

Preface

This brief seeks to bring together research in transport and air pollution, decarbonisation and energy conservation, and the use of urban greening to achieve low-carbon cities and urban sustainability. It does this from an interdisciplinary perspective, where geography and planning meet plants and the biosciences as well as planning and urban design. Environmental sustainability is examined from ranging scales, from microclimatic investigations to global perspectives, as with global warming. Various countries in the developed and developing world are considered as a part of the published literature, but the case study focus in this brief is Oxford, UK. The Oxford Transport Strategy (OTS) serves to converge past and ongoing (longitudinal) research as representative of a European city that has undergone an environmental transformation in its transport scheme in order to achieve reduced traffic congestion, better air quality, and a more sustainable urban environment, including improved human and environmental health for its buildings and the built environment more generally.

As such, this brief encompasses a long-term perspective on transport changes implemented in the Oxford city centre in 1999 and the ramifications for the current environmental situation and future of the city. The Environmental Monitoring of Integrated Transport Strategies (EMITS) project is conveyed in detail, including reports and published works, as a measure to assess environmental change (in congestion, air quality, and human and environmental health). The focus on improved health, to encompass both human and environmental health, conveys the interlinked nature of air pollution as an environmental issue, and the necessary approach (of human and physical holistic investigations) to understand the problems and attempt to reach solutions. Moreover, as a longitudinal study (published more than 15 years after the implementation of the OTS in the Oxford city centre), this work is representative of sustainability studies that are concerned with the long-reaching ramifications of decisions and policy-setting. Not only does this brief examine environmental change in the long term, but it also encourages that further longitudinal studies are conducted to investigate the outcomes of current decision-making.

Although it can be argued that a traffic redistribution occurred, from the city centre towards the city fringe and onto quieter roadways, post-OTS Oxford

represents a model of what can happen when decisions are made to clean up the urban environment. It is true that Oxford is an ideal setting for the OTS because of its established public transport system (already in place before the OTS) and park-and-ride (P&R) system, and it is also a walkable city with cycling (in addition to bus) lanes. Nevertheless, restrictions on private vehicles promoted a greener approach to transport that is still evident today, with new bus fleets that deploy hybrid technology. There is no going back for Oxford, and it is now a green city and a healthier urban environment. Oxford has come a long way since the burning of coal at its colleges and the darkening of its building exteriors from these coal emissions. Today, it is a place where hard-core cyclists traverse the streets, confident pedestrians navigate its walks, and full-up buses pass-by on streets in the historical city centre. Its buildings have also gained a new appearance, looking brighter and less decayed, and also somewhat greener in places.

Readers interested in following the progression of the urban environment, since the OTS, are welcome to read the following pages. It is anticipated that environmentalists, planners, urban designers, architects, geographers, policy-makers, and more, will be interested in the material integrated in this brief, drawing from the main fields of environmental issues, urban studies, and sustainability. It is hoped that this brief reaches a varied audience, from students, researchers, and academics to practitioners, professionals, and government. Whether one is familiar with Oxford and the OTS or not, it is hoped that this read will intrigue and promote innovative forward-thinking in its audience. Not only is Oxford a special place, but it is also a world city of culture and heritage as well as a hub for knowledge. The author anticipates that this brief will stimulate the imagination of its readers as well as be an impetus for world change. It is possible to make cities increasingly better places to live in—places where the air is healthy and the atmosphere is welcoming, and well-structured places that are connected in time to progress as well as history. Environments where people can feel connected with each other and nature. Environmental health and sustainability mean this; they require that people think about the long-term beyond their own lifetimes and that they operate in unison with the natural environment. Human health and environmental health are one in the same, destroy one and the other is ultimately destroyed. Transformations, such as healthy and sustainable living, can begin through small (local) actions. Contributions that together are for the greater good and well-being of humanity and the Earth.

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