

TRANSPORT SCOTLAND RAIL EVALUATION WORKSHOP – 22 MARCH 2013

NOTE OF PROCEEDINGS

Morning Session

Introductions

The event began with Martin McKinlay giving a short overview of recent and future rail projects in Scotland. The last few years has seen major investment in rail projects with a number of new lines opening, new stations and infrastructure added, and new rolling stock purchased. Future years will see further investment, and thus there is an opportunity to learn lessons from previous projects to help inform future development.

Karl Johnston then gave an overview of the draft rail evaluation guidance which he had produced. Although a great deal of time is spent appraising projects at the start, recent rail projects have not been routinely evaluated. This draft guidance draws upon insight from STAG (Scottish Transport Appraisal Guidance), as well as from the HM Treasury Green and Magenta books. It outlines existing sources of data which could be used to inform an evaluation, as well as primary data that could be collected. The document recommends that process evaluations be conducted, and also gives suggestions of when these evaluations be carried out after project completion.

The guidance also includes a section on learning from previous ex-post evaluations of rail projects which John Galilee had drafted. He said a few words about some of the key themes highlighted by the review, most notably that when evaluations are carried out they often occur too soon after project completion. Although the focus is slowly changing they tend to ignore factors such as changes in carbon emissions, congestion levels, and issues of access. European projects have also not traditionally considered property and land prices. Copies of the longer version of the evidence review were made available on the day.

Workshop comments on guidance

Delegates were then offered the opportunity to comment on this draft guidance. One of the early points raised was that the document does not explicitly mention the importance of establishing a baseline before an intervention is put in place. It was suggested that guidance on this subject should be added, along with one on the counterfactual (what would have happened if the project had not been implemented, or had been conducted in a different way). Moderation and mediation effects should likewise be mentioned in the document: an intervention may not necessarily result in a particular impact but it could contribute to it or affect the decision making process. It was suggested that the reopening of a station may not necessarily incline a person to buy a house nearby but it could influence their decision.

As well as there being a clear need for and understanding of the evaluation by policy makers and project manager, there needs to be an awareness of who the customers are, the purpose of it, the decisions it will affect, and who will learn from it. Starting

from the initial appraisal stage, thought needs to be given to how the intervention will be evaluated and the types of evidence required. There need to be clear links between the pre-scheme appraisal and the post-scheme evaluation. Drafting a logic model may help with this particularly in thinking about what behaviours the project is seeking to change, and in also considering how these will be measured.

The remit of the evaluation also needs to be proportionate to the size of the project which it is evaluating and it was questioned whether small rail projects should be evaluated. Thought needs to be given to how soon after a project is completed before it is evaluated. Interventions which have longer time objectives such as environmental benefits may need to be evaluated at least 5 years after completion. Likewise behavioural changes may only become apparent in the long term. An evaluation has an important function to play in identifying issues which were not identified in the initial appraisal / forecasting. However there was a suggestion that if actual patronage meets passenger forecasts that there was little need to carry out further detailed investigations.

Data collection and evaluation methods

John gave a short presentation on secondary data sources which could be used to inform an evaluation. One of the key compendium of transport data in Scotland is the Scottish Transport Statistics publication which is published every December. The collection brings together various key statistics from ORR and train operating companies on rail travel, including passenger traffic originating in Scotland, freight traffic and distance travelled. Other sources highlighted included the Scottish Household Survey, National Passenger Survey, and rail ticket sales data (LENNON). A document highlighting the various secondary data sources available was distributed on the day.

Rachel Risley from Accent then spoke about primary data collection which could be carried out for the evaluation. The focus of her presentation was predominantly market research with passengers. She spoke about how these respondents could be recruited, the different types of passengers, and the data collection tools. These ranged from more traditional face to face interviews and paper questionnaires, through to tele-depth interviews and blogging. A short paper on primary data collection for rail was also distributed on the day.

Workshop discussion on data collection and methods

Following these presentations delegates highlighted issues around data collection, and also identified other sources of data which could be drawn upon. One suggestion which was potentially quick and cheap for collecting the views of rail users and non-users could include buying questions in existing omnibus surveys. The inclusion of questions on rail travel in existing research panels such as UK Household Longitudinal Study could also be considered as this has the potential of providing time series data.

It was also flagged up that the views of off-peak passengers should also be collected, as well as those who do not travel by rail. Questions on reason / purpose for travel, as well as hypothetical questions on how and if people would travel if

service was not available could also be added. It was suggested that unless it is a large project, secondary data should usually be sufficient for an evaluation. If the evaluation is looking at new stations or lines then there would probably be a case for collecting primary data, while changes to frequency or fares or minor timetable improvements may require only secondary data analysis. There was a consensus that an initial evaluation after one year and a more in-depth evaluation after five years would be generally suitable for large projects.

The use of control sites was also suggested, which would help to determine whether changes have occurred as a result of the intervention. However the difficulties of employing such an approach were highlighted. Simon Blainey offered to send on references of using control sites in rail evaluations. Logic models were once again highlighted as an important tool for determining the types of data sources which could be drawn upon, and the data collection method to be used.

The importance of sharing experience from other recent rail evaluations such as the HS1 and Olympics rail improvements was also raised.

Afternoon Session

After lunch delegates were allocated into one of three discussion groups, and were asked to discuss how they would evaluate a recent or on-going rail project. One group focused on the Borders Rail project, another on the building of a new station at Laurencekirk, and the third on the Paisley Corridor Improvements. Some key points raised by each group are given below:

Borders Rail

The group heard that work on the reinstatement of this line had just commenced. Closed in the 1960s as a result of the Beeching cuts, the Borders Railway is scheduled to be re-opened in 2015 at a cost of £350m. It will re-establish passenger railway services from Edinburgh through Midlothian to Tweedbank in the Scottish Borders. It will support 400 jobs during the construction phase and act as a catalyst for increased business development and housing opportunities within easy commuting distance of Edinburgh.

The business case identified the positive impact the line will have on employment, as more people are within commutable distance to the labour markets in Edinburgh. It will also improve journey time reliability as journeys on the new line will take a maximum of 55 minutes to Edinburgh, as opposed to 1 hour 40 minutes for some journeys currently taken by bus. It is also hoped that the reopened line will reduce the decline of young people in these areas, as it will make further and higher education more accessible.

The group identified a number of challenges in carrying out an evaluation of the scheme. The difficulties of setting up a control area particularly within the Scottish Borders was raised, as there may be spill over effects of the project on neighbouring areas. It was also suggested that some localities not on the route who could be used as comparison sites may not be ideal as they could present too negative a picture.

Suggested primary research which could be carried out included an on-board survey of passengers. This would collect demographic information on the users, as well as data on how they travelled to the station. A survey of businesses to measure business confidence was also suggested. Qualitative data could also be collected from passengers through in-depth interviews and / or focus groups, and this could be used to inform a number of case studies.

Secondary data which could be used included business data, road traffic flows before and after the line is opened, and also data from other modes to see whether users had switched (it was identified that this may be difficult as bus data is not routinely provided by bus operators).

There was a consensus that as it is a new line, as opposed to other forms of new investment that it may not take long for users to get in the habit of using it. The group felt that the initial evaluation should take place 5 years after the completion of the new line, however the impact on housing and education may not be fully apparent at that point.

Laurencekirk

The original Laurencekirk station closed in the 1960s and following a long campaign by local residents it finally re-opened in May 2009 at a cost of £3.5m, with patronage levels of over 64,000 in the first year – almost double the initial forecast of 36,000. The group heard that all five components of the STAG criteria were covered in the project's objectives: Accessibility and social inclusion; economy; integration, safety and environment.

Suggestions for elements to include in an evaluation included having a counterfactual – a closed station in a similar area which could be used to compare factors such as types / levels of employment change, and the modes of transport used. A passenger survey could be carried out to find out origins and destinations of passengers, and also to find out if and how they would have made the same trip without the stations. It could also collect information on accessibility and social inclusion by asking passengers details of their journey purpose. For instance are people travelling to Aberdeen for educational facilities / establishments which would have been previously inaccessible? Staff at the station could also be called upon in the design of the survey as they observe who uses the stations and services.

It was suggested that it would be difficult to assess the impact of the project on road safety / accidents; an alternative would be to look at the percentage of trips diverted. It was acknowledged that there may not be reduction in road traffic, as the reopening of the station could release latent demand.

To understand whether the new station has resulted in modal shift a survey of car park users was suggested, which would also collect information on the journey purpose of passengers. Also a survey of the use of cycle facilities at the station and the number of cycles being transported on the train was also suggested. The impact on bus services also needs to be considered, as well as how much connectivity there is between buses and trains. Given that the project was also promoted by the council, it was suggested that they should have a role in the evaluation.

The group discussed possible reasons for the success of the station, and why patronage rates were double that which had been forecast. It was suggested that passenger forecasting method is only effective when there is base demand already, and so cannot forecast patronage to a new station. It was felt that this underlined the importance of evaluation in developing more robust forecasting tool. The station proximity to Aberdeen was suggested as a possible reason for its success, and had it been closer to a less prosperous city it may not have been as successful.

There was a question as to whether this could be strictly categorised as a new station given that it was the reopening of a station which had been closed following Beeching. It was also flagged up whether consideration be given to re-estimating the original BCR given the higher patronage rates, and that value for money is better than anticipated.

Paisley Corridor Improvements

The primary purpose of the project had been to ease congestion of services passing through Paisley to Glasgow and Ayrshire. The improvements has seen the introduction of an electrified third track running through Paisley, and the construction of two new platforms at Glasgow Central. New rolling stock had been introduced for services using the line, and two minutes had been taken off the journey time for services to and from Glasgow.

The following suggestions for elements to be included in an evaluation were given. The direct outcomes of the improvements (number of trips taken, revenue and Public Performance Measure (PPM) versus the impacts (economic growth, carbon emissions and accessibility / social inclusion). Although it was acknowledged that it would be very difficult to link any such changes to this project, it was suggested that secondary data sources be used to see if the socio-economic circumstances of individuals living in Ayrshire / Paisley area had improved as a result of the scheme. On board passenger surveys could also be carried out to find out about journey purposes, and a household survey could be carried out to find out more about those who were not using / excluded from using the service.

It was suggested that changes in neighbouring transport infrastructure also be considered. Due to the upgrade of the M77 between Ayrshire and Glasgow, there had been a trend of more people choosing to take the car or bus in journeys from south and east Ayrshire, and it would be useful to see whether the rail upgrade had an impact on this growth in road traffic. Other dis-benefits of this investment should also be considered. The original forecasts for passenger numbers should be looked at, along with ticket sales and revenue. A logic map / model could be used to understand whether the original business objectives had been met.

Next Steps

The event witnessed general support for the main principles of the draft guidance and constructive buy in from participants about what TS intend to achieve in this workstream. Some important issues were highlighted to be considered in the subsequent development of the guidance. The Rail Evaluation guidance document

will be updated and expanded to include further information on methods which could be used and will also include examples of recent case studies. The new sections in the guidance will include: (i) establishing a baseline, (ii) the counterfactual, (iii) proportionality / size of an evaluation, and (iv) logic models. TS will now identify recent rail projects which can be used to pilot the evaluation guidance for the stage one (after one year) and stage two (after five years) evaluations. TS will also maintain links with the DfT in order to keep abreast of developments there to evaluate HS1.