

Phase III

Phase III - an integrated approach to sustainable urban redevelopment: Birmingham Eastside as a national and international demonstrator (January 2007 – June 2008)

Having identified in Phase II the vital role and dimensions of decision-making, the Phase III research explored how sustainability is addressed in decision-making processes, and the extent to which path-dependency becomes problematic. Phase III also assessed the actual built form through interdisciplinary tools designed to analyse and conceptualise the sustainability impacts of development. Broadening from Phase II, four core areas of specific investigation were studied in depth: infrastructure, energy and utility provision; social and economic aspects; the natural environment and biodiversity; and built environment and open space provision.

Key outcomes from Phase III research include:

- There are many tools, checklists, process maps, guidance documents and suchlike aids to sustainable development that are already available. Nevertheless, whichever form of assistance used, compromise, involving trade-offs, will always be an unavoidable part of improving the sustainability of the built environment. Consequently, as well as measuring and benchmarking, managing this process of compromise must be central to the design/development process
- Design decisions are interdependent; to make effective decisions, the implications of each choice must be made explicit. Understanding these implications requires appropriate data, expertise, models, and so on to be available at the appropriate time, as well as a clear and consistent commitment to sustainable design ideals. This is a potentially complex task, but crucial for ensuring decisions are transparent, reproducible and observable, and that the resulting design fits with the brief
- The Development Timeline Framework (DTF) tool was developed to elucidate the points at which a single design decision may 'lock-in' or 'lock-out' various possible outcomes; in essence it is a tool that facilitates an understanding of the linkages and synergistic effects of decisions on sustainability outcomes. Critically, it allows the tensions and trade-offs that may lead to 'lock-out' to be identified, and windows of opportunity to be made apparent. As shown later, the DTF may be applied to any aspect of redevelopment
- The impact on the relative sustainability of design decisions is potentially different at different spatial scales; this must be recognised in the design process, although the DTF is necessarily applied to the specific scale of the development studied
- Inevitably, at some point, someone will have to make a judgement on the relative importance of one objective over another. Such a judgement is best guided by local priorities and will probably have to be remade throughout the design process as the design evolves; however there are different 'lock-out' / 'lock-in' (or trade-off) points that are reached at certain times during this process. The factors considered, and balanced, in making a trade-off decision must also be transparent, reproducible and observable, particularly as the consequences of such a decision are typically considerable
- The DTF advances our capacity to bring about developments that are more sustainable, beyond forms of measurement and benchmarking, because it makes explicit the impacts of timing, sequencing and interdependencies, and demonstrates where dialogue is required and how that dialogue should take place

See also

- [Phase I \(/research/activity/civil-engineering/eastside/aims-and-objectives/phase-i.aspx\)](/research/activity/civil-engineering/eastside/aims-and-objectives/phase-i.aspx)
- [Phase II \(/research/activity/civil-engineering/eastside/aims-and-objectives/phase-ii.aspx\)](/research/activity/civil-engineering/eastside/aims-and-objectives/phase-ii.aspx)