

JOP CONSULTING LTD

# Barmouth Viaduct Project

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## Economic Impact Assessment Final Report

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This is an economic impact assessment of the proposals to create a new access route from the town of Barmouth to the Viaduct.

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## **Introduction**

JOP Consulting Ltd was commissioned to undertake an economic impact assessment of improving the access from Barmouth town to the Barmouth Viaduct on behalf of the Barmouth Viaduct Access Group (“BVAG” hereon in) and Gwynedd Council. The work was undertaken during March – June 2015 and followed Green Book guidelines for undertaking such studies. JOP Consulting Ltd would like to acknowledge the support and contribution of the BVAG in this study which has been material in generating a robust impact assessment. This report details the key results of the economic impact assessment and continues with the following sections:

- Background
- Context
- The BVAG Project
- Methodology
- Survey Results
- Impact Assessment
- Conclusions

## **Background**

Barmouth is one of the principal tourist destinations in southern Snowdonia attracting between 150 -200,000 staying visitors per annum<sup>1</sup>. The town has a population of around 2,500 and is a hub for coastal tourism and outdoor activities, providing a vibrant retail, hospitality and accommodation offering within a high quality natural and built environment.

One of the town’s key attractions is the iconic Barmouth Viaduct. Opened in 1867, the 2\* listed structure, incorporates a railway bridge as part of the Cambrian Coast mainline railway and a walkway for pedestrians and cyclists. The Viaduct constitutes part of the Mawddach Trail leisure route between Dolgellau and Barmouth and is part of the Wales Coastal Path. It is estimated that there are upwards 100,000 leisure users of the Viaduct annually (see Impact Assessment section below).

Access to the Viaduct from Barmouth is, however, very challenging with pedestrians and cyclists forced to travel along the carriageway of the very busy A496 to gain access. The route is difficult and dangerous and has been identified as a key constraint to greater use of the Viaduct and increasing the tourism benefits to the town of Barmouth as well as the surrounding area.

In response, the Barmouth Viaduct Access Group was established by the local community in February 2013 to develop a solution to the challenges of accessing the Viaduct from Barmouth and thereby enhancing the tourism offering of the town and indeed wider area more generally.

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<sup>1</sup> The latest resort profile indicates that Barmouth has around 2% of bed spaces in the county; the latest tourism data indicates that near 8m day / overnight and overseas visitors to Gwynedd.

## Context

The Dolgellau / Barmouth area was until very recently designated as a 'dependence district' as part of the UDP Regeneration Framework - it therefore had its own regeneration area plan for the 2007-13 period. It remains unclear how critical this strategy document remains for the area's development given that the timeframe has now lapsed and there appears to be no prospect of continuity in this regard. Rather the more recent Employment Plan for Meirionnydd appears to be the only current strategic development framework for the area. Whilst laudable in its own right the degree of emphasis on the smaller coastal settlements would appear to leave Barmouth a somewhat edifying prospect. This despite originally assuming a Communities First status as an area of significant deprivation. Whilst not an accolade one would welcome but at the time this at least recognised the need for support in some key areas of the town. In truth the locality remains deprived; the Census results indicate that unemployment remains stubbornly high in the town where the LSOA<sup>2</sup> categorisation highlighted a medium level of unemployment relative to other LSOAs. The latest IMD<sup>3</sup> indicates that it remains in the upper half of the most deprived wards in Wales. Our observations would suggest that those aspects highlighted in the regeneration plan in most part have currency today in that the following key strengths and weaknesses persist:

### Strengths include

- The area's environment, coast and natural assets
- Good infrastructure connections along the coast (public transport links by train/ bus in nearly every village/town)
  - Exceptional natural resources for outdoor activities – inland and coastal; and the potential to develop a prosperous outdoor sector in the area
- The area's villages and communities are pleasant places to live in; demonstrated by the demand for houses there and local people's attachment to the area
- There is a broad range of social events, activities and opportunities available to everyone and a strong sense of community
- The Meirionnydd administrative centre is located in Dolgellau.
- The area's businesses are dependent on each other and work well together.
- The area's strong history and culture
- Dolgellau is a strategically important location for business, the public sector, and educational establishments and agriculture.

### Weaknesses include

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<sup>2</sup> Lower Super Output Area.

<sup>3</sup> Index of Multiple Deprivation

- Local employment reliant on a limited number of sectors e.g. Public Administration and Education and the Tourism sector (ie Wholesale / Distribution / Retail / Hotels and Catering sectors).
- Lack of quality employment opportunities locally to keep young people from migrating from the area
- Lack of work and employment units within the area to attract investment and to allow businesses to expand
- Lack of affordable housing in some of the area's villages
- Lack of rented accommodation (that is not rented on a seasonal basis) in some villages in the area
- Lack of services for some specific age groups such as older people and young people
- There are still pockets of significant deprivation within some communities
- A lack of social activities for young people
- A need for better leisure provision/facilities in the area
- A need to review the public transport provision
- The benefits system makes it difficult for seasonal workers to return to employment quickly
- Recycling systems for businesses are viewed as ineffective.

Whilst many of these issues are beyond the scope of the current study it is very apparent that one of the key weaknesses in the area is an over-dependency on a few sectors – especially tourism. We do not see this changing – in fact, as we observe the developments that have (and indeed, are) taking place in Meirionnydd then we expect this dependency to increase as public sector employment retrenches, the effects of the changes in the CAP militates against Agriculture and the overwhelming focus of the wider area's latest developments and plans which revolve around the leisure tourism business. The latest consultation document regarding the new joint LDP for Gwynedd and Anglesey defines Barmouth as a key settlement area and a key part of the coastal tourism hub with a close link to the National Park. As noted the Wales Coastal Path runs through the town whilst the Mawddach Trail also convenes locally via the viaduct alongside of course other links to the National Park and the towns of Dolgellau, Harlech, Fairbourne and Tywyn. Barmouth is central to south Meirionnydd with a major contribution to the tourism offering – the development of the access to the Barmouth Viaduct is therefore a very important development opportunity for the whole area. Consultations with local business people and the wider community also highlighted the following key themes and issues for Barmouth:

- That the area was (and still is) affected by national trends – such as the last recession – although suffering perhaps a much shallower variance both up and down in economic activity than elsewhere. Its market therefore maintains a very strong loyalty with the West Midlands that is arguably limiting in both ways – it will not be a 'big hitting' venue but at the same time maintains a high degree of resilience during downturns.

- However it was also argued that it is not any easy sell; businesses do struggle and have to work very hard indeed to maintain a living many of which appear to be stalwart businesses of the area.
- Whilst the market remains distinctly seasonal there are changes which is influencing the structure of the Barmouth offering and which is closely cognisant of the proposals to improve the access to and from the viaduct including:
  - o Whilst the 'bucket and spade' market is still apparent for the 6 weeks summer peak period this is gradually becoming less relevant to the resort
  - o The development of other important outdoor leisure facilities (eg Mawddach Trail, ZipWorld) which are not weather dependent have been playing their part in:
    - § Changing (or enhancing) the type of tourists coming to the town / area with a much wider portfolio of requirements than just sand and sea
    - § Cycling, walking etc are growing markets and attracting a different and arguably more discerning clientele to the area with a much greater emphasis on quality services / products
    - § Changing the structure of the local offering where many commoditised B&Bs for example have closed down – the remaining pool of services are having to invest to increase the quality offering in the area across the board (ie retail, pubs, B&B etc)
    - § Significantly extending the tourism season in the area with some businesses able to keep open a full year whilst others extending to 10 months – depending on the sectors.
  - o Barmouth is said to be a town which is 'on the up' which is reflected in terms of, for example, stable property prices and sales, decent employment prospects for people in the area both young and old and a community which is highly motivated and industrious over the welfare of the area and its people;
  - o A striking feature of the town is that there are currently no shop vacancies available which is clearly very indicative of an area that is doing well in what is still very challenging circumstances. Moreover the shops that are occupied are in the vast majority of cases 'independents' thereby presenting a far more interesting and varied shopping experience for locals and tourists.

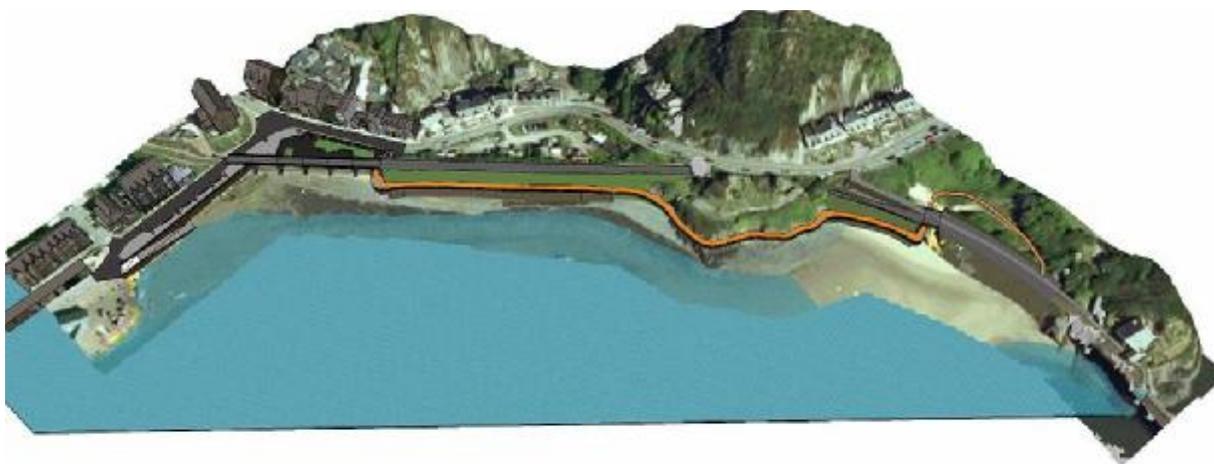
Barmouth has been gaining a positive media coverage (eg Countryfile etc) which has raised the profile of the area as an interesting if not quaint place to visit / stay and it is thought (by the local businesses) that the viaduct plays a critical role in this respect. The viaduct was referred to as being "iconic", "massively important" and "impacting on every business" in the town / area. In turn anything that was thought to improve the access and safety of this attraction was thought to significantly benefit the town and indeed surrounding area.

## The BVAG Project

The BVAG proposal is to quite simply to re-route the path to the Barmouth Viaduct through the town of Barmouth that will:

- Make it far safer for patrons (ie walkers, cyclists and especially the disabled) to use the viaduct
- Significantly improve the accessibility of the viaduct thus enhancing the general appeal of the bridge as a tourist attraction
- Provide a much more visible link between the town and the viaduct thereby integrating the attraction to the town's wider tourism offering
- Provide a much clearer, safer and more defined link between the Coastal path, Mawddach Trail and other key local, regional and trans-regional routes and the town
- Provide a major pathway to and from the town that should allow for developing key recreational events such as marathons, triathlons, cycling , para- events as well as others
- Provide the potential for related developments given the enhanced links the project will have with existing and prospective pathways (eg Bunk House project in the old toll house) and the harbour
- Generate a different 'balance' to the visitor profile for the town with hopefully higher spending capacity and longer overnight stays already becoming apparent through the development of the Coastal Path.

The key design of the revised access route to the viaduct is detailed in Appendix 1 and shows that it links the town to the viaduct without compromising the current town features, routes (including rail) and pathways – this is shown in the CGI below. It is sympathetic to the coastal line and is consistent with the design of the current coastal flood walls. Indeed it should provide greater protection to the south part of the town given the current flat facing design of the wall below the concrete bridge.



B-VAG

An options appraisal was undertaken by BVAG to establish the best approach to undertake the development and this was ranked as the preferred option. At an estimated cost of £3m then the project presents a sizeable investment. The key focus of this study is to ascertain whether it presents economic benefits that generate a worthwhile value for money prospect.

## Method

Clearly a method needed to be adopted that would allow us to measure the potential *marginal impact* of delivering the project. That is, unlike a wholly new project what we had here was a pre-existing facility which was asserted not to be working as effectively as it potentially could. In essence there appeared to be two effects which we needed to consider: one was the extent to which the problem existed in the first place and whether that was indeed having an (economic) effect locally; and the other was how this position could change if the project was undertaken. This was not a straight forward task. A survey of pre-existing people frequenting the town and viaduct would provide us with some answers regarding the two effects however it would not tell us whether access was a hindrance more generally (ie stopped new visitors from coming to Barmouth / accessing the bridge). So whilst a tentative baseline was to hand surveying existing patrons would only provide us the partial effects of the development proposals. In technical terms we could 'gross-up' the results to reflect potential increases in volumes resulting from the investment based on potentially similar benchmarks. However the uniqueness of the viaduct – in terms of structure, scope and location – would also make it very difficult to draw on relevant benchmarks. At the same time where we expected to discuss the project with local townspeople then we were most likely to encounter response bias mainly in favour of the project. Budgetary constraints also precluded commissioning a research outfit to conduct a survey of users. The compromise therefore was for BVAG to facilitate a random sample survey stratified to cover the range of people using the viaduct during the year which were assumed to reflect both the pre-existing volumes and the potential change this project could have on this volume. In turn a sampling frame and questionnaire were developed which were designed to explore the potential marginal change in use, value as well as qualitative changes locally from implementing the BVAG proposals. Alongside which the aforementioned focus group meeting with local businesses was undertaken to ascertain views about the proposals and the potential impact it could have locally. Copies of the questionnaire and pro forma used for these latter purposes are at Appendix 2. This supplemented with relevant available benchmarks from previous impact works formed the basis of the impact assessment that follows.

## Survey Results

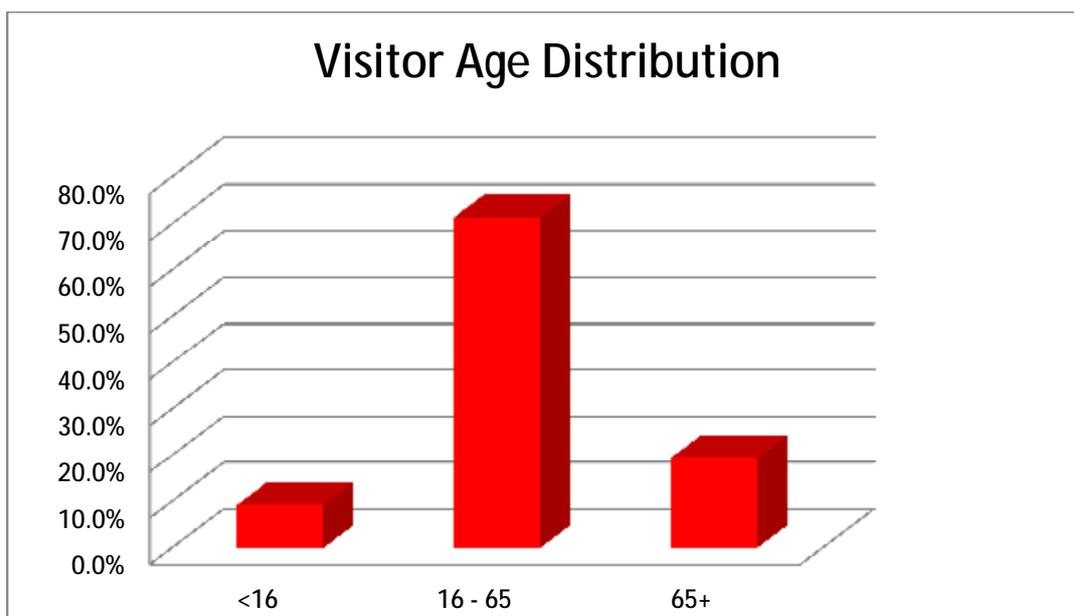
The following details the key results from the survey that was undertaken to ascertain the potential current contribution of the viaduct to the tourism offering in Barmouth and how this could change in the event that the project was implemented. These results also incorporate input that was provided through the business/ community focus group that was convened at Barmouth in May 2015.

The survey was stratified specifically to cover a mix of people accessing the viaduct and a total of 120 questionnaires were coded and analysed but which reflected a total of 587 people<sup>4</sup>. This provided a very sound basis for the analysis and we would therefore conclude that the following results are statistically representative.

### Baseline

Every attempt was made to ensure a random selection including limiting the survey of 'known' contributors / local townspeople in order to avoid patently biasing the results. In turn a high percentage (70%) of respondents were non-local – that is, these were people who lived at least 25 miles away from Barmouth and therefore a 'trip' to the town was either an 'excursion' (ie a deliberate journey to the town) or a holiday. Chart 1 below provides the age distribution of the people represented through the survey; the major users of the viaduct appear to be in the 16 to 65 group; retirement age groups (ie 65+) making up around 20% of users although it is apparent from the results of this work that this picture would change potentially quite significantly if the project was to go ahead. We believe that it would present a very attractive proposition for the 65+ age group and particularly those with disabilities who currently find it difficult to access the bridge.

Chart 1- Visitor Age Distribution

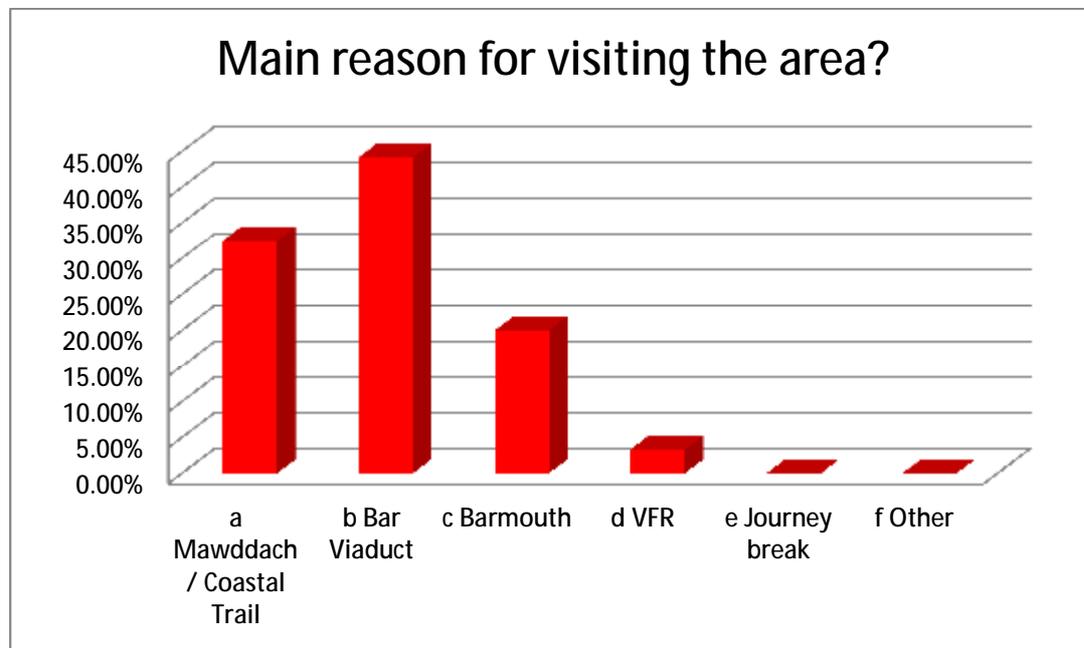


<sup>4</sup> That is, 120 questionnaires were completed but reflecting associated groupings of 587 people in total (ie groups of around 5 people on average) crossing the viaduct during the survey. This was the basis of all grossing /weighting of the results where appropriate.

Source: BVAG Survey 2015

Chart 2 below shows that the main reason people were in the area and crossing the viaduct appeared to be either:

Chart 2- Reason for Visit

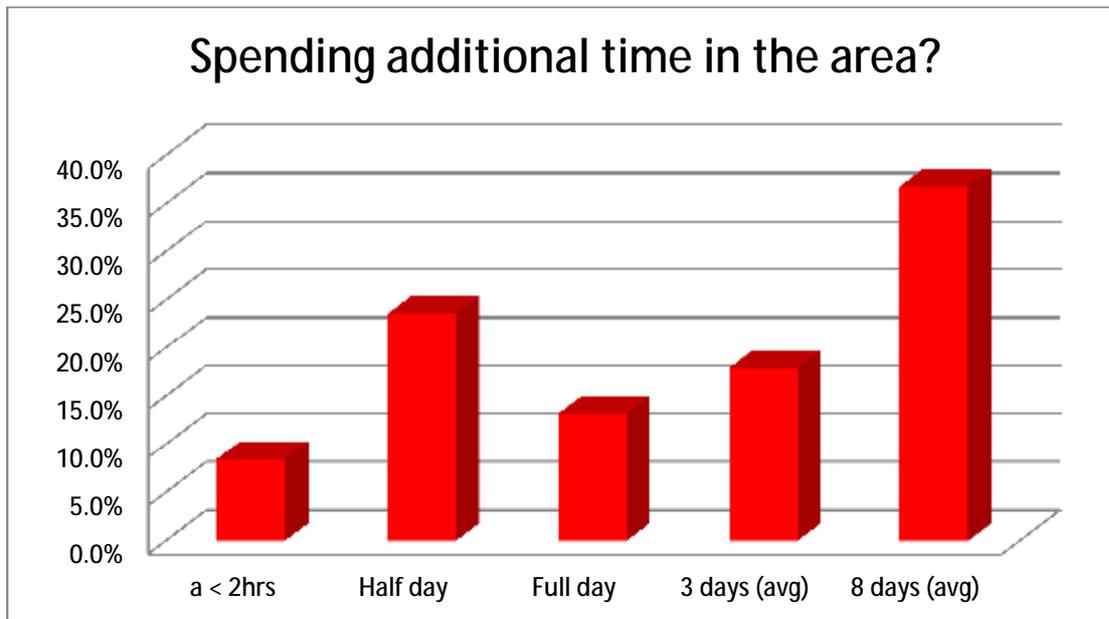


Source: BVAG Survey 2015

the Barmouth Viaduct itself (44%) or the Mawddach trail (32.5%). This would seem to clearly suggest that the viaduct itself was indeed an attraction for the area in its own right. Not a surprise although we suspect that there may have been a degree of response bias in this given the context for the survey - we noted a number of double entries on the questionnaires between these two responses<sup>5</sup>. Regardless, and as highlighted during the focus meeting in Barmouth, the Viaduct forms an integral part of the Mawddach Trail. The latter is likely to reflect the major factor behind the use of the viaduct with Barmouth itself coming a somewhat distant third most important factor (20% of respondents). Chart 3 below shows that in all likelihood the majority of people using the viaduct were tourists; whilst it was clearly possible that local people could spend more than a day in the town nearly 90% of local respondents highlighted a day or less in the area as one would have expected. Therefore 55% of those spending additional time in the area were spending on average between 3 (18%) and 8 (37%) days in the area which is clearly reflective. Moreover nearly all the non-local respondents highlighted that they would be spending additional time in the area – 70% of which were spending between 3 and 8 days (which was 95% of all those spending between 3 and 8 days in the area).

Chart 3 – Additional time in the area

<sup>5</sup> That is for both the Mawddach Trail and the viaduct



Source: BVAG Survey 2015

Overall 95% of respondents highlighted that they would be spending additional time in the area whilst also of course using the viaduct. The weighted average length of stay of those also using the viaduct was estimated at 3.75 days. The value of the visits which is potentially attributable to the viaduct is also clearly of interest. According to the survey 78% of respondents from outside the area (ie non-local respondents) expected to be spending in the local shops. The weighted average spend per person was between £25 -£31 ppd<sup>6</sup> of which around 50% (£14.5ppd) was thought attributable to the presence of the viaduct. Assuming 100,000 visitors pa to the viaduct (see below) then this would suggest a baseline gross spending of around £6m of which £3m was attributable to the viaduct<sup>7</sup>. This seems high but then these were all people surveyed using the viaduct. In any case this would convert to approximately £2.25m additional GVA income in total of which £1.13m was thought directly attributable to the viaduct every year. So in simple language the viaduct appears to be attracting just over £1.1m of income to the local economy (noting here the Confidence Interval, and then at worst say £1m). Given its uniqueness then it's difficult to gauge whether this is relatively high or low but then according to the latest 2013 NRC survey of the Wales Coastal Path this suggests that the average visitor spend was around £13.18 pp. This is marginally less than what we identified through this survey but not unreasonably so – and is within reach of the confidence interval implied by the sampling levels<sup>8</sup>. Therefore on this basis it would appear that these estimates are very reasonably reflective and indicate an important visitor attraction role for the viaduct in its own right.

## Visitor Impression

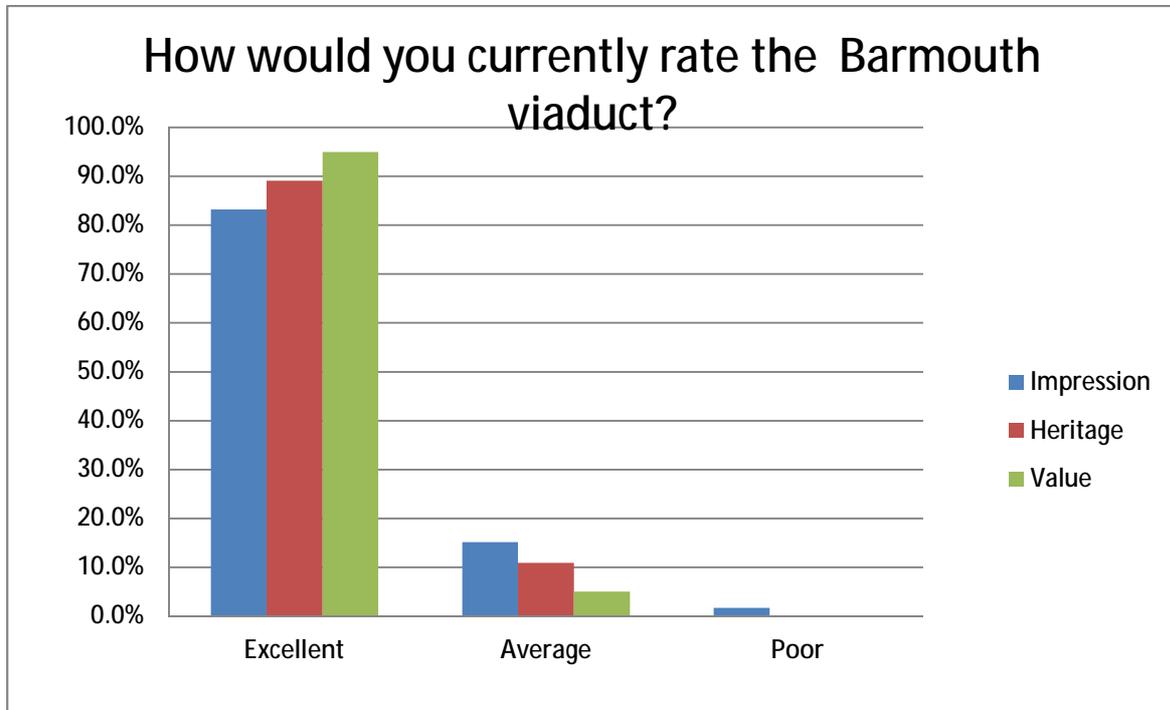
Chart 4 below shows the impression of those surveyed of the viaduct in terms of its contribution to the local economy and local heritage:

<sup>6</sup> Per Person Day

<sup>7</sup> That is  $100,000 \times 70\%$  (ie non local)  $\times 78\%$  (ie % spending) = 55,000  $\times$  £29 pp  $\times$  3.75 days = £6m.

<sup>8</sup> The CI is +/- 8.94%

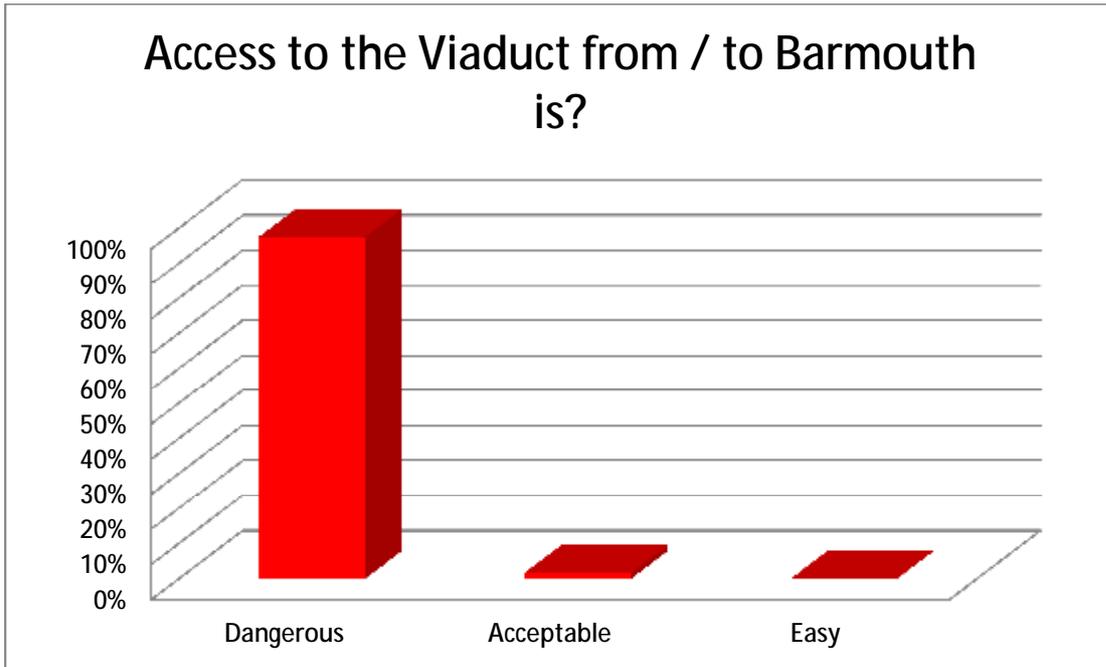
Chart 4 – Viaduct Rating



Source: BVAG Survey 2015

The results clearly show that visitors to the viaduct are impressed by its presence in the estuary and equally rate it in terms of its perceived value to the local economy and local heritage. The slightly weaker response on the impression of the viaduct reflecting the need for some renewal work on the structure rather than a negative perspective of its image in the area per se. Overall therefore respondents had a very high regard for what is a magnificent structure across the Mawddach estuary. That said, and most importantly here, there was also a uniform response to the question about its accessibility from the town as Chart 5 below shows:

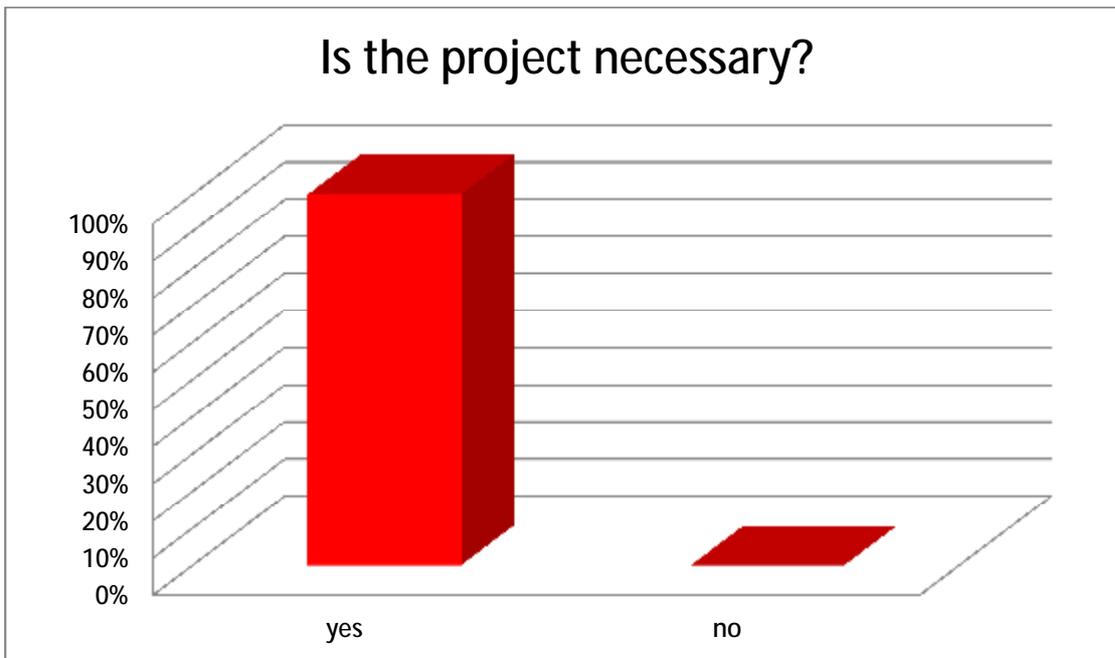
Chart 5 – Viaduct Access



Source: BVAG Survey 2015

A resounding 98% of respondents highlighted that the access to the viaduct from or to Barmouth was dangerous (with some adding comments that it was only a matter of time before someone would get very seriously hurt<sup>9</sup>) – the remaining 2% suggesting it was acceptable. In turn as chart 6 below shows, there was unanimous support for the redevelopment project to improve the access to the viaduct and make it safer and more appealing for people to enjoy.

Chart 6 – Project Support

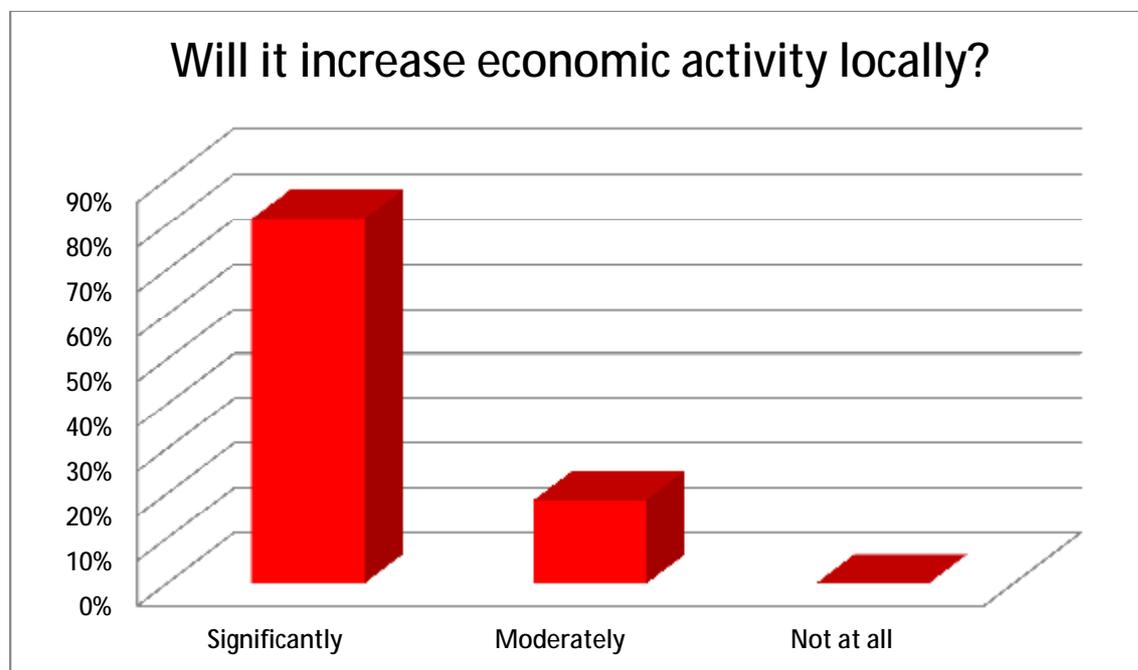


Source: BVAG Survey 2015

<sup>9</sup> Some even suggesting the potential for a fatality.

There was also a general consensus that this would have a significant impact on economic activity locally as shown below in Chart 7:

Chart 7 – Project Impact on Economic Activity



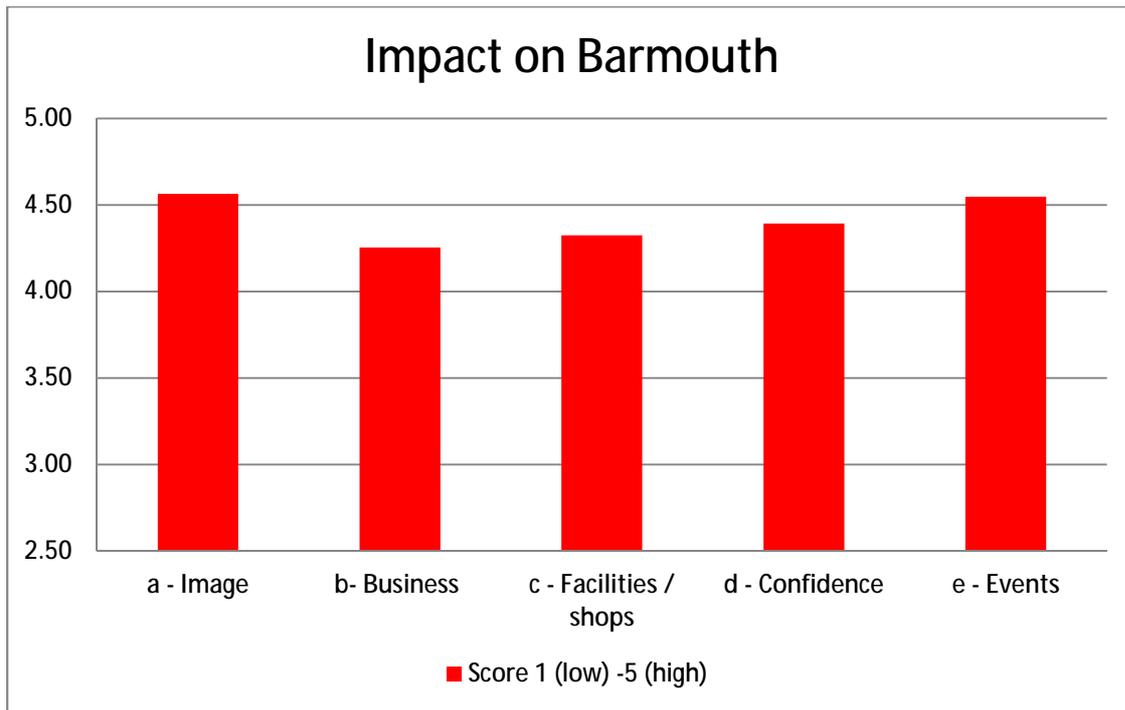
Source: BVAG Survey 2015

Around 81% of respondents highlighted that the project would have a significant impact on the local economy – 19% suggesting that the impact would be more moderate. Additional comments offered in this regard included:

- "it would encourage tourists on bike and foot"
- "better / safer access"
- "encourage greater use of the bridge"
- "make it more dramatic to enter Barmouth"
- "more people could use the train if they advertised and reduce parking problems"
- "it would dramatically improve the coastal path through Barmouth"

Finally chart 8 below shows what sort of impact respondents thought that this development would have across a range of important factors associated with the town itself:

Chart 8 – Project Impact on Barmouth



Source: BVAG Survey 2015

Respondents scored the impact of the project highly and very evenly across all key factors affecting the economic vibrancy of the town. Of particular interest was the fact that it was likely to increase the attractiveness of Barmouth as a town to hold key events – this was very clearly echoed during the group business forum held in the town which also resonated with a past reputation for holding successful events.

### Project Additionality

Where potential public funding is concerned then the scale of additionality will be of major importance and of course the impact section of the report will also need to draw on the prospective level of additionality associated with the project. Quite simply in the case of this project – and perhaps rather unusually – the message from the survey was emphatic. Project deadweight – that is the extent to which these impacts were going to happen anyway in the absence of this project – was thought to be almost negligible at 3%. Similarly the level of displacement - that is, where the project was likely to displace impacts or similar activity / proposals in the town – was also thought to be negligible at 3%. In turn prospective project additionality was thought to be very high indeed. Of interest here was the similarity highlighted by the business group forum of the impacts from the Foot and Mouth outbreak in 2001 which was a serious one-off event but which somewhat counter-intuitively had a major positive boost to the economy. It was thought that very few opportunities had come along that had allowed a 'step-change' in economic activity within Barmouth but this project was clearly thought to be one of them.

In turn we asked those surveyed whether the project was going to impact on their frequency of visits and expenditure patterns locally to this effect. Again the response was pretty unambiguous where 87% indicated greater frequency of visits which on average would be a 50% increase and a further 84% expecting to increase expenditure in the area by a weighted average of over £21 ppd. In gross terms therefore this was likely to yield gross additional spend of over £790k annually as a direct result of the project. The next section calculates what this translates to in net income terms for the area.

Finally for this section a significant number of additional comments were included in the questionnaires which highlighted the significant support for the project including:

- "great idea to improve health and leisure"
- "stunning project"
- "please do this now!"
- "brilliant idea"
- "view from the walkway will add to its (ie Barmouth's) attractiveness"
- "hugely beneficial to all in every way - will extend the holiday season"
- "long overdue - you will be doing a great service to Barmouth area"
- "massive plus for wheelchair users"
- "Everyone gains, no losers - this is not rocket science!"
- "would have to re-design the cycle tour without the viaduct"

There was one mildly negative comment in the whole survey referring to the overall cost of the project being "lots of money to spend on just this project in the area".

An on line survey of the questionnaire was posted by BVAG on their website which attracted some 40 responses. Noting that this was largely an unscientific survey of the questionnaire yet on the whole this corroborated the results of the main survey.

Of interest however were a number of relevant comments posted on the site and these are detailed below:

<i>Because it allows you to do events and is accessible then for everyone - I once lived in Barmouth and it used to have many events that would allow people all through the year to enjoy and this easy access could help business again all through the year in my day though cars were not as many as today but now this is an issue and the plan seems to show a much safer route hope it is achieved</i>
<i>It's not a great access particularly for the disabled or children from a busy road</i>
<i>To be able to complete a walk along the Mawddach Trail into Barmouth without having to negotiate the junction with the road would improve access for walkers, cyclists and families. This could increase visitor numbers to an</i>

<i>area of outstanding beauty.</i>
<i>I cycle across the bridge at least twice a week I would like to take make children across the bridge but it is so dangerous to access the bridge with my children.</i>
<i>The present main road access is dangerous, especially to youngsters/inexperienced cyclists. I feel this may put off return visits. A safe, easy access to the Viaduct &amp; thus Mawddach trail (or Barmouth town - depending on direction of travel!) would encourage such people to visit again and recommend it to their friends.</i>
<i>Barmouth is already an attractive resort and the viaduct makes it distinctive. By improving accessibility, people will revisit the area to access the estuary via a safe walkway. The current route is dangerous particularly for bikes, pushchairs, wheelchairs and disability scooters.</i>
<i>Make Barmouth more walkable to from across the estuary. People will be encouraged to walk to the bridge and it would make a nice evening walk as well therefore encouraging more visitors.</i>
<i>Barmouth Bridge and the Estuary are well known National landmarks; it's about time some of that marketing money was ploughed back into it.</i>
<i>£3 million too expensive. There are easier and quicker routes to develop much easier. The bridge itself hasn't got much longer and why don't you collect toll charges at £1 a time? Once the railway has gone the line itself can be used. This has always been the plan, together with the road improvements. How come you don't know that?</i>
<i>Since we purchased in 2012 I have already noted an increase in off season economic activity i.e. more eating and more visits. Agree? £3m actually seems reasonable cost for what is being gained. I trust some automated pumps are being incorporated to protect the southern end of town in case of repeat of 2014.</i>
<i>Would improve awareness of access to the bridge and the Mawddach trail etc. Encourage more visitors to the bridge and therefore improve the experience of visitors to Barmouth. Visitors more likely to stay longer in the town.</i>
<i>A safe and pleasant pedestrian access from the town to the viaduct will improve access to walking trails on the other side of the estuary, and so improve what the town has to offer to visitors</i>

We've highlighted two particularly interesting comments. The first refers to this idea that Barmouth could reinvigorate itself as an event location. This hasn't been factored into the calculation here but it is clearly an aspect which the town could develop with positive prospects for success<sup>10</sup>. The second highlighted comment is very interesting if not controversial in some respects. Noting that the BVAG have already undertaken an options appraisal this comment is not without some substance that the line path through the tunnel would be a very interesting alternative were it to become available. That said it would seem very unlikely in the current climate that the rail service would be terminated especially given the recent and very significant investment at Bont Briwet in Penrhyndeudraeth.

<sup>10</sup> Whilst we have used a local multiplier in the calculations these sorts of impacts would be additional in our view and would add to the impact estimates included in this report.

## Conclusion

A survey of local and non-local users of the Barmouth viaduct has revealed strong support for the project. According to these results the viaduct is already making a significant contribution to the local economy despite the apparent access issues. However it is also the case that the access to / from Barmouth is almost universally thought of dangerous with a unanimous view that the project as proposed by BVAG is necessary on a number of counts but mainly *safety*. The prospective impact of the project was thought very significant with positive effects expected across a range of factors (eg image) associated with economic activity in the area. The additionality of undertaking the project was also thought very high indeed by the respondents of the survey. Finally a number of very positive supporting comments revealed widespread support for the project.

The following therefore goes on to consider the impact of undertaking the project as proposed.

## Impact Assessment

As highlighted in the proposal there are two key elements that need to be considered as part of the impact assessment works:

- The impact of the construction stage of the project; and
- The impact of the operational stage – that is, once the project is complete what would we expect in terms of economic return.

The following goes on to deal with these two aspects separately.

### Construction stage

The general approach (or dictate) by HMT<sup>11</sup> concerning the construction stage of a project is that these impacts are transitory and form no permanent imprint on economic activity. In many respects unless there are particular 'structural' elements associated with the projects that induce an underlying change to the sector then the construction stage is therefore largely 'ignored'. However when a significant construction project is implemented in a largely deprived area then clearly despite its apparent transitory nature the impact can be quite significant. Therefore a project which is estimated to cost some £3m within this area should have an appreciable effect worth at least alluding to here. Given the very sparse details of the project and the build specification then what follows is at best indicative. But drawing as it does on the experience elsewhere in Gwynedd of capital projects more generally and specifically the experience on Bont Briwet<sup>12</sup> then it is possible to provide an order of magnitude of possible (transitory) impacts. Regardless with the availability of benchmark details this at least affords us to sensibly calibrate the net contribution of the project using the multipliers etc that have been used on these other projects.

According to the preliminary results from the Bont Briwet project then the capital expenditure up to November 2014 could be disaggregated to the following :

Table 1:

Expenditure in Wales – Bont Briwet	Exp (£M)	%
Labour costs (Wales)	1.01	5.1%
Supplier costs (Wales)	8.6	43.0%
Total Cost	20	100.0%

Source: Gwynedd Council

Whilst it is unclear what stage of the build this relates to it does appear to imply that around half the spending on this construction project was expected to leak out of the Welsh economy. Looking at

<sup>11</sup> Her Majesty's Treasury

<sup>12</sup> There was very limited information regarding the contracting specification for this build although the BVAG can refine these current results once the evaluation of Bont Briwet is completed later in 2015.

the results for other builds in the region then this seems high which would suggest that our measures for Wales are significantly short of the final outcome. However it is likely that the proportion spent between labour and supplies are broadly reflective although here again supplies often will incorporate some labour costs as well especially where subcontracting is implied. So for example where we assumed that the expenditure total was nearer 75% complete in November 2014 then this would imply a much lower overall leakage rate. Leakage in this case is defined as spending outside the local area and not the whole of Wales in that we would like to understand how much of this would contribute to the local economy. From previous 'capital build' works we have assessed in Gwynedd then we would expect around 55% of the spend to be local – depending on the supplier base available. With a 25 mile 'local' radius then this should provide a good supply base for this project (ie in previous works we have defined much narrower definitions of 'local') . Therefore it would seem prudent to apply a 45% leakage rate for the capital element of spending. Given also the difference between the impact of labour costs and supplies then the 5% flow apparent in Bont Briwet again seems very (if not unrealistically) low. Again our previous empirical research indicates that the labour cost component approximates 40% of supplier costs with 60% related to actual materials. This may be a feature of the particular build for the bridge in terms of high material costs although a general rule of thumb would have at least a third of costs as labour costs – which is far nearer the empirical evidence referred to here. A compromise perhaps therefore would be to reduce the labour cost component to around a 'rule of thumb' level (ie in this case 30%) although keep the 'non-local' as identified from previous works.

Therefore this would have the following implications in terms of decomposition of gross spending on this project:

% Assumptions	Local	Non-local
Total	0.55	0.45
wages	0.30	0.45
supplies	0.70	0.55

£ Outturn Forecast	local	Non-local
Total	1650000	1350000
wages	495000	607500
supplies	1155000	742500

Accordingly we would have 55% of forecast local spending of £1.65m around £0.5m of which would be on labour and £1.2m of which on materials. The net impact of this expenditure in terms of the net income and implied net job levels is detailed in Table 2 below taking account of relevant scalars and multipliers (ie indirect and induced effects):

Table 2

Construction Stage – income flows	Local GVA Impact (£)
Wages	825000
Suppliers	620,000
Total	1,445,000
Construction Stage - jobs	Local FTE - nos
Total 2 year FTE jobs	32

Therefore the build stage is forecast to contribute some £1.45m of GVA into the local economy supporting 32 FTE jobs over a period of 2 years<sup>13</sup>. The total impact of the works are clearly greater as it takes into account the non-local expenditure and wages as well<sup>14</sup>.

## Forecast Operational Stage

Notwithstanding the safety and accessibility issues affecting the viaduct which the project should fully address the main economic impact of the development is expected to come from potential changes in visitor flows. As noted the impact may come in one or two ways: the existing population of people using the viaduct increasing their frequency of visits to the town ; and that the development of the walkway has a more general impact on visitor numbers to the town and surrounding area. In terms of setting a baseline there exists somewhat conflicting evidence as to the true level of visits to / from the viaduct. However, the last toll survey undertaken in 2009 indicated that there was approximately 70,000 visits to the viaduct. BVAG highlighted that this survey was undertaken during the peak period – both in terms of time (ie 9am – 5pm) and season . Therefore it would miss ‘evening’ walks and those undertaken during the winter period. It also does not take account of any dynamic change in visits since this period – either up or down. On the general trends since 2009 then total o/n visits<sup>15</sup> have increased by around 5% - we could therefore suggest that there will have been an increase in overall visits since 2009 of possibly 10%. However one would also have to acknowledge here that the toll survey will have covered the vast majority of visits to the viaduct. Assuming an 80% coverage through the toll survey then this would suggest around 100,000 total current visitor baseline. This (perhaps conveniently) coincides with BVAG’s estimate for the attraction but is significantly less than some quoted figures for the viaduct.

Therefore taking the results from the survey we estimate the impact as detailed in the Table below:

<sup>13</sup> An overall 2 year build period is assumed.

<sup>14</sup> The total value of the build is forecast at over £3.5m and near 80 two year FTE jobs.

<sup>15</sup> Gwynedd Tourism Profile 2010-12. Only provides a time trend for o/n stays.

Base	100,000
Increase visits (A)	87%
RATE (%) (B)	50
Leverage (A*B)	0.44
Volume increase	43,700
% People Spending more	84%
Increased spend pp (weighted average)	£21.65
Gross increase in expenditure (£)	£790,000
minus d/w	97%
minus displacement	97%
Plus local multiplier (15%)	1.15
Net Additional Expenditure Impact of the project (£)	£850,000
Estimated Net additional GVA impact of the project (£)	£325,000
Attribution level of BV	0.51
Estimated Net GVA Impact of BV	£165,000

So according to the results of the survey then the net expenditure impact of the project is estimated at £850k per annum – which using a nominal scalar converts to around £325k of GVA per annum which is effectively a near 15% increase on the current baseline contribution or value of the viaduct to the local economy (which is an effective ROI measure). This is very interesting in that during the forum discussions with the local businesses this was the exact percentage increase in business that was mooted as being the impact of the Foot & Mouth outbreak on the town. Restrictions during this period ‘forced’ people to use the facilities in the town<sup>16</sup>. So this in real terms would give a payback period of some 10 years for the project which given the longevity of the bridge to date is negligible<sup>17</sup>. What we haven’t factored into this calculation is whether additional visits would actually entail a period of stay or indeed extend the average period of stay. For example if the development was to increase the average length of stay up from 3.75 then this would clearly increase the impact suggested quite considerably. However, the vast majority of responses indicated a % increase in the number of visits which is what we have used in the calculation here but this should be considered as a realistic and conservative estimate. Any associated impact on the length of stay beyond a day would clearly induce a concomitant ‘multiplier’ on this level of impact.

We should however also add that the actual *attributable* GVA from the viaduct is considerably less at around £165k per annum (c. £440k of expenditure) – half the overall impact. The result is very consistent in that what the survey identified was a willingness to come more often (or as noted potentially stay longer) as a result of the project and this would induce a slightly lower expenditure profile to the existing spending pattern but with what is an existing inferior ‘product’ on offer. So whilst the response indicated that the development would induce this overall level of additional expenditure we need to acknowledge the contribution of the project as a whole not just what was attributable directly by Barmouth Viaduct. That is, this acknowledges that the viaduct forms only a part of the overall direct impact of the project although that impact would not take place in its absence.

<sup>16</sup> This support a slightly higher GVA scalar for the estimation process.

<sup>17</sup> At 3% DCF a £3m project would have a payback of just under 10 years with a constant £325k pa flow of GVA.

## Monitoring Issues

Whilst we believe that the results of this study are robust and accurate it is evident that there are some areas where the BVAG ought to consider more work. The key area is clearly the footfall on the viaduct. In order to estimate the potential impact of the BVAG proposals we have used a baseline which is at best a guesstimate. Whilst we believe that the gross volume estimate used is within an order of magnitude of the actual volume footfall on the viaduct it would clearly be beneficial to secure a better more accurate measure than this. Three factors support this assertion:

- Given the evidence base available within this report then a far more accurate measure could be provided of the actual and forecast economic contribution of the viaduct where a more accurate footfall baseline was available
- It would provide a basis on which to develop the business case for the bunkhouse development
- It would seem an obvious development opportunity to measure these volumes in terms of the year long business base development.

## Conclusions

Barmouth is a key part of a coastal tourism hub in South Gwynedd – a fact recognised in the latest draft of the joint LDP plan and confirmed by the response of the local community / businesses to this study. At the centre of the town's growing appeal is the Barmouth Viaduct – we feel appropriately described as an iconic piece of architecture and engineering heritage. Access to the viaduct was thought dangerous and unsafe and precluded this 'attraction' playing a full part in the local economy – certainly from the perspective of Barmouth town. A survey of users confirmed this and therefore set into context the proposals by BVAG to improve the access and safety of the viaduct through a £3m development that would provide a stunning walkway to and from the viaduct. This economic impact assessment forecasts that the value of this development would be near £1.5m and 32 FTE 2 year jobs during the building phase and an increase of £325k GVA income per annum through a projected net increase of some 44k visitors to the area – equivalent to an estimated increase of 12.5 permanent jobs in the area. This would seem to provide a reasonable RoI for the project. Moreover the major contribution of the development would be to enhance the appeal of the whole area that could inter alia:

- Allow the town to develop key leisure / sporting events (eg marathon, triathlons etc) which it has a previous successful track record of doing (eg Barmouth Regatta)
- Help extend the season beyond the current levels to almost a full year
- Create a much wider appeal to those infirm or disabled to enjoy the delights of the Mawddach estuary without fear of accidents or having to negotiate impossibly difficult inclines to access the viaduct
- Create a far more convincing link to the Coastal , Mawddach and indeed other paths and trails
- Potentially exciting developments on the viaduct (ie bunkhouse ) that would contribute to the cost of maintenance but would add to the attraction in its own right.

None of these associated impacts have been specifically quantified within the economic impact assessment<sup>18</sup> which should therefore be considered as very conservative and eminently achievable. The proposals therefore present Barmouth and its surrounding towns and villages an exciting opportunity to build on the momentum that is slowly gathering in this largely 'overlooked' area of South Gwynedd. Finally the most important factor underpinning the proposal remains without any doubt the safety of the people that currently and potentially will use the viaduct.

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<sup>18</sup> Though noting the use of multipliers for calculating impact estimates.

## Appendix 1 – BVAG Project Design

(BVAG to insert)

## Appendix 2 – Questionnaires

# Visitor Questionnaire – Barmouth Viaduct Access Group (BVAG)

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We would be grateful if you could answer this short questionnaire. It will only take you a few minutes and it will help the Barmouth Viaduct Access Group (BVAG) to evaluate the economic and social contribution locally of remodelling the approach to and from the viaduct within Barmouth. If you are a family or group then please just complete one questionnaire broadly representing the group or family. If you need more background information on the development then please ask a member of BVAG and/or please visit the website <http://www.b-vag.org.uk/>. Thank you.

1. Are you local or from outside the area (i.e. more than 25 miles away from here)?	Local (i.e <25 miles)    .. ..... Non Local (i.e > 25 miles)    ..		
2. How many people in your group or family visiting the area? Pls specify numbers within the age group bands  Number of people in the group / family visiting	Less than 16 years  <input data-bbox="802 1848 965 1899" type="text"/>	16 – 65 years  <input data-bbox="1018 1809 1181 1861" type="text"/>	Over 65 years  <input data-bbox="1238 1776 1401 1827" type="text"/>

<p>3. What is the main reason you have visited the area today? (<b>tick one only</b>)</p>	<p>a. The Mawddach trail / Coastal Path      ..</p> <p>b. To cross the Barmouth viaduct      ..</p> <p>c. To Barmouth town more generally      ..</p> <p>d. To visit someone/family living nearby      ..</p> <p>e. To break a journey to somewhere else      ..</p> <p>f. For another reason      ..</p> <p>    please specify</p> <p>.....</p>
<p>4. Will you be spending additional time in the local area (i.e. Barmouth area)?</p> <p> </p> <p>If you answered 'yes', roughly how much time? (tick one only)</p>	<p>Yes      ..                      No      .. (goto Q5)</p> <p> </p> <p>a. Less than 2 hours      ..</p> <p>b. Half a day      ..</p> <p>c. Full day      ..</p> <p>d. More than a day but less than a week      ..</p> <p>    Please specify .....</p> <p>e. A week or more      ..</p> <p>    Please specify .....</p>

<p>5. Where you have indicated that you are from outside (i.e. &gt;25 miles away) the area then have you, or do you expect to, spend some money in the local shops, cafés, hotels, restaurants etc. while you are in the area? (Please include all types of expenditure)</p> <p>a. <b>If you answered ‘yes’</b>, could you say roughly how much you might expect to spend per person per day?</p> <p>b. And roughly what proportion of this expenditure would you <b>directly attribute</b> to the presence of the Barmouth viaduct? (That is, if your main reason for visiting the area was to visit / cross the viaduct then you might want to attribute 100% of expenditure to it. But if you are staying here for 10 days and you feel that one whole day can be attributed to the viaduct then you would attribute 10% of expenditure)</p>	<p>Yes      ..                      No      .. (goto Q6)</p> <p>£.....</p> <p>.....%</p>
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<p>6. Tell us what you think of the Barmouth viaduct:</p> <p>a. Your overall impression of the viaduct?</p> <p>b. How would you rate it in terms of heritage / cultural interest?</p> <p>c. How would you rate the viaduct's overall value to the area's tourism offering?</p>	<p>Excellent</p> <p>..</p> <p>..</p> <p>..</p>	<p>Average</p> <p>..</p> <p>..</p> <p>..</p>	<p>Poor</p> <p>..</p> <p>..</p> <p>..</p>										
<p>7. Do you think the access to / from the viaduct on the Barmouth side is:</p>	<p>Difficult / Dangerous</p> <p>..</p>	<p>Acceptable</p> <p>..</p>	<p>Easy</p> <p>..</p>										
<p>8. BVAG hope to improve the access and route to /from the viaduct from the Barmouth end and make it safe and enjoyable for everybody - the project will cost about £3m.</p> <p>a. Do you think this would be worthwhile?</p> <p>b. Do you think it would increase economic activity in the area:</p> <p>    Significantly</p> <p>    Moderately</p> <p>    Not at all</p> <p>c. Could you please comment why you think it would (or would not) impact on the local economy?</p> <p>Comment :</p>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">Yes</td> <td style="width: 50%; text-align: center;">No</td> </tr> <tr> <td style="text-align: center;">..</td> <td style="text-align: center;">..</td> </tr> <tr> <td style="text-align: center;">..</td> <td></td> </tr> <tr> <td style="text-align: center;">..</td> <td></td> </tr> <tr> <td style="text-align: center;">..</td> <td></td> </tr> </table>			Yes	No	..	..	..		..		..	
Yes	No												
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<p>9. How do you think this project to improve the walkway and access to / from the viaduct could change or impact on Barmouth in terms of:</p> <p>Please rate between a score of 1 – 5 where 5 = Improves a lot 1= Deteriorates a lot.</p> <p><b>Please note that ‘5’ means that it’s expected to get better</b> <b>Please note that ‘1’ means that it’s expected to get worse</b></p>	<p>a. Its image / attractiveness (rate)? ..</p> <p>b. Its business activities / investments (rate)? ..</p> <p>c. Its facilities / shops (rate)? ..</p> <p>d. Its confidence / status (rate)? ..</p> <p>e. Its appeal to host events (rate) ? ..</p> <p>f. Other (rate)? ..</p> <p>please specify ..... .....</p>
<p>10.a. In the absence of the proposed access improvement to the viaduct do you think these sorts of impacts would happen anyway in relation to the viaduct within Barmouth? <b>(tick one)</b></p> <p>AND</p> <p>b. if the proposals <b>did not go ahead</b> how likely is it do you think that similar developments / impacts would take place anyway in the town? <b>(tick one)</b></p>	<p>Yes .. No ..</p> <p>Very likely .. Likely .. Not very likely ..</p>
<p>11 Do you think that this sort of development would displace other investment or activity locally?</p>	<p>Yes .. No .. (goto Q12)</p> <p>If yes then what exactly do you think it could displace and to what extent ? ..... ..... .....</p>
<p>12 Would you expect to increase the frequency of your visits to Barmouth / the viaduct as a direct result of this proposal to improve the walkway / access to the viaduct?</p>	<p>Yes .. No ..</p> <p>Increase number / % of visits = .....</p> <p>If ‘no’ can you please tell us why?</p> <p>Comment:..... .</p>

<p>13 Would you expect to spend more money in the area – and specifically in Barmouth – as a direct result of this proposal to improve the walkway / access to the viaduct?</p>	<p>Yes    <input type="checkbox"/>    No    <input type="checkbox"/></p> <p>If yes, then please specify : Estimated additional spending per person per day.....</p>
<p>14 Any other comments about the BVAG proposals to improve access to the viaduct ?</p>	<p>Comments:</p>

Thank you – now please return the questionnaire to the BVAG member

### Guidance

Take your time with the questions – they are technical and your considered response is very important – so don't rush it. Take particular care to answer those questions where we are asking you to rate a factor (i.e. Q9) – many get the ratings the wrong way around! It is important that you have a clear understanding of the BVAG proposal to develop a walkway / access to the viaduct from the south end of the town near the harbour. (Please refer to the plans on show)

Q1 – here we just need to know whether you are local or not because any different spending patterns you then have in the area is largely irrelevant because it's not adding to anything. So > is greater than and < is less than.

Q2 – this is simply to secure an estimate of the coverage from the survey and of course to understand the general characteristics of the 'population' crossing the viaduct. Simply include the numbers in the boxes.

Q3 –We would like to understand why you have visited the area today and in particular of course whether the Barmouth viaduct was a factor in your choice .There may be a mixture of factors but we would like to understand the main reason you are in the area. So tick one box only.

Q4 – We are interested to understand whether your visit to Barmouth is linked to a specific timeframe – that is, is it a brief stay or part of a longer period in the area.

Q5/a – this is trying to estimate how much you might spend during a day out which is most likely to involve food, drink and leisure / tourism spending. Do include travel costs as well. It is important that you treat this aspect as spending which you would normally associate with normal leisure related spending etc. and not the normal weekly shopping for example. For Q5b then this is a more difficult question but critically important to the work. We need to understand whether the viaduct is contributing to local visitor flow and expenditure through being an attraction in its own right. Can we therefore assert that it is drawing a captive visitor flow and thus local spending? Therefore we need you to attribute (if appropriate) a proportion of the local spending to the existence of the viaduct. Notes on the questionnaire show how this could be done- a common sense approach is required which recognises a partial contribution as well as one which may be wholly attributable (or indeed one that is not attributable at all).

Q6 – this is self-explanatory . There should clearly be a link between your answer to Q5 and Q6c

Q7 – This refers strictly to the access to and from the Barmouth side of the viaduct. There is no safe gateway to the viaduct within Barmouth – the access is thought treacherous and dislocated from the main walkways in the town. We would like your opinion on this assertion especially where we refer to young children, the use of prams / buggies / bikes and especially the disabled requiring easy access to the viaduct crossing.

Q8 - this is self-explanatory.

Q9 – Note here that the proposal is not only to provide ease of access to the viaduct it actually presents a key link to the coastal path as well as provide a safe and splendid walkway in its own right for the town (providing great views of the estuary, harbour and the viaduct). We would therefore like opinions about the potential wider impact the proposals could have on the town ranging from ' how people feel about the area' to business investment (i.e. opening new shops). So in terms of the individual questions:

- a. Its image (rate) – by this we mean the perception of the town following the investment. Barmouth's reputation as a 'nice place to be' has perhaps been deteriorating and this investment is all about changing that perception
- b. Its business activities / investments (rate) - by this we mean the fact that given a prospective boost to the apparent daily 'footfall' in the area with also significant spending power by visitors to the area then this could provide new opportunities for businesses and investment in the local area (as well as Barmouth)
- c. Its facilities / shops (rate) - by this we mean that the investment could lever in greater variety of services / facilities in the town linked to the apparent increase in 'footfall' and a positive change in image
- d. Its confidence / status (rate) - by this we mean that positive effects linked to those aspects highlighted in (a) – (c) should perhaps increase the overall confidence and status of the town area. This should help temper negative aspects (eg inclement weather ) and increase confidence in the town's ability to regenerate and invest

- e. Its appeal to host events (rate) - the development may help to establish the development of key events in the town (eg biking, running, triathlon etc.) given the 11 mile stretch of coastal path that this very development will link up.
- f. Its overall attractiveness - the impact of (a) – (e) should help with the overall appeal and attractiveness of the area at every level.

Q10a/b – this is a more difficult question and clearly hypothetical and if you feel uncomfortable with trying to answer it then please move on to Q11. These are technical questions concerning what is technically known as additionality. So we want your opinion whether the impacts covered through the questionnaire (i.e. more spending, improved confidence hopefully etc.) could happen without undertaking this project.

Q11 - again this is a technical requirement of the study and that is to explore the scope of this proposal to displace existing or proposed activity that could reduce the overall apparent positive impact from the project . Please explain your response including some measure of what level of displacement that is likely to take place. So for example if the path is expected to affect the local beach reducing the overall number of visitors to the area then by how much would you expect the number or % of visitors to drop?

Q12 – we need to understand whether this sort of development would DIRECTLY change the frequency of visits you would make not just to cross the viaduct but to the town more generally. Express the increase either in days or % of your answer to Q4.

Q13 – again this is a more difficult question and hypothetical however it is very important to the survey. We need you to think about the situation that if the proposal goes ahead would this change your pattern of coming to, and spending time in, Barmouth especially with regards to the use of the walkways and viaduct. Would this then induce some more spending in the town as well which wouldn't otherwise happen? To this effect we would like some idea how this could change in terms of spending patterns (this to include both visitor leisure spending and normal weekly spending). So we want to measure the impact it might have on all spending patterns.

Q14 - open question but focus responses on the subject matter which is the potential economic impact of the project.

Thank you very much for your support.

## **BVAG Business Focus Group – pro forma**

1. What has been the socio-economic context in Barmouth and surrounding area over the last 3-5 years? (eg how has the recession affected the area; Gwynedd education plans etc)
  
2. Perceptions of the current tourism offering in Barmouth - and how has this changed over the last 3 years or so?
  
3. Role of the Barmouth Viaduct in attracting tourists and visitors to the town / area ?
  
4. Perception of the importance of the Barmouth Viaduct to the tourism offering of the town?
  
5. Perceptions of the BVAG proposals to enhance the access and walkway to / from the Viaduct into the town?
  
6. What sorts of impacts could this have on the town in terms of:
  - a. The local economy?
  - b. Volume of tourism?
  - c. Volume of business?
  - d. Other ?
  
7. Would you perceive any negative impacts from developing the walkaway / access as proposed? And how could these be addressed?
  
8. Any other comments / observations?