

ANNEX D

CASE STUDY: M40



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1 INTRODUCTION

1.1 The project

1:01 The M40 from London to Oxford was completed in 1973. Its continuation from Oxford to Birmingham opened in 1991, creating a second motorway route from London to the West Midlands (the first being the M1/M6, which opened in the 1960s).

1.2 Available studies

1:02 This review is based on a report by Headicar and Bixby (1992) and a subsequent paper by Headicar (1996). The report was prepared for the Council for the Protection of Rural England (CPRE) – a charity and pressure group which lobbies for the care and improvement of the English countryside.

1:03 The subtitle of the report, and the title of the paper, was “Local Development Effect of Major Roads – M40 Case Study”. This is an accurate reflection of the work reported. It is not an impact study in general, but an analysis of the way in which the planning and building of major roads affects the local development process – which in turn has an important influence on local economic impacts. This study is therefore of considerable interest in showing how such impacts may come about in the presence of a planning process which purports to exercise some control over such changes.

1:04 Some further examination of the effect of strategic transport developments on residential location, with specific reference to the M40 corridor, can be found in separate study reported in Headicar and Curtis (1998).

2 CONTEXT

2.01 In contrast with the M62 case study, the area through which the southern M40 passes is highly prosperous. One of the key points developed by Headicar and Bixby is that although the M40 was intended as a national transport link, not as a measure to promote local development and economic growth, it has nevertheless had such effects.

3 DEVELOPMENT IN THE M40 CORRIDOR

3.1 The London-Oxford corridor

3.01 The study is not concerned with measuring transport and accessibility effects in the conventional form. Rather, it emphasises two different local effects of motorway building (p55).

3.02 Firstly, the motorway alters the local topography, creating a major new division in previously open countryside and, in many cases, leaving a

relatively narrow strip of countryside between the road and existing urban areas.

- 3.03 Secondly, the motorway changes the nature and pattern of accessibility within the motorway corridor such that
- certain types of development requiring large catchment areas (eg major shopping centres) become feasible
 - the focus of accessibility, in the minds of the car-owning population and of developers, shifts from the traditional town centres to the motorway intersections.
- 3.04 Detailed local analysis demonstrated that the combination of new physical divisions (the motorway itself), new patterns of accessibility and new pressures for development have brought about
- development on greenfield sites not identified for development before the motorway was built;
 - radical changes in the pattern of development; and
 - the generation of additional traffic on the motorway or at motorway intersections, undermining the original accessibility improvements and creating pressure for further investment in the highway network.
- 3.05 The specific developments studied by Headicar and Bixby shared a number of characteristics:
- development took place on land which seemed unlikely to have been developed had the motorway not been built
 - they were developed more intensively than was initially anticipated
 - they consist of uses with high car parking and traffic generation factors.
- 3.06 In each of the three major cases studied, the size and shape of the area developed appeared to be entirely a function of engineering considerations in the design of the motorway, not of planning considerations.
- 3.07 The High Wycombe case study examined by Headicar and Bixby illustrates these points very well. The first formal plan for the town, in 1954, proposed a by-pass to take the London-Oxford road around the southern edge of the town close to the existing built-up area. The by-pass plan was subsequently upgraded to a motorway proposal, at higher design standards requiring an alignment further from the town. The 1954 plan envisaged that part of the area – the Cressex site - between the town and the road would be used for a school, with the rest remaining undeveloped. From the 1960s to 1980, it was planned that some housing would also take place on the now enlarged area, but with the land closest to the motorway still remaining undeveloped.
- 3.08 The outcome by 1990 was that the school and the housing were built roughly as planned, but that series of unrelated major commercial developments occurred, each approved on its individual merits, along the strip of land closest to the motorway. The developments included offices, major convenience and comparison stores, and a cinema. Travel to these developments is almost

entirely by car. The traffic generated is such that major congestion occurs at the intersection of the local roads with the M40, with peak traffic queueing back onto the motorway itself.

- 3.09 At the time the 1996 paper was written, Government was considering two alternative schemes to deal with these problems: either an additional level of grade separation, or the rebuilding of a short section of the motorway somewhat further from the urban area. The latter proposal would create a further enclave of land between the motorway and the town, alongside the Cressex site. Headicar is particularly critical of the fact that despite the planning history of the Cressex site, the discussion and planning of the latest road proposals was supposed to assume that they will have no effect on development – the possibility of the new enclave likewise being developed was not meant to be considered.
- 3.10 In contrast with the Cressex experience and similar cases elsewhere, national designations of areas for development restraint were found to have been remarkably effective. In the southern M40 case, these were the [London] Metropolitan Green Belt and the Chilterns Area of Outstanding Natural Beauty: “no significant development had taken place in contravention of [these] national policies to protect the areas of open land”. Note however that at High Wycombe, the Green Belt and AONB boundaries were drawn taking account of the motorway proposals, leaving the Cressex area between the town and the motorway without the benefit of formal protection.
- 3.11 It is also the case that such policies, combined with improvements in accessibility brought about by (in this case) a motorway, can lead to considerable pressures on the housing market and the planning system in immediately adjoining areas – for example, long-distance commuters increasing the demand for housing in attractive villages and pricing out local residents.
- 3.12 The authors identified two additional factors, apart from the motorways’ creation of new land divisions and new patterns of accessibility, why sites close to motorways¹ are particularly attractive to developers. The first is the value of a site which is visible to large numbers of passing motorists. Secondly, the noise and pollution generated by the motorway traffic may mean that adjoining areas become unattractive as sites for housing and suitable only for industrial or warehousing uses, for whom noise and pollution are relatively unimportant, or for large-scale commercial uses which can afford to “design out” the problems. Modern retail developments, with their emphasis on creating an enclosed and controlled “shopping environment”, obviously all into the latter category.

3.2 The Oxford-Birmingham corridor

- 3.13 Both the economic and the planning context of the northern extension of the M40 were very different. Economically, being further from London, the pressure for development is less. The motorway was planned as a complete long-distance route, and the line was fixed some 15 years before construction

¹ More precisely, to motorway intersections – few if any developments in the UK have been allowed to create their own dedicated points of direct access from any motorway.

took place, allowing the local planning process ample time to make plans which explicitly took account of the new road in identifying the amount, type and location of future development. The main limitation in this is that the time-horizon of local planning – 10 to 15 years – is relatively short, shorter than the 20+ years which most analysts would agree to be the time needed for the impacts of the motorway to become fully apparent.

- 3.14 There is also an element of risk that investor interest in motorway-related land with fewer protective designations, coupled with economic growth and increasing housing demand, may lead to development pressures on a much greater level than the planning system has foreseen.

4 CONCLUSION

- 4.01 The work by Headicar and Bixby does not attempt to measure the overall impact of the southern M40. However, given the evidence that substantial “unplanned” developments have taken place in some locations, it would seem likely that the motorway has had a significant positive impact. The fact that those developments have taken place where no development was planned, but that proposals in locations with more formal protective designations have been consistently rejected, suggests that any attempt at forecasting the impact of future transport schemes will need to take account of the subtleties of the planning system.

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