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The full report will be published during 2000.
ASSESSING THE BENEFITS OF TRANSPORT

EXECUTIVE SUMMARY

1. Much attention has been given in recent years to the external costs of transport, such as congestion and pollution. It is known that when transport prices do not reflect such costs, potential economic and welfare benefits may be foregone. In principle, the same argument should apply to any external transport benefits, if they also are not reflected in the costs. This raises the issue of the wider effects on economic activity, arising from a transport investment, which are often important considerations in policy and investment decisions. Theory, and historical experience, suggests that these wider economic impacts can arise if transport costs are changed (for example by shortening journey times): they include effects on employment, prices, and economic growth at the local, regional, national or international level.

2. Not all countries use, or rely on, cost-benefit analysis (CBA), but when well-specified cost-benefit analyses are carried out, they have the great advantage that changes in transport production costs are usually identified and measured, including both the money cost of movement and the time costs. The question is whether the inclusion of these costs fully represents their direct and indirect value to the economy.

3. In some circumstances, where the overall economy is relatively undistorted and the general price level reasonably closely reflects the costs of production, the costs and benefits measured in CBA are a reasonable measure of the overall economic effect. But in other circumstances, the value of these wider effects is greater than the effects measured in CBA, and in that case some extra allowance should be given. However, the wider economic effects are not all benefits – in some circumstances they can have negative impacts on the economy, not positive. Therefore there can be no justification for any simple rule-of-thumb to add a uniform ‘economic factor’ to CBA results.

4. Transport investments are sometimes intended to produce specific economic benefits in particular locations, such as regeneration of a depressed area or growth in a peripheral region. These intentions are not always realised, as the benefits may actually accrue to a different, competing region.

5. Thus transport infrastructure or policy may act as an instrument for economic development, but it is first necessary to identify the specific mechanisms by which a transport change could have an impact on the competition between firms and areas under consideration. This is likely to depend on careful analysis of the current prices charged for transport services, and prices charged for goods by companies using those transport services, in relation to the costs. Without this analysis, well-intended initiatives may have unintended effects, even the opposite of what is desired.

6. Depending on the circumstances, there can be a net extra benefit from the wider economic effects, which therefore will strengthen the case for an infrastructure investment (road, rail or other, according to local conditions), provided it actually delivers its promised improvements in costs, speeds etc. In other conditions, however, wider economic benefits may be more effectively achieved by transport initiatives other than infrastructure investment (for example traffic management, infrastructure pricing, etc.). In general, where there are distortions in pricing, it is better to correct the prices than to develop investment projects based on the existing prices.
7. There are various suggestions for methods of carrying out project and policy assessment of the wider economic effects of transport, some of the proposals involving very elaborate computer models and very extensive data collection. None are yet proven. However, more practical outline assessments can be made now by identifying:

- the specific economic weaknesses which a transport initiative is intended to solve (for example external costs imposed by traffic, monopoly prices in local industry, competition for scarce labour, etc);
- the mechanisms by which changes in transport costs are expected to address these weaknesses;
- the relative competitive strength of the different areas or regions concerned.

It will then be possible broadly to distinguish between those cases where changes in transport costs have the intended, or unintended, effects.

8. This approach leads to the conclusion that a well-carried out Cost Benefit Analysis is crucial to the assessment of the economic costs and benefits of projects and policies, whether in conditions of perfect competition or not.

9. It should be noted that the failure to realise potential benefits does not arise only – or even mainly – because of imperfections in the measurement of some benefits. It also arises from the gap between best practice project assessment, and the reality of the process of decision-making in which such assessments may be omitted, or may be of poor quality, or may be ignored. Therefore there is a broader question of understanding the sources and nature of this gap, and developing procedures which could help to align investment decisions more closely with the results of project assessment.

10. Even transport projects and initiatives that have passed a thorough CBA test are not always implemented. In some cases, this is because they are believed to ‘crowd out’ private investments which are thought to be more worthwhile. The problem is that financial assessment tests differ between private and public sectors, making direct comparison of value for money difficult. The appropriate test is to see whether the calculated return on the public investment exceeds its cost by more than an allowance for the opportunity cost of public funds. This opportunity cost might be measured by the long term bond rate, including a weighting if higher public expenditure would affect this rate. A project that passes this test – and satisfies environmental, legal and other related conditions – would then be justified. Such a decision rule has been employed in practice, for example in France where an opportunity cost rate of 8% was used for most of the 1990s.

11. Employing such an objective rule in investment decisions has important implications for the development of efficient pricing in transport. It demonstrates that the revenues from marginal social cost pricing arise as part of a consistent set of economic instruments, not as a result of under-investment.