Northwest
REGIONAL DEVELOPMENT AGENCY

Keswick to Penrith Railway

Stage 2 Report: Business Case Executive Summary

1 Introduction

Background

1.1 The railway between Keswick and Penrith was part of a longer line linking Penrith, Keswick, Cockermouth and Workington. In 1963 the Beeching Report recommended closure of the line and in 1966 the line west of Keswick was closed: but it was not until 1972 that the passenger service between Penrith and Keswick was withdrawn.

1.2 Although the line has been closed for more than 30 years, much of the trackbed and many of the structures remain in place. The section of line between Keswick and Threlkeld has been converted by Sustrans into a railway path that forms part of the Coast to Coast National Cycle Route 71.

1.3 In the mid 1990's concern about the impact of road traffic in the Lake District led Cedric Martindale to propose re-opening of the railway between Keswick and Penrith. In 1995 he prepared an Outline Development Plan for Reconstruction of the Railway between Keswick and Penrith. This led to an independent pre-feasibility study funded by Local Authorities. In 1998 CKP Railways Ltd (later CKP Railways plc) was formed to develop the rail re-opening project independently. In the last eight years CKP Railways has raised £330,000 through the issue of Bonds and has used this money to fund a series of feasibility, engineering design and environmental studies intended to pave the way for an application for the Transport and Works Act Order necessary to permit reconstruction of the railway.

1.4 In 2005 the Northwest Regional Development Agency made a decision to fund this current investigation to establish whether a commercial business exists for reinstatement of the Keswick to Penrith Railway. JMP Consulting was appointed to undertake the study in July 2006.

1.5 The study brief required the investigation to be undertaken in two stages:

- Stage 1: A preliminary financial and economic appraisal of options for reconstruction of the railway and operation of a rail passenger service;
- Stage 2: A refinement of the initial appraisal and preparation of a Commercial Business Plan.

Key Findings (Stage 1 and Stage 2 reports)

Engineering and Operational Feasibility

1.6 CKP Railways plc had previously commissioned Corus Rail Infrastructure Services to undertake investigations of the physical feasibility of reinstating the railway between Keswick and Penrith; to prepare preliminary designs and implementation cost estimates; and to provide other advice needed in advance of an application for an Order under the Transport and Works Act. Most of the design and cost estimation work took place in 2002.

1.7 During Stage 1 we validated the civil, structural and rail engineering design work undertaken by Corus to verify feasibility and provided estimates of cost for the acquisition of land needed for both the reinstatement of the railway and a replacement for National Cycle Route 71.

1.8 The track bed of the former railway is severed in a number of locations as a result of the construction of a new alignment for the A66(T) between Penrith and Keswick after closure of the railway and development at several locations along the line. The scheme developed for reinstatement of the railway includes proposals to overcome these difficulties. Substantial earthworks and several new structures are needed to bridge the A66 and minor roads where the alignment is severed west of Penruddock. A short deviation of route is proposed to the south of Penruddock to bypass development that has taken place on the site of the old station. A design and cost estimate was prepared for a second deviation of route parallel to the A66(T) between Penruddock and Stainton to avoid development at North Lakes Industrial Park at Flusco. Although the original alignment remains the preferred route between Penruddock and Penrith, the Stainton Deviation is feasible although more costly to construct.

1.9 It was proposed that the rail passenger service on the reinstated railway should take the form of an hourly service between Keswick, Penrith and Carlisle using modern diesel multiple unit rolling stock capable of fast operation on the West Coast Main Line (WCML). A lower cost option of operating a Keswick to Penrith shuttle service was rejected by the Study Steering Group at the completion of Stage 1 as being incompatible with the broader transport aims of the project.

1.10 Timetable assessments show that a Keswick to Carlisle service stopping only at Penrith is feasible via both the original alignment and via the Stainton Deviation. Timetable constraints mean that additional intermediate stops between Keswick and Penrith are difficult to accommodate unless measures to build further operational resilience to the timetable are implemented. A comprehensive review of the WCML timetable may ease this position and in Stage 2 options which included intermediate stations were considered.

1.11 At the end of Stage 1 in discussion with the Study Steering Group it was decided that three infrastructure options should be considered:

- Option 1 - a minimum infrastructure option consisting of the original alignment (with the Penruddock deviation) and a simple Keswick station layout;
- Option 2 - as (1) plus three intermediate stations at Rheged, Threlkeld and Penruddock;
- Option 3 - as (2) plus the Stainton deviation plus a passing loop at Keswick station.

1.12 These options are the ones referred to in the remainder of this summary.

Stakeholder Views

1.13 During Stage 1 we consulted with a wide range of stakeholders. Our findings showed that they have mixed views. In general, the organisations with a tourism or economic regeneration remit, such as the Cumbria Tourist Board, Keswick Tourism Association and Penrith Partnership were highly supportive of the concept. This was reinforced by tourist attraction operators and by the views of tourists who completed a survey issued to local guesthouses and hotels.

1.14 In contrast, local government and the Regional Assembly were less supportive. In general, with the exception of Cumbria County Council whose transport and spatial planning department confirmed their long held view that a quality bus service was the appropriate transport solution for the corridor, most of the authorities were not opposed to the concept of reinstatement but were sceptical about its feasibility or viability.

Implementation and Operating Costs

1.15 The central estimate prepared for the study is that the railway would cost between £85m (Option 1) and £107m (Option 3) to implement (including land costs but excluding construction and re-instatement costs associated with the re-routing of the existing Keswick-Threlkeld cycle path). The opportunities for (and risks of) variations from this central estimate are discussed later.

1.16 Estimates for the implementation costs associated with the Keswick-Threlkeld cycle path are an additional £4.2m. It is possible that a proportion of these costs could be recovered from funding sources other than those directly associated with the core railway project.

1.17 Operating costs would be in the range of £2.8m to £2.9m per year for a service operating between Keswick and Carlisle – again this is a central estimate.

Demand and Revenue Forecasts

1.18 A demand and revenue estimating model was developed and populated with data on current traffic volumes derived from existing counts and surveys and from a series of new surveys undertaken for this study. Surveys of current rail and bus travel and of the travel patterns of tourists were also undertaken to support the analysis.

1.19 Our central forecasts indicated that the service would attract in the region of 240-320,000 passenger trips per year in 2016. By way of a comparison the figure of 240,000 is broadly equivalent to current usage of the Windermere branch line.

1.20 The revenue generated from the service was looked at in two ways – namely the revenue that would accrue directly to the operator of the service and the revenue that would be accrued to the wider rail network. The latter figure is significant as the expected pattern of travel for the railway shows that it would attract people from throughout the country.

1.21 The revenue accruing directly to the operator from the Keswick-Carlisle service was estimated to be in the region of £0.6m to £0.7m (in 2016). Compared to operating costs of £2.8m-£2.9m the railway would therefore cover between 20-25% of direct operating costs. This is not untypical of many 'regional' railways in the UK.

1.22 However, when the revenues that would accrue to the entire rail network are considered they are significantly higher, reflecting the fact that people are forecast to travel relatively long distances. The forecasts for total revenue to the rail industry (again in 2016) were between £1.6m and £1.8m. Whilst over £1m pa higher than the direct revenue to the Keswick-Penrith-Carlisle operator they nevertheless indicate that on-going revenue support would be required for the railway's operation.

Central Economic and Financial Viability Assessment

1.23 We have conducted a standard DfT Rail financial and economic (cost benefit) appraisal which looks at the Net Present Value (NPV) of the stream of benefits and costs over a 60 year period from an assumed start of construction in 2011.

1.24 Our analysis shows that the economic benefits of the project would exceed the costs of construction and operation. The scheme would have a Net Present Value of between £8m and £17m and a benefit cost ratio (BCR) of between 1.11:1 and 1.26:1, the lower figure being for Option 3.

1.25 Despite being positive (i.e. the benefits from doing the scheme are greater than its costs) these results would be classified as 'Low' Value for Money using the

DfT's convention. A figure of 1.5:1 would be classified as 'Medium' and is the unofficial hurdle that DfT are increasingly looking for. Having said that, a number of the re-opening schemes that have gone forward in Scotland and Wales are believed to have had benefit cost ratio's similar to Keswick-Penrith.

1.26 The level of financial support (capital and operating) in present value terms that would be required over the appraisal period to 2070 is between £92m and £104m.

Robustness of the Analysis- Risk Assessment

1.27 The central estimates of cost, revenue and benefit were subject to a two stage risk assessment which tested independently, then in aggregate form, all of the key input assumptions to the appraisal. Each Option showed a wide spread in the possible range of the BCR, with Options 1 and 2 having over a 25% probability of the BCR falling below 1.0 and Option 3 an even higher probability of 41%. More positively, Options 1 and 2 show roughly an equal probability of the BCR exceeding 1.5 than falling below 1.0.

1.28 The range of operating subsidy required for each option is approximately +/- £7million from the expected value although each option demonstrates a high probability that the subsidy required will remain within £5million around the central value. The Financial cost to Government however shows a high degree of risk with Options 1 and 2 showing a wide spread of outcomes covering the range from approximately £20million to £95million and Option 3 from £30million to £110million.

The Wider Case

1.29 While the appraisal and risk assessment has been based around the variables that are normally included in a DfT Rail business case there is a wider public sector case for investment in rail which needs to be considered.

1.30 A key issue when considering investment in assets which will have a life well into the second half of this century is the extent to which rail enables economic development to take place more sustainably. This is clearly of great significance in the context of access to the Lake District National Park when 75% of day visitors and over 85% of staying visitors to Cumbria arrive by car. Furthermore there is the potential for the new rail link to contribute to other environmental, social and wider economic development policy objectives such as:

- The positive impacts on local air quality and climate change through modal shift from private car and corresponding reduction in pollutants such as CO_2 and particulates;
- Improving rural communities access to key facilities by improving the availability of transport, cost of transport and widening travel horizons;
- Helping to tackle the 'skills gap', which is reflected in the relatively low levels of educational attainment in the regions compared with London and the South East by improving access to further educational and training opportunities;
- Improving access to health care - where similar issues with inadequate transport provision result in delays in diagnosis and/or missed appointments (with their associated costs to the Health Service);
- The promotion of active travel in combination with public transport (for example walking or cycling to and from rail stations) can also help improve health through increasing routine physical activity;
- The economic effect of improved public health includes increased efficiency for businesses as healthy workers take less sick leave and they are also more productive while at work. Moreover, improved health leads to less NHS expenditure.

1.31 However, the main additional benefits are expected to be in terms of wealth creation within the local economy. This is expected to occur through additional employment, during both construction and operation of the railway, and from additional visitor expenditure in the area. The Gross Value Added (the local economic equivalent of GDP) of around 194 full time equivalent (FTE) additional jobs created by the construction and operation of the railway is estimated at around £8m and £127million over the 60 year appraisal period. The additional visitor spend in the vicinity of the railway is estimated at around £1.1m pa, in total £80million over 60 years.

Changes to the Policy Environment

1.32 The results reported above have concentrated on a central set of economic and demand growth assumptions. In the context of a transport infrastructure investment which is being appraised over 60 years, the introduction of some form of road user charging or other demand management measures to discourage visitors from accessing the Lake District by car is a scenario which has to be considered.

1.33 Although tested in a relatively simple way, analysis during Stage 1 showed that potential ridership could increase from the central scenario estimate of 230,000 in 2016 (for the shuttle service option) to 480,000 for the same service with a road user charging/extensive demand management regime in place. The benefit cost ratio in this example would increase from 1.32:1 to 3.29:1

Potential Funding Mechanisms

1.34 We have focused our attention on a PFI based approach combining different levels and types of public sector support. The impact on the BCR and the cost to government has been assessed for each funding option.

1.35 The starting point for the analysis has been a comparison of a PFI approach with a 100% public sector grant funded scheme – essentially the appraisal described to date. We have then looked at the opposite end of the spectrum whereby the scheme is initially financed wholly by a private sector infrastructure provider who would levy an access charge on the train operator which would be sufficient to recoup the capital and on-going maintenance and renewal of the infrastructure and provide an appropriate rate of return. We have then considered different combinations of grant and access charge and various interest rates.

1.36 The conclusions are as follows;

1.37 The most realistic option for consideration would be a combination of grant funding from non-central government funds and an access charge arrangement for the remainder. We have looked at a more extensive grant option, or some other form of non-refundable local/regional source of funding, whereby £50m of non-repayable funding is procured from non-DfT sources, and alternatively a relatively modest grant to the value of £10m (not dissimilar to what has been obtained for some of the Scottish re-opening schemes).

1.38 With a £50m injection of non-DfT funds the scheme begins to look more attractive in that the BCR (at 5% return) rises to 2.08:1 and the cost to government in support over the appraisal period falls to £39m (pv). This would actually move the scheme into the DfT's 'high' category of value for money (>2.0:1) although this is of course simply a result of the BCR being calculated on the costs that accrue to central government (which have fallen by £50m in this scenario). It should also be noted that the economic performance of the scheme would improve even further if the remainder of the capital cost was funded by central government grant as there would be no requirement to make a return for the infrastructure provider.

1.39 As the non-DfT grant funding is reduced to only £10m, a PFI based access charge mechanism begins to look less attractive or affordable. The BCR of the scheme falls to 1.00:1 and the cost to government increases to £81m.

1.40 The option of a private sector infrastructure provider levying an access charge to recoup the entire costs of the scheme appears difficult to formulate. At even the lowest interest charge that we have considered, 5%, the BCR would fall from 1.25:1 for the 100% public sector grant funded option to 0.88:1 and the total cost to government over the lifetime of the appraisal would rise from £65m (pv) to £92m. At an 8% return the BCR would fall to 0.58:1 and the subsidy increases to £140m (pv). The attraction of the scheme to the private sector would, ironically be, that since so little of the required revenue would be coming from the train operators farebox, the income stream would be relatively low risk (since it would be largely provided by support payments to the operator by DfT Rail). Conversely, the likelihood of that support being obtained is considerably weakened by the impact on the financial and economic performance of the scheme of the requirement to provide a return to the infrastructure provider.

1.41 In addition to the various PFI based mechanisms we have also examined how other recent railway re-openings in the UK have been funded – including several in Scotland and Wales. The clear conclusion is that all of them have had their capital costs either wholly, or substantially, funded by the public sector in the form of non-repayable grants. All are requiring on-going financial support, usually in the form of absorption into an existing franchise or explicitly, in the case of the Ebbw Vale line, for a limited period of time after the scheme begins operation.

1.42 Interestingly, the political justification for most of the schemes in Scotland and Wales has been couched in terms of the sorts of wider (economic, environmental) benefits that we have described above. However, there is little or no evidence that in England the DfT, despite producing guidance suggesting that they will consider wider benefits beyond those captured in the BCR when judging value for money, are minded to follow this line of argument unless there is a convincing BCR on the table.

1.43 We have also looked at the scope for adopting some of the more innovative forms of funding that are beginning to come forward in the UK – with land value capture/ development gain capture being considered for two major schemes in England and Scotland. These approaches substantially remove the need for public sector funding, however, neither mechanism is considered to have any potential in the context of the Lake District planning regime.

Funding Implications and Recommendations

1.44 Our conclusion, reached at the end of Stage 1, that re-opening the Keswick-Penrith Railway appears likely to generate economic benefits in excess of its costs still stands. The risk analysis conducted during Stage 2 confirms this, whilst highlighting where the key areas of risk lie.

1.45 The economic performance is however, relatively modest, being positive and not dissimilar to other re-opening schemes in Scotland and Wales, but falling short of the DfT's 1.5:1 threshold which would move it from the 'low' to 'medium' value for money category. Any expenditure with a BCR over 1 might be considered as worthwhile pursuing. But financial constraints will mean that in practice not all proposals over this threshold will be fundable and the general advice from DfT is that few transport schemes in the low category will be funded unless there are substantial non-monetised benefits.

1.46 Therein lies the key to any funding vehicle for taking the project forward. The project will require a substantial local or regional injection of funding to reduce the requirement on DfT funding and improve its 'fundability' against other calls on

their funds. Providing the funding purely by the suggested PFI route of an infrastructure provider charging for access to the track is not viable in our opinion as the DfT value for money position worsens significantly once a margin for the infrastructure provider is built in to the equation.

1.47 The local funding would need to be justified on the wider social, environmental and economic grounds that we have considered in this report. Unfortunately these benefits are currently unlikely to be valued at a level that would lever in the scale of local or regional funding required. The most useful indicator of local economic value – the number of new jobs created and the cost of providing these new jobs – shows that the cost per new job created would be of an order of magnitude higher than what would normally be considered acceptable, whilst the additional tourism spend in the local economy, whilst valuable, would make only a modest contribution.

1.48 We need to look at the bigger picture to see how the railway could potentially be funded locally. In the context of the on-going failure of the government to make any inroads towards it own key sustainability indicators (greenhouse gas emissions, greater walking/cycling and public transport use) and growing concern about car based access to our National Parks it must be considered distinctly possible that within the next ten to fifteen years some form of policy to charge or in someway restrict access by private car to the Lake District will come onto the agenda as a serious prospect.

1.49 Visitors to the North Lakes travel considerable distances to access the area, as do residents travelling out of the area, and as a consequence the railway would have an impact well beyond its immediate environment. In this scenario, rail access to the heart of the North Lakes and the excellent public transport network which radiates out from Keswick as a complement to the existing facility at Windermere for the South Lakes would be highly attractive. As we showed in the Stage 1 report such a policy could result in a much improved BCR (making the central government case for investment stronger) whilst opening up the possibility of a revenue stream against which to raise the local funding component.

1.50 All of which points to a conclusion that whilst the funding climate does not appear to offer a short term prospect of implementing the scheme the medium term environment may well be much more favourable and as a consequence it is very important that decisions are not taken which could preclude its future development.

Immediate Steps

1.51 There are some key short term hurdles to overcome here. Despite the efforts of CKP Railways in successfully engendering sufficient support and funds to continue progressing the scheme design and the requirements of an Environmental Statement the proposals lack critical support at local authority and regional level.

1.52 Stakeholders with an interest in tourism and economic development are generally highly supportive of the proposals but the more ambivalent views of some of the local authorities must be of some concern as the scheme will require their full support if it is to progress smoothly through the Transport and Works Act process.

1.53 Furthermore the scheme does not have any priority status within the DfT's Regional Planning Assessment, the Regional Spatial Strategy or Network Rail's Route Utilisation Strategy. This militates against its potential fundability.

1.54 A key priority therefore is to use the findings of this report to engage with the key local stakeholders, particularly the planning authorities, to confirm that the proposal can bring worthwhile economic benefits and that the remaining alignment should be safeguarded against further incursion.

1.55 At a regional level the scheme needs to be considered for inclusion in the Regional Transport Strategy. It is not currently a priority scheme but, if as expected, rail schemes come in to the Regional Funding Allocations (RFA) process in the next year or two the scheme needs to be 'in the pot' for consideration in this context. It will not be possible to get it into consideration unless it has a public sector promoter, whether at local or regional level. With this in mind the immediate priority for CKP railways must be to use the generally positive conclusions and the evidence base behind this report to actively engage in discussion with the public sector with a view to obtaining support in principle to firstly safeguard the alignment and secondly to bring the scheme into the appropriate regional and national strategies outlined in paragraph 1.53.