# A railway to regenerate Levenmouth



A project that ticks all the boxes This booklet shows the benefits of reinstating the mothballed Levenmouth railway and how this would transform the local community.

Sco	LMRC	
High Level	Promote economic growth	V
Objectives	Promote social inclusion	V
	Protect environment and improve health	V
	Improve safety of journeys	V
	Improve integration	V
Key Strategic	Improved journey times and connections	V
Outcomes	Reduced emissions	V
	Improved quality, accessibility and affordability	V

# CONTENTS

	Fage
1. INTRODUCTION	
1.1 Executive Summary	1
1.2 The Vision	2
1.3 The Proposal	3
2. BACKGROUND INFORMATION	
2.1 The mothballed Leven line	4
2.2 Population	6
2.3 Previous studies	8
2.4 Potential rail freight	10
2.5 Support for Levenmouth rail link	11
3. BENEFITS	
3.1 Personal stories	12
3.2 What makes a good rail reopening project?	14
3.3 Delivering Scottish Government policy	15
3.4 Freight	16
3.5 Land Value Capture	17
3.6 Tourism	18
3.7 Wider economic and regional benefits	20
3.8 The business case - Benefit to Cost ratio	21
4. RE-INSTATING THE RAILWAY	
4.1 Construction costs - Comparing Levenmouth with Borders	22
4.2 Timetable issues	24
4.3 Other project issues	25
5. MOVING FORWARD	
5.1 Conclusions	26
5.2 The final report?	26
6. LEVENMOUTH RAIL CAMPAIGN	
6.1 About our campaign	27
6.2 Our Charter	28
6.3 More information	29

### **1.1 Executive Summary**

This booklet has been produced by the Levenmouth Rail Campaign (LMRC) with the support of a group of railway professionals who wish to lend their expertise to the campaign.

It demonstrates that, in respect of connectivity, Levenmouth is one of the best value rail re-opening schemes in Britain, certainly the best in Scotland and that at 2017 prices, re-instating the Levenmouth line is likely to cost between £37 and £56 million. It also shows how the line could be part-funded with significant contributions from developers.

Based on these costs and, taking wider economic, environmental and social benefits into account, the booklet shows that the new line's payback would be around twice the cost of its provision. The benefits will be even greater if, as has generally been the case with other rail re-openings, traffic levels are higher than predicted.

Behind these sums of money are the human stories which illustrate how this new rail link would transform the lives of those living in the area.

This booklet also explains the problems that need to be overcome to reinstate passenger and freight services on the Levenmouth line, some of which are significant. We believe that it is important to present a balanced view by highlighting such issues, but also consider that these do not detract from the compelling case to re-instate the line to Levenmouth.

In summary we consider that reinstating the Levenmouth line is:

- technically and operationally feasible;
- good value for money
- affordable, in the context of Transport Scotland's annual £2 billion budget

Eugene Clarke Chairman, LMRC

"The Levenmouth Rail link will allow young people access to education and employment beyond Levenmouth". Stephen Gethins MP

### **1. Introduction**

### 1.2 The Vision

### MORE THAN JUST A RAILWAY

The LevenMouth Rail Campaign (LMRC) wishes to regenerate the Levenmouth area. Experience elsewhere, such as the Armadale example below, has shown that re-opened railways provide the necessary catalyst for such regeneration. We want to see improvements in all the aspects of our community's life that currently fall short of what we should expect in 21<sup>st</sup> Century Scotland.

We see the restored line as offering opportunities to make life better for the 46,000 people living in the catchment area. It will also benefit central and west Fife as well the west side of Edinburgh by providing an additional pool of employment and easy access to less expensive housing. We believe the restored line will result in huge improvements for these communities in areas such as:

- Higher education
- Employment
- Increased business activity
- Easier access to hospital and other medical services
- Expansion of tourism



Opened in 2011, Armadale station on the Airdrie to Bathgate railway line is now the centre of a £200 million regeneration scheme which includes plans for 1,000 homes.

### **1. Introduction**

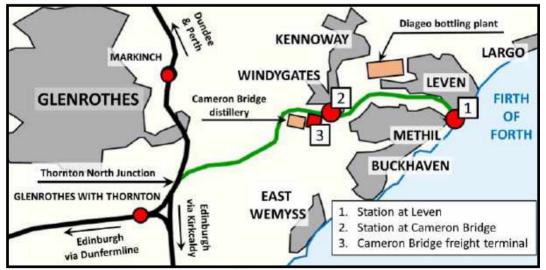
### 1.3 The Proposal

The out-of-use Levenmouth line has no blockages, is owned by Network Rail and has an operational junction with Edinburgh to Dundee the main line. Thus the cost per mile of reinstating this line would be significantly less than other rail re-openings.

The outline LMRC proposal is for a reinstated line with two new stations at Cameron Bridge and Leven served by a half-hourly passenger train service and with an intermodal freight terminal at Cameron Bridge.

To progress this proposal further a detailed infrastructure specification is required. This needs to be derived from a study to determine the optimum timetable for Fife passenger trains services with a re-opened Levenmouth line. This would determine, for example, the signalling required, where a passing loop should be located on the re-opened line and would assess the need for additional rolling stock.

Only after such a study can a detailed estimate of capital and operating costs be made to finalise the required business case. Based on costs and benefits identified to date, this booklet demonstrates that, quite apart from its contribution to the general regeneration of the Levenmouth area, the direct benefits of a re-wakened Levenmouth line are likely to be twice the costs of its reinstatement.



Stephen Gethins MP 🔮 @StephenGethins

Strong case from @LevenmouthRail on restoring rail link to Leven. Biggest urban area without one @JennyGilruthSNP

### 2.1 The mothballed Levenmouth line

The railway line between Thornton North Junction and Levenmouth opened in 1854. It was built as a single track, was double tracked in 1910 and then singled in 1970.

- 4 -

The Beeching report "The Reshaping of British Railways" (1963) did not propose closure of passenger services on the Levenmouth line but did recommend closure of the railway from Leven around the Fife coast via St Andrews. The original Leven station was on this line which closed in 1965.

The withdrawal of passenger services to Leven in 1969 resulted from further cut-backs. The line to Methil power station remained for freight up to 2001 and was 'mothballed' thereafter. A new coal opencast terminal was constructed at Earlseat in 2012, after which the first mile of the line carried two coal trains a week until 2015.

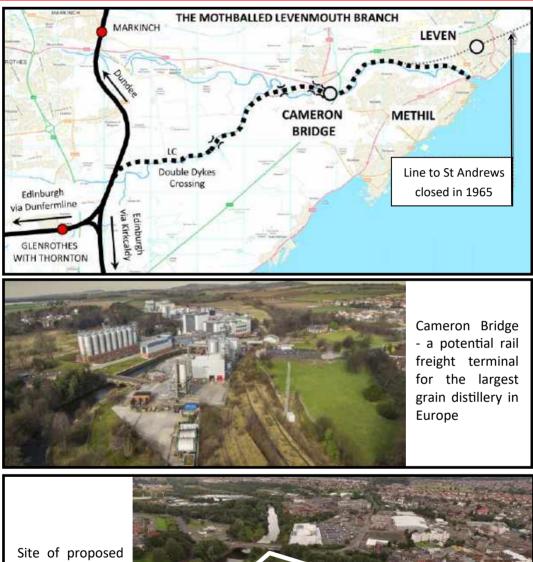
The six mile long line is owned by Network Rail, though out of use under "Short Term Network Change" (STNC) provisions. This means that Network Rail is not required to maintain the line. However it does receive funds to keep it as part of the main rail network and so are obliged to re-open the line to the previous capability for freight traffic if a request is received from a freight operator.

It is a single-track line with sidings at the Cameron Bridge distillery. The line has no blockages and no major structures. It has four river bridges, a public subway and five road bridges over the railway and one footbridge. There is a private level crossing at Double Dykes for a dirt track across the railway. A footpath also crosses the line at Duniface. The main line connection at Thornton North Junction is still operational but secured out of use.



Signal ET568 still controls exit from Levenmouth at Thornton North Junction





- 5 -

Site of proposed station at Leven

"Given the advantage it will bring to the area and beyond, I remain confident a strong case can be made to have the link delivered" Douglas Chapman, West Fife MP

### 2.2 Population<sup>1</sup>

Levenmouth is made up of the communities of Buckhaven, Kennoway, Leven, Methil and Windygates. With a population of 33,131, it is the largest settlement<sup>2</sup> in Scotland without a rail service.

- 6 -

With poor transport links, the closure of its coal mines and other industries, it is a generally deprived area. The 2016 Scottish Index of Multiple Deprivation (SIMD) shows that 44 percent of its population are in the bottom 20 percent of the SIMD ranking. The area has significant deprivation hotspots. Methil, for example, has an average SIMD rank of 796 (bottom 11%) out of the 6976 zones that make up the SIMD study.

The immediate catchment area for the proposed stations at Cameron Bridge and Leven is the settlement of Levenmouth plus the smaller communities of East Wemyss and Lower Largo with a combined population of 37,182. Moreover these stations will also attract traffic from a wider catchment area of Largoward, Elie, St Monans, Pittenweem and Anstruther which have a total population of 8,948.

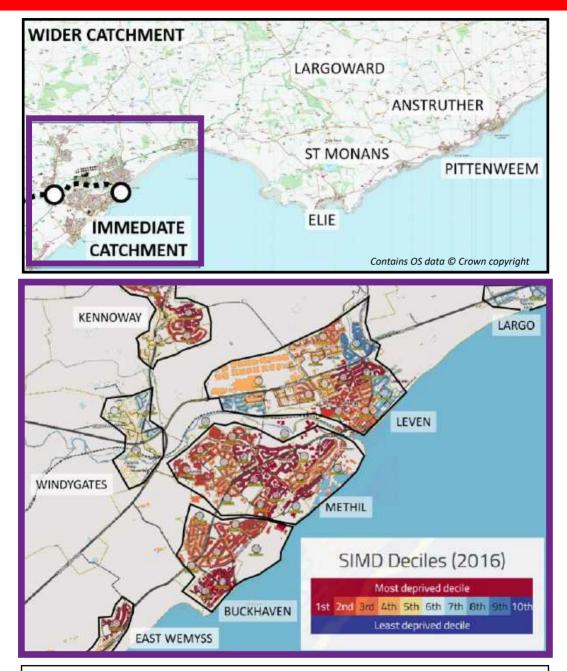
The combined catchment for Cameron Bridge and Leven stations is thus 46,130.



Methil High Street

- 1 2014 population estimate used in 2016 Scottish Index of Multiple Deprivation
- 2 a group of high density postcodes whose combined population exceeds 500

Scottish Settlements above 10,000 without a rail link				
Settlement	Population	Miles to closest station		
Levenmouth	33,131	5.9		
Bonnybridge	22,628	3.4		
St Andrews	18,762	5.4		
Peterhead	17,733	32.3		
Kirkintilloch	17,446	1.7		
Renfrew	16,891	2.4		
Broxburn	16,665	2.2		
Erskine	16,601	3.2		
Penicuik	16,479	9.3		
Grangemouth	15,987	3.1		
Whitburn	14,323	1.6		
Hawick	14,003	18.2		
Forfar	13,925	13.7		
Fraserburgh	13,772	41.8		
Culloden	13,352	3.3		
Westhill	12,703	7.6		
Bo'ness	10,254	3.6		
Ellon	10,197	17.1		



- 7 -

"The case for Levenmouth rail link is clear. The area is the largest in Scotland without a train service and the need is there for Government support in its attempt to grow the local economy" Claire Baker MSP

#### 2.3 Previous studies

Re-instating the Levenmouth line has been assessed by two Scottish Transport Appraisal Guidance (STAG) reports. In 2008, Scott Wilson produced a STAG report funded by the South East Scotland Transport Partnership (SEStran). Systra produced a STAG report for Fife Council in 2015.

- 8 -

#### Additional rail journeys

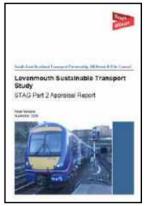
Both reports evaluated bus, hovercraft and rail options to improve transport in the Levenmouth area. Both concluded that a direct rail service from Leven and Cameron Bridge stations would generate circa 160,000 additional rail journeys per year (Scott Wilson 156,750, Systra 172,000).

Scott Wilson considered additional journeys from new housing developments but did not consider that a new rail link in itself would generate additional journeys. Both reports considered the likely shift from other modes. Scott Wilson estimated a 51% shift from bus to rail and a 14% shift from car to rail.

Previous rail re-openings have made similar assumptions which have proved to be highly conservative as shown in the table below. In particular, the demand at Tweedbank shows that drivers will travel further to a railhead than previously thought.

Project		Year	Annual journeys		Demand	Commont
		opened	Forecast	Actual	difference	Comment
Larkhall Milngavie – new stations		2005	475,200	584,300	+23%	Forecast 2yrs after opening
Stirling to	Alloa	2008	155,000	416,000	+268%	Based on first 6 months operation
Laurencekirk Station		2009	18,000	37,500	+208%	First full year operation
Airdrie to Bathgate		2010	-	•		31% growth in ith 14% growth across UK
	Tweedbank		43,242	325,000	+750%	Midlothian stations
Borders Railway	Galashiels	2015	46,862	195,000	+416%	close to Edinburgh less
	Stow		11.686	49.500	+423%	than forecast





#### Benefits

Both reports concluded that the benefits of the rail option would be greater than its capital and operational costs and so has a positive Benefit to Cost Ratio (BCR). They also concluded that the rail option is the only one that delivers major economic benefits and meets the requirements of transport planning policies. However, as the bus option is a lower cost option, it has a higher BCR but with much lower benefits.

-9-

#### **Capital costs**

The Scott Wilson report estimated that the cost of a re-opened line on the current alignment with stations at Cameron Bridge and Leven to be £58 million whereas Systra considered it would cost £91 million.

This disparity between the estimates is due to differing approaches taken to evaluate the value of project risk. Scott Wilson derived a value of risk from a sophisticated Monte Carlo risk assessment of 19 key project risk areas. In contrast, Systra reviewed cost estimates from the previous Scott Wilson report and then applied a blanket 50% optimism bias. We consider that the application of optimism bias in this way on a project of this nature to be wholly inappropriate. In contrast Scott Wilson's more focused risk assessment approach provides a more realistic assessment of risk value.

For this reason, Systra's £91 million capital cost estimate is not realistic and Scott Wilson's figure of £58.3 million is the more credible estimate. As shown in section 4.1, Scott Wilson's estimate is also very close to this booklet's upper estimate of £56 million derived from a comparison with Borders Railway construction costs.

#### Conclusions

- Forecast journeys in both STAG reports do not take account of additional trips generated by a rail link and so are likely to be an under-estimate
- Both reports show that a rail link is the only option that delivers major economic benefits
- The Systra STAG report significantly over-estimates the cost of re-instating the Levenmouth rail link.

"The project represents an opportunity to deliver a step change in supporting investment and access to jobs locally and in major growth areas, including Edinburgh and Dundee, which remain beyond reach for people without ready access to transport."

George Eckton, SEStran partnership director

### 2.4 Potential Rail Freight

Modern day rail freight is most cost-effective when regular long trains (each the equivalent of dozens of lorries) can be operated. The spirits company Diageo generates freight traffic in train-load quantities. It two major local sites are a 150-acre bottling plant at Leven which produces 30 million cases a year and the largest grain distillery in Europe at Cameron Bridge which has mothballed freight sidings. The 2015 STAG report identified the following traffic flows from these plants:

Leven bottling plant - received bottles, despatched cased goods and empty casks

Cameron Bridge distillery - received grain neutral spirit, casks & malt, despatched whisky

With other potential freight customers in the area, for example the Fife Energy Park, there is potential for a multi-user intermodal freight terminal at Cameron Bridge with a baseload of Diageo traffic.



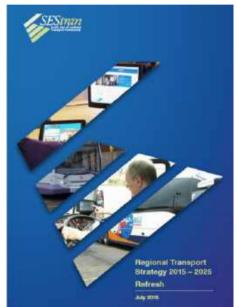
"The route is essential for connecting Levenmouth to the rest of Fife and Edinburgh, enabling local people to access a wider jobs market, bringing in tourists and new business opportunities while taking freight off our congested roads and back onto rail" **Mark Ruskell MSP** 

### 2.5 Support for Levenmouth Rail Link

Re-instating the Levenmouth rail line has the support of the local community who see it as essential for the re-generation of their area. In June MSPs Jenny Gilruth and David Torrance were amongst a delegation from Levenmouth who presented Scotland's Transport Minister with a petition with 12,506 signatures for the rail link's reinstatement.

MSPs, MPs, MEPs and Councillors from all parties have expressed their support for a Levenmouth Rail Link as shown by the quotes throughout this booklet. In addition letters of support from Scottish Enterprise, St Andrews University and Fife College were included in Systra's STAG report.

The **South East of Scotland Transport Partnership (SEStran)** also supports the need for a Levenmouth rail link as shown by its Regional Transport Strategy. Its Director, George Eckton considers that it represents a once in a generation opportunity "to deliver lasting economic change to deliver jobs, skills and opportunity to one of the most deprived communities in Fife,"



Fife Council's Co-leader David Ross considers that a Levenmouth Rail Link is "vital for improving the local economy". Its re-instatement is mentioned in:

- Fife's Economic Strategy 2017 2027 which identifies gaps in transport connectivity and so asks "the Scottish Government to commit to delivering the Levenmouth Rail Link"
- Local Transport Strategy for Fife 2006 which will "pursue the provision of a passenger rail service to Levenmouth"
- Levenmouth Area Local Community Plan 2016 which states that to provide access to employment, education and training, the Council will "continue feasibility study around the reopening of the Levenmouth rail link".

### **3.1** Personal stories

Transport projects such as reinstating the Levenmouth Rail link are ultimately about their impact on people. Here are some short descriptions of how, in the absence of a rail link, local people struggle to gain access to employment, health care, education and family days out.

#### Heather Gardner of Lower Methil is fighting bravely against cancer

"One thing that would make my life much easier is a rail link from Leven. I have to attend appointments at the Royal Infirmary in Edinburgh which means a bus to Kirkcaldy then a train to Edinburgh.

I often have a heavy suitcase when going for my treatment. I am registered disabled and walk with a stick. I like to get the train for part of the journey as it has a toilet and this saves time. However, in my state of health that's a big ask so the walking for the bus and train can really drain me as well as the time it takes for the whole trip."

#### Kirsteen Reekie of Leven found it impossible to commute to Edinburgh

"I had a job in Edinburgh city centre but had to give it up. Although the work was only a standard 37.5 hour week, public transport connections meant I was away from home for over 60 hours per week, so I couldn't get back in time for the childcare arrangements

I am currently looking at new positions, mainly in the area of legal traineeship, and if Leven had a train station that would get me to Edinburgh in a reasonable time, it would open up so much more options for me."

#### Yusaf Mohammed of Methil spends five hours a day to get to his classes in Edinburgh

"As a student at Edinburgh University, I have to attend classes in George Square four times a week. To travel by bus from my home in High Street Methil involves a journey of 2 hours 30 minutes and requires leaving home before 06.00 to make sure I can get to a class starting at 09.00. There is a similar journey back home. Although there is, in theory, a slightly quicker option by train from Markinch, I have found that I cannot rely on the connecting bus service.

This means I can spend up to 20 hours per week travelling to and from classes. Five hours per day travelling is not conducive to good study practice. A reinstated direct rail service from Leven to Edinburgh would have a huge impact on me and my fellow students."

#### Gordon Taylor is unemployed and finds it difficult to accept jobs in Edinburgh

"I have been unemployed for the past two years and am in receipt of benefits. I have tried hard to find work but, apart from seasonal vacancies in Levenmouth, most advertised jobs are some distance from the area.

I have been shortlisted for jobs in Edinburgh, Rosyth and Dunfermline but find the problems of commuting by bus are a serious obstacle, especially if early and late shifts are required."

#### Jim Teevan is disabled and finds it difficult to visit his family

"I am 60 years old, and around six years ago I had a series of strokes. These left me permanently disabled, and resulted in me having to give up my driving licence.

I live in Nottinghamshire but was born in Methil. If I want to visit my family up to Fife, I have to use the Railway system. Unfortunately, this only takes me as far as Kirkcaldy.

My legs aren't what they used to be, so I have to walk from the Railway station to the bus stop, I barely have the strength to climb aboard the bus.

If there was a railway station back in Leven, not only would it cut my journey time by at least an hour, but it would be extremely beneficial to my health."

#### Colin Pentland was unable to take his family to Edinburgh Zoo

"We had planned a family outing to Edinburgh Zoo this summer. We have no car and felt the nearly 2 hour bus journey each way would be too much for our four children so we tried to go by train.

We found that, although the family rail ticket return to Haymarket was reasonably affordable, the bus fares from Methil to Kirkcaldy made the trip both too expensive and too long due to the connection times between trains and buses. As a result, the trip never took place.

It is wrong that families from Levenmouth, a mere one hour drive from Edinburgh by car, should be deprived of fast and affordable public transport to Edinburgh."

The lack of a rail link has a significant impact in limiting job opportunities for local people and the potential for investment. Connecting Levenmouth by rail would be a game-changer."

Jenny Gilruth MSP

### 3.2 What makes a good rail re-opening project?

Throughout their history, railways have brought economic prosperity by connecting communities. Recent rail re-openings in Scotland have shown that this is still true in the modern age. However, providing new railway infrastructure is an expensive business which needs to be justified and there are many competing rail re-opening projects.

Re-openings that have the best case are those that, at a relatively low cost, offer high connectivity by giving large communities a rail link within commuting distance of a large city. An article in Rail Engineer "After Borders what next?" (available on line) concluded that there are five such potential schemes in Britain, of which Levenmouth is the only one in Scotland.

The diagrams below illustrate this concept by comparing the Levenmouth proposal with the re-opened Borders Railway which the Scottish Government recognises as having a positive economic benefit and social impact.

A re-instated railway to Levenmouth would offer benefits akin to those of the Borders Railway for a fraction of its cost and also has the potential for significant freight traffic. This shows the strong case for a Levenmouth railway which, to progress further, requires Scottish Government support.



Circles and lines are proportion to populations and length of re-opened line required

### **3.3 Delivering Scottish Government policy**

Various Government policy documents show that the reinstatement of the Levenmouth rail link is a project that meets Scotland's infrastructure and transport objectives. For example, in a section on tackling inequalities (1.7), the Scottish Government's Infrastructure Investment Plan states that:

"Our investment in transport across Scotland will deliver the best possible connectivity, improving journey times and tackling inequality by improving accessibility of services and opportunities. Further, we aim to invest in a way that reduces carbon emissions in Scotland."

In its National Transport Strategy, the Scottish Government describes its vision of:

"An accessible Scotland with safe, integrated and reliable transport that supports economic growth, provides opportunities for all and is easy to use; a transport system that meets everyone's needs, respects our environment and contributes to health ."

The objectives and outcomes of this strategy are as shown below.

Exercised	Scottish National Transport Strategy		
Scotland and	High Level	Promote economic growth	
	Objectives	Promote social inclusion	
		Protect environment and improve health	
National Transport Strategy		Improve safety of journeys	
January 2016		Improve integration	
	Key Strategic	Improved journey times and connections	
	Outcomes	Reduced emissions	
		Improved quality, accessibility and affordability	

### Levenmouth is a project that ticks all these boxes

"Reinstating the link was about 'doing the right thing' in terms of fairness, equality and social justice for those living in Levenmouth" Lesley Laird MP

### 3.4 Freight

The Scottish Government's vision for rail freight is for it to provide "an increasing role in Scotland's economic growth by providing a safer, greener and more efficient way of transporting products and materials" as rail freight produces 76% less carbon than road freight and less than one tenth of the nitrogen oxide and particulate emissions.

For these reasons, the Scottish Government is committed to attracting new freight onto the railway network. Its rail freight strategy includes the creation of a £30 million Scottish Strategic Rail Freight fund which could part-fund infrastructure works associated with creating rail access to a new rail freight terminal.

The 2015 STAG report estimated that Diageo's bottling plant at Leven and distillery at Cameron Bridge generated 25,029 HGV movements on local roads, totalling 6.7 million HGV-km per annum. This is equivalent to two freight trains a day of 20 containers.

To carry this traffic an intermodal rail freight terminal at Cameron Bridge would be required. This could be a multi-user terminal, operated by an established logistics company offering services to manufacturers, processors and other major businesses in the surrounding catchment area.

Rail freight on a reinstated Levenmouth line has the potential to provide a more costeffective and reliable option for Diageo, avoiding road congestion. A train would convey 20 containers or more, each equivalent to an HGV. Furthermore, 75% of its freight is to and from Grangemouth port / rail hub which transfers containers to ships or Anglo-Scottish trains. Using rail from Cameron Bridge would eliminate many local road movements in the Grangemouth area, as well as Fife.



"The Levenmouth Rail Link makes sense economically and socially" Stephen Gethins SNP NE Fife

### 3.5 Land Value Capture

New transport facilities will inevitably increase the value of adjacent land and property. Examples of such house price rises are:

- close Edinburgh trams stops, prices have grown 7% above the average.
- within a mile of London's new Crossrail line, prices are 15% above average.
- in Fife, there is evidence of a 20% rise after Dalgety Bay station was completed.

Such value uplifts are part of the wider economic benefits of new transport schemes. However, contributions from the developers who directly benefit (such as those promoting the £200 million Armadale scheme pictured on page 2) rarely contribute to the cost of such projects except through planning gain Section 75 agreements which fail to capture most of the uplift in value and come too late in the process.

One way of generating funds is through early agreements with developers, which share the uplift in value from the new transport facility. This is new money which will only be generated if the new transport facility is provided. This approach benefits all parties concerned. It improves the financial case for a new transport scheme by raising funds to finance the scheme and it increases the profit of the developers.

E-Rail, a company who specialise in securing private sector finance for new public transport projects through Land Value Capture, considered how this could be done for the Levenmouth proposal about ten years ago. To do so, the company reviewed all relevant planning documentation and met developers and Council officials. Their conclusion was that a re-instated Levenmouth railway would increase land values substantially and so generate a significant proportion of the capital funding required.

#### Conclusions

- The increase in land values resulting from a re-instated Levenmouth railway is a potential source of funding for the project.
- The work done by E-Rail in this respect should be reviewed to determine likely funding available from developers and the best way to achieve this.



### 3.6 Tourism

Between 2012 and 2024, Fife aims to increase annual visitor expenditure by 36% to £416 million. To do this they are by promoting the 'Kingdom' as an easily accessible destination by building on its close proximity to Edinburgh to attract some of the city's increasing number of visitors. This requires improved transportation, a key priority of which is reintroducing Levenmouth's rail services.

Fife's East Neuk offers a comprehensive coastal "experience" on one of Scotland's few south facing coasts. This includes the Fife Coastal Path, picturesque fishing villages, beaches, maritime heritage, golf courses and restaurants. Fife also has the world class tourist destination of St Andrews, a place of golf, history, learning and culture.

A line to Levenmouth would provide East Fife with a railhead, which if combined with a frequent hop-on, hop-off minibus service, would provide easy public transport to these attractions which struggle to accommodate large numbers of visitors' cars. Similar services from the Borders Railway railhead at Tweedbank have been a success.

Specific East Neuk attractions include the 14th century Kellie Castle and its gardens; the Scottish Fisheries Museum; pleasure boat trips to the Isle of May; a cold war secret bunker, the Crail heritage centre and the Kingsbarns distillery and visitor centre. There are plans to retire steam locomotives 60009 "Union of South Africa" and 61994 "The Great Marquis" to a new museum at St Monans in 2019.



"Undoubtedly connectivity is vital if visitors are to travel around the country, exploring new places and enjoying the very best that Scotland offers"

Malcolm Roughead, Chief Executive, VisitScotland



Leven remains a popular family holiday resort and has a two kilometre long beach with a play area, kiddies rides, summer fair, and more stretching along the promenade. Also ideal for families are the parks of Letham Glen and Silverburn. The community museum at Methil explains the history of the area, whilst the Fife Heritage Railway showcases the history of Fife's railways.

Nearby is Lundin Golf Club which is a qualifying course for the Seniors Open when it is played at St Andrews. Beyond Lundin Links is the ancient fishing village of Lower Largo.



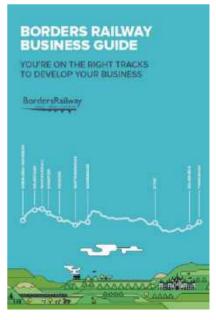
#### 3.7 Wider Economic and Regional Benefits

In both STAG reports, wider economic benefits (WEB) were mentioned but not included in the Benefit to Cost Ratio calculation which, thus, did not include such benefits as:

- increased economic activity from better connectivity, including rail links to the UK and Edinburgh airport which would particularly benefit the Methil Energy Parks
- greater business interaction within and between Levenmouth and other areas
- greater inward investment as the area which would be perceived to be "on the map" rather than "out of the way"
- local businesses gaining better access to investment capital from increased property values
- wider job opportunities into and out of the area
- job opportunities during construction
- Improved access to educational opportunities
- better integration with the rest of Fife and beyond
- tourism benefits using improved connectivity to capitalise on the attractions of Levenmouth, the East Neuk and St Andrews

A Levenmouth rail link is the only transport option that would put its population within an hour of Edinburgh's employment growth areas and also provide access to affordable housing in Levenmouth to meet the strategic aims of the Edinburgh and South East Scotland City Regional Deal.

Clearly the Scottish Borders region is now realising such WEBs from its new railway, with business opportunities promoted by the Borders Railway Blueprint and its Business Guide which supports the Scottish Government's strategy of strengthening transport connections and making them more reliable to maximise opportunities for employment, business, tourism and leisure. No doubt this strategy could also be successfully applied to Levenmouth.



#### 3.8 The business case - Benefit to Cost Ratio

3. Benefits

Any transport project needing public funding must have a satisfactory business case which shows that it fits wider public policy objectives, is financially affordable and offers value for money. Section 2.5 of this booklet shows that a Levenmouth rail link is part of Regional and Council strategies, whilst its cost of under £100 million is affordable in the context of Transport Scotland's annual £2 billion budget. Its value for money is shown by both STAG reports showing it to have a Benefit Cost Ratio (BCR) of around 1.4 (Scott Wilson 1.5, Systra 1.3). Yet, the BCR should be higher than this as:

- The £91 million cost of re-instating the railway in Systra's STAG report is too high and should be between £37 and £56 million (2.3, 4.1)
- The BCR in the STAG reports does not include Wider Economic Benefits (WEBs). In the Borders Railway's final business case, WEBs were 27% of all benefits (3.7)
- Railway re-opening schemes result in a step-change in travel demand which is difficult to predict and so is almost always under-estimated (2.3)
- Land value capture could generate a significant proportion of the capital funding required (3.5).

Taking these factors into account, it is likely that the Levenmouth rail link will have a BCR of around 2.0. This is particularly good value for money in comparison with the schemes below which could only be justified by including WEBs.

Project	BCR without WEB	BCR including WEB
Borders Railway (1,2)	0.96	1.3
Dualling A9 Perth to Inverness road (3)	0.78	1.12
Dualling A96 Inverness to Aberdeen road (4)	0.75 to 1.0	1.0 to 1.25

 Non-technical summary of the Outline Business Case submitted to the Waverley Railway (Scotland) Bill Committee, 2005

- 2. Borders Railway Final Business Case, Nov 2012
- 3. A9 Dualling, Case for Investment, Main Report, 2016, WEBs include the questionable concept of a monetary value for "driver frustration"
- 4. Inverness to Aberdeen Corridor A96 Dualling Strategic Business Case, Sept 2014

"The project represents a once in a generation opportunity to deliver lasting economic change to deliver jobs, skills and opportunity to one of the most deprived communities in Fife," George Eckton, SEStran partnership director

### 4.1 Construction costs - Comparing Levenmouth with Borders

The re-opened Borders Railway is 30.5 miles long and cost £377 million or £12.4 million per mile. The work involved in this project is shown below. This illustrates what has to be done to re-open an obstructed disused railway and highlights the significant cost items required to overcome the significant blockages on the Borders Railway. **Fortunately the mothballed Levenmouth railway has no such blockages**.

- 22 -

		Borders -30.5 miles	Levenmouth—6 miles
TRACK	Length of track	40.4 miles with 9.9 miles dynamic loops, Borders project had economy of scale	5.8 miles plus loop of length to be determined
	Trackbed	2.75 miles of new railway alignment	No new alignment
	Drainage	Renewal and repair	Renewal and repair
	Fencing	Much low security rural areas	High-security in urban areas
	Bridges	137 bridges of which 42 were new	Repair / replacement of four river bridges, possible work at six overbridges
	Major structures	Edinburgh By-pass, Hardengreen - 190 metres, Gorebridge - 120 metres and Falahill 200 metre skewed overbridge	None
	Tunnels	Repairs to Bowshank and Torwoodlee tunnels	None
CIVILS	Earthworks	804,000 tonnes of earthworks and 22,800 m3 gabion baskets to stabilise large cuttings and embankments as well as road works. 75% of Borders Railway contract value was civils works	No large cuttings, embankments or road works
	Road schemes	11 major road schemes e.g. a mile of new roads at Shawfair, 2 x 0.25 mile roads with underbridges to replace level crossings and extensive alterations at Galashiels	Minor alterations at station car park entrances
	Mining	Significant mining remediation work	Probably significant
	Obstruc- tions	Houses at three locations	None
	Utilities	Significant spend on utilities across aban- doned trackbed and in affected bridges.	Minimal as trackbed owned by Network Rail and no road bridges affected
	Advanced works	£52 million spent on advanced works included land purchase and initial utility work	No such requirement
	S including ervices	Seven (one every 4.4 miles)	Two (every 2.9 miles)

# 4. Re-instating the railway

All values adjusted to 2017 prices

		Borders - 30.5 miles	Levenmouth—6 miles
60.T	Signalling	Signalling and points for three loops, provision at Tweedbank	Junction alterations, loop and Leven, possible freight terminal,
S&T	Telecoms	15 masts, fibre optic cable and associated equipment	The one mast already in place is likely to suffice
	Land	All land required had to be purchased	Little additional land required - stations and possibly earthworks
LEGAL	Parlia- mentary process	Lengthy and costly process required for authority to acquire land and block roads	To be determined– possibly not required.
LEVEL CROSSINGS		New bridges and roads required for two public roads on old trackbed	No public road crossings, Double Dykes crossing and footpaths likely to require work

- 23 -

Advice from those managing the Borders Railway project is that, on the basis of this comparison, re-instatement of the Levenmouth line is likely to cost between 50% and 75% of the cost per mile of the Borders project (i.e. between £6.2 and £9.3 million per mile). This estimate includes an allowance for any engineering uncertainties but does not include the cost of a possible freight terminal.

Significant cost item definitely not applicable to Levenmouth
Less expensive cost item
Significant cost item that may not apply to Levenmouth
Costs likely to be similar
Levenmouth is more expensive



Major structures required for the Borders Railway

#### Conclusion

Reinstatement of the Levenmouth line for passenger and freight services is likely to cost between £37 and £56 million, excluding the cost of a possible freight terminal.

# 4. Re-instating the railway

### 4.2 Timetable issues

Before the infrastructure requirements for the re-instated branch can be finalised, a passenger train timetable has to be devised to provide the required connectivity between Levenmouth and Edinburgh as well as the rest of Fife.

- 24 -

Fashioning such a timetable is not a simple exercise as track and station capacity on the existing routes are constrained, such that accommodating trains on an additional route will demand considerable ingenuity, as well as resources of trains and crews.

A new Levenmouth service therefore needs to be part of a revision of the full Fife timetable. ScotRail is currently planning for a major revision to its timetable in December 2018. This presents a unique opportunity to passively incorporate a future Levenmouth service.

We believe it should be possible to provide Leven with a half-hourly service to Edinburgh in a journey time of around an hour. This would require at least two extra train sets. The existing single line would suffice, but require a crossing loop at a location to be determined.

Careful design of the loop may enable freight trains to operate without affecting passenger services; otherwise freight trains might demand pre-planned off-peak withdrawal, part-way, of a passenger train on perhaps two pre-planned occasions per day.

#### **Conclusions:**

- Passive provision for Levenmouth services needs to be part of the forthcoming revision of the complex Scottish timetable.
- It should be possible to provide a half-hourly service between Leven and Edinburgh with a journey time of around an hour.
- This would require a loop on the new line at a location to be determined and additional train sets.
- A freight service may require an occasional reduction in the half-hourly off-peak passenger service

"Re-opening the Levenmouth Rail Link is vital for improving the local economy" David Ross Co-leader Fife Council



# 4. Re-instating the railway

#### 4.3 Other project issues

The following issues require more detailed study, both to confirm the benefits of reinstating the Levenmouth line and to develop a detailed infrastructure and operational specification. Only then can a definitive business case be produced.

- 25 -

<u>Freight</u> - If the reinstated line is to carry freight, this requirement needs to be incorporated into infrastructure design at the start of the project. Otherwise, any later addition of freight facilities would add significant costs. Hence potential freight customers' requirement for freight needs to be determined as part of a detailed study.

**Level crossings** are unlikely to be acceptable on a new railway. Any rights of way across the line, such as the private crossing at Double Dykes, and the footpath over the line at Duniface need to be extinguished or a suitable bridge provided. There may also be crossings without a legal right to cross the railway. All crossings need to be considered as part of the detailed study.



<u>**Transport and Works Act**</u> - New railway infrastructure normally requires an Order under this Act, to provide authority to acquire land and close rights of way. This is a costly and time-consuming process. Although the Levenmouth railway is currently owned by Network Rail, some additional land will be required, for example at stations or perhaps for earthworks stabilisation. It needs to be established whether such land can be acquired, and any rights of way extinguished or altered, without such an Order.

<u>Land Value Capture</u> - The opportunity for a developer's contribution needs to be explored before approval is given to reinstate the line. An assessment of such contributions should be part of the business case for the line.

<u>Active travel</u> - As the line will be a mainly single track on a double line trackbed, it may be possible to provide a parallel walkway /cyclepath in accordance with the Scottish Governments policy of increasing active travel. This would also improve the catchment of the two new stations. It may be possible to provide this at minimal cost during the line's reinstatement. This would further increase its benefits and may attract additional funding. Hence the feasibility of this active travel option should be considered as part of the detailed study

#### **5.1 Conclusions**

- 5.1.1 This booklet shows that previous STAG reports both understate the benefits and overestimate the costs of re-opening the line to Levenmouth.
- 5.1.2 Statements made by MSPs at a Parliamentary debate on the re-opening the Levenmouth line on 27th September 2017, reinforced this conclusion.
- 5.1.2 These points were also reinforced by speakers at a LMRC conference on 27th April 2018 which launched the LMRC Charter.

### 5.2 The final report?

- 5.2.1 At the Holyrood debate on September 27<sup>th</sup> 2017 the then Transport Minister Humza Yousaf announced there would be a further report, this time commissioned by and reporting to Transport Scotland. The remit is to ensure the business case is "robust" and that it included reference to both social and economic wider benefits.
- 5.2.2 The report is being carried out by Peter Brett Associates LLP who have considerable experience in public transport consultation and who have helpfully been involved in work with the Borders Rail.
- 5.2.3 They have a programme of wide consultation both with the public and businesses and other interested stake holders which is due to end September 2018. The final report will go to Transport Scotland at the end of 2018 who will then make recommendations to the new Transport Minister Michael Matheson.



Trains should soon branch right at Thornton Junction to join the Levenmouth line.

# 6. Levenmouth Rail Campaign

### 6.1 About our campaign

We are a community based campaign who share a vision of a prosperous and healthy Levenmouth and recognise the crucial importance of good rail links in realising this.

Our support comes from a wide range of sources and we work hard to make this inclusive.

- Our monthly planning meetings are open to all
- We have organised a petition with over 12,500 signatures which was presented to Holyrood
- We work closely with and are supported well by Fife Council officials
- Business organisations including Fife Chamber of Commerce and the Federation of Small Businesses have declared they support our campaign
- Local MSPs from all the major parties have agreed to work together to achieve our aims.
- Local MPs likewise are working on our behalf
- Every single local councillor has expressed her/his support
- Dozens of local voluntary organisations have voiced their support.

Our campaign supports many of the strategic aims of the Scottish Government by reducing inequalities in Scotland.





# 6. Levenmouth Rail Campaign

### 6.2 Our Charter

The Charter is an invitation to all businesses and organisations including clubs and the voluntary sector to show their support for the reinstatement of the Levenmouth rail link. As of August 2018, 130 organisations have signed the Charter which states

- 28 -

We want the reinstatement of the Levenmouth Rail Link to:

- Bring about regeneration of the Levenmouth area and to promote economic growth
- Protect the environment and improve health
- Promote and create opportunities and social inclusion



Local councillors, MSPs and business people witness the first Charter presentation at the LMRC's conference in April 2018.



# 6. Levenmouth Rail Campaign

#### 6.3 More information

- Website www.levenmouth.co.uk
- Email: info@levenmouth.co.uk
- Address: 36 College Street Buckhaven, KY8 1JY
- Phone: Chair 07790 881760 Secretary 015927 13078

- 29 -

https://www.facebook.com/LevenmouthRail/



@LevenmouthRail



On 23rd April 2018 the campaign marked the Year of Young People by holding a walk along the line event with pupils from local primary schools, Levenmouth Academy and Fife College walking various distances along the line.

"The Levenmouth Rail campaigners should be commended for their unstinting efforts as the local driving force behind the rail link – I will continue my work in partnership with them to this end." Jenny Gilruth MSP



### Published by Levenmouth Rail Campaign

First published September 2017, updated September 2018

### www.levenmouth.co.uk

V2 13.8.18

#### Credits

Source Material:	Eugene Clarke, Allen Armstrong, Ross Bennett, Ken Haig, George Hazel
Railway operational and engineering advice	Andrew Anderson, Bob Gardiner, Robin Nelson, Derek Sime, David Spaven, Jim Summers, John Yellowlees and others
Composition and editing	David Shirres
Proof checking	Eugene Clarke, David Spaven, Derek Sime
Diagrams	David Shirres
Photographs	Allen Armstrong, John Sniegon, Fife Tourism Partnership, David Shirres