Thank you for your letter of 30th March 2016.

I should explain that I have no particular expertise in the management of large infrastructure projects, and my observations in that respect were limited to what has already been widely publicised over the years. I do, however, have long experience in the application of economic models to policy issues, beginning with my role in establishing the Institute for Fiscal Studies over thirty years ago and subsequently establishing a major economic consultancy business i, and it was in that capacity and on that issue that I wrote to you.

I should further explain that my assessment of the cost benefit analysis by Steer Davies Gleave was relatively casual - I had no relevant commission or resources at the time and acted simply as a concerned member of the public, and that I have found that the underlying material appears no longer to be in the public domain, although presumably the inquiry has access to it. The following observations are based in large part on my recollections from almost a decade below.

My concerns are principally (1) whether the Webtag/Scot-tag modelling framework provides an appropriate basis for informing public policy decisions, and (2) whether, given that framework, the work done for Edinburgh was satisfactory. In practice I find it almost impossible to separate the questions.

The inquiry will have noted that the actual usage of the tram is circa 5m passengers annually as against the 22m projected for 2016 in the final business case. While the 2007 projections did assume completion of the entire project, and those usage figures were not broken down in the business case, the impact of the project on public transport in Edinburgh is not just smaller but an order of magnitude smaller than that implied in the business case. The reasons for the difference between projected and actual usage require investigation which is not possible from publicly available information.

The purpose of a model of a project such as this is, in my view, not to offer a ‘black box’ that provides a numerical answer, but to identify the issues requiring research, experienced judgment and political decision. In the present case, it appears that these were:

- the provision of an additional transport link to Edinburgh Airport
- Better access to Gyle/Edinburgh Park
- improved links to potential development areas in Leith/Granton
- more comfortable travel than existing buses

Each of these questions should have received specific investigation. I would as preliminary observe that:

- the business case appears to have anticipated that public transport users to and from the airport would split about 3-1 in favour of the tram. In fact these proportions have been reversed - the split is about 3-1 in favour of the pre-existing bus
- better access to office/retail premises in west Edinburgh is the principal benefit of the project as completed. Careful analysis of the nature of these benefits, and in particular of the costs of providing such access in alternative ways - e.g. by improved bus services, should have been provided
• the ‘do nothing’ counterfactual in relation to new housing and other property development is plainly absurd. A careful exploration of the relative costs of alternative provision should have been provided. In practice, of course, this is no longer relevant because neither the development nor the tram link have occurred. One might expect that if the superiority of the tram were material a significant part of the cost could have been recovered from developer contributions. The risk that such development would not materialise was always real, and the Monte-Carlo type simulations purporting to determine the probability distribution of outcomes is no substitute for a considered analysis of the risks involved, including in particular the kinds of risk which generated such extreme cost overruns.

• passenger preferences for trams over buses appear simply to have been an assumption of the model rather than based on research on actual choices made in areas where these alternatives are available.

A proper business case - the document described as ‘business case’ is not what any private sector organisation would recognise as business case - would have considered the extent to which anticipated revenue was diverted from existing buses, distinguishing Lothian Buses from other operators. Only such analysis, then or now, would permit a proper understanding of the continuing financial impact of the project on Edinburgh.

My overall point is that despite the substantial expenditure on consultant’s reports, the modelling framework used does not illuminate, but rather obscures, the questions which a proper commercial assessment of this, or any similar, project would address. This has implications not only for the tram project - and any proposed extension - but for other large transport projects in the UK.

Please recognise the limitations of the assessment I can make given the information and resources at my disposal. My purpose in writing to you, initially and again now, was to help the inquiry identify issues which I believe require further investigation.

John Kay