Why investors should be cautious of planners wearing rose-tinted spectacles

*In July, the credit rating agency Standard & Poor's published a commentary entitled 'Fare's Fair? Why Tram Projects are on a Bumpy Road'. **Carol Debell** talked to **Robert Bain**, the report's author and an Associate with the Infrastructure Finance Ratings team at Standard & Poor's, London, about project risks, credit drivers and an unhelpful industry trend that he describes as 'uncertainty denial'.*

Robert Bain, is a credit analyst whose background lies in transport consultancy, with extensive international experience.

There is a view that trams are smart. This view is not confined to the UK where the 10 Year Transport Plan flagged up, up to 25 new light rail or tram lines in major cities. There are some 450 tram systems operating around the world and plenty more in the pipeline. They go under a variety of names – tramways, light rail, light rapid transit, streetcars, metro – but what they have in common is that they are relatively modern, they run on rails and they often involve a mix of street and segregated running. In the eyes of many planners and policy makers, they represent a better quality mode of public transport than the bus. As a result, there is a tendency to optimistically view forecasts of patronage and revenue through rose tinted spectacles.

That, anyway, is the conclusion of a special report that has been written by the credit rating agency, Standard & Poor's. The author, Robert Bain, is a credit analyst whose background lies in transport consultancy, with extensive international experience.

So what was it about trams, or light rail, that captured the analysts' attention? Bain explains that along with other analysts in the transportation team, he is routinely looking at sectors such as rail, the bus industry, airports and airlines, and toll roads. 'As part of our rating responsibilities we are constantly monitoring our individual sectors, reviewing business, financial and credit trends. When these trends have implications for credit, we publish commentaries.'

He says that he has been looking at trams for some time now and that some of the figures coming across his desk make pretty grim reading. In the UK alone, we have Tramtrack Croydon recording an increase in pretax losses of 34% to just under £10 million. In Manchester Altram has experienced spiralling losses and returned the concession to the Greater Manchester Passenger Transport Executive. In the West Midlands, the Midland Metro tram has reported losses of about £16 million since it started operation in 1999. And the South Yorkshire Supertram in Sheffield is known to have experienced considerable difficulty in the early years with revenues reaching only about 30% of forecasts. Even today it is operating well below capacity.

What all this suggests to Bain is a failure to recall that forecasts are simply a view of the future predicated on specific underlying assumptions. No crystal ball is involved. 'Forecasting is not trivial, particularly when looking at a 30-year forecast horizon for a new urban transport mode. I think we need more recognition of the fact that forecasts are a view of the future given certain simplified inputs and if those inputs change, or fail to happen as anticipated, then the outputs will change too. Uncertainty at the input level typically serves to magnify uncertainty at the output level, although such risks are down-played by scheme proponents and promoters. This we call 'uncertainty-denial', the tendency to place more confidence in forecasts than any rigorous analysis of the predictive process would support.'

The reality of course is that decisions, about whether or not to go down the tram route, are usually taken at a political level. With his analyst's hat on, Bain explains that policy concerns are not a rating agency's primary focus. 'Our interest as analysts is in the attributes of a transaction and its inherent creditworthiness, that is the ability and willingness to service debt obligations in full and on time. If a deal is structured with strong security and protective provisions, limiting investor risk, it is more likely to be highly rated. As the risk profile deteriorates – and this includes exposing the investor to uncertain patronage and revenue forecasts – the probability of failing to meet these obligations increases and this is reflected in a lower credit rating.

But why would this be of interest to transport policy makers and planners? Because, explains Bain, the credit rating that a particular project attracts will determine the cost of raising capital, and hence the value-for-money that can be achieved.

'Financial advisors want to know how to structure a tram transaction so that it attracts an investment grade credit rating which, in turn, means access to capital at reasonable rates of interest. It means that they will reduce their financing costs and also broaden the investor audience for their particular transaction.'

So it is of more than academic interest to discover that scheme proponents have difficulty coming up with reliable forecasts of patronage and revenue. That is not to say that all the forecasts have over-estimated demand. For some operators, it has worked the other way – in the US systems in Denver, Dallas and Salt Lake City are reported to be struggling to cope with demand. In Bilbao early indications suggest that passenger projections will be exceeded and Docklands Light Railway is having to acquire more rolling stock to meet demand.

'There is no fundamental reason why tram systems should not achieve investment-grade ratings', says Bain. However, because of uncertainty, structures that pass patronage and revenue risk wholesale to private sector operating consortia significantly weaken a project's credit profile. He remains concerned that planners can overestimate the novelty value of a new form of transport – and hence its competitive market position – in their desire to have a new transport initiative adopted, and turn a blind eye to the risks.

One of the issues facing planners is that in most situations trams are a new travel option and there is little opportunity to learn through observing actual consumer behaviour. As a result planners tend to rely on research techniques that attempt to gauge likely demand based on hypothetical travel choices in the future. Poor or inappropriate survey design, says Bain, will lead to unreliable forecasts. 'Even well-designed surveys can have problems. A survey conducted at one point in time can give one result. The same survey at another time could result in quite different results. So timing is clearly important, and it is crucial that this research is carried out at a stage when the interviewees can correctly conceptualise and respond to the travel alternatives presented to them.'

And no matter how robust those initial surveys are, there are plenty of other factors that can intervene and upset the apple cart. An example of this, he says, would be land use development. 'You can base a set of assumptions on the fact that a certain development is going to take place. If that development doesn't take place, or doesn't happen as planned, then the forecasts will be wrong. Or there might be anticipated demographic changes that were incorrect or did not materialise.'

Similarly, he says that there is a tendency to underestimate the ability of buses to respond to the competitive challenge. 'In the UK we have a deregulated operating environment outside London which means that bus operators can respond to competition very quickly by reducing fares or improving service levels. I think people often forget that buses are very convenient for short journeys and that most urban journeys are short. If the assumptions behind the forecasts fail to take account of competitive threats, then the forecast is likely to overestimate demand.'

Another problem, he believes, is that there is often an overestimation of the tram's inherent attractiveness. 'The tram does have novelty value but the reality is that passengers respond to issues such as service frequency, speed, convenience, comfort and personal security. I don't think there is any evidence that over the long term they respond to steel wheels versus rubber tyres.'

Despite all that has been said about the unreliability of forecasts, Bain is anxious to stress that he is not criticising the forecasters. 'As I said, this is a very challenging area in which to work and of course things change. What we are faced with, however, is what I would call "uncertainty denial". There is a feeling that unless you talk-up a project it won't happen and this masks all sorts of risks and uncertainties. If people were more open about the uncertainties involved, then the discussions that take place would be more realistic and more useful.'

There are certain lessons that he would draw from this research. The first is that any tram operator who relies on forecasts of patronage and revenue as the cornerstone of their business case, is going to find potential investors very sceptical. 'What planners need to do is minimise the private sector's exposure to market risk. They don't have to base the business proposition on revenue forecasts alone. In Nottingham, for instance, they limited exposure to market risk by basing the business case for the Nottingham Express Tram 70% on the availability of the service and only 30% on the fare box. As a result its credit profile has been considerably strengthened.'

'Parallels can be drawn from other asset classes. Take the UK's DBFO shadow toll road programme. The cost recovery mechanism employed during the early years was based almost exclusively on traffic usage. More recently, the importance of traffic – and hence the reliance on traffic projections – has been diminished as metrics such as asset availability and performance have been increasingly employed to calculate operator reimbursement. We may see a similar evolution of the payment mechanisms adopted in the tram sector.'

There appear to be a number of lessons to be learned from Standard & Poor's review of tram and light rail projects. 'For PPP schemes, rigorous stress testing of the financial model at levels commensurate with the rating aspiration is key' concludes Bain. 'And our commentary suggests some areas in which stress testing and scenario analysis could usefully be focussed. However, we have to reiterate our central conclusion. In the UK and beyond, PPP-type tram projects whose business case rests entirely on fare box revenue are going to continue to struggle to attain investment-grade credit ratings.'

For further information or to receive a copy of the Standard & Poor's report contact Robert Bain: robert_bain@standardandpoors.com or call +44 (0) 20 7826 3520.

What is a credit rating agency?

A rating agency specialises in credit risk analysis and provides an objective, informed and independent opinion about a company's ability and willingness to repay its debts in full and on time. This is expressed by letter-grade ratings linked to specific probabilities of default. Ratings are usually assigned to debt securities (bonds, bank loans etc.) issued by a company. A 'AAA' obligation has an extremely low probability of default. The letter-based scale runs from AAA, AA and A down to BBB. Below BBB minus lies what is called 'non-investment grade' companies. By the time you get down to CC, the company in question is pretty likely to default on its debt obligations in the near future.

For more information see: www.standardandpoors.com

Robert Bain is concerned that planners can overestimate the novelty value of a new form of transport – and hence its competitive market position – in their desire to have a new transport initiative adopted, and turn a blind eye to the risks.