

5.0 Demonstrating the Value of Benefits

5.1 Introduction

This appraisal of benefits is based on the five route options proposed. The appraisal concentrates on economic impacts, taking a demand-side approach i.e. it estimates the number of visitors that each option might be expected to bring into the local area, and the potential economic benefits – in terms of expenditure and employment – they will provide. Only limited account has been taken at this stage of the supply side i.e. the capacity of local tourism and leisure businesses to capture the estimated increase in recreational expenditure. However since Leek already has a well-developed economy, with a broad spectrum of services catering for the rural hinterland, it is assumed that the capacity will be available to meet any increase in demand.

The appraisal forecasts demand and compiles visitor estimates for different activities on and close to the canal. Visitor predictions are then combined with spending patterns associated with each activity to give an estimate of *gross* expenditure associated with tourism and leisure use of the route. Multipliers are then used to convert expenditure to employment.

In order to forecast economic impact at the local level, this gross expenditure estimate needs to be interpreted carefully. It needs to take into account: -

- **The extent of the study area.** Economic impacts are assessed at the level of the town of Leek and its immediate hinterland.
- **Displacement.** This is to account for the fact that a proportion of economic expenditure is not “new” but simply involves a switch from one activity or location within the study area to another. We have defined displacement as the proportion of expenditure that would have occurred within the local tourism and leisure economy, irrespective of the development of the canal.
- **Leakages.** Not all the new visitor expenditure created will be retained within the area and lead to employment locally. For example a pub or restaurant may source supply and support facilities from a regional distributor located outside the area; non-local contractors may be employed to undertake construction or maintenance works; or income received by businesses is spent elsewhere. We have used published research into the way that tourism expenditure ‘leaks from’ or is ‘retained by’ rural economies as the basis for our calculation of local jobs. The most thorough study in this area remains the Scottish Tourism multiplier study¹. Of course as part of project design, it is possible to introduce measures to minimise leakage and thus increase local employment eg. through measures to encourage local sourcing. This is something that should be reviewed as the project progresses.
- **Multiplier impacts.** The ‘retained’ income will have knock-on economic impacts as it is re-spent within the local economy – either by businesses on local supplies or by local people through their wages. The consequence is that jobs are created by the initial, *direct* expenditure within tourism and leisure businesses, and then through these *indirect* and *induced* effects. Again evidence provided through the Scottish Tourism study has been used to quantify this effect.

¹ Scottish Tourist Board, 1993: *Scottish Tourism Multiplier Study*

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Tourism and recreation through visitors to the canal is one type of economic activity that the scheme will support. The extension of the canal to a new terminal basin will open up opportunities for developments alongside the basin – pub/restaurant, residential, retail, office etc. The development opportunities will vary between options. At this stage, it is difficult to determine the types and scale of activity that could be generated. This will require further work. Studies elsewhere have shown that canal-side sites are attractive to developers and act as a “positive” factor in locational decisions. In the case of residential developments, this is reflected in enhanced values for waterside properties. The canal provides a market (through generating visitors and hence footfall) for retail and leisure activities. For office schemes, there is evidence to show that properties can be sold on quicker, due to environmental and aesthetic factors.

5.2 Recreation & Tourism Impacts of the Options

Canals are used for a wide range of recreational activities:-

- All types of boating. Nationally the British Waterways network is host to around 25,000 powered boats, many of which are based on traditional narrowboat designs. Most boats are privately-owned, but over 1,000 boats are available for holiday hire and around 150 boats are available for public trips or operate as floating restaurants. Unpowered craft, such as canoes and rowing boats also make extensive use of the network;
- Fishing (mainly coarse angling);
- Recreational walking & cycling on the towpaths alongside the waterways;
- General sightseeing – visits to heritage and other sites along the network. It is estimated that over 400 million visits are made to British Waterways’ canals and rivers each year; and
- Special events and waterway festivals.

These activities have given rise to a range of economic enterprises that are dependent upon the waterways – marinas, pubs & restaurants, canalside shops etc – which generate employment and help maintain local services.

Estimates of the baseline position (i.e. existing volume of use) and forecasts of changes arising from each option are set out in this section.

5.2.1 Boating

Boating activity on inland waterways relates to the use of powered vessels, such as cabin cruisers and narrowboats and to unpowered craft – mainly canoes.

The majority of powered craft are privately-owned vessels, owned by individuals or groups of people. Overall the number of such craft has been growing consistently for many years. During the 1990s, this growth averaged 1% - 2% per annum. The growth rate is forecast to increase to perhaps 3% - 4% per annum over the next 10 years or so (provided there are no major external shocks, such as an economic recession).

Other types of powered craft are operated by businesses or charities. Business craft include holiday hire boats, day hire boats, timeshare craft, hotel boats, trip & restaurant boats and floating shops and offices. Craft operated by charities include canal society boats, which are often used for public trips, and vessels providing activities for particular groups of disadvantaged people eg. people with disabilities; young offenders etc.

The number of boats based throughout the Caldon Canal is at present quite small – in total there are about 120 privately-owned boats and two business boats on the canal. Boat traffic generated is moderate. Using lock counter data available from counters at three locks along

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the canal, it is possible to estimate levels of traffic, using standard boat-lockage ratios to convert the number of lockages per year recorded by the counters to boat movements per year². This gives the following estimates of annual boat traffic through the 3 locks, based on mean traffic levels for the years 2002 to 2004 inclusive.

Lock	Boat movements per annum
Planet	4,256
Engine	4,569
Hazlehurst	3,980

Traffic levels throughout the main line of the Caldon Canal are therefore reasonably consistent. No figures are available for traffic levels on the Leek Arm, since there are no locks on the branch. In view of the consistency of figures on the main line, together with anecdotal evidence, traffic levels on the branch are likely to be low – possibly no more than 500 boat movements per year.

Boat traffic on the canal is mainly by privately-owned powered vessels (70% estimate) and hire boats (30% estimate). A commercially operated trip boat currently operates on the canal, based at Froghall Wharf on the main line. A further passenger carrying boat is based at Cheddleton and is operated by The Beatrice Charity for disabled and special needs children.

Under Options 1 – 4, it is assumed that permanent moorings for 15 privately owned craft are accommodated at the terminal basin.

Currently there is only one small hire boat company (single boat) based on the Caldon Canal near Post Lane, Endon. However, it is possible that an operator might be attracted to base holiday hire vessels at the terminus. For the purposes of this analysis, moorings for both privately-owned craft and a boat operator have been included.

Visitor moorings will also be available to allow craft from elsewhere to moor up for short periods to visit the town. In the case of Option 5, it is assumed that only visitor moorings are provided, due to limitations on space.

The extension of the Leek Arm to a more accessible terminus and the development of a basin attraction will increase the number of visiting craft using the Arm. Traffic levels on the adjacent stretch of the Caldon main line are close to 4,000 boat movements per year. A proportion of vessels cruising on the main line will divert to visit Leek. Also the development of an attractive destination will encourage boats to visit the Caldon Canal from elsewhere. Options 1, 2, 2a and 4 would probably be most attractive for visiting boaters, as they are closest to walking routes to the town centre and other attractions in the area. Option 3 is located close to the A53 near to a bus route to town but furthest from Leek town centre. Accordingly it is assumed that the following additional levels of traffic would be generated by the extension (over and above current traffic levels on the arm of approximately 500 boat movements per year):

² The Standard boat-lockage ratio for narrow canals is assumed at 1.4.

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Route Option	Anticipated boat movements on Leek Arm per annum
Route Option 1	2,500
Route Options 2 and 2a	2,500
Route Option 3	1,000
Route Option 4	3,000
Route Option 5	1,000

A terminus at Leek would also be likely to attract a trip boat operator to the basin. Again the scale of operation would probably be greater for Options 1, 2, 2a & 4. In association with the trip boat operation, it is assumed that two further powered boats would be available for hire.

Use of the Caldon Canal by canoeists is currently limited. An extension of the Leek Arm would encourage additional canoeing activity and a small allowance for additional canoe visits has been made for each Option.

5.2.2 Angling

Canals are widely used for coarse angling. It is estimated that around 4,000 angling visits are made each year to the section of the Caldon Canal between Stockton Brook and the Leek terminus³.

Nationally, it is difficult to determine trends in coarse angling over time, but data suggests the market is – at best – static. Data from membership of the National Federation of Anglers shows a reduction in the number of affiliated clubs and the number of individual members within clubs since 1975. This suggests there may have been a decline in angling participation over the same period, at least in terms of organised activity. Trend data shows that, over the last 20 years, carp fishing has increased in popularity through the development of intensively managed still water fisheries that often specialise in carp. This type of fishery has been a major growth area in recent years, probably corresponding with a decline at the expense of perch and pike, especially amongst young anglers. Canal fishing is technically more difficult, particularly for novices.

Although the extension of the canal will open up additional lengths of waterway for fishing, because of the market situation we have assumed only a minimal growth in angling activity for each option, related to the length of new waterway opened up.

5.2.3 Other Visitors to Canal Towpaths and Canal-side Sites

The majority of visits to waterways involve informal activities on the towpath - walking for pleasure, general sightseeing, cycling, jogging etc. Canal visitor sites are also often used for special events, such as boat rallies and festivals.

Visitor monitoring programmes, using pedestrian counters, have been undertaken at a number of canalside sites in association with restoration works and towpath improvements on the Lowlands Canals in Scotland and in the West Midlands. These programmes demonstrate that increases in visitor numbers can be substantial following investment in the canal infrastructure.

³ British Waterways, National Count, 1995

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Lowlands Canals, Scotland

1	Site	Visits p.a. Before	Visits p.a. After	% Change
	Ratho	56,000 (1998)	111,000 (2003)	+100%
	Linlithgow	20,000 (1997)	144,000 (2003)	+343%
	Edinburgh (Viewforth)	89,000 (1998)	112,000 (2003)	+26%
	Maryhill	60,000 (1997)	71,000 (2003)	+21%
	Cadder	48,000 (1997)	76,000 (2003)	+37%
	Craigmarloch	29,000 (1997)	67,000 (2003)	+90%
	Bonnybridge	59,000 (1997)	57,000 (2003)	-3%

West Midlands

2	Site	Visits p.a. Before	Visits p.a. After	% Change
	Walsall (W.Midlands)	71,500 (1999)	154,500 (2001)	+110%
	Stourbridge (W.Midlands)	41,500 (1999)	87,500 (2001)	+111%

This demonstrates that improvements to existing waterways and the restoration or creation of new waterway links can generate substantial volumes of visitors to towpaths and canalside sites.

Current use of the towpath of the Leek Arm was estimated through the British Waterways National Count in 1995. This suggested there are some 260,000 visits per year by walkers, cyclists and joggers to the 9 kilometre stretch of canal between Stockton Brook and Leek. Around half these visits (c130,000) would be to the Leek Arm itself.

Development of a visitor destination at the canal terminus would attract substantial levels of activity. Option 4 would be likely to attract the highest number of visitors, given its easy access to the town centre, proximity to housing and established businesses on the edge of the town such as Morrison and Focus DIY together with the length of new canal towpath created. It is assumed that this could attract up to 200,000 visits per year – slightly more than towns such as Walsall (West Midlands) and Linlithgow (Scotland), but less than some of the key canal honeypot sites, such as Bingley 5-Rise (West Yorkshire) or Foxton (Leicestershire). The other Options would be expected to generate lower visit levels. Assumed visitor levels and justifications are as follows:-

Route Option	Visits p.a.	Note
1	100,000	Link to Ladderedge Country Park; Possible associated development at the basin; Some access to town centre
2 and 2a	130,000	Link to Cornhill redevelopment; Link to proposed Churnet Valley Railway extension; Possible associated development at the basin; Some access to town centre

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3	50,000	Link to Ladderedge Country Park; More remote from town centre; Limited development opportunities; Possible access problems
4	200,000	Proximity to town centre; Associated development at the basin
5	25,000	More remote from town centre; Limited development opportunities;

Such volumes of visits appear large. However many visits will be made by local people, often for functional rather than recreational reasons (e.g. commuting or walking the dog). In terms of economic impact, a high proportion of visits will be displaced from elsewhere in the town and its vicinity.

5.2.4 Development Impacts

As mentioned earlier, it is likely some of the options would lead to further developments being implemented in association with the terminal basin. Particular opportunities exist in the case of Options 1, 2, 2a and 4. At this stage it is difficult to determine the exact nature of such developments – various mixes of residential, leisure, retail and office / industrial uses are possible. Obviously leisure and retail schemes would be in a position to capture some of the visitor spend generated by the recreation and tourism activity on the canal. However other types of development will create additional economic outputs e.g. residential units in the case of housing; employment in the case of office / industrial schemes. Options 2 and 2a particularly have the potential to link to regeneration of the Cornhill area and to the extension of the Churnet Valley Railway.

5.3 Economic Impacts

The calculation of the economic impact of the various options is set out in Appendix 9, based on the assumptions regarding future recreation and tourism use outlined in Section 2. Summary outputs for each option are as follows:-

Route Option 1

Additional powered boats permanently based on the canal	18
Additional visits per year (000s)	125
Additional visitor spend per year (£000s)	£587
Annual income retained within local economy (£000s)	£235
Total employment generated (FTEs)	17

Route Options 2 and 2a

Additional powered boats permanently based on the canal	18
Additional visits per year (000s)	155
Additional visitor spend per year (£000s)	£666
Annual income retained within local economy (£000s)	£267
Total employment generated (FTEs)	20

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Route Option 3

Additional powered boats permanently based on the canal	18
Additional visits per year (000s)	62
Additional visitor spend per year (£000s)	£351
Annual income retained within local economy (£000s)	£140
Total employment generated (FTEs)	10

Route Option 4

Additional powered boats permanently based on the canal	18
Additional visits per year (000s)	226
Additional visitor spend per year (£000s)	£878
Annual income retained within local economy (£000s)	£351
Total employment generated (FTEs)	26

Route Option 5

Additional powered boats permanently based on the canal	3
Additional visits per year (000s)	37
Additional visitor spend per year (£000s)	£170
Annual income retained within local economy (£000s)	£68
Total employment generated (FTEs)	5

In addition to the permanent jobs created by the Options, temporary employment will be generated during the construction phase of the scheme. An estimate of this temporary employment can be made, using standard indicators related to the capital cost of the work to be carried out. Employment is expressed in terms of FTE person-years⁴.

⁴ 1 person year FTE construction job per £70,000 capital spend is assumed. This is consistent with English Partnership guidelines.