12- week consultation period closes, it is a requirement that all responses are recorded and all questions answered in the form of a consultation response

The Abercynon New Station is a joint project involving Welsh Assembly Government and the South East Wales Transport Alliance (SEWTA), and is being constructed by Network Rail. The Project is part of a wider investment in modernising the railway infrastructure and train services between Merthyr, Abercynon and Cardiff.

Currently, the town of Abercynon has two separate stations, 180 metres apart. The separation of the stations is a feature of the existing infrastructure, there being two separate running lines, one for Aberdare and one for Merthyr. At present, two trains per hour serve the travelling public at each separate station.

The Project involves the building of a brand new Station at Abercynon and, when that Station is ready to open, closure of the old Station at Abercynon North. The opening of the New Station and the closure of Abercynon North Station will be simultaneous, resulting in no loss of opportunity for passengers. The New Station will be built on the site of the existing Abercynon South Station (next to the old Signal Box). Passengers who currently travel to and from Abercynon North Station will then use the New Station, which will be situated 180 metres away.

The Project will be completed in summer 2008. The main benefits for passengers will be:

### ***Improved Train Services***

- Merthyr trains and Aberdare trains will stop at the new station – this is an improvement over the current situation where Merthyr trains stop at Abercynon South and Aberdare trains stop at Abercynon North. It will enable some platform transfer between the branches.
- The frequency of Merthyr trains will improve from every hour to every 30 minutes.
- 4 trains per hour in each direction during the daytime – providing customers with more a more frequent train service and greater choice of journeys will serve the New Station at Abercynon.
- Longer platforms so that longer trains with additional seating capacity can be run.

### **Better Access and Waiting Facilities**

- Closure of the old subway and replacing it with a modern, dry and well lit new subway that is fitted with CCTV.
- 24 hour CCTV coverage.
- Weatherproof canopies, with clear panels to assist with personal security.
- Integrated, clear and coherent signage and information displays, together with signage to station from outside
- For the future, a Park & Ride Car Park with secure car parking.
- Tactile paving throughout the new station platforms to assist visually impaired, currently only available on Abercynon North.

### **New Station Project Appraisal**

The Abercynon New Station Project has been assessed against the five criteria specified within the Railways Closures Guidance:

- Integration
- Economy
- Accessibility
- Safety
- Environment

#### ***Integration***

The New Station Project will improve integration between train services and other modes by providing one Station at Abercynon, as opposed to the current situation where there are 2 stations situated on different railway lines some 180 metres apart.

The Project will enable delivery of an enhanced service to and from Merthyr (from hourly to every 30 minutes), and will consolidate services into one Station thus providing 4 trains per hour in each direction (as opposed to 3 trains per hour spread over 2 different stations). The introduction of the second hourly Merthyr service is under consideration.

Currently, Abercynon North Station is a stand-alone facility and its proposed Closure will therefore not have an adverse affect on integration between modes.

## ***Economy***

The Abercynon New Station Project supports the wider policy objectives of Welsh Assembly Government by improving accessibility between key settlements and concentrated centres of employment, education and leisure. Demand for train services between Cardiff and Abercynon/Merthyr/Abercynon is growing by upwards of 10% per annum, year on year. The construction of a New Station, and the Closure of Abercynon North Station, are important factors in developing a railway infrastructure that has the capacity for meeting growing demand for train services.

The Project is part of a wider investment scheme in modernising the railway infrastructure and train services.

The Project includes modernisation of the railway infrastructure, resulting in replacing the antiquated mechanical signalling system with a modern equivalent form Solid State Interlocking signalling system, thus improving the capability and capacity of the asset and, at the same time, reducing the ongoing Operating & Maintenance Costs for Network Rail.

The New Station Project will reduce waiting times for passengers (by providing greater choice between journeys), improve access to train services (by improving frequencies), reduce journey times (by modernising the signalling system), and will provide provision for additional train capacity by providing longer platforms.

Welsh Assembly Government does not believe the Closure of Abercynon North Station will have any appreciable disbenefit because the facility will be replaced by a far superior New Station at a distance of 180 metres away.

## **Accessibility**

The New Station Project will deliver Disability Discrimination Act 1995 ("DDA") compliant step-free access for encumbered passengers. This is in comparison to Abercynon North Station, which is currently non-compliant with DDA, and neither does it have scope for adapting to DDA compliance due to limitations on the available land-take footprint.

The New Station will provide step-free interchange between train services, in comparison to the current situation whereby passengers have to walk between Abercynon South Station and Abercynon North Station (both of which are non- DDA compliant) to change trains.

A Park & Ride facility with approximately 250 car parking spaces will provide access to a wider market of rail users. The capacity of the current car park at Abercynon North is 5 spaces.

## **Safety**

The New Station Project will provide a significant improvement in lighting, CCTV surveillance, platform surfacing, waiting areas and weatherproof shelter. In addition, the New Station is within sight and close proximity to a continuously staffed Signal Box (Abercynon) which provides additional assurance for passengers.

In comparison, the existing Abercynon North Station is poorly lit, remote, does not have CCTV surveillance and has a rudimentary waiting shelter.

Welsh Assembly Government believes that closure of Abercynon North Station and transferral of passengers to the New Station will have a positive impact on passenger safety and security.

Once the new station is fully operational, the station at Abercynon North will be decommissioned and made safe.

### ***Environment***

The New Station Project will deliver improved and more frequent train services, as well as a new Park & Ride facility with capacity to transfer journeys from car to rail.

The New Station Project is part of wider investment project that will deliver additional 3,000 journey opportunities every day between Merthyr, Abercynon and Cardiff (Monday to Saturday).

Delivery of these environmental benefits is contingent upon Closure of Abercynon North Station and the concurrent opening of Abercynon New Station.

### **Assessment**

An initial assessment of the proposal to close Abercynon North Station was carried out by Jacobs Consultancy on behalf of the South East Wales Transport Alliance (Sewta). The assessment took into account the five criteria specified within the Railways Closures Guidance:

- Integration
- Economy
- Accessibility
- Safety
- Environment

The cost benefits Analysis Results show a Benefit – Cost Ratio (BCR) of 2:35.

In addition to consulting with the prescribed stakeholders, it was felt that the public should be further engaged and the Wales Transport Research Centre of the University of Glamorgan, conducted surveys of the travelling public between 10<sup>th</sup> and 16<sup>th</sup> September 2007.

The key findings include

- High level of awareness of the scheme with a good overall level of support
- Good response to the improved station facilities
- And an expectation that the improvements would result in an increase of passenger numbers on the line.



As no negative response in respect of the scheme has been received from the stakeholders or the general public, Welsh Assembly Government will now seek to obtain ratification of the proposed closure from the Office of Rail Regulation (ORR).

A full list of all consultees can be seen at Appendix A  
A list of responses may be seen at Appendix B

Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

Trafnidiaeth Cymru  
Transport Wales

28<sup>th</sup> November 2007

Dear Consultee,

**Consultation on the Proposal to Build a New Station at Abercynon and Close the existing Station at Abercynon North.**

In order to facilitate the opening of the new Abercynon Station, closure of Abercynon North Station (and all services to/from it) is subject to the closures process under sections 24 and 41 of the Railways Act 2005 (subsequently referred to as "the Act").

Before any closure may proceed, sections 24 and 41 of the Act requires that the railway funding authority (in this case the Welsh Assembly government) requires a consultation in accordance with Schedule 7 of that Act. I am therefore writing to invite views on the proposal to close the station at Abercynon North and the consequential discontinuance of railway passenger services from that station.

The Abercynon New Station is a joint project involving Welsh Assembly Government and the South East Wales Transport Alliance (SEWTA), and is being constructed by Network Rail. The Project is part of a wider £18 million investment in modernising the railway infrastructure and train services between Merthyr, Abercynon and Cardiff.

The Consultation paper sets out the details of the proposed project and the document can be viewed at <http://new.wales.gov.uk/topics/transport/rail/>

Copies of the Closures Guidance published by the Secretary of State/Welsh Assembly Government/Transport Scotland, can be found at <http://www.dft.gov.uk/pgr/rail/legislation/sgd/railwaysclosuresguidancea/railwaysclosuresguidance?version=1>

Please send responses to:  
Jon Price, rail Unit, Cathays Park Cardiff CF10 3NQ (Tel: 02920 826104) or e-mail to [Jon.Price@wales.gsi.gov.uk](mailto:Jon.Price@wales.gsi.gov.uk)

The consultation in Wales will last until 11 February 2008.



## Transparency policy

In line with our policy of openness, at the end of the consultation period copies of the responses we will be collated and a summary produced which will be made publicly available through the Welsh Assembly Government web pages. Copies of the responses will also be made available to the Office of Rail Regulator (ORR).

If you do not consent to this, you must clearly request that your response be treated confidentially. Any confidentiality disclaimer generated by your IT system in e-mail responses will not be treated as such a request. You should also be aware that there might be circumstances in which Welsh Assembly Government will be required to communicate information to third parties on request, in order to comply with its obligations under the Freedom of Information Act 2000.

The Publications Centre will supply copies of consultation responses to personal callers or in response to telephone (tel: 029 2082 3683) or email requests: [assembly-publications@wales.gsi.gov.uk](mailto:assembly-publications@wales.gsi.gov.uk)). Wherever possible, personal callers should give the library at least 24 hours' notice of their requirements. An administrative charge will be made to cover photocopying and postage costs.

Comments or complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) should be addressed to Aeronaw Hawkins, Rail Unit, Cathays Park, Cardiff, CF10 3NQ (Tel: 02920 826849) or e-mail to [aeronaw.hawkins@wales.gsi.gov.uk](mailto:aeronaw.hawkins@wales.gsi.gov.uk)

Thank you for your help in this matter, if you have any queries please contact us as above.

Yours sincerely



*Tim James*

**TIM JAMES**  
Head of Rail Unit.

Mr J Price  
Rail Unit  
Rail and New Roads Division  
Transport Wales  
Welsh Assembly Government  
Cathays Park  
CARDIFF  
CF10 3NQ

Please reply to/Anfonwch eich ateb yn ôl at:

Charlie Nelson  
Sewta Rail Working Group  
c/o 5th Floor  
Sardis House  
Sardis Road  
PONTYPRIDD  
CF37 1DU

Our Ref/Ein Cyf:  
R206-01/CEN

Your Ref/Eich Cyf

Date/Dyddiad:  
11 February 2008

Dear Mr Price,

**CONSULTATION ON THE PROPOSAL TO BUILD A NEW STATION AT  
ABERCYNON AND CLOSE THE EXISTING STATION AT ABERCYNON NORTH**

Thank you for your letter of 28 November 2007 seeking views on the proposal to close the station at Abercynon North.

The construction of a new single station at Abercynon is part of the Taff Vale North Project, which is being promoted by Sewta (South East Wales Transport Alliance). The Station Closure Guidance requires the assessment to show that reasonable alternatives to closure have been examined. However in this case, the closure is a part of the Sewta Rail Improvement Programme and is only being implemented as part of a wider scheme of enhancements.

I can therefore confirm that the closure of Abercynon North Station is a necessary part of this project. It will only take place at the same time as improved passenger facilities at a new Abercynon Station, located on the site of the existing Abercynon South Station, and increased passenger services to Cardiff and Merthyr Tydfil are introduced, together with the transfer of the Aberdare Line stop. The closure option has been discussed with our partners Arriva Trains Wales and Network Rail.

I commend the assessment undertaken by Jacobs Consultancy in September 2007 for Rhondda Cynon Taf Council and Arriva Trains Wales, which concluded that once a new single station is built at Abercynon, the existing Abercynon North Station should close. In the meantime, should you require any clarification, please do not hesitate to contact Charlie Nelson or myself on 01443 494818.

Yours sincerely

**Charlie Nelson**  
Chair, Sewta Rail Working Group



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

Eich cyf/  
Ein cyf/

Passenger Focus  
9<sup>th</sup> Floor,  
Rail House,  
Store Street  
Manchester  
M1 2RP

14<sup>th</sup> January 2008

Dear Mr Pickering,

Thank you for your letter of 10th January 2008 regarding the proposed closure of Abercynon North Station.

This is to confirm that on completion of the works, CIS displays will be in place at the station and the infrastructure will be removed thus ensuring Health and Safety will not be an issue.

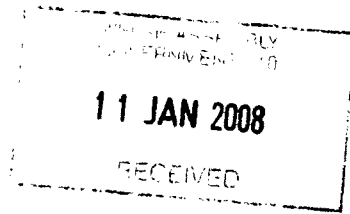
The park and ride facility is subject to completion of Compulsory Purchase Order Procedures.

Yours sincerely

Aerona Hawkins  
Rail Team  
Transport Wales

[Address]

English Enquiry Line 0845 010 3300  
Llinell Ymholiadau Cymraeg 0845 010 4400



Jon Price  
Rail Unit  
Welsh Assembly Government  
Cathays Park  
Cardiff  
CF10 3NQ

9th Floor, Rail House, Store Street,  
Manchester, M1 2RP

w [www.passengerfocus.org.uk](http://www.passengerfocus.org.uk)  
t 0870 336 6095 f 0161 244 5981  
e [info@passengerfocus.org.uk](mailto:info@passengerfocus.org.uk)  
direct Phone 07918 626124  
e Email [simon.pickering@passengerfocus.org.uk](mailto:simon.pickering@passengerfocus.org.uk)

10 January 2008

Dear *Jon,*

### Closure of Abercynon North Station

Passenger Focus believes that the proposals regarding Abercynon will, in the main, benefit passengers and is pleased to agree to them. In conjunction with the South East Wales Transport Alliance (SEWTA), we have undertaken passenger research into the proposal, and found that only 5% of those surveyed believed that the plans would result in a less convenient station.

However, there are several points that we wish to comment on.

1. The consultation letter "Abercynon New Station Project"

(<http://new.wales.gov.uk/topics/transport/rail/16806601/?lang=en>)

states: "Abercynon North will be decommissioned and made safe". We suggest that it should be dismantled (hopefully parts can be re-used) as the only sure way of preventing the platform from being used by vandals and other mischief-makers.

2. The park and ride car park is described as "For the future". We are concerned by that somewhat open-ended statement and ask for clarification of the timescale involved.

3. With the wider range of destinations that will be available from the new station it is essential that passengers have adequate CIS and public address systems. There is no mention of them in the letter.

4. The improved facilities and train services at the new station need full promotion to bring them to everyone's attention.

Yours sincerely,

*J. Sears for*

Simon Pickering, Passenger Link Manager.

Mr J Price  
Rail Unit  
Rail and New Roads Division  
Transport Wales  
Welsh Assembly Government  
Cathays Park  
Cardiff  
CF10 3NQ

My Ref/Fy Nghyf: R206-01/CEN  
Your Ref/EichCyf:  
Date/Dyddiad: 11 February 2007  
Please ask for/  
Gofynnwch am: Charlie Nelson  
01443 494818

Dear Mr Price,

**CONSULTATION ON THE PROPOSAL TO BUILD A NEW STATION AT ABERCYNON  
AND CLOSE THE EXISTING STATION AT ABERCYNON NORTH**

Thank you for your letter of 28 November 2007 seeking views on the proposal to close the station at Abercynon North.

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I can therefore confirm that the closure of Abercynon North Station is a necessary part of this project. It will only take place at the same time as improved passenger facilities at a new Abercynon Station, located on the site of the existing Abercynon South Station, and increased passenger services to Cardiff and Merthyr Tydfil are introduced, together with the transfer of the Aberdare Line stop. The closure option has been discussed with Arriva Trains Wales and Network Rail.

I commend the assessment undertaken by Jacobs Consultancy in September 2007 for the Council and Arriva Trains Wales, which concluded that once a new single station is built at Abercynon, the existing Abercynon North Station should close. In the meantime, should you require any clarification, please do not hesitate to contact Charlie Nelson or myself on 01443 494818.

Yours Sincerely

**For and on behalf of Mark Adams  
Head of Construction Projects**



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

Eich cyf/  
Ein cyf/  
Charlie Nelson  
SEWTA Rail Working Group  
C/O 5<sup>th</sup> Floor  
Sardis House  
Pontypridd  
CF37 1DU

14<sup>th</sup> February 2008



Dear Mr Nelson

**CONSULTATION ON THE PROPOSAL TO BUILD A NEW STATION AT ABERCYNON  
AND CLOSE THE EXISTING STATION AT ABERCYNON NORTH.**

Thank you for your letter of support for the above scheme, dated 11<sup>th</sup> February 2008.

Yours sincerely

Aerona Hawkins  
Rail Team  
Transport Wales



[Address]

English Enquiry Line 0845 010 3300  
Llinell Ymholiadau Cymraeg 0845 010 4400





Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

Eich cyf/  
Ein cyf/  
Mark Adams  
Head of Construction  
Projects  
Rhondda Cynon Taff County  
Borough Council  
Sardis House  
Sardis Road  
Pontypridd  
CF37 1DU

14<sup>th</sup> February 2008

Dear Mr Adams  
**CONSULTATION ON THE PROPOSAL TO BUILD A NEW STATION AT ABERCYNON  
AND CLOSE THE EXISTING STATION AT ABERCYNON NORTH.**

Thank you for your letter of support for the above scheme, dated 11<sup>th</sup> February 2008.

Yours sincerely

Aerona Hawkins  
Rail Team  
Transport Wales

[Address]

English Enquiry Line 0845 010 3300  
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