Making the City Mobile: The Place of the Motor Car in the Planning of Post-War Birmingham, c. 1945-1973

Thesis submitted for
the degree of
Doctor of Philosophy
at the
University of Leicester

Matthew Parker
Centre for Urban History
University of Leicester

May 2015
Abstract

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This thesis explores the ways in which Birmingham was planned for the purposes of mass automobility between 1945 and 1973. The urban landscape was reshaped substantially during this period; the relationship between automobility and town planning is examined to elaborate a deeper historical understanding of the impact of the motor car on the urban environment. Existing literature on the impact of the motor car on British society has focussed on specific roads or patterns of car usage. This thesis instead addresses the issue of how the city changed as a result of planning for automobility and what the repercussions of this strategy were. City centre redevelopment, slum clearance, public transport provision and pollution are investigated to show how the city’s commercial, civic and residential spaces changed, and how the lives of Birmingham’s inhabitants were affected as a result of living in a ‘motor city.’

Birmingham City Engineer Herbert Manzoni believed that a modern city should be redeveloped to facilitate increased car use. The redevelopment of Birmingham as a ‘motor city’ was in large part ideological. Birmingham was not planned as a ‘motor city’ in reaction to increased motor car use, but rather proactively redeveloped to facilitate future increases in motor ownership. This thesis argues that Birmingham Corporation utilised other aspects of the planning process, such as city centre redevelopment and slum clearance, to implement new road systems. It also argues that these policies had repercussions for everyone, including pedestrians. The pursuit of automobility in Birmingham resulted in a lack of resources being directed towards public transport and growing concerns with public health caused by motor car pollution. As a consequence by the early 1970s the tide had turned against the motor city ideal.
Acknowledgements

The utmost appreciation must firstly go towards my supervisor Simon Gunn. Simon’s guidance and knowledge has been invaluable and it is impossible to think of a greater influence on the development of my research. I also express thanks to Sue Townsend for her advice and encouragement, and I am indebted to The Leverhulme Trust for the financial assistance provided to allow me to undertake this research.

The assistance of Sally Horrocks regarding the histories of public health and pollution was incredibly valuable. Thanks go to the many staff and students based at the Centre for Urban History who over the past few years who have offered helpful advice or resources, and in particular Richard Harrison.

Staff at all the libraries and archives visited must be thanked for their help during research trips. Special thanks are reserved for the assistance of Richard Shenton at the Media Archive for Central England.

From Leicester, I could not have managed without the support and patience of Becca Fisher. Ben Harvey was a continuous source of academic stimulation, entertainment and friendship. Thanks also go to Joe, Cat, Sarah and Claire. There is an endless list of people to thank from Sheffield, but particular thanks is made to Adam, Ed, Jamie, Josh, Luke, Martin, Miles and Ryan.

The final thanks and dedication go to my family. My parents, Barry and Carol, for their continuous encouragement. My brothers Stephen and Christopher for welcome relief at home through trips to Hillsborough and long conversations about horse racing. And finally to my grandparents, Anne, Audrey and Byron, and to the memory of Vincent.

Matthew Parker.
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Abbreviations

BBC – British Broadcasting Corporation
CDSc – Civic Development Sub-Committee
dBA – A-Weighted Decibels
GPC – General Purposes Committee
LBA – Library of Birmingham Archives
MACE – Media Archive for Central England
MIRA – Motor Industry Research Association
PWC – Public Works Committee
TC – Transport Committee
TOC – Tramways and Omnibus Committee
TNA – The National Archives
WSL – Warren Spring Laboratory
Chapter 1 - Introduction

‘People are coming from all over Europe, and to some extent from all over the world, to see what Birmingham is doing.’¹ In the autumn of 1959, City Engineer and Surveyor Herbert Manzoni was in buoyant spirits. Construction had commenced on the Inner Ring Road in 1957 and a substantial slum clearance programme was under way; in Manzoni’s opinion, Birmingham was developing a worldwide reputation for civic progress. Representatives from countries across the world visited Birmingham to marvel at such developments. Henry Barnes, the Traffic Commissioner for Baltimore, toured a number of European cities in 1959, and stated that ‘the Birmingham [Inner] Ring Road is amazing because it embodies a well-planned redevelopment for traffic, the pedestrian, and actual building… I am full of admiration for what has been achieved so far.’² In February 1960 seventy Canadian architects and civil engineers arrived in Birmingham to view the Inner Ring Road site.³ Visiting parties from as far afield as Russia, China and Japan were not uncommon. Foreign newspapers were also embroiled in emotive praise of the redevelopment of Birmingham; the Birmingham Post in September 1963 proudly reprinted a headline from a newspaper in Hannover which praised the Birmingham Inner Ring Road. ‘Bei uns noch Wunschtraum – in England schon praktiziert’ stated the German paper enthusiastically; ‘still a dream of the future for us – already practised in England.’ The Birmingham Post insisted that ‘a compliment to British road engineering from the home of the autobahn is well worth reproducing.’⁴ Fifteen years later however this celebrated motoring wonder was crumbling before the people of Birmingham’s eyes. In 1977 structural engineers found that concrete on a number of the Inner Ring Road’s main beams had started to fall away. Sections of the road were at severe risk of collapse within ten to fifteen years unless ‘urgent repairs were carried out’; measures to repair the defective structure were estimated at over half a million pounds.⁵ The thesis echoes this rise and fall narrative regarding the ‘motor city’ ideal in Birmingham; the first half of the thesis details the ways in which the city was enthusiastically planned to be re-modelled as a ‘motor city’, while the second half of the thesis discusses some of the negative

¹ ‘World-Wide Interest in ‘New Birmingham’’, Birmingham Post, 1 September 1959.
² ‘Inner Ring Road is Amazing, says U.S. Expert’, Birmingham Mail, 12 November 1959.
³ ‘Canadians See Site of Inner Ring Road’, Birmingham Post, 6 February 1960.
externalities which ultimately led to the decline of the ‘motor city’ strategy. The aim of this thesis is to examine the relationship between automobility and town planning in an age of vastly increased car ownership and road construction, through a case study of Birmingham from the 1940s to the 1970s.

The term ‘automobility’ is used throughout this thesis, and it is useful to define it at this early stage of the introduction. The sociologist Mike Featherstone defined automobility in the following way:

The term automobility works off the combination of autonomy, and mobility. In its broadest sense we can think of many automobilities – modes of autonomous, self-directed movement. The auto in the term automobile initially referred to a self-propelled vehicle (a carriage without a horse). The autonomy was not just through the motor, but the capacity for independent motorized self-steering movement freed from the confines of a rail track.6

Automobility, in the context of this thesis, is therefore concerned with the rise of a mode of travel, propelled by the internal combustion engine, which offered an element of freedom to the driver (or passenger) in terms of deciding where to travel to, via what route, and at what time. John Urry argued that automobility was a source of freedom, and that ‘its flexibility derives in part from how the car waits as a ‘standing-reserve’, to be immediately on hand.’7 The system of automobility that is discussed in this thesis is the rise of the private motor car and the associated public infrastructure necessitated for its prosperity (i.e. roads).

**Birmingham and the Rise of the Motor Age in Britain, c. 1945-1973**

One of the most prominent developments in Britain during the 1950s and 1960s was the rapid expansion of motor vehicle usage (Figure 1:1). The number of private motor

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vehicles (cars and vans) on Britain’s roads increased from approximately 1.5 million in 1945 to 13.5 million in 1973.

Figure 1: Number of motor cars as a proportion of total vehicles, Britain 1945-1973.


The growth in importance of the motor car to mobility patterns in British society cannot solely be conveyed through increases in car ownership. Motor car usage not only increased substantially, but it did so at the expense of other modes of transport which suffered prolonged decline.
Figure 1:2 - Per cent of journeys made by transport mode, Britain 1954-1973.

The rise in motor vehicle ownership required a substantial increase in road space and increased investment from central government; economic restrictions of the post-war years of austerity, however, restricted any immediate substantial expenditure. For example, in 1950 central government allocated just £25.9 million for road expenditure. There developed a consensus between the major political parties in the early 1950s that in order to claim an end to the years of austerity, the motor car as one of the ‘proud symbols of normal times’ could no longer be restricted; the Labour party desired to ‘show they were not the implacable enemy of the middle class,’ and the Conservative party promoted the idea that there was ‘more room for self-expression’ under their leadership. Both parties believed they could achieve these aims through supporting a vastly increased road expenditure programme, which would accommodate the increasing number of motor


vehicles on Britain’s roads. The motor car was viewed as a marker of affluence, and road infrastructure attracted greater financial support from central government to encourage prosperity.\textsuperscript{10} By 1957, central government expenditure had already nearly doubled from the amount spent in 1950 to £49.7 million. The rise in expenditure continued ferociously during the 1960s and by 1970 central government road expenditure totalled £334.4 million.\textsuperscript{11} Mileage of roads in Britain increased from 183,821 in 1950 to 212,034 in 1973, which included the construction of 1,000 miles of motorways between 1958 and 1970.\textsuperscript{12} The financial enthusiasm of Whitehall was matched by local authorities, whose road expenditure increased significantly from £53.2 million in 1950 to £276.5 million in 1970.\textsuperscript{13}

Alongside the expansion of the motor age in post-war Britain, towns and cities across the country underwent a significant period of reconstruction and redevelopment. The German air-raids of the early 1940s encouraged a number of blitzed towns and cities such as Bristol and Coventry to produce plans to guide their eventual post-war reconstruction.\textsuperscript{14} A civic desire for reinvention developed, and even led towns where there was little bomb-damage, such as Wolverhampton and Worcester, to produce their own advisory ‘reconstruction’ plans.\textsuperscript{15} The Town and Country Planning Act of 1947 required all local authorities to produce plans, and there were at least eighty-seven published reconstruction plans from authorities across Britain between 1942 and 1952.\textsuperscript{16} A spirit developed amongst parties interested in town planning in which ‘anger and sorrow soon gave way to a wave of hope and enthusiasm … the country now had an opportunity to forget the past and plan its cities for the future,’ and was perhaps best

\textsuperscript{11} Plowden, Motor Car and Politics, p. 479.
\textsuperscript{13} Plowden, Motor Car and Politics, p. 479.
\textsuperscript{14} Hasegawa, J., Replanning the Blitzed City Centre (Buckingham, 1992); Tiratsoo, Reconstruction, Affluence and Labour Politics.
\textsuperscript{16} Larkham & Lilley, ‘Plans, Planners and City Images’, p. 186.
embodied by Lord Reith’s plea in 1941 for local authorities to ‘plan boldly.’

Urban Britain underwent an unparalleled transformation from the 1950s.

This thesis examines the relationship between the expansion of the motor age in post-war Britain and the rise of urban reconstruction. The thesis will argue that these were inseparable developments, and aims to elaborate a deeper historical understanding of the impact of the motor car on the urban environment. Birmingham was chosen as a case study for the thesis as it represented Britain’s most forthright ‘motor city’ from the 1940s to the 1970s. This was a moniker attached to Birmingham for a range of reasons, and more than simply a self-identification. In an article from 1972 regarding Birmingham’s relationship with roads and transport, The Times reflected that:

Birmingham’s love affair with the car has led to an affair of equal passion with roads. The city’s inner ring road … was opened by the Queen last year in an atmosphere normally reserved for the independence day of an emergent African state.

Contemporary references to the city’s perceived ‘love affair’ with the motor car were common; for example in 1971 the Automobile Association’s Drive magazine argued that ‘[Birmingham] wears Ringway as proudly as the Lord Mayor wears his chain.’ Terence Bendixson, in an article for the Guardian in 1969 contended that ‘there is nothing like [Birmingham] anywhere else in Britain because Brum has got on faster than any other major city with building a snaking inner ring road lined with shiny new shops and offices.’ Construction of Birmingham’s Inner Ring Road (sometimes referred to as Ringway or Queensway) started in 1957; substantial road developments such as the Leeds Inner Ring Road (1964), Glasgow Inner Ring Road (1965), and the Mancunian Way in Manchester (1967) all followed in the trail of the Birmingham Inner Ring Road. By 1967, the Corporation’s debt in respect of highways and bridges was £22.26 for every resident

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19 Self-promotion of ‘motor city’ status from Birmingham Corporation was exemplified by the release of a film entitled Ringway (1963) by the Public Works Department. This film celebrated the design and construction of Birmingham’s Inner Ring Road.
21 ‘With this Ringway…’, Drive (1971), p. 50.
of the city, more than twice the amount of any other provincial city. Yet the status of ‘motor city’ in Birmingham was more than just a recognition of the influence of the road construction in the city. Ministry of Transport officials in 1966 considered the people of Birmingham to possess a ‘car-consciousness’ unlike any other city in the country. This was explained by a number of reasons. One of the major sources of employment within the city was in the vehicles sector, and particularly within the motor manufacturing subset of this category. In 1961 fourteen per cent of the city’s workforce was employed directly in vehicles industry, and this represented Birmingham’s largest sector of employment.

Table 1:1 - Employment figures for vehicles industry in Birmingham, 1951-1971.

<table>
<thead>
<tr>
<th></th>
<th>1951</th>
<th>1961</th>
<th>1971</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicles Sector</td>
<td>98,703</td>
<td>94,946</td>
<td>86,063</td>
</tr>
<tr>
<td>Of which Manufacture of Motor Vehicles and Cycles</td>
<td>55,860</td>
<td>74,034</td>
<td>74,725</td>
</tr>
</tbody>
</table>


In addition to this, a burgeoning research community developed in Birmingham surrounding motor vehicles and transport; for example the University of Birmingham was the first university in Britain to establish a Department of Highway and Traffic Engineering in 1959. The Motor Industry Research Association’s headquarters relocated to Nuneaton in 1948, around thirty miles from Birmingham and the Longbridge car manufacturing plants. This ‘car-consciousness’ was also evident in car ownership and usage patterns. Vehicle registrations of private cars in Birmingham increased from 53,818 in 1950 to 195,120 in 1973. The Census of 1971 estimated that 42 per cent of households in Birmingham possessed a private car, which was higher than Sheffield (39 per cent), Leeds (36 per cent), Liverpool (33 per cent), Manchester (32 per cent) and

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25 It was estimated that in the 1950s, somewhere between a fifth and a quarter of Birmingham’s ‘capital and labour’ was involved, either directly or indirectly, in motor manufacturing; Cherry, G., Birmingham: A Study in Geography, History and Planning (Chichester, 1994), p. 156.
27 City of Birmingham Central Statistical Office, City of Birmingham Abstract of Statistics (Birmingham, 1974).
Newcastle-upon-Tyne (30 per cent).\(^\text{28}\) In a comparative analysis of Britain’s major provincial cities, the citizens of Birmingham continually displayed patterns of highest motor car usage for work purposes during the 1960s and 1970s, but the gap had closed considerably by the end of the 1970s. (Table 1:2). Birmingham was a city which underwent a radical transformation in the post-war period; architectural critic Ian Nairn, writing in 1967, argued that since his last visit in 1960 ‘Birmingham is almost a new city. No other town in Britain except Croydon has changed its looks so radically.’\(^\text{29}\) Colin Buchanan, author of the seminal *Traffic in Towns* report, believed that ‘achievements to date of the rehousing and road building programmes probably exceed in the relative sense those of any other city of Britain.’\(^\text{30}\) Birmingham therefore presented the perfect example of a city which not only emerged as the country’s foremost ‘motor city’, but also underwent an extensive physical transformation.

**Table 1:2 - Per cent of journeys to work made by motor car in Britain's provincial cities, 1966-1981.**

<table>
<thead>
<tr>
<th></th>
<th>1966</th>
<th>1971</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birmingham</td>
<td>27.7</td>
<td>36.0</td>
<td>49.7</td>
</tr>
<tr>
<td>Manchester</td>
<td>21.6</td>
<td>30.9</td>
<td>47.4</td>
</tr>
<tr>
<td>Liverpool</td>
<td>18.3</td>
<td>27.7</td>
<td>40.2</td>
</tr>
<tr>
<td>Newcastle</td>
<td>20.5</td>
<td>29.3</td>
<td>43.4</td>
</tr>
<tr>
<td>Leeds</td>
<td>21.1</td>
<td>30.2</td>
<td>48.3</td>
</tr>
<tr>
<td>Sheffield</td>
<td>23.3</td>
<td>31.7</td>
<td>44.8</td>
</tr>
</tbody>
</table>


The thesis will argue that Birmingham was redeveloped as a ‘motor city’ in the 1950s and 1960s. An important relationship existed between redevelopment and road building, and much of this was with the aim of facilitating future car owners. One of the most influential actors in this process was City Engineer and Surveyor Herbert Manzoni. The administrative arrangements of Birmingham Corporation were deemed ‘unusual’ by historian John Gold insofar as ‘all the functions of urban development and management

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\(^\text{28}\) Exact figures for households per 1000 without a motor car: Birmingham 577, Sheffield 610, Leeds 644, Liverpool 674, Manchester 684, Newcastle-upon-Tyne 700. Per cent of cars per household calculated by subtracting quoted figures from 1000 to present number of households per 1000 with car. Number then divided by 10 to give per cent; Office of Population Censuses and Surveys, *Census 1971: England and Wales* (London, 1971).


(engineering, architecture and town planning)’ were grouped under the control of the Public Works Department, which in turn acted upon the advice of Manzoni.\(^{31}\) The role of the ‘expert’ in dominating the town planning agenda in post-war Britain is not revelatory, though the City Engineers are an important and largely neglected sub-group in the literature. It is useful to explore the strong power that Manzoni exerted within the Corporation. Kenneth Newton’s study into democratic processes in Birmingham from 1976 sought to downplay the influence of ‘expert’ officials in the decision making processes, and argued against the theory of Max Weber that ‘the trained permanent official is more likely to get his own way in the long run than his nominal superior, the Cabinet Minister, who is not a specialist.’\(^{32}\) Instead, Newton argued that much of the political power still emanated from the elected members: ‘Council members do have some resources to call upon when they confront expert opinion, and these resources are not, by any means, negligible for some sections of the membership.’\(^{33}\) Yet even in this study that restrained the influence of unelected officials, Manzoni was exempt from the hypothesis. Newton argued that it was ‘difficult to underestimate Manzioni’s influence at the height of his power.’\(^{34}\) The power of Manzioni has continually been stressed in the literature; Gordon Cherry argued that Manzioni ‘held the reins of power’ in the city, and Anthony Sutcliffe and Roger Smith believed that the ‘coherence and direction which he gave to Birmingham’s post-war reconstruction’ meant that Manzioni exercised ‘significant influence over the formulation of policy, as well as its execution.’\(^{35}\)

In order to examine the development of the ‘motor city’, it is necessary to understand the motivations and principles which guided Manzioni due to his influential presence in the planning of Birmingham. Firstly, Manzioni was a fervent supporter of comprehensive redevelopment programmes, and held the ideals of conservation and historic sentimentality in low regard; speaking in 1954 he argued that ‘most of our buildings put up in the last hundred years are finished… throughout most of the country we shall see complete rebuilding of our cities and towns.’\(^{36}\) In 1957 Manzioni directed this viewpoint directly towards Birmingham:

\(^{31}\) Gold, Practice of Modernism, p. 73.
\(^{33}\) Ibid, p. 164.
\(^{34}\) Ibid, p. 200.
\(^{35}\) Cherry, Birmingham, p. 199; Sutcliffe & Smith, History of Birmingham, p. 474.
\(^{36}\) ‘Complete Rebuilding of our Cities Envisaged’, Birmingham Post, 21 May 1954.
I have never been very certain as to the value of tangible links with the past. They are often more sentimental than valuable … As to Birmingham’s buildings, there is little of real worth in our architecture. Its replacement should be an improvement.\textsuperscript{37}

Secondly, Manzoni strongly believed that British society would become in thrall to the motor car, and it was the responsibility of town planning to facilitate this move to a motor society. In 1955, Manzoni stated: ‘I see no reason why traffic in this country should not reach the proportions of traffic in America … that is – one vehicle per adult, four times as much as we have got now. But it won’t matter so much if all our roads are right.’\textsuperscript{38} He reiterated this view in a speech at the British Road Federation’s national conference in 1956:

> Everybody wants a car, and if there are a few who don’t, there are others who want two … In this country we have one vehicle to 11, but we are going to have one vehicle to three. That is quite obviously every family’s ambition. We ought to start now on the schemes and jobs to meet this eventuality.\textsuperscript{39}

Manzoni’s belief in planning \textit{for} the motor car, rather than in reaction to its growth, was clearly evident. The thesis will explore the ways in which Birmingham was planned and redeveloped from the 1940s to the 1970s, and attempt to gain an understanding of how the potentially conflicting demands of aspects such as city centre redevelopment and slum clearance dovetailed in practice with road construction and the pursuit of the ‘motor city’ through planning for the motor car. Externalities of the rise of the ‘motor city’, such as the decreasing usage of public transport and the increase in public health concerns regarding the motor car and pollution are also analysed, alongside issues surrounding the contestation of urban space between car and non-car users and the sensory experience of driving in the ‘motor city.’

\textbf{Urban History and the Motor Car}

\textsuperscript{38} ‘A Car for Every Adult, Forecasts Sir Herbert’, \textit{Birmingham Gazette}, 8 January 1955.
\textsuperscript{39} ‘Plan Roads for Day When Each Family has Car’, \textit{Birmingham Mail}, 19 September 1956.
There exists an important history of planning theories from the first half of the twentieth century that that need to be considered before the thesis moves on to discuss the links in the various literatures between urban history and the motor car. Theories from planning and architectural movements shaped the belief of civil engineers and town planners in the post-war period regarding the separation of pedestrians and vehicles. Ebenezer Howard’s ‘Garden City’ idea represents a useful starting point. Howard developed the Garden City idea in the late nineteenth century in response to the congested and polluted industrial cities. The Garden City instead suggested that cities should be rationally zoned for different uses and self-contained communities be developed, as this would solve the problems of overcrowding and allow room for vast green spaces to be located within the city.⁴⁰ The Garden City was important because its principles of segregation of space were adopted by other planners as the twentieth century progressed and transport and traffic became more pressing concerns in town planning. The development of Radburn, New Jersey, in 1929 by architects Henry Wright and Clarence Stein was one such Garden City-inspired example.⁴¹ Lewis Mumford commented that Radburn was defined by ‘the differentiation of foot traffic from wheeled traffic in independent systems, [and] the insulation of residence quarters from through roads.’⁴² Influential town planning theories were in the early twentieth century starting to shape urban areas to segregate pedestrians from vehicles.

The Modern movement was an architectural school of thought which displayed similar segregation characteristics as the Garden City movement. The Congres Internationaux d’Arcitecture Moderne (CIAM) was a radical architectural movement which met over a period of thirty years (1928 – 1959) to form ‘a complex laboratory of progressive ideas for designing the city.’ Groups such as CIAM had formed to pool ideas and support between like-minded individuals.⁴³ CIAM attempted to position itself as the ‘antithesis to everything that had previously existed’, but historians such as Konstanze Sylva Domhardt argued that there were ‘numerous points of connection’ with the Garden City movement, and various members of CIAM were ‘deeply influenced ideologically by

⁴⁰ Howard, E., Garden Cities of To-Morrow (London, 1898).
⁴³ Gold, Practice of Modernism, pp. 34-35.
Ebenezer Howard’s vision for urbanism.’ Modernists such as Le Corbusier shared the viewpoint of Garden City inspired developments (such as Radburn) that pedestrians should be segregated from vehicles. Le Corbusier argued that traffic was ‘like dynamite flung at hazard into the street, killing pedestrians. Even so, traffic does not fulfil its function. This sacrifice of the pedestrian leads nowhere.’ In order to solve the problems of congested cities and pedestrian suffering, the everyday shared ‘street’ would be banished, as these spaces were ‘full of noise, dust and deprived of light.’ The city, in the view of modernists such as Le Corbusier, was split into four key functions – housing, work, recreation and traffic – and ‘each was to be specifically catered for so that it would mesh smoothly with the others to make the machine-city hum.’ The Modern movement aimed to limit the interaction between different functions, in much the same way that the Garden City movement implemented zoning systems and self-contained communities.

The notion of pedestrian-vehicle segregation persisted in the post-war years through groups such as the Society for the Promotion of Urban Renewal (SPUR). Formed in 1958, SPUR were a pressure group consisting of professional planners and architects who campaigned for the ‘resuscitation and reorientation of the faltering urban reconstruction programme.’ One of the central characteristics of the group was its enthusiastic approach to ‘multi-level circulation systems.’ John Gold argued that members of SPUR in the late 1950s believed that ‘drastic and speedy action was needed to propel cities into the modern age… [and] for SPUR, this perceived imperative would lead to an enduring love affair with the notion of recasting circulation systems on a multi-level basis.’ There existed important links between numerous pre-war planning theories, and the popularity of these links (such as segregation of pedestrians from vehicles) persisted into the 1950s and 1960s. It is important to understand that this was part of the planning context in which people such as Manzoni, were operating.

It would be incorrect to suggest that planning histories have ignored the influence of the motor car. Lionel Esher’s A Broken Wave highlighted that ‘the emergent mixed

46 Donald, J., Imagining the Modern City, (Minneapolis, 1999), p. 57.
48 Ibid, p. 207.
economy of state socialism and takeover capitalism’ enabled the rebuilding of city centres; new ring roads drove the further development of car parks, shopping malls, and office blocks which were located inside the ring road. Peter Hall argued that the growth in motor car ownership during the 1950s and 1960s increased pressures for ‘urban development’ around large urban areas. Such works however concentrated on detailing the responses of planners to the growth of urban Britain. Automobility and the motor car did not assume central importance in the early planning histories; they were part of the story, but were seen as secondary. More recent histories of post-war Britain have sought to address this issue, notably John Gold’s *The Practice of Modernism* (2007), in which the role of architects in the development of urban Britain during the 1950s and 1960s is the focal point. Gold argued that most power in local authorities was held by the surveyors and engineers (such as Herbert Manzoni), and the work of this professional group was guided by a key principle of road-building. Links between the Institution of Highway Engineers (to which the majority of surveyors belonged) formed a partnership with the British Road Federation and Society of Motor Manufacturers and Traders ‘to lobby [central government] for the economic benefits of road improvements.’ Gold firmly stressed the importance of the engineers and surveyors; it was ‘the engineer’s ring roads and radial schemes [that] effectively drove the town planning agenda.’ These conclusions from Gold shifted the importance of policies of automobility to the centre of fully understanding the development of urban Britain from the 1950s to the early 1970s. Recent works reinforce this placing of automobility at the centre of understanding post-war development. Peter Larkham and David Adams argued that the redevelopment of British city centres was often the result of attempts of town planners aiming to impose modern ideals of speed and accessibility through road construction.

A number of important works exist that document how the car system in Britain developed and was reinforced throughout the second half of the twentieth century.

52 Gold, *Practice of Modernism*, p. 69.
William Plowden’s *The Motor Car and Politics in Britain* (1973) analysed attempts by central government to plan for the motor car throughout the twentieth century. Plowden explicitly stressed that his work was ‘concerned with the way society has treated the car’ and questioned how policies aimed at the motor car were crafted.54 One of the key conclusions was that ‘[n]either motorists or the motor industry now “make policy” towards the car more directly than they did [in the early twentieth century].’55 Plowden argued that in the first half of the twentieth century politicians were content to restrict their intervention into motoring issues, but this changed with the sharp increase in motor car ownership in the 1950s and the realisation that ‘it might not be possible … to satisfy all the demands on resources made by the car.’56 The problem, according to Plowden, was that by the 1960s the ‘car system’ in Britain was so embedded that political parties were reluctant to present policies that could be attacked as being anti-car by powerful motoring organisations such as the Automobile Association and Royal Automobile Club. This resulted in a lack of any clear policy developing from successive governments to counteract unchecked automobility, and thus the interests of motorists ‘prevailed by default.’57 The motoring lobby did not create policy, but they were adept at restricting any potential alternatives developing to automobility.

Plowden’s work was a thorough examination of central government approaches to automobility, and Geoff Vigar’s *The Politics of Mobility* (2002) provided a useful companion in that it attempted to examine transport decisions made at the local level through an examination of relationships with central government.58 Vigar arrived at a similar conclusion to Plowden regarding the driving forces behind policies of automobility; the road lobby undoubtedly exerted some influence, particularly over individual schemes, but there were more pressing factors behind the policies of automobility. An important consideration for local politicians was that ‘attitudes of the general public… usually stand in opposition to traffic restrictions and support new roads.’ Local politicians endorsed vast road-building schemes in the 1950s and 1960s because, according to Vigar, there were ‘many more votes for local politicians in such policies

than in restricting the freedom of motorists.’"59 Simon Gunn argued that the sociological
studies of affluence of the 1950s and 1960s recognised automobility as ‘an index of
‘affluence.’’60 If it was the desire of the general public to strive towards motor car
ownership as a marker of personal affluence, then it is unsurprising that local politicians
were reluctant to pursue policies that could have potentially restricted automobility.

A substantial amount of an older literature which assessed the relationship
between the motor car and British society focussed on the decision-making processes and
development of transport policies.61 In more recent years a scholarship has emerged
which looks beyond the policy discussions around automobility and has focussed on the
experiences of automobility for drivers and others. A number of works have examined
specific roads in Britain. Peter Merriman’s *Driving Spaces* (2007) analysed the
‘production and consumption of the landscapes’ of the M1, and argued ‘against
suggestions that driving is *asocial* and that roads are *placeless* spaces.’62 The approach
espoused by Merriman was that in order to fully understand why people possessed ‘an
enduring attachment to their cars … it is vital that they understand the social relations,
embodied practices and ontologies associated with driving.’63 A mix of senses such as
excitement, boredom, ubiquity and modernity were elicited through the act of driving on
major national roads such as the M1.64 Joe Moran’s *On Roads* (2009) continued this
argument and suggested that although sensory experiences of driving along particular
roads were often overlooked because ‘its shared routines seem to offer little opening for
individual creativity or invention’, these roads had actually ‘penetrated our imaginations
obliquely, not through the myth and folklore of the great driving roads but through
compulsive habits and accidental poetry of the commonplace.’65

60 Gunn, ‘*People and the Car*’, p. 226. For examples of contemporary studies of affluence, see Goldthorpe,
J., Lockwood, D., Bechofer, F., & Platt, J., *The Affluent Worker – Vols. 1-3* (Cambridge, 1968-9); Bell, C.,
*Middle-Class Families: Social and Geographical Mobility* (London, 1969); Birch, A., *Small-Town Politics: A
1961).
61 Hall, P., *Great Planning Disasters* (London, 1980), ch. 3; Starkie, D., *The Motorway Age: Roads and
62 Merriman, P., *Driving Spaces: A Cultural-Historical Geography of England’s M1 Motorway* (Oxford,
64 Merriman, P., ‘*Driving Places: Marc Auge, Non-Places and the Geographies of England’s M1 Motorway*’,
A substantial literature written by sociologists has developed to assess the experience of automobility.\textsuperscript{66} John Urry argued that the motor car should be viewed as a ‘way of life and not just a transport system for getting from one place to another.’\textsuperscript{67} The flexibility of motor cars to owners, through the ability to exert freedom over their travel times and destinations, was ‘necessitated by automobility’:

Automobility divides workplaces from homes, producing lengthy commutes into and across the city … Cars are a major ‘convenience device’ of contemporary society, devices that make complex, harried patterns of social life just about possible, at least of course for those with cars; a complexity that the car itself generates.\textsuperscript{68}

Urry stated that the car became increasingly indispensable to people’s daily lives. Daniel Miller had presented a similar argument, by stating that the act of driving is often taken for granted and ‘that we think of our world through a sense of the self in which driving, roads, and traffic are simply integral to who we are and what we presume to do each day.’\textsuperscript{69} Miller asserted that to understand truly the development of a car system, social histories of the car must include the driver and their experience of driving: without this, the histories would be ‘a fetishized history that makes the critique of the car appear abstract and distant from humanity in which it is involved.’\textsuperscript{70} Chapter Seven of this thesis explores the process of driving in Birmingham in order to evaluate whether the exciting portraits of driving in the ‘motor city’ were matched in reality. Sociologists have attempted to document this sensory experience of driving.\textsuperscript{71} Mimi Sheller, for example, contended that to understand people’s feelings about both cars and driving would enable a truer understanding of the development of dominant car cultures, and could enable discussions to develop surrounding ‘what will really be necessary to make the transition

\textsuperscript{67} Urry, Mobilities, p. 115.
\textsuperscript{68} Ibid, p. 120.
\textsuperscript{70} Ibid, p. 9.
from today’s car cultures … to more socially and environmentally “responsible” transportation cultures.\textsuperscript{72}

The historiography of the experience of driving in Britain is still developing. Colin Pooley, Jean Turnbull and Mags Adams’ investigations into mobility patterns in cities such as Manchester and Glasgow during the twentieth century are particularly useful as they present an in-depth analysis of how car owners utilised their motor cars.\textsuperscript{73} Changes in mobility patterns of journeys for work, school and leisure were analysed and one of the key conclusions was that there while there were a number of obvious changes in mobility patterns, there was also in fact an ‘underlying stability of everyday mobility experience’ throughout the twentieth century.\textsuperscript{74} Simon Gunn’s examination of contemporary motoring surveys argued that ‘mass motorization did less to transform patterns of social life than many contemporary commentators or subsequent sociologists allowed.’\textsuperscript{75} This therefore shifts focus onto non-drivers, and a number of works assess the experience of the pedestrian and the cyclist in the city.\textsuperscript{76} This is a literature that discusses the contestation of space between driver and non-driver. Joe Moran’s analysis of the experience of pedestrians crossing the road in Britain during the twentieth century argued that a shift occurred in the 1950s ‘towards changing the street landscape rather than coercing pedestrians or drivers to behave in certain ways.’\textsuperscript{77} The result was the separation of traffic and pedestrians, and the creation of new spaces for singular inhabitation such as subways (for pedestrians) and limited-access urban motorways (for drivers). David Adams has also examined the experience of walking in post-war Birmingham through analysing oral testimonies. One conclusion was that ‘existing pedestrian routines’ were interrupted by the construction of new roads, but this was

\begin{itemize}
  \item \textsuperscript{74} Pooley et al, \textit{A Mobile Century?}, p. 11.
  \item \textsuperscript{75} Gunn, ‘People and the Motor Car’, p. 237.
\end{itemize}
afforded little attention from Corporation officials who were more concerned with achieving ‘unconstrained circulation of vehicular traffic.’

There exists a more established literature surrounding the social and cultural history of the motor car in the United States of America. This is partly down to the fact that the boom in motor car ownership in the United States began in the 1920s, compared to the 1950s in Britain. Cotton Seiler’s *Republic of Drivers* analysed ‘the act of driving and all of those components that make driving possible, practical, empowering, fun, salutary, and imperative.’ The relationships between American automobility and gender, race, nationality and citizenship were examined, and in conclusion Seiler argued that ‘the subjects produced by the apparatus of automobility pronounce and feel themselves free with an intensity that asserts motion to be the epitome, and not simply one possible dimension, of freedom.’

Peter Norton’s *Fighting Traffic* argued that in the 1920s American motorists began to assert their domination in city streets, and ‘fought for a new kind of city street – a place chiefly for motor vehicles.’ In order to achieve this, Norton asserted that ‘motordom [his collective name for motoring interests] developed a case that appealed to American traditions of economic and political freedom.’ American cities were reconfigured to be ‘hospitable to cars’ through a ‘rhetorical festival celebrating freedom.’ Yet Norton contended that ‘the automotive city took back much of the freedom it promised.’ The dominance of the streets by motor cars diminished the ability of other users of the street to utilise the space for anything other than motoring. Prior to the motor car, according to Norton, the street was freer and accessible to all.

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80 In 1950, there were four persons per car in the United States, compared with 22 persons per car in the United Kingdom. By 1961, there were three persons per car in the US and nine persons per car in the UK; British Road Federation, *Basic Road Statistics*, p. 9.
82 Ibid, p. 149.
83 Ibid, p. 18.
motor car in America significantly altered the dynamics of space for its citizens. It was not simply a history of changing landscapes but a history of how the motor car changed the lives of all Americans. Brian Ladd expanded on the arguments of Norton and suggested that the domination of city streets for almost exclusive transport purposes began before the rapid expansion in motor car usage. Urban culture had already been transformed by transportation such as bicycles, wagons and carriages, and tramways; the ‘increased mobility of people and goods reflected fundamental changes in the economic order of society.’ The transformation of city streets in America ‘was completed, but was not caused’ by the arrival of the motor car.

This thesis addresses a gap in the literature about the impact of the motor car on British society. The works of Merriman and Moran are important in developing understanding of the cultural impact of the motor car in Britain, but the research is limited to specific roads. Instead, detailed studies are required of the impact of the motor car specifically upon cities. Pooley, Turnbull and Adams have made a considerable contribution through their analysis of car usage patterns in Manchester and Glasgow, but the work does not intend to address how the form of the city changed. This thesis examines the impact of planning for the motor car in the development of commercial, civic, and residential spaces in Birmingham, and also asks how inhabitants’ lives were affected by the Corporation planning for the motor car. The historiography of post-war Birmingham has certainly not neglected discussing the construction of roads in the city. This thesis aims to delve deeper and analyse what some of the repercussions of this road-building agenda were, such as pollution and a neglected public transport system. It is important to continue to develop understanding of the relationship between the motor car and the urban environment because it possesses the potential to inform discussions around sustainable transport currently taking place. Countries such as China and India are experiencing sharp increases in private motor car ownership. Projections for car ownership figures between 2008 and 2030 predict that the rate of vehicle ownership will increase 10.6 per cent and seven per cent annually in China and India respectively. By

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2030, it is considered that there will be 269 vehicles per 1000 people in China, which is ‘comparable to vehicle ownership levels of Japan and Western Europe in the early 1970s.’ By 2050, some studies estimate that there could be increases in car ownership worldwide of 350 per cent, an increase of 2.3 billion cars. An important global issue will be how Chinese and Indian cities plan for these vast predicted increases in car ownership. There are already examples in China of government policies promoting urban motorway construction and ‘turning street space over to the motoring minority in ways that recall the United States in the 1920s.’ A detailed study of how the city of Birmingham planned for the proliferation of the motor car, in a period of sustained increases in car ownership in Britain, can provide useful indicators for some of the potential repercussions of planning for automobility.

Automobility and Modernity

The relationship between automobility and modernity is an important dimension that the thesis explores. This link can be viewed under four headings: the ability to remake the world over; the pursuit of individual freedom; speed and unrestricted urban flows and circulations; and the rise of the car as a central symbol of the modern.

One of the central components of modernity is that it was seen to offer an ability to remake the world over. Marshall Berman argued that:

To be modern is to find ourselves in an environment that promises us adventure, power, joy, growth, transformations of ourselves and the world – and, at the same time, that threatens to destroy everything we have, everything we know, everything we are.

James Scott described the modernist ideology as a ‘muscle-bound version of the self-confidence about scientific and technical progress’, and the experience of modernity was

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‘the experience of disorientating speed, movement, and change, which self-proclaimed modernists found exhilarating and liberating.’ To be modern was to not only believe the world could be transformed on a grand scale, but also that change could be enacted at a great pace. A modernist possessed a belief that there was ‘the power to change the world that is changing them, to make their way through the maelstrom and make it their own.’ The modern has a long history of representing a ‘break with the old’; for example the Industrial Revolution was a modern transformation that ensured British cities represented an entirely new society to contemporary observers.

Automobility was a central component of the ceaseless modern makeover of the city in the twentieth century. The construction of vast road networks, designed primarily for the motor car, represented a large-scale sweeping away of existing streets and neighbourhoods and was an important strategy that underpinned high modernity. The output of Robert Moses, the urban planner responsible for implementing a vast highway network in New York, is often cited as a prime example of the link between automobility and a modern re-ordering of the city. Moses believed that in order to create the modern system of highways in New York, ‘when you operate in an over-built metropolis, you have to hack your way with a meat ax[e].’ He presented himself to the public of New York as ‘the vehicle of impersonal world-historical forces, the moving spirit of modernity’, and to oppose his large scale developments, such as tunnels and expressways, was ‘to oppose history, progress, modernity itself.’ A similar transformative effect emerged in post-war France, and Kristin Ross argued that the rise of mass automobility heralded ‘a revolution that saw the dismantling of all earlier spatial arrangements, the virtual end of the historic city, in a physical and social restructuring that matched the transformations of a hundred years earlier.’ In an examination of the Australian experience of the emergence and subsequent domination of the motor car, Graeme

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94 Scott, J., Seeing like a State: How Certain Schemes to Improve the Human Condition have Failed (London, 1998), p. 93
95 Ibid, p. 16.
97 Hubbard, P., City (Abingdon, 2006), p. 137.
100 Ibid, p. 294.
Davison argued that automobility was not only capable of reordering the existing Australian city, but also that sections of the city were specifically created by the presence of the car. A new landscape of suburbia emerged that was designed to promote automobility; drive-in cinemas, motels, shopping centres, service stations, multi-level car parks and so forth were seen as a modern transformation of the city. Automobility demanded a vast remaking of the old city into a modern city, and also created new suburban landscapes and expanded the city.

A further dimension to the relationship between modernity and automobility was the idea of enhancing individual freedom. There existed a belief that the anonymity afforded to people by the modern city allowed people to create new identities and lives for themselves regardless of their personal histories. This emphasised a ‘liberatory potential of the [modern] city.’ The rise of automobility further highlighted the link between modernity and freedom. Davison argued that in post-war Melbourne, the motor car played a central role in discussions about promoting freedom, and that any attempts to restrict the motor car were viewed as an affront to personal liberty. The car in post-war Australia ‘was a freedom machine, a physical expression of the liberal principles of free movement, free association and free enterprise.’ This was partly because during the Second World War and in the immediate post-war years of austerity, the freedom of movement for Australians was restricted through petrol rationing and the prioritisation of army vehicles on rail and road. The demand for freedom of movement from Australians rapidly increased in the peaceful new modern world; the motor car offered ‘independence [and] privacy … a decade of austerity had made [the motor car] irresistible.’ To achieve this freedom, one could realise it through owning a motor car.

A similar argument had emerged in the United States in the early twentieth century; Peter Norton argued that those with a vested interest in the rise of automobility (what he termed ‘motordom’) utilised a rhetoric of freedom and modernity as a method of promoting automobility. The rise of cities re-planned to accommodate the motor car

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103 Ibid, pp. 78-81.
104 Hubbard, City, p. 20.
105 Davison, Car Wars, pp. 111-116.
107 Ibid, p. 3.
was viewed as an act of celebrating freedom.\textsuperscript{108} Cotton Seiler suggested that, as American workers suffered ‘apparent losses to autonomy, privacy and agency’ in the transition to corporate capitalism, the act of driving was ‘crucial compensation … [and] an important ideological tool for the preservation of hegemony.’\textsuperscript{109} Seiler asserted that automobility shaped the meanings of “America” and “American” in the twentieth century. American citizens exercised their freedom through automobility; ‘[they] pronounce and feel themselves free with an intensity that asserts motion to be the epitome, and not simply one possible dimension, of freedom.’\textsuperscript{110}

Notions of circulation and flows also form part of our understanding of modernity. The idea of the city representing a ‘sick body’ that had to be decongested was a cornerstone of Baron Haussmann’s modern development of nineteenth century Paris; ‘the slums of industrial cities were cesspools of tuberculosis and cholera, spreading contagiously and destroying the surrounding countryside like a disease.’\textsuperscript{111} Modernists such as Le Corbusier advanced this one step further, and proposed that the way to ease the ailments of the city was to ‘organise and recreate the city as a machine, as a ‘working tool.’\textsuperscript{112} A modern ‘networked’ city was rationally characterised by order and reasoning and meticulously planned the connections between planning and the urban environment.\textsuperscript{113} The new modern urban environment replaced the old street, perceived as an irrational and unordered multi-purpose mix of people and traffic, and instead created spaces which served separate purposes and were for specific types of movements.\textsuperscript{114} The new road networks that automobility necessitated were a central component of attempts to rationally manage urban space; to enhance the prosperity of the modern city was to enable traffic to move freely and quickly, unhindered by interactions with other users of the street.

A desire for speed, in addition to free-flows, also forms an important part of understanding the modern city. James Donald and James Scott both argued that the

\begin{footnotesize}
\textsuperscript{108} Norton, Fighting Traffic, p. 261.
\textsuperscript{109} Seiler, Republic of Drivers, p.149.
\textsuperscript{110} Ibid, p. 149.
\textsuperscript{111} Donald, Imagining the Modern City, p. 57.
\textsuperscript{112} Ibid, p. 57.
\textsuperscript{113} Graham & Marvin, Splintering Urbanism, p. 42.
\textsuperscript{114} Berman, All That Is Solid Melts Into Air, p. 168.
\end{footnotesize}
experience of speed was a crucial aspect of modernity. To be modern was to move at speed, and the rise of automobility allowed the individual to experience such sensations. Berman suggested that the aspiration of speed was ‘universally modern’, and the faster one could travel ‘the more of a “real man” – the more masculine … he can be.’ Ross also identified that the attraction of speed and automobility was an important part of the definition of modern France:

At the other end of the spectrum of the car’s functions from the mundane, daily commute lies the phenomenology of pure speed, celebrated first in France to any mass acceptance by Françoise Sagan, and continuing up to our own day in the panegyrics of Jean Baudrillard. Going fast, as Sagan and Baudrillard both point out, has the effect of propelling the driver off the calendar, out of one’s own personal and affective history, and out of time itself.

The main method for people to experience speed in the city during the twentieth century was through the adoption of automobility. The use of a motor car on new limited access roads offered this opportunity, and John Knott argued that this ability to travel at speed was an essential part of the motor car’s appeal. Automobility ‘spoke of modernity and technological progress … it reminded everyone of humanity’s triumph over distance and time.’ One of the main attractions of the motor car was that it enabled people to experience modern characteristics of ‘efficiency, functionality, speed, mobility and beauty.’

The motor car as an object was often viewed as representing the chief symbol of the modern. In Europe, this was achieved in the decades following the Second World War; as increases in buying power were directed towards the purchase of motor cars. Ross argued that motor car advertisements in post-war France offered the consumer an easily accessible tool for transforming their life to fit with modern France; ‘with such and such a product, the ad reads, traditions, the French way of life, are both conserved and

115 Donald, *Imagining the Modern City*, p. 55; Scott, *Seeing like a State*, p. 93.
119 Davison, *Car Wars*, p. xi.
120 Ross, *Fast Cars*, p. 19.
gone beyond; past and future are one, you can change without changing.’ It was not solely the motor car that represented a symbol of modernity, but also the new road networks. Peter Merriman argued that the motorway system in Britain was a symbol for the modern, and emerged as a ‘space of discovery and experimentation, an exotic space.’ The motorway assumed a place in popular culture in the 1960s as a symbol for modernity and adventure. The apparatus of automobility symbolised modernity.

**Research Questions, Thesis Structure and Sources**

The thesis addresses one central research question; how far was the motor car and the city brought together in Birmingham and the ideal of the ‘motor city’ realised during the period 1945-1973? In order to answer this three sub-questions are required:

- How far does the study of Birmingham stress the importance of the relationship between town planning and automobility in the pursuit of creating a modern city?
- What were the priorities of Birmingham Corporation regarding transport provision?
- What was the impact of the Corporation’s ‘motor city’ strategy and increases in motor car ownership on the quality of life of citizens in Birmingham?

The thesis focusses solely on Birmingham in order to delve into detail around increasing understanding of the rise in motor car ownership and its relationship with the transformation of urban Britain. The selection of Birmingham as the city for analysis was due to its status as the most prominent ‘motor city’ in Britain, the reasons for which have already been explored earlier in this chapter. The literature review of the previous selection highlighted that research into the relationship between automobility and redevelopment of post-war Britain is relatively limited at present. Although a detailed comparative analysis of ‘motor cities’ is not what this thesis sets out to achieve, the findings of this research on Britain’s foremost ‘motor city’ during the post-war period

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121 Ibid, p. 22.
allows an opportunity for further research of other towns and cities to be undertaken and compared to the experience of Birmingham.

The remaining chapters of this thesis fall into two parts. Chapters Two, Three, and Four assess in what ways Birmingham changed due to the influence of planning for the motor car; and Chapters Five, Six, and Seven analyses some of the externalities of the creation of the ‘motor city’. The structure is thematic rather than chronological and each chapter examines the city from the 1940s to the 1970s. At times, chapters will analyse dates outside of the stated time-frame for the thesis as a whole of 1945-1973. This is unavoidable as many of the decisions of Birmingham Corporation undertaken in the immediate post-war decades were gestations of policies that originated in the 1920s and 1930s, and the effects were experienced after 1973.

Chapter Two examines the influence that the rise in mass motor motorization had upon the urban form of Birmingham. Aspects such as suburbanisation, location of industry, and city centre redevelopment are examined. This is useful in the first substantive chapter, as it provides an overview of the development of the city. The main argument is that the development of new road networks simultaneously encouraged an ever expanded city with regards to housing location, while reinforcing traditional industrial locations in the centre of the city. The development of municipal housing estates located towards the outskirts of the city in the 1920s and 1930s had been made possible by improved motor bus routes to serve the estates. As personal motoring gained popularity during the 1950s and 1960s, improvements to Birmingham’s road network allowed residents of the city the opportunity to move towards the fringes of the city, and travel into the central areas to work. Improvements to roads in Birmingham meant there was no direct pressure for industry to decant with housing due to improved access by motor car. The ‘motor city’ therefore encouraged ever-greater levels of commuter traffic.

Chapter Three focuses specifically on city centre redevelopment in Birmingham. The literature review has already indicated that the urban centres of Britain underwent substantial reconstruction, redevelopment, and finally renewal programmes at various different stages throughout the study period. This chapter used the development of ‘traffic architecture’ as a method of analysing the ways in which Birmingham city centre was redeveloped in order to function as the centre of a ‘motor city.’ It is argued that city
centre redevelopment and road construction were not viewed as separate objectives by Birmingham Corporation, but instead were planned together in order to create a city centre that facilitated motor car usage. The Inner Ring Road assumed multiple objectives; primarily to ease traffic congestion in the centre, but also to provide new commercial and leisure spaces alongside stretches of the road such as Smallbrook Ringway and Paradise Circus. New architecture in the city centre was designed that considered its close proximity to the Inner Ring Road.

Chapter Four continues to focus specifically on what changes the physical form of Birmingham underwent during the ‘motor city’ era, and examines the Corporation’s vast slum clearance programme. The arguments here reinforce the findings of the previous chapter; road construction was rarely considered in isolation by the Corporation, but was instead utilised as a driver for wider redevelopment within the city. It is shown that the slum clearance programme was closely aligned to the construction of the Middle Ring Road, which was planned to either run directly through, or in close proximity to, five central redevelopment areas.

Chapter Five marks a shift into the second half of the thesis, in which focus turns away from physical changes to the form of the city to instead analyse the externalities of increased motor car usage in Birmingham. This chapter examines the operation of public transport in Birmingham in the wake of rising car ownership in the city, and puts the road-building agenda of the 1950s and 1960s into a wider context by considering what influence the development of the ‘motor city’ had on public transport. It is argued that the tramways and trolley buses of Birmingham were abandoned in favour of improved motor bus services by the Corporation as part of an ideological shift that demanded increased road investment. The chapter also examines the decisions behind the lack of implementation of numerous rapid transit schemes in the city. It is argued that despite the lack of funding for alternatives to the motor car in the 1950s and 1960s, by the 1970s there was a growing public desire for improved funding for radial rail routes and rapid transit projects. This represented a rejection of the ‘motor city’ ideal.

Chapter Six assesses the impact that the growth in motor car usage had on public health through noise and air pollution. The structure of this chapter is different from the other chapters, as much of the content is devoted to examining the rise in understanding
of the links between motor car pollution and public health from the 1940s to the 1970s in a national rather than local context. It is argued that attempts to address motor car pollution in Britain in the 1960s were largely economic, rather than ideological. Motor car manufacturers that wished to continue to export cars to the United States were required to modify designs to meet strict American legislation regarding motor exhaust emissions in states such as California and New York. British research into motor car pollution in the late 1950s and 1960s was generally conducted in an effort to protect growing export markets, rather than in response to a demand from the British public opinion. The chapter also analyses the experience of Birmingham in the early 1970s with regards to motor car pollution. It is argued that the opening of the Gravelly Hill interchange in 1972 was the catalyst for a substantial rise in public concern regarding motor car pollution within the city. The apparatus of the ‘motor city’- vast motorway interchanges and high speed roads which ran in close proximity to housing- brought the issue of motor car pollution into focus for many residents of the city.

Chapter Seven poses the question: what sensory experiences did driving in the ‘motor city’ elicit? The chapter analyses the ways in which Birmingham was depicted as a ‘motor city’ through local newspaper special editions, television shows, motoring events and advertisements. It is argued that Birmingham, as a ‘motor city’, was presented as a modern space of excitement, adventure and intrigue. Plans to host motor race in the streets of the city centre attempted to glean some of the allure associated with the street races of Monaco and Barcelona. The motor car and developments such as the Inner Ring Road were used as a mechanism for promoting the city as glamorous. The chapter argues that there was actually a detachment between how Birmingham was presented, and how drivers actually experienced the city. Drivers had to learn to use roads which utilised new traffic management systems, such as the Aston Expressway with its central tidal flow lane which allowed the movement of traffic in either direction dependent upon the instruction of overhead signs. The chapter argues that such experiences actually ensured that the process of driving in the ‘motor city’ elicited feelings of fear and lack of control rather than the excitement that was promised.

Chapter Eight will summarise the main findings of each chapter and attempt to answer the three research questions outlined earlier in this chapter. It will assess the study’s contribution to the understanding of automobility in post-war urban Britain.
A variety of sources have been utilised in the thesis, presenting a range of different approaches. Birmingham Corporation committee minutes and reports provided an opportunity to assess the decision making processes behind the town planning developments that occurred in the city. Additionally, official Corporation-sanctioned publications offered a perspective on how the Corporation wished to promote the city’s image. These two sources enabled an analysis of the public and private attitudes and views of the Corporation towards the development of the ‘motor city’. Files from the Ministry of Transport and the Ministry of Housing and Local Government provided valuable insights into the relationship between central and local government. Local and national newspaper articles were useful in providing evidence to assess the rationale behind why certain decisions were made. Published reports, such as the Corporation’s plans, transport studies, and regional studies, were an important source for providing the quantitative and qualitative data that was utilised by decision makers, and also for clearly showing policies and proposals. All of these sources were the basis of the top-down evidence required for the analysis of the Corporation’s decision making processes. Additionally sources such as contemporary film clips, particularly from local television news reports, were important for providing interview material from residents of Birmingham. They acted as a useful gauge of public opinion in reaction to the development of the ‘motor city’, and offered a perspective that differed from those of Corporation officials.
Chapter 2 – Urban Form

The urban form of Birmingham changed substantially between the 1940s and 1970s; suburbanisation, encroachment into the rural fringes, and a rapidly redeveloped city centre all contributed to the evolution of the city’s urban form. This chapter is concerned with how far the ‘motor city’ strategy, that of the Corporation pursuing policies which promoted the use of a private motor car, influenced the urban form of Birmingham. The main aim of this chapter is to analyse the link between road development and the determination of urban form in Birmingham. A number of scholars have examined the development of Birmingham’s urban form. Anthony Sutcliffe and Roger Smith’s *History of Birmingham* explained ‘how and why a policy of retrenchment replaced expansionism’ from the 1940s to the 1970s, and provided an account of the influence of various local and central government policies on the restriction of the city’s growth.¹ Peter Hall’s *The Containment of Urban England* likewise examined the changes to Birmingham’s urban form during the 1950s and 1960s, and instead assessed the impact of Birmingham’s pressures towards urban expansion on the wider West Midlands region. Hall explored the impact of the expansion of Birmingham on surrounding local authorities, and argued that Birmingham’s growth in the 1960s was checked by constraints on overspill and industrial relocation.² This chapter will contribute to this literature by analysing the influence of road development and increased car ownership on the city’s urban form.

Private car ownership in Birmingham from the 1940s to the 1970s increased substantially; in 1938 there were 49,991 registered vehicles in Birmingham, which increased to 210,250 in 1974. This vast increase in motor car ownership within the city materialised at the same time the urban form of Birmingham became increasingly constrained. It is therefore necessary to analyse the relationship between this increase in motor car ownership and the containment of the city’s urban sprawl. This chapter will analyse how far housing development, industrial and commercial location, and green belt proposals were influenced by the growth in motor car usage. The first section will discuss the role of roads and the motor car in the final stages of expansion of the city in the 1930s and 1940s through suburbanisation and ribbon development. Asa Briggs in 1952 argued

¹ Sutcliffe & Smith, *History of Birmingham*, ch.3.
that ‘most of the phases of Birmingham’s growth can be studied in the bricks and mortar of main roads leading out of the city,’ which showed the important role of roads and the motor car in the development of urban form in the 1930s and 1940s.\(^3\) The second section will analyse the period when expansion of the city came to a halt in the 1950s and 1960s. The urban form was instead constrained by a lack of industrial relocation out of the city and the impact of a green belt checking further peripheral expansion. The final section will assess the changes in urban policy from the 1940s to the 1970s, and through an analysis of travel to work statistics present an example of the influence of motor car usage on the urban form of the city.

**Suburbanisation and Ribbon Development – the 1930s and 1940s**

Anthony Sutcliffe and Roger Smith argued that ‘until the early 1930s it had been an article of faith among the city fathers that sheer size was conducive to the prosperity … of Birmingham.’\(^4\) The designation of Special Areas in 1934 by central government, which aimed to encourage industrial growth in ‘depressed’ areas of the country, ‘implied a deceleration of the immigration of people and industry into large cities like Birmingham.’\(^5\) The 1930s therefore represented the final decade of policies of urban expansion by Birmingham Corporation. One of the most prominent developments in Birmingham’s urban form during this period was rapid suburbanisation. From 1920 to 1939 nearly 100,000 houses were built in the city, of which half were municipal. It was estimated that 90 per cent of these municipal developments were situated in the outskirts of Birmingham (Figure 2:1).\(^6\) The process of suburbanising Birmingham dated back to the early 1800s with the development of suburbs such as Edgbaston.\(^7\) The large house-building programme during the 1920s and 1930s accelerated this process further. By 1938, four in seven Birmingham residents lived in the ‘outer ring’ where a substantial ‘wide belt of mainly semi-detached housing’ surrounded the city.\(^8\) There were significant

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\(^4\) Sutcliffe & Smith, *History of Birmingham*, p. 120.

\(^5\) Ibid, p. 120.


\(^8\) The wards of Birmingham were considered in three separate sections; central areas, middle ring, and outer ring; Briggs, *History of Birmingham*, p. 305; Hall et al, *The Containment of Urban England: vol. I*, p. 508.
developments at Perry Barr (North), Acocks Green and Hall Green (South-East) and Selby-Oak (South-West) by 1938. It cannot therefore be argued that the car in the post-war ‘motor city’ was responsible for starting the process of suburbanisation.

The motor car in Birmingham during the 1930s and 1940s was the ‘most important factor determining the limits of the outer migration of the business man.’ This was because ownership of a motor car offered the household that could afford such a luxury the freedom to live where they so desired. It was public road transport, rather than private car ownership, that was the most important source of mobility for households of the new municipal estates located on the fringes of the city. Even by 1949, only three per cent of semi-skilled and unskilled workers owned a car in Britain. Few of the houses constructed in the suburban municipal housing estates of the 1920s and 1930s were built with a garage, and ‘the expectation was that people would travel easily from the suburbs to the city by tram or motorbus.’ Contemporary town planner Frederick Osborne echoed such sentiments, and in 1946 said that public transport had ‘enabled the people moving out from the centres (sic) to fund the open residential surroundings they desired.’

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The inter-war municipal estates were well serviced by the Corporation’s omnibus fleet (Asa Briggs described it as the ‘largest fleet of municipal omnibuses in the world’) which covered a route mileage of 153 miles by 1938.\(^{13}\) The radial routes connected the residents

\(^{13}\) Briggs, *History of Birmingham*, p. 250.
of the municipal estates on the fringes of the city to employment and leisure facilities in the city centre. This enabled the Corporation to successfully entice residents to inhabit the new housing estates towards the edge of the city, such as at Kingstanding in the north and Hall Green towards the south-east. The bus network in this period was ‘unlike the earlier tracked tram or train systems [and] could operate like the car wherever roads existed.’ The connectivity of the arterial road network was an important step in the further suburbanisation of Birmingham by the 1940s.

The arterial road network also contributed to the development of the city’s urban form through the increase in commercial and industrial ribbon development. Influential town planners Patrick Abercrombie and Herbert Jackson argued that increases in motorisation were responsible for this development: ‘the new means of transport … quickly encouraged ribbons of dwellings and other buildings along the main roads. Dwellings on the main road were converted to shops to serve the residential areas growing behind them.’ The map below (Figure 2:2) by the West Midland Group on Post-War Reconstruction (which included Herbert Manzoni) showed that shopping facilities in 1948 were not concentrated in central areas, but instead had spread outwards towards the fringes of the city along radial routes.

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15 Abercrombie, P., & Jackson, H., West Midlands Plan (1948), chapter 5 section 9 (note – no page numbers)
The West Midlands Group highlighted the ‘shoe-string development of shopping centres along the roads leading out from … Birmingham’; the almost continuous line of retail from Birmingham to West Bromwich was a prime example. The Conurbation study noted that the main traffic routes out of Birmingham were lined with shops for long distances, such as the Birmingham-Wolverhampton Road which had, on the Birmingham side, a ‘string of shops [that] runs continuously for four miles.’ The West Midlands Group called this ribbon development ‘clearly dangerous and undesirable’ due to the ‘speed and congestion of modern traffic,’ and instead argued that ‘the separation of shopping areas from main traffic roads should be a main objective in future planning.’ Substantial ribbon development occurred because of a lack of planning regulations; it was not until the Restriction of Ribbon Development Act in 1935 that the process was limited
due to a fear of urban sprawl. Legislation was implemented as planners feared increased development along main roads ‘pushing their way out from the existing urban environment and into the countryside.’ Some shops gravitated to the radial routes, and sensed the opportunity for successful business locations as more people utilised the roads since the substantial increase in suburbanisation from the 1920s. This access was either through the various bus stops that lined the routes, or those fortunate enough to own a private car who travelled along these routes on their way to the centre of the city for work and leisure.

Industrial ribbon development was also another factor in the development of the city’s urban form in the 1930s and 1940s. New factory premises on main arterial roads in areas such as Tyseley (to the south-east of Birmingham city centre) and Tame Valley (to the north-east) were developed. ‘In striking contrast to the old central industrial districts,’ factories were built ‘of a high standard’ and in more open space. Areas such as Tyseley and Tame Valley, often three to five miles from the city centre, offered cheap land, increased floor space, and further room to expand if necessary. The West Midlands Group saw the ‘rapid growth of industrial ribbon development’ as having developed ‘side-by-side with the increase of road transport’. The rise in road transport allowed some factories to move out of congested central areas, and still retain links with other factories in their network through motor transport on the arterial roads. Briggs argued that it was ‘because of the necessity for quick communications, [that] there was industrial ribbon development on the main roads out of the city.’ Pre-war industrial ribbon development was not overly extensive however; the map below (Figure 2:3) showed that in the 1930s, much of the industry was still located in the congested central areas.

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20 West Midlands Group, *Conurbation*, p. 150.
22 West Midlands Group, *Conurbation*, p. 143.
Figure 2:3 - Communications and the distribution of industry in Birmingham, 1948.

The map showed some evidence though of industrial growth along the principal roads (marked in black lines), towards the north-east especially. Briggs argued that in 1938, the actual location of firms in Birmingham ‘showed that the old lines of district demarcation
had not been completely obliterated, particularly in the old central core of the city.'

Many factories in central Birmingham were reluctant to move out of the central areas due to inter-connections with other factories that performed ‘consecutive processes’; a study from 1971 estimated that 40 per cent of small plants in metalwork and light engineering supplied components or equipment for the vehicle industry. In 1951, 75 per cent of manufacturing plants employed 11 to 99 people, which showed the importance of small industrial operations in Birmingham. This large quantity of small plants relied on quick access to other factories in the manufacturing process in order to supply parts. There was an inter-dependent structure, in which factories relied on other factories for certain parts of their operations; this was why many of the factories had previously been cramped together in central areas. One result was a reluctance of many small factory owners to move away from the network they so closely relied upon for business.

Abercrombie and Jackson in their *West Midlands Plan* of 1948 recommended improvements to the road network in order to allow factories to be geographically further apart, yet to retain connectivity via speedier travel along a new road network:

One can think of no more likely way of attaining some dispersal from the congested parts of the Conurbation than by putting new industrial groupings within easy reach of those existing. If physical proximity in or near the Conurbation is undesirable, it is only possible to achieve a relative nearness in terms of time. Should two factories be remote from each other by half-an-hour’s travel there is little difference whether it be three or four miles across the congested town, or twenty to thirty miles away by fast road.

This was necessitated by their demand for a greater decentralization of industry out of the city altogether. Birmingham had suburbanised heavily by the 1940s, but industry had not followed at the same rate. The *West Midlands Plan* argued that the ‘overcrowded centre’

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26 There were 2237 manufacturing plants in Birmingham in 1951, of which 1668 employed 11 to 99 people; City of Birmingham Central Statistical Office, *City of Birmingham Abstract of Statistics* (Birmingham, 1952).
needed to be remodelled along lines of decentralisation, in order for both housing and industry to ‘attain proper economic modern standards.’ Abercrombie and Jackson proposed to decentralise both housing and industry at ‘points outside a twenty mile radius from the Conurbation.’ This was the distance at which they argued there was unlikely to be:

Any large-scale daily movement of workers to and fro. If people, though located away still travelled backwards and forwards, central congestion would be worse than ever and great expense imposed on the workers. Beyond the twenty mile limit there would be more assurance of dispersal being permanent, with industries and people thus moved settling down, becoming attached to their new communities and building up their own focal points. Abercrombie and Jackson were wary of the prospect of Birmingham becoming a commuter city and the resultant pressures on the road network, such as congestion, that would develop. This suggested that they were worried about the opportunities that the arterial roads presented; people could live further away from work, yet still be taken into the centre by a growing municipal bus network or private car.

The growth of suburbanisation and ribbon development encouraged both the West Midlands Group and Abercrombie and Jackson in 1948 to recommend Birmingham’s footprint be contained and further growth restricted in order to protect surrounding countryside. The West Midlands Group argued that:

The rapid development of road transport between the wars produced … a new phenomenon – the sprawling “residential area” which spread out in ribbon development beyond the suburbs for miles into the surrounding country.

The map below (Figure 2:4) highlighted this problem; Birmingham and Smethwick to the west had long been joined by continuous urban development, but by 1948 a similar

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28 Ibid, chapter 3.
29 Ibid.
30 West Midlands Group, *Conurbation*, p. 184.
situation had started to form in the north towards Sutton Coldfield, and the south towards Solihull.\textsuperscript{31}

\textbf{Figure 2:4} – ‘Redevelopment in the green setting’ in Birmingham, 1948.


\textsuperscript{31} Figure 2.4 - red represented urban developments, and green represented the ‘green setting.’
The West Midlands Group lamented the ‘increasing attraction of the countryside for the town dweller’ as bringing ‘unfortunate results’:

The improvement in terms of transportation has made it possible for town workers to live farther and farther from their work and for their families to enjoy the countryside environment – during the brief period that is, before the whole areas lapses into a featureless suburb. Urban development and urban sprawl destroyed the amenities of thousands of square miles of English countryside in two decades [1920s and 1930s].

There was no official green belt policy in operation in Birmingham until 1975. The West Midlands Group however argued that areas of the countryside required protection from increases in urban sprawl; due to factors such as loss of valuable agricultural land, the West Midlands Group argued that ‘we can no longer afford the expansive and uncontrolled sprawl of the period 1919-1939.’ This led the West Midlands Group to propose that the only way to preserve the countryside was to ‘prohibit all development, except that associated with agriculture, beyond a certain limit set around existing towns or new towns.’ There was a concern that the radial routes, described as ‘tentacles’ by the West Midlands Group, damaged the integrity of the countryside and significantly heightened the risk of more urban development through ribbon development. An apprehension towards urban sprawl had developed throughout the British planning community since the 1920s, particularly with the formation of the Council for the Preservation of Rural England in 1926. This interest group was founded in an initiative led by Abercrombie in his year as President of the Town Planning Institute. It was therefore no surprise that Abercrombie and Jackson’s West Midlands Plan also recommended that ‘no new building should take place [on the fringes of the Conurbation] … except to provide for the population already there.’ Publications such as England

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32 West Midlands Group, Conurbation, p. 209.
37 Abercrombie & Jackson, West Midlands Plan, chapter 7 section 12.
and the Octopus by architect Clough William-Ellis in 1929 added further weight to the argument of containing the tentacle-like development of urban sprawl.38

The arterial roads of Birmingham in the inter-war period successfully encouraged some housing, commerce and industry to move out of the centre, and were also seen as a threat to the surrounding countryside and greenery. Decentralization, Peter Hall noted, was ‘already observable in the 1930s but … gained momentum in the 1960s.’39 It would therefore be incorrect to suggest that Birmingham’s urban form began to be transformed in the post-war decades by roads and the rise in car ownership. If anything, rising car ownership ‘was in part a response to increasing decentralization of populations from the cores to suburban fringes.’40 Housing, for example, had already decentralized substantially by 1939.41 Employment and commerce however (though some examples did occur) had not decentralized so rapidly.42 Hall argued that even in the 1950s, there was still only a ‘very modest tendency to decentralize’ employment. During the period 1951-1961, the central core gained 65,000 workers, and the ring 42,900: Hall calculated this represented only a relative decentralization of 1.74 in terms of the share of the core, which was ‘a remarkably low index for such a large and apparently congested conurbation.’43 Locations of work did not decentralise as quickly as housing in Birmingham, and therefore placed greater emphasis on the road network of the city to enhance connectivity. It was no surprise therefore that the radial routes gained importance as shopping destinations; as more people used the routes to travel from housing at the edge of the city to work towards the centre, the locations along the roads represented good business opportunities due to greater passing traffic. The private motor car and public road transport network offered an opportunity to live outside the city centre, but still access central urban services that had not decanted so quickly.

The Development of the City Centre and the Restriction of Urban Sprawl – the 1950s and 1960s

39 Hall, Urban and Regional Planning, p. 120.
40 Ibid, p. 120.
42 Hall, Urban and Regional Planning, p. 120.
The plans of Abercrombie and Jackson, and the West Midlands Group, firmly cemented the notion of containment of urban sprawl in Birmingham. Urban development at the fringes of the city became more restricted throughout the 1950s and 1960s, but during this period the city centre underwent a transformation. The implementation of the Inner Ring Road scheme (Figure 2:5) was designed to address the ‘medieval’ street layout in the city centre, which the Corporation in 1952 believed ‘cannot cope with the volume of traffic of to-day’. The Corporation’s Development Plan highlighted the pressures on the existing road network by estimating that 250,000 people converged on the city centre daily from the suburbs and outlying districts. The Inner Ring Road was not planned solely to solve the city centre congestion problem; the Corporation argued that the Inner Ring Road could revitalise the city centre as a business and leisure location:

The construction of the Inner Ring Road … will encompass the rebuilding of much old and unsuitable property, create precincts for shopping, commerce, etc., and providing sites for car parking whilst achieving the relief of shopping congestion by spreading and increasing the area of the City centre.

The planning and adoption of the Inner Ring Road in Birmingham was one of the most significant factors in the Corporation’s development of the ‘motor city.’ The Corporation had no desire to exclude cars from the city centre; it was evidence of planning for the motor car, not in response to it (in 1952, the number of private motor vehicles registered in Birmingham was only 60,306 – the boom in car ownership was to gather momentum later from the late-1950s). The Inner Ring Road proposed to create an additional 5,049 frontages, as the Corporation insisted that the majority of ground floor frontages of buildings which lined the route should be developed as shopping frontages. This was a policy that responded to one of the problems that Conurbation highlighted, in that the arterial roads had encouraged new shopping facilities to set-up along those routes leading away from the centre. Instead, the Inner Ring Road represented an attempt by the Corporation to halt this trend and reinvigorate the centre as the shopping hub. Not only did the Inner Ring Road provide new frontages, it was also seen as a way to ‘clearly define

\[45\] Ibid, p. 61.
\[46\] Ibid, p. 62.
\[48\] City of Birmingham, Development Plan (1952), p. 41.
the extent of the central shopping, business and commercial area, and thus enhance the value of and encourage the rebuilding [of displaced shops and offices] on existing sites which are becoming ripe for redevelopment.\textsuperscript{49}

\textbf{Figure 2:5 - Plan of the Birmingham Inner Ring Road, 1952.}


\textsuperscript{49} Ibid, p. 41.
The successful growth of commercial facilities in the city centre was evident by 1963; there was an increase of 2.4 million and 2.9 million square feet in shopping and office floor space respectively between 1939 and 1963.\(^{50}\) Most of the shopping development replaced demolished premises, therefore the total floor space of shopping facilities only expanded 2.3 per cent from 1939 to 1963. Office development however largely was added to existing premises; between 1939 and 1963 office floor space expanded by 25.9 per cent (from 5.8 to 7.3 million square feet) in Birmingham city centre.\(^{51}\) The further success of office development in Birmingham city centre was highlighted in the vast growth in employment in office-based occupations (Table 2:1).

Employment in office-based roles more than doubled from 1951 to 1971, whereas employment for Birmingham as a whole dropped 0.5 per cent. In 1961, 45.2 per cent of all jobs in insurance, banking and finance in the West Midlands were located in Birmingham, which showed the strong attraction of the city for office-based employment.\(^{52}\) The rebuilding of Birmingham city centre in the 1950s and 1960s was encouraged by the creation of new frontages and sites located along the Inner Ring Road. The development of the central road system in Birmingham during this period was one of the most important determinants of urban form in the city. The city centre of Birmingham underwent a substantial transformation during the 1950s and 1960s; Chapter Three elaborates on this theme further by examining the development of traffic architecture associated with the Inner Ring Road within Birmingham city centre.

### Table 2:1 - Employment figures for insurance, banking, finance and professional services in Birmingham, 1951-1971

<table>
<thead>
<tr>
<th>Occupation</th>
<th>1951</th>
<th>1961</th>
<th>1971</th>
<th>Per cent change 1951 – 1971</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance, Banking, Finance</td>
<td></td>
<td></td>
<td></td>
<td>117.7</td>
</tr>
<tr>
<td>Professional Services</td>
<td></td>
<td></td>
<td></td>
<td>109.2</td>
</tr>
</tbody>
</table>


\(^{51}\) Ibid, p. 5.

The primary aim of the housing strategy of Birmingham Corporation in the 1950s and 1960s was to undertake a vast slum clearance programme as quickly as possible. In 1945, 21 per cent of Birmingham’s housing stock was deemed as ‘ripe for [immediate] demolition’ under slum clearance, with a further 15 per cent earmarked for demolition upon completion of urgent slum clearance. The Corporation’s Development Plan (1952) declared the relief of housing congestion as a main priority, and five central redevelopment areas were targeted in the first round of slum clearance. This urgent demand for slum clearance in the five central redevelopment areas was highlighted by the fact that out of 30080 dwellings, 60 per cent were back-to-back housing and 66 per cent were without separate sanitary accommodation. In the five redevelopment areas before slum clearance began 102,896 people were resident, (at 32.7 dwellings per acre). When the redevelopment was completed the density of population and housing had vastly decreased; 56,996 people resided there (at 23.7 dwellings per acre). Around 45,900 residents required re-accommodating by the Corporation elsewhere in the city, and the Development Plan estimated in 1952 that there was enough undeveloped land available for residential purposes in the city to accommodate 23,000 dwellings. The slum clearance of the five central redevelopment areas meant that more housing was required to accommodate displaced residents in new housing developments towards the fringes of the city; Gordon Cherry called this ‘the most profound social dislocation in such relatively short time in the country’s urban history. A 350-acre site (20,000 people) at Castle Bromwich airfield (five miles to the north-east of the city centre) was purchased by the Corporation in 1959, and a further 1500 acres (50,000 people) were acquired at Chelmsley Wood (seven miles east of the city centre) in 1964. Birmingham continued to

53 Birmingham’s total housing stock was 297,000 in 1945, of which 63,400 required demolition under slum clearance, and 45,000 required demolition after slum clearance was completed; West Midlands Group, Conurbation, pp. 91-92.
54 See Chapter Four.
57 City of Birmingham, Development Plan (1952), p. 4.
58 Cherry, Birmingham, p. 174.
suburbanise substantially throughout the 1950s and 1960s, and the outer ring became increasingly dominant in terms of housing location (Table 2:2).

Table 2:2 - Population of Birmingham central wards, middle ring and outer ring, 1961-1971.

<table>
<thead>
<tr>
<th></th>
<th>Central Wards</th>
<th>Per Cent</th>
<th>Middle Ring</th>
<th>Per Cent</th>
<th>Outer Ring</th>
<th>Per Cent</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>149000</td>
<td>13.5</td>
<td>378000</td>
<td>34.1</td>
<td>580000</td>
<td>52.4</td>
<td>1107000</td>
</tr>
<tr>
<td>1971</td>
<td>76137</td>
<td>7.5</td>
<td>326914</td>
<td>32.2</td>
<td>611528</td>
<td>60.3</td>
<td>1014579</td>
</tr>
</tbody>
</table>


A result of this suburbanisation was increased pressure on the road network as people converged towards central areas for work by motor car or bus (the location of industry will be analysed later in this section); 35.8 per cent of residents were employed in the central wards in 1952. This was significant as just over a third of the city’s population travelled to the central wards for employment, an area which covered around 4,000 acres. By 1971, 69.1 per cent of residents in the middle ring and 77.4 per cent of residents in the outer ring of the city used a motor car or bus to travel to work, which showed the importance of the road network for residents travel to work patterns. The Development Plan in 1952 proposed a vast twenty-year road building programme to provide for the ‘general relief of traffic congestion in the city’; this included the construction of Inner, Middle and Outer Ring Roads, improvements to arterial roads, and the creation of new by-pass and link roads. The continued suburbanisation that occurred in Birmingham in the 1950s and 1960s required an improved road network in order to facilitate the movement of a large amount of the population back into the central areas for employment.

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60 A direct statistical analysis of population of central wards, middle ring and outer ring between 1951 and 1971 is not possible due to boundary changes in 1961.
One of the main problems for the Corporation during the 1950s and 1960s was that while more people lived towards the fringes of the city, employment opportunities did not decentralise at the same rate. The *Development Plan* in 1952 continued the arguments made by the West Midlands Group regarding the reluctance of firms to relocate away from their established networks; the Corporation warned that ‘many of Birmingham’s industries are interdependent, supplying materials, goods and services to other factories.’ In 1967 the West Midlands Economic Planning Council re-affirmed this stance, by stating that ‘the West Midlands has a higher than average proportion of firms with close industrial links … which may be most frequent in the region’s metal using industries.’ In 1951, 101,943 persons were employed in the metal industries in Birmingham, and by 1971 this had only decreased 4.7 per cent to 97,145. A large proportion of the city’s workforce (16.7 per cent in 1951, 16 per cent in 1971) was employed in an industry reluctant to decentralise due to its desire to remain close to other factories in their production networks. Individual firms had to ‘pay close attention to their location in relation to that of their main suppliers and customers.’ The competitive advantage, particularly of many of the small firms in the metalwork or light engineering industries, was ‘based largely on their ability to keep their overhead costs below those of their customers [through] inexpensive premises [and] local labour.’ Industries within the city which employed large numbers of people, such as metal works and engineering, were reluctant to move away from the established industrial networks located towards the centre of the city. There was a fear that competitiveness would be weakened by removal from close proximity to fellow suppliers and customers. The Corporation was reluctant to force industry out of central areas too; for example the *Development Plan* recommended increasing industrial usage from 182 acres to 347 acres in the central redevelopment areas. Forcing firms out of the city was hardly appealing to the Corporation since this would result in reduced incomes from business rates. The Corporation rejected the idea that firms should be ‘harassed’ to relocate away from the city centre, due to a belief that industry was ‘the life blood of the city.’ Instead of

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66 Metal industries include the categories ‘metal manufacture’ and ‘metal goods not elsewhere specified’ as defined in City of Birmingham *Abstract of Statistics*.
70 Sutcliffe & Smith, *History of Birmingham*, p. 139.
planning for the removal of industry from the city, the Corporation believed that improving the road network would allow for more efficient access to premises for employees, customers and other firms.

A major issue for the relocation of industry to overspill areas, according to the West Midlands Economic Planning Council, was that there were no financial incentives for firms in central Birmingham to relocate to an overspill area (unlike if a firm relocated to an assisted/development area). Industrial Development Certificates (IDCs) played a role in limiting any relocation of factories in the central conurbation to overspill areas just beyond the West Midlands conurbation. The Board of Trade split industry in the West Midlands into mobile and non-mobile categories; any mobile industry that requested to move was ‘encouraged’ to move away from the West Midlands and to a Development Area, and non-mobile industry was allowed to remain where it was ‘on the grounds that its links with other conurbation industry were too strong to move it at all.’

The Birmingham Chamber of Commerce in 1968 surveyed 968 firms regarding industrial relocation; 121 firms had considered expansion but decided not to apply for an IDC, while a further 77 firms had held informal discussions regarding applying for an IDC but not pursued the issue further. A situation existed where non-mobile industry was reluctant to decentralise away from established networks they were reliant on for trade and component parts, while mobile industry was reluctant to seek new premises for fear of being re-directed away from the West Midlands towards Development Areas in the North or Wales. Peter Hall argued that policies of the Board of Trade maintained the dominance of the conurbation, and the rapid development of ‘commuter dormitories, in or just beyond the green belt, became inevitable.’ The lack of financial incentives to encourage relocation into overspill areas also made the proposition of relocation less attractive to firms in central Birmingham.

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71 Assisted/development areas were largely located in Wales and the North of England, see Hall, *Urban and Regional Planning*, p. 109.
72 Any firm that wished to locate or expand in ‘prosperous’ regions such as the South-East and the Midlands required an IDC from the Board of Trade before they could proceed. The Board of Trade therefore could encourage firms to build in development areas by restricting IDC approvals in ‘prosperous’ regions; Hall, P., Gracey, H., Drewett, R., & Thomas, R., *The Containment of Urban England: Vol II – The Planning System* (London, 1973), p. 74.
was further pressure on the city’s road network as increasing amounts of people commuted from the fringes and outside of the city towards the central areas for employment.

The adoption of an informal green belt policy also had important repercussions for mobility in Birmingham. The Corporation had not formally adopted any green belt policies by 1965, but based much of its planning decisions around proposals made by Abercrombie and Jackson in the *West Midlands Plan* of 1948. Peter Hall criticised this plan, calling it ‘hopelessly outdated by events’ by the mid-1960s; the only possible response of local government was ‘to cut back further growth as far as possible within the inner limits of the green belt, somehow hoping to contain the uncontainable.’

Research from the Centre for Urban and Regional Studies at the University of Birmingham in 1970 commented that in the preceding few years ‘it has become clear that the dichotomy of town and country is breaking down in response to mobility and affluence.’ The Department of Economic Affair’s *The West Midlands: A Regional Study* was published in 1965 in an attempt ‘to provide a new regional strategy for the West Midlands [and] to replace the outdated Abercrombie and Jackson strategy.’ The study referenced the green belt which Birmingham Corporation had informally operated since 1948, but stated that this ‘could contain the conurbation’s outward pressure for a time, but could not relieve it.’ The informal green belt had led to relief being sought ‘through continued private housing development in enclaves within the green belt or at places beyond it – with a consequent increase of commuting.’

The *West Midlands Study* suggested that if the informal green belt policy continued, then ‘the next outlet for conurbation-generated or conurbation-oriented growth must be development just beyond the green belt, within commuting range of the conurbation.’ In combination with a lack of ‘steerable’ industry and the reluctance of factory owners in Birmingham to move premises, this development had important repercussions for automobility in Birmingham. An increasingly mobile population thus

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76 Ibid, p. 535.
80 Ibid, p. 61
81 Ibid, p. 64.
required the ‘necessary improvement of communications’ to serve those people travelling from the green belt and just beyond into Birmingham for work.\textsuperscript{82} Improved roads and increased car ownership allowed people the opportunity to live further out of the city (either at the edge of the city, in the green belt, or even beyond the green belt entirely), and reduced pressure on industries to decentralize. The improved road network facilitated commuter traffic; hence the central industries were still easily accessible for the suburbanised population. The problem was that between 1952 and 1965, private car ownership in Birmingham approximately tripled from 60,306 to 184,980.\textsuperscript{83} The \textit{West Midlands Regional Study} warned that a continuation of this policy meant ‘exacerbation of the road and transport problems both inside the conurbation and around it would become acute.’\textsuperscript{84} It would put further pressure on the city’s road network to facilitate the high levels of in-traffic. A number of satellite towns were suggested, such as Stafford, Lichfield and Tamworth, that could accommodate 50,000 people from Birmingham. An additional 140,000 could be catered for with a ‘thickening up of the settlement pattern all round the green belt’, but this still left a shortfall of 150,000 people.\textsuperscript{85} Instead, to relieve pressure on Birmingham, the \textit{West Midlands Regional Study} recommended the development of centres ‘well beyond commuting range of the conurbation’, such as at Swynnerton (between Stafford and Stoke-on-Trent), Worcester, and Dawley new town development. It was suggested that this policy would meet the 150,000 shortfall up to 1981.\textsuperscript{86} The \textit{West Midlands Regional Study} argued that these sites would be ‘sufficiently well-placed for industrial attractiveness’ as they were located ‘on national lines of communication which are either already good or are going to have to be made good anyway.’\textsuperscript{87} If Birmingham was to solve the overspill problem, then jobs needed to decant in addition to housing.

In 1966, on average there were 0.43 cars per household, though there were significant disparities in ownership depending on geographical location within the city. Car ownership levels were much greater in the outer wards of the city; for example in Kings Norton there were 0.55 cars per household, in Brandwood 0.56 per household, and

\begin{itemize}
  \item \textsuperscript{82} Ibid, p. 64.
  \item \textsuperscript{83} City of Birmingham Central Statistical Office, \textit{City of Birmingham Abstract of Statistics} (Birmingham, 1966).
  \item \textsuperscript{84} Department of Economic Affairs, \textit{The West Midlands}, p. 66.
  \item \textsuperscript{85} Hall et al, \textit{The Containment of Urban England: vol. I}, p. 538.
  \item \textsuperscript{86} Ibid, p. 538.
  \item \textsuperscript{87} Department of Economic Affairs, \textit{The West Midlands}, p. 68.
\end{itemize}
in Hall Green 0.6 cars per household. By contrast, in central wards such as Newtown, Duddeston and Aston, the ownership levels were much lower at 0.18, 0.22, and 0.23. The urban form displayed in the 1950s (which originated in the pre-war decades), of people living further out towards the edge of the city, was one that was further encouraged by the rise in car ownership. Every other household on the fringes of the city owned a car, which made travelling to work in established locations of industry in the city centre much simpler. It represented the functionality of a ‘motor city’; a city that relied on high levels of commuting back into the centre each day. As will be explored later in the thesis, it was not solely commuting that residents were increasingly utilising the motor car for, but also for shopping and leisure purposes.\textsuperscript{88} Popular entertainment facilities, particularly those developed in the 1950s and 1960s such as the Big Top and Bull Ring shopping centres, were located in the city centre, and thus demanded further usage of the roads for people to gain access by bus or car from the outer ring of the city.

\textbf{The Decline of the ‘Motor City’ – the 1970s}

The population of Birmingham from 1961 to 1971 dropped from 1,113,755 to 1,014,670. The Corporation’s \textit{Structure Plan} of 1973 indicated that ‘the major reason for the substantial drop in population has been the rate of net outward migration.’\textsuperscript{89} It confirmed that on the outer edges of the city, ‘low density suburbs have now substantially taken up all the available land for development … made possible by the greater availability of both public and private transport.’ A situation existed where ‘those who can afford to move, do so.’\textsuperscript{90} There were still significant disparities in housing amenity between the central wards, middle ring and outer ring, which highlighted why residents, who could afford to, desired to leave the central wards and middle ring.

\textsuperscript{88} See Chapter Seven.
\textsuperscript{89} City of Birmingham, \textit{Structure Plan: Written Statement}, (Birmingham, 1973), p. 20
Table 2.3 - Housing conditions by ward location in Birmingham 1971.

<table>
<thead>
<tr>
<th>Ward Location</th>
<th>No Hot Water</th>
<th>No Bath</th>
<th>No Inside WC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Wards</td>
<td>20.8</td>
<td>22.6</td>
<td>23.8</td>
</tr>
<tr>
<td>Middle Ring</td>
<td>15.2</td>
<td>16.7</td>
<td>23.0</td>
</tr>
<tr>
<td>Outer Ring</td>
<td>1.7</td>
<td>1.7</td>
<td>10.1</td>
</tr>
</tbody>
</table>


The vast investment in a new road network for Birmingham also raised issues regarding the desirability of residing in the central wards and middle ring. The 1970s represented a decade when the notion of rejecting the ‘motor city’ ideal was increasingly adopted by residents. Automobility appeared to have contributed to a decline in desirability for living in the central wards and middle ring. For example, residents of the middle ring suburb of Edgbaston protested in 1972 regarding the proposed construction of an eight-lane interchange (as part of the Middle Ring Road construction), complaining that it would cut off housing from the nearest shops, and inflict unacceptable levels of traffic noise upon residents. In 1977 Edward Hanson, Chairman of the Leisure Services Committee, called for the entire city’s subways – implemented to allow for traffic on the new roads to be uninterrupted by pedestrian crossing - to be ‘bricked up’ in order to reduce the number of muggings, and he stated that ‘a lot of people will not come into the centre after 9 o’clock at night.’ In 1973 a Corporation-commissioned questionnaire was issued to residents of the city via the press; only 2.67 per cent of respondents stated that ‘new road building and improvements’ should be a priority, and 80 per cent believed that ‘the use of the private motor car should be restrained.’

The Corporation’s *Structure Plan* of 1973 represented a significant shift in urban policy. The strategies of the 1950s and 1960s had served to reinforce the centre of the

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91 Wards grouped into central wards, middle ring and inner ring based on boundaries defined by Sutcliffe & Smith, *History of Birmingham*, p. 490.
92 By 1967, the Corporation’s debt in respect of highways and bridges was £22.26 for every resident of the city, more than twice the amount of any other provincial city; Sutcliffe & Smith, *History of Birmingham*, p. 399.
93 ‘Noise Protest by Ringway Tenants’, *Sunday Mercury*, 3 December 1972; further examination of environmental repercussions of road construction on nearby housing is discussed in Chapter Six.
95 Approximately 3,850 questionnaires were returned to the Corporation for analysis; *Structure Plan* (1973), pp. 66-67.
city; slum clearance programmes had cleared much of the undesirable housing, construction of the Inner Ring Road had created new spaces for commercial development within the centre, and there had been no policy from the Corporation to force industry out of the central areas. The *Structure Plan* stated that the policies of the 1950s and 1960s ‘advocate[d] the retention of a dominant city centre’ as many residents had moved to reside in the outer ring or beyond, yet many employment opportunities remained in the centre. In a marked shift away from the commitment to road construction found in the *Development Plan* of 1952, the *Structure Plan* instead argued that the cost of a transport system ‘built for free choice private vehicle dominance, and catering ultimately for high demand will be high and not just in financial terms.’ 96 The Corporation insisted that the present road system served ‘a function, but with limited capacity.’ This statement was in fact an acknowledgment that the city’s transport system, based largely around road construction, was inadequate. By 1972, private car registrations in Birmingham had risen to 199,350, yet the city’s road network was still largely based upon the recommendations of the 1952 *Development Plan*, when private car registrations within the city had been much lower at 60,306. 97 It was unsurprising that such a system struggled to cope under the strain of sustained growth in car usage in the city. This did not mean that road construction was halted altogether in the city; the *Structure Plan* allocated £63,745,000 for highway schemes from 1972 to 1981 (including approximately £17,000,000 to complete the Middle Ring Road). 98 In order to provide a transportation system that was less reliant on ‘free choice private vehicle dominance’, the Corporation proposed increased investment on improved radial public transport rail routes. The map below from the *Structure Plan* (Figure 2:6) highlighted the routes suggested, from Erdington to Sutton Coldfield, Selly Oak to Bromsgrove, Tyseley to Solihull, and Tyseley to Stratford.

The Corporation intended the improved rail routes to act as drivers for growth of industry and employment away from the centre. Two of the improved rail routes, from Aston and Erdington to Sutton Coldfield, and through Selly Oak and Kings Norton to Bromsgrove, were to be within areas of major housing land availability. 99 The Corporation proposed to begin concentrating housing development in clusters around

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99 Ibid, p. 58.
improved rail routes, such as along the Redditch/Bromsgrove line and the Sutton Coldfield line. The *Structure Plan* stated that within these areas, housing located close to stations ‘would be aimed at encouraging the population to make use of the improved public transport facilities.’ The proposals suggested providing 314 acres of industrial land (indicated as dark red patches on Figure 2:6) primarily in the east, for ‘industrial restructuring purposes.’ In the short-term major growth of services was still targeted in the city centre, but towards the end of the 1970s it was suggested that ‘service employment centres would be developed in areas of concentration near to the rail stations at Aston, Erdington, and Kings Norton’ (indicated as vertical black shading on Figure 2:6). The policy to entice jobs away from the centre (either industrial jobs to the east or service jobs to the north-east and south-west) and encourage housing located close to stations to utilise the railway rather than roads, represented the Corporation’s final admission that the answers to the future of the city could not be solved by ‘private vehicle dominance.’

It was not, however, a total shift away from car dependency. In effect, the proposed radial rail route improvements were an early example of park-and-ride arrangements. Colin Pooley noted that by the 1970s, the car and commuting had already locked themselves together. Regarding rail networks, Pooley argued that ‘over the twentieth century the British rail system shrank from a dense network that penetrated most parts of the country to a more skeletal system primarily serving major cities and suburban commuters.’ The 1960s, with the publication of the Beeching Report in 1963 in particular, had led to the closure of much of the network, and left rural areas with limited rail provision. The Corporation’s plans for improved rail radial routes served those who resided along existing lines, but for those not within close proximity, especially on the rural fringes, there was still a need to travel to the stations along the route, demanding the continued use of a car. On the issue of the future use of commuting by rail, architect Brian Richards wrote in 1969 that railway stations might not be accessed by people walking to them, but by good road connections allowing buses and cars to drop passengers off. He advised that ‘the architecture of these interchange points will be an

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100 Ibid, p. 77.
101 Ibid, p. 58.
102 Ibid, p. 58.
103 Pooley, ‘Landscapes without the Car’, p. 270.
104 Ibid, p. 270.
important factor [in] deciding whether a commuter can be coerced into leaving his car as far outside the city as possible by ensuring him a relatively painless transition and a fast, comfortable trip."\textsuperscript{105} This was similar to the strategy that Birmingham Corporation proposed in 1973.

**Figure 2:6** - Plan for improved rail routes in Birmingham *Structure Plan*, 1973.


\textsuperscript{105} Richards, ‘Urban Transformation and City Form’, p. 243.
A statistical analysis of workplace and residential locations reinforces the argument that by the 1970s, Birmingham’s appeal as a destination for commuters had grown substantially.

Table 2:4 – Per cent of household and workplace location for Birmingham residents, 1951-1981.

<table>
<thead>
<tr>
<th>Year</th>
<th>Reside and Work in Birmingham</th>
<th>Work in Birmingham, Reside Outside City</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>85.2</td>
<td>14.8</td>
</tr>
<tr>
<td>1966</td>
<td>76.3</td>
<td>23.7</td>
</tr>
<tr>
<td>1971</td>
<td>72.2</td>
<td>27.8</td>
</tr>
<tr>
<td>1981</td>
<td>68.5</td>
<td>31.5</td>
</tr>
</tbody>
</table>


By 1981, nearly one third of the city’s working population travelled into Birmingham from outside the city boundaries. It is worth noting this was not an experience unique to Birmingham; in 1981 40.8 per cent of workers in Liverpool, and 55.8 per cent of workers in Manchester resided outside the city.106 The factor that set Birmingham apart from other provincial cities in Britain was found in the percentage of workers in the city who travelled to work by motor car:

Table 2:5 - Per cent of journeys made by car by persons working within Birmingham, 1966-1981.

<table>
<thead>
<tr>
<th>Year</th>
<th>Birmingham</th>
<th>Manchester</th>
<th>Liverpool</th>
<th>Newcastle</th>
<th>Leeds</th>
<th>Sheffield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>27.7</td>
<td>21.6</td>
<td>18.3</td>
<td>20.5</td>
<td>21.1</td>
<td>23.3</td>
</tr>
<tr>
<td>1971</td>
<td>36</td>
<td>30.9</td>
<td>27.7</td>
<td>29.3</td>
<td>30.2</td>
<td>31.7</td>
</tr>
<tr>
<td>1981</td>
<td>49.7</td>
<td>47.4</td>
<td>40.2</td>
<td>43.4</td>
<td>48.3</td>
<td>44.8</td>
</tr>
</tbody>
</table>


The figures highlight that in the 1960s, workers within Birmingham used a car to travel to work more extensively than workers in other provincial cities in Britain. This further confirmed Birmingham’s role as Britain’s ‘motor city’ in the 1950s and 1960s. The situation began to change in the 1970s; Manchester and Leeds displayed growth of car usage for travel to work of persons employed within the city of 16.5 per cent and 18.1 per cent between 1971 and 1981, whereas Birmingham’s growth was only 13.7 per cent, indicating in the 1970s car usage in other cities started to catch-up with that of Birmingham. This is potentially explainable by the fact that Birmingham began its vast road building programme earlier than other provincial British cities. Birmingham Corporation began construction on their Inner Ring Road in 1957, but Leeds for example did not commence construction of its Inner Ring Road until 1964. The urban form of Birmingham developed through the 1950s and 1960s encouraged motor car usage on the new road network, built or under construction. This was facilitated by a commitment from the Corporation to substantial road-building within the city; for example the Aston Expressway, planned in the 1960s, was not designed for local, intra-city travel. Chairman of the Public Works Committee Councillor Harold Edwards said of the road:

This will be the main leader from the centre of Birmingham, it will go direct to the motor road [motorway], and it will mean the centre of Birmingham will be communicated with every part of the country directly without having to use any of the old-fashioned, normal roads.

The pressure of the Corporation’s ‘motor city’ strategy on urban policy began to wane by 1973. The Structure Plan attempted to look at provision beyond the private motor car. Policies suggested included refusing planning applications for out of town developments where it was ‘considered that these would reduce the trading potential and detract from investment in existing shopping centres in the city.’ The Corporation argued that ‘despite the forecast increase in the levels of car ownership … local shops and corner shops will have a vital role to play for those groups in the community who do not own a

car or have access to one for shopping purposes.'

These policies suggested the Corporation aimed to plan for a more socially just city where the car no longer dictated policy and determined the urban form.

**Conclusion**

From 1945 to 1973, it is clear that the road network and the rise in car ownership played a significant role in shaping the urban form of Birmingham. Housing developed on the fringes of the city was enabled by the arterial road network and the provision of ring roads, allowing people greater flexibility over their mobility. This was not solely through car ownership, but initially through improved bus routes to municipal estates. Industries were under little pressure to decant; instead the Corporation provided the means for people to travel to work in the central areas yet still reside towards the edge of the city. The urban form of Birmingham in this period was one that reinforced the notion of automobility. Sociologist John Urry has argued that:

> Automobility divides workplaces from homes, producing lengthy commutes into and across the city. It splits homes and business districts, undermining local retail outlets to which one might have walked or cycled, eroding town-centres, non-car pathways and public spaces. It separates homes and leisure sites often only available by motorized transport.

This separation of work and home developed in Birmingham during the 1950s and 1960s. Industrial premises were not encouraged to leave the more central areas of the city at the same rate as housing, and this therefore led to a growth of commuting. This was something the Corporation planned for with roads such as the seven-lane Aston Expressway which linked the national motorway network with the city centre. The Corporation lacked any inclination to pursue alternative modes of mobility, and road building dominated transport policy. It was not until the 1973 Structure Plan that an acknowledgment developed that the residents of the city required more than the car to travel around and into the city. Yet by this point, the car was already locked in to the city.

Peter Freund observed that ‘modernist urban landscapes were built to facilitate

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automobility and to discourage other forms of human movement.'\textsuperscript{111} This had been achieved in Birmingham by the early 1970s. Vast expenditure on the network of ring roads and arterial roads meant that the role of roads had been constantly reinforced throughout the previous two decades. Attempts to incorporate rail into the commuting patterns of residents were, perhaps, too late by the 1970s. The car had already played its role in determining the urban form of the city. Car ownership levels reached approximately 200,000 in Birmingham by 1973; it was a mode of mobility that the residents of the city used extensively. Peter Hall suggested that recommendations of people such as Ebenezer Howard and Lord Reith to move towards a policy of decentralising populations (and industry) to self-contained communities away from congested centres ‘seemed less necessary’ as increased car ownership ‘produced greater personal mobility.’\textsuperscript{112} The chapter looked at similar ideas suggested by Abercrombie and Jackson in 1948, but instead of the development of a city where high levels of dispersal of both industry and housing occurred, the Corporation exercised little pressure on industry to relocate on a mass scale. Throughout the history of mobility, where ‘it could be afforded and was feasible [people] have opted for that form of transport that offered the greatest flexibility, privacy and individual control.’\textsuperscript{113} In the 1950s and 1960s, this was through the use of the private motor car in Birmingham.

\textsuperscript{111} Ibid, p. 30.
\textsuperscript{112} Hall, \textit{Urban and Regional Planning}, p. 133.
\textsuperscript{113} Pooley et al, \textit{A Mobile Century?}, p. 225.
Chapter 3 - Traffic Architecture and the Redevelopment of the City Centre

The comprehensive redevelopment of British town and city centres represented one of the hallmarks of British town planning between 1945 and the 1960s. In the early years of the Second World War, there developed nationally a ‘keen realization of the need for comprehensive and radical town planning,’ particularly within central areas that were of a Victorian or industrial nature, deemed as having no ‘historic value.’¹ Town planning in the 1950s showed ‘little sentimentality’ towards existing historic townscapes, and instead city centres ‘were to be made “liveable” not by preserving the familiar … but by projecting a vision of modern vitality.’² One method of achieving this ‘modern vitality’ was through the implementation of new urban road networks, designed to facilitate the flow of the private motor car. The Ministry of Town and Country Planning in 1947 advised local authorities that evidence from the United States of America ‘showed that the volume of business done in a central area [was] directly related to ease of access by motor car and the parking facilities available.’³ City centre redevelopment and road construction was thus entwined, and remained an important consideration for town planners throughout the 1950s and 1960s. Individuals such as Colin Buchanan considered how to plan effectively for city centre redevelopment and accommodate the growth in motor car usage.⁴ Buchanan, in Traffic in Towns (1963) was the first person in Britain to recommend the implementation of ‘traffic architecture’ within city centres.⁵

Traffic architecture was defined by Buchanan as:

Abandoning the idea that urban areas must consist of buildings set along vehicular streets, with one design for the buildings and another for the streets. This is only a convention. If buildings and access ways are thought of together, as constituting the basic material of cities, then they can be moulded and combined in a

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⁴ Car ownership had risen from 4.4 million motor vehicles in Britain in 1950 to 13 million in 1965; Gunn, ‘People and the Car’, p. 224.
⁵ Cherry, Cities and Plans, p. 172.
variety of ways many of which are more advantageous than the conventional street.\textsuperscript{6}

This chapter will explore how Birmingham city centre was redeveloped to incorporate various examples of ‘traffic architecture’ in order to accommodate the motor car: Smallbrook Ringway (particularly the Ringway Centre built 1958-1962), the Central Library as part of the Paradise Circus development (1969-1973), and measures in improving and enhancing traffic flow in the city centre through a series of service tunnels. These case studies show that the development of traffic architecture within Birmingham started in the 1950s, before Buchanan recommended in \textit{Traffic in Towns} in 1963 that more urban redevelopment needed to adhere to this ‘new and largely unexplored field of design.’\textsuperscript{7}

In analysing traffic architecture I have omitted discussing the Bull Ring shopping centre; literature exists elsewhere that has already extensively detailed the development’s linkage to the construction of the Inner Ring Road in Birmingham.\textsuperscript{8} The chapter will instead argue that the development of traffic architecture within Birmingham city centre represented a much wider undertaking than the Bull Ring. I will analyse how Birmingham city centre was redefined, and the role of planning for the car in this redefinition. It will explore the political and commercial pressures that produced the new city centre. Planning of the city centre in Birmingham was not undertaken in response to the car and the rise of mass car ownership, but to facilitate the rise of the motor car, and \textit{for} the car. Peter Mandler argued that British planners in the 1950s were often ‘responding to rather than leading events.’\textsuperscript{9} This chapter will suggest that Birmingham Corporation planning officials were, rather, at the forefront of encouraging traffic architecture in the city centre. It will assess the different approaches to redeveloping the city centre as part of a ‘motor city’, and look at who were the actors in the policy and

\begin{footnotesize}
\begin{enumerate}
\item Buchanan, C., \textit{Traffic in Towns} (Harmondsworth, 1963), p. 68.
\item Ibid, p. 68.
\item Mandler, ‘New Towns for Old’, p. 221.
\end{enumerate}
\end{footnotesize}
implementation of such ideas. Finally, it examines how the needs of the non-motorist, particularly the pedestrian, were considered in the re-planning of the city centre.

**The Inner Ring Road and City Centre Redevelopment**

The influence of inner ring roads on town planning from the 1950s is well established; John Gold has argued that ‘ring roads and radial schemes effectively drove the town planning agenda for many cities’ due to the dominance of the city engineers in the planning decision making processes.\(^\text{10}\) Other groups, such as architects, tended to be marginalised; Birmingham Corporation did not appoint a City Architect until 1952, nine years after Herbert Manzoni and the Public Works Department had introduced plans to implement an Inner Ring Road.\(^\text{11}\) The development of the Inner Ring Road had a profound effect on central Birmingham, which will be explored in the subsequent sections of this chapter. The city centre was redesigned to accommodate the motor car.

The realisation of the Inner Ring Road in Birmingham was the result of processes which began in the early 1900s. It was first suggested by City Engineer Henry Stilgoe, who in 1917 suggested an ‘inner ring’ or ‘kind of loop’ around the city centre to link together arterial roads.\(^\text{12}\) In 1943 the ring road route suggested in 1917 was approved in principle by the Corporation.\(^\text{13}\) The Birmingham Corporation Act was passed by parliament in 1946, which allowed the city to enforce compulsory purchase orders to obtain the land needed to construct the ring road.\(^\text{14}\) In the parliamentary sessions to discuss the bill, Chairman of the Public Works Committee Walter Lewis was asked whether the traffic in the city centre was ‘a matter of considerable magnitude and importance?’ Lewis replied that it was indeed ‘very considerable’, and there was a necessity to address it through the Inner Ring Road scheme, adding ‘we did feel if this scheme was not put into operation in a few years time very little business would be possible in the centre ring of the city.’\(^\text{15}\) The Corporation attached great importance to

\(^{10}\) Gold, *Practice of Modernism*, p. 69.
\(^{11}\) For further details of the tensions between city engineers and architects, see Gold, *Practice of Modernism*, ch. 4.
\(^{13}\) Ibid, p. 401.
\(^{15}\) Cherry, *Birmingham*, p. 201.
the construction of the Inner Ring Road for the economic prosperity of Birmingham’s city centre. Manzoni firmly believed in the economic advantages that improved road networks offered businesses within the city; in 1960 he argued that a (hypothetical) firm that operated 300 vehicles which travelled between five factories in a ‘large city’ could save ‘no less than £20,000 per annum’ if the average speed for the vehicles could be increased from ten to twelve miles per hour. It was not until 1957 that construction started on the Inner Ring Road; the immediate post-war years were marked by austerity, and road building across Britain received only ‘nugatory investment’ from Central Government. In 1955, Minister of Transport John Boyd-Carpenter was ‘impressed’ by the Inner Ring Road scheme, but nonetheless had to consider it ‘within the resources at his disposal.’ The nature of central government road expenditure through the 1950s and 1960s was marked by its ‘stop-start’ nature. The below graph (Figure 3:1) shows that, while central government road expenditure increased substantially from 1950 to 1970, there were times when increases were minimal or slightly decreased (1953-1954, 1960-1961, 1965-1966, 1968-1969). This highlighted that central government funding became limited nationally, not just for Birmingham Corporation, at numerous times during the 1950s and 1960s.

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17 Kynaston, Austerity Britain, p. 461.
18 ‘Minister is ‘Impressed by its Urgency’, Birmingham Mail, 21 November 1955.
It was not until Harold Watkinson assumed the transport brief in early 1956 that progress was made on the Inner Ring Road, when in principle the scheme was accepted into the Ministry of Transport’s four year plan.\textsuperscript{19} In 1957 a grant of £704,384, which represented 75 per cent of the total cost of the scheme, was awarded to Birmingham Corporation from the Ministry of Transport to enable the construction of the first section of the Inner Ring Road.\textsuperscript{20} This did not signify the end of financial matters; Manzoni argued that the Corporation were owed another £228,821 from the Ministry. This was due to a difference of opinions between the Corporation and Whitehall about the cost of providing waiting lanes. The Ministry argued that ‘waiting lanes are not required for the movement of traffic and that they are really in lieu of service roads for which there would not normally be any grant.’\textsuperscript{21} Manzoni recommended the start of work regardless of this difference, and suggested the issue be resolved at a later date. This emphasised that Manzoni was anxious for the Corporation to begin road construction as soon as possible,

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure3.png}
\caption{Central Government road expenditure, 1950-1970.}
\end{figure}

\textsuperscript{19} ‘Start in Summer on Inner Ring Road’, \emph{Birmingham Post}, 23 February 1956.
\textsuperscript{20} LBA: Records of Birmingham City Council and its Committees, Departments and Affiliated Bodies [hereafter BCC] 1/AO/1/1/144, Public Works Committee Minutes and Reports [hereafter PWC], ‘Letter from Ministry of Transport to Town Clerk about Birmingham Inner Ring Road’, 18 January 1957.
\textsuperscript{21} LBA: BCC/1/AO/1/1/144, PWC, ‘Note from Manzoni to PWC about Inner Ring Road Scheme, Section I. Part from Suffolk Street to Queens Drive’, 31 January 1957.
even while the differences in grant allocation remained unresolved. The Inner Ring Road was crucial to the redevelopment of the city centre. Manzoni had produced no central master plan for Birmingham city centre; instead the Corporation compulsorily purchased land adjacent to the proposed Inner Ring Road, which would then be leased to private developers. In January 1957, Manzoni summarised the policy to the Public Works Committee:

As your committee are aware the policy of the Corporation has been to acquire sufficient land in connection with the Inner Ring Road Scheme as will permit proper control and development of the frontages and enable the Corporation to obtain some betterment value from the construction of the new road.22

The decision not to develop a central area master plan was intended to incentivise potential developers.23 The Corporation wanted to allow developers to exert more control over sites. This directly tied together city centre redevelopment and road building in Birmingham; without construction beginning on the Inner Ring Road, adjacent sites remained undeveloped and a substantial amount of rateable city centre land remained unfulfilled.

It was not solely for economic reasons that the Corporation desired to link together city centre development and the construction of the Inner Ring Road. Prominent figures within the Corporation possessed a genuine belief that the future of transport within the country would be based on ownership of private motor cars. In 1956, a Corporation deputation visited Chicago, Washington, Pittsburgh, Philadelphia and New York to study how city officials managed traffic. Frank Price, Chairman of the Public Works Committee, returned from the visit and vociferously forewarned people that the time had come to plan boldly for the motor car; Price later recalled that upon his return to Britain he had ‘trumpeted [the] message loud and clear [that] we needed to prepare for the two or three family car … I was ridiculed, but the cynics hadn’t seen the future; I had.’24

22LBA: BCC/1/AO/1/1/144, PWC, ‘Inner Ring Road Scheme: Land fronting New Road between Hurst Street and Wrottesley Street’, 17 January 1957; The issue of ‘betterment value’ was examined by the Uthwatt Report (1942). Peter Hall stated that this recommended that ‘all property owners should pay a regular betterment levy, calculated at the rate of 75 per cent of the increase of the value of the site alone (without the building) since the previous valuation’; Hall, Urban and Regional Planning, pp. 72-73.
23 Gold, Practice of Modernism, p. 82.
Manzoni gave a speech to the British Road Federation’s international conference that echoed similar sentiments. Reflecting on his visit to America, Manzoni said that while there was one car to every three persons in America:

In this country, we have one vehicle to 11, but we are going to have one vehicle to three. That is quite obviously every family’s ambition. We ought to start now on the schemes and jobs to meet this eventuality.\(^{25}\)

This belief of the need to plan for vast car ownership was not newly discovered in America for Manzoni as perhaps it was for Price; in 1955 Manzoni said ‘I see no reason why traffic in this country should not reach the proportion of traffic in America… that is one vehicle per adult, four times as much as we have right now … but it won’t matter so much if all our roads are right.’\(^{26}\) Crucially influential actors in Birmingham’s redevelopment processes, such as the Chair of the Public Works Committee and the City Surveyor and Engineer, were fully supportive of the need to plan for mass car ownership by 1956, and not react to it later. This belief that the population desired to use private motor cars at a much higher rate than existed in the mid-1950s meant that the city centre had to be redeveloped for a ‘motor city.’ The subsequent sections of this chapter explore how different examples of traffic architecture aimed to develop a city centre that matched the ‘motor city’ ambitions of Manzoni. These examples of traffic architecture served to accommodate the motor car within central areas, on sites linked to the Inner Ring Road.

**‘Strip’ Development – Smallbrook Ringway**

The commencement of Inner Ring Road construction in 1957 opened up a number of sites on Smallbrook Street for development. Smallbrook Street disappeared in the development of the Ringway, but had been a popular leisure destination within the city; it was home to Scala Cinema, built in 1914, which was one of the city centre’s first cinemas.\(^{27}\) A number of interests were declared in three sites advertised on Smallbrook Street. For example the Jack Cotton-led Creative Investments Limited proposed building a ‘super cinema’ on one of the sites along with a casino, dance hall and shops on another

\(^{25}\) ‘Plan Roads for Day when each Family has Car’, *Birmingham Mail*, 19 September 1956.


site.\(^{28}\) This was, however, not considered suitable by the Public Works Committee because the City Estates Officer R. F. H. Ross indicated that ‘the ground rent would not be secured under this proposed development.’\(^{29}\) The site had to be economically viable as it was responsible for providing rates that would go into the future construction of further sections of the ring road; economic considerations were at the forefront of the Corporation’s decision-making process. A joint development proposed by John Laing & Son and J. L. G. Investments Limited was considered as ‘much more ambitious and comprehensive’ than the other schemes considered from Laing (as a single developer) and Jack Everton Land & Property Company Limited. For example, the latter proposed a theatre that would be ‘run at a loss’, which alarmed Ross who stated ‘this particular … development would not constitute an attractive security for the ground rent.’\(^{30}\) The Laing and J.L.G joint-development was also praised by Manzoni as the developers had stressed that it was ‘their intention to proceed as expeditiously as possible with the construction of the proposed new buildings and this is an attractive feature from the Corporation’s point of view.’\(^{31}\) Speed of development was essential for Manzoni. The quicker developments could be started, and finished, the quicker rents could be collected that could be re-invested into construction of further sections of the Inner Ring Road.\(^{32}\)

One part of the Laing and J.L.G joint-development was the Ringway Centre, designed by Birmingham architect James Roberts. The development possessed a continuous frontage of five storeys running along the whole of the southern side of Smallbrook Ringway. It was a type of development that was often referred to as Birmingham’s answer to London’s Regent Street, and was to house 23 shops and two large stores at ground level, and 132,000 sq. foot of office space above.\(^{33}\)

\(^{28}\) LBA: BCC/1/AO/1/1/146, PWC, Letter from Jack Cotton & Partners to City Estates Officer about Site No. 2, Smallbrook Street, Birmingham, 11 September 1957; LBA: BCC/1/AO/1/1/146, PWC, Minutes, 12 September 1957.
\(^{29}\) Ibid.
\(^{30}\) LBA: BCC/1/AO/1/1/146, PWC, Report of City Estates Officer to PWC about Sites for Development in Smallbrook Street, 12 September 1957.
\(^{31}\) LBA: BCC/1/AO/1/1/147, PWC, Note from Manzoni to PWC about Birmingham Inner Ring Road Sites for Development in Smallbrook Street, 10 October 1957.
\(^{33}\) ‘750ft. Block Will be Colourlit’, Birmingham Post, 8 April 1959.
The artists’ impression (Figure 3:2) of the development showed the Ringway Centre, to the left, sweeping down the side of the Inner Ring Road. This type of traffic architecture was akin to the ‘strip’ development that was common in America. It was this sort of development that led *Guardian* writer Terence Bendixson to dub Birmingham in the 1960s the ‘Las Vegas of the Midlands’. He stated:

There is a strange coming together of an American “strip” and an English high street in the middle of Brum. In this urban hybrid the ring road is the “strip”, that unique American phenomenon of the stretched out shopping street lined by car parks and buildings and tricked out in advertisements designed to catch the eye of the automobile citizen.\(^{35}\)

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One of the main reasons that shopping frontages were encouraged by Manzoni along the Inner Ring Road was ‘to provide for the extension of the commercial and shopping centre of the City – which is too small.’\textsuperscript{36} This was a position that contradicted the Ministry of Transport’s \textit{Design and Layout of Roads in Built-Up Areas} (1946), which recommended that the Inner Ring Road should not be developed as a shopping centre.\textsuperscript{37} Manzoni had been a member of the committee which contributed to the report, and was perhaps influential in the concession of the report which stated that ‘it may be unavoidable that portions of the frontages to the ring road will have to accommodate shops.’\textsuperscript{38} The Birmingham Inner Ring Road though utilised road construction as a method to open-up new shopping spaces. The Public Works Department stated:

\begin{quote}
It is expected that by the provision of the Ring Road new properties will be erected along the line of the Ring attracting increased rateable value and the life of the centre of Birmingham will be revitalised, and this will result in further business and commerce being drawn to the City, increasing its prosperity.\textsuperscript{39}
\end{quote}

The provision of shops along the Inner Ring Road was not primarily for the direct benefit of drivers, but instead to create new commercial spaces for a central area that was deemed too small by Manzoni. Road construction was utilised to help achieve other town planning aims; this is a theme which is revisited in the next chapter in which the construction of the Middle Ring Road was planned in conjunction with slum clearance of five redevelopment areas. In 1962, Manzoni received the praise of J. Edgar Jones, Midland Divisional Road Engineer at the Ministry of Transport, who commented that before the Inner Ring Road was constructed Birmingham had lacked a ‘distinctive character for its central area.’ Jones believed that ‘the development within the Inner Ring Road would largely correct that deficiency.’\textsuperscript{40} Manzoni also received support for allowing shopping frontages along the Inner Ring Road from the Ministry of Housing and Local Government; an internal briefing document stated that ‘so long … as provision is

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\textsuperscript{38} Ibid, p. 31.
\textsuperscript{39} City of Birmingham Public Works Committee, \textit{Inner Ring Road Scheme}, (Birmingham, 1957).
\textsuperscript{40} ‘Discussion: The Inner Ring Road, Birmingham’, \textit{Institution of Civil Engineers Proceedings}, 22, no. 1 (1962), p. 98.
made for cars to park in such a way as not to interfere with the flow of traffic there is no fault to be found.\textsuperscript{41}

In the ‘terms of development’ for proposals in Smallbrook Street, it was stated that ‘retail shops are to be provided at street level on all frontages to Smallbrook Street, Hill Street and Hurst Street.’\textsuperscript{42} The Corporation possessed a vision, albeit a car-led vision, that shops should line the Inner Ring Road, and provide a new commercial environment. Architecture such as the Ringway Centre was a key component of this vision. This sort of commercial facility was not an afterthought of the Inner Ring Road; it was planned to work together, to create a ‘strip’ style development. Birmingham Corporation attempted to create a new modern ‘attractive city’, where:

All these commercial, entertainment and shopping facilities will result in more vehicles being attracted to the road system from outside. Birmingham will benefit from this increased activity and representatives of commerce and other interests and shoppers must not be dissuaded from bringing their cars into the City.\textsuperscript{43}

New commercial areas sensitive to and accessible to the motor car needed to be developed. There was a spatial shift, from old shopping areas less accessible to the car, such as New Street and Corporation Street, towards areas such as the Smallbrook Ringway, and later the Bull Ring (which linked to the end of the Smallbrook Ringway).\textsuperscript{44}

One of the issues that arose from this development was that of pedestrian access to the new shops and offices that lined the Inner Ring Road. The problem with a ‘strip’ development was that there needed to be a way for the pedestrian to get from one side of the road to the other. The technique implemented in this development was to install pedestrian subways so as not to ‘interfere with the free flow of traffic and also to provide for the safety of pedestrians.’\textsuperscript{45} Richard Hornsey’s study of pedestrian movement in interwar London found that, by the end of the 1930s, pedestrians ‘retained a formal and

\textsuperscript{41} TNA: HLG 131/65, Note from A. Mac. Armstrong to Parliamentary Secretary, 15 June 1961.
\textsuperscript{42} LBA: BCC/1/AO/1/1/147, PWC, Draft Heads of Terms for the Development of Lands in Smallbrook Street, 10 October 1957.
\textsuperscript{44} Stedman & Wood, ‘Urban Renewal in Birmingham’, p. 5.
\textsuperscript{45} City of Birmingham Public Works Committee, \textit{Inner Ring Road Scheme}. 
practised autonomy over the places and times at which they entered the carriageway.’

Pedestrian management was therefore clearly an issue for planners. The language used by the Corporation was in itself interesting – the word ‘interfere’ suggested that the pedestrian was a nuisance to the flow of traffic, rather than the fast traffic a nuisance to the pedestrian in the city centre. The spatial politics of the city centre were being contested, and such language reflected the main priority of Manzoni and the Public Works Committee; that the motor car required free flowing access to the Inner Ring Road, and motorists’ speed would not be restricted by stopping for pedestrian crossings.

The subways however were not merely thoroughfares, and were commercialised in an attempt to make them more attractive to pedestrians. In a promotional film titled *Ringway* (1963), the Public Works Committee stated:

> To encourage pedestrians to use the subways, access to them is made as easy as possible, and in the case of the Hurst St subway, the whole width of the footways on the forecorners is ramped. The shops in the adjoining development on the south-west side also follow the ramp and have been recessed to give a very wide and pleasing approach.

This showed that the Corporation made some attempts to create new pedestrian spaces that were easily accessible and attractive for pedestrian movement.

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47 MACE: *Ringway: The Birmingham Inner Ring Road Stage One* [film] (City of Birmingham Public Works Department, 1963).

48 See Chapter Seven for discussion of some of the critical praise that these new underground pedestrian spaces received initially in Birmingham.
At the opening of the Hill Street/Hurst Street subway in 1959 (Figure 3:3) Frank Price complained that ‘segregation of pedestrians and traffic was one of the things on which [the Corporation] had to concentrate,’ and the city had recognised a need to not follow London’s mistakes of making subways that people did not want to use.\(^{49}\) The inclusion of kiosks in the subways was one method pursued to attempt to achieve this; Manzoni had previously reported to the Public Works Committee that they ‘may consider that the inclusion of a kiosk in this subway will add to its attractiveness and encourage its use by pedestrians.’\(^{50}\) Manzoni added that in these subways the walls had display or advertisement cases and the floor and walls were tiled in a clear efforts to make these new pedestrian areas appealing and accessible.\(^{51}\) There was evidence that the Corporation was ahead of the Buchanan Report, insofar as they were aware of the pivotal need to segregate the pedestrian from the motorcar even in the late 1950s. Frank Price in his autobiography, however, later claimed the Corporation had wanted to send traffic underground, not pedestrians, but were denied by the Ministry of Transport.\(^{52}\) Public Works Committee Chairman Alderman Denis Thomas praised the Smallbrook Ringway in 1966, but said if the Corporation had to redo the Inner Ring Road ‘it may be that pedestrians would be

\(^{49}\)‘City Opens First Ring Road Subway’, *Birmingham Post*, 8 April 1959.

\(^{50}\) LBA: BCC/I/AO/1/1/145, PWC, Note from Manzoni to PWC about Inner Ring Road Scheme and Pedestrian Subway at Hill Street/Hurst Street - Application for Kiosk, 6 June 1957.

\(^{51}\) LBA: BCC/I/AO/1/1/146, PWC, Note from Manzoni to PWC Inner Ring Road Scheme - Kiosks in Pedestrian Subways, 26 September 1957.

walking at higher levels and motorists would travel on underpasses, but here again cost would have to be taken into account.\(^{53}\) There was a realisation by 1966 that the spatial dynamics of pedestrians forced under the road to ensure a free flow of traffic above did not work as well as was anticipated.

It would be unfair to say that the pedestrian was diverted under the road without any measures to make the new spaces pedestrian-friendly. Entrances gently sloped down to the subway, were well-lit and lined with shops; these were planned to be new bustling pedestrian areas for the city centre. The fact they were not as successful as planned did not mean pedestrian needs had been completely neglected in the planning process. However, the subways were part of an early example of traffic architecture, where shoppers walked alongside and under the new urban motorway, and were safely segregated. The Smallbrook Ringway, the Ringway Centre and accompanying subways showed that Birmingham city centre in the late 1950s had already implemented traffic architecture design principles, before *Traffic In Towns* argued for their greater usage in 1963. Buildings were planned to facilitate the flow of the motor car, but also with new means of pedestrian access in consideration. The problem for the pedestrian, according to the critics, was that conditions prioritised motor car access too far over the needs of pedestrians. The *Guardian* columnist Terence Bendixson complained the ‘problem with Birmingham only hit you when you were out of the car, and hit by the noise and the smells and the chaos of navigating a city planned for the motor car.’\(^{54}\) In *The New Birmingham* in 1959, the publication had playfully asked ‘could you find your way around this city centre?’\(^{55}\) It seemed that by the mid-late 1960s, the answer from the critics of this sort of development, complete with subways, was yes, but without pleasure. However, it showed at least an early attempt from Birmingham Corporation to utilise traffic architecture as a way of easing the transition to a city centre that accommodated the motor car, and encouraged its usage.

**‘Integrated’ Development - Paradise Circus & the Central Library**

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A number of different forms of traffic architecture developed in Birmingham city centre such as ‘integrated’ developments. This was architecture planned for the road to run through, under, or over it; literally where the road was integrated into the planning of the site. The process behind the planning of the Central Library was one that was tied in with the city’s desire for the establishment of a more prominent civic centre. Birmingham Corporation had long desired a prominent civic centre, with plans and talks dating back to the 1920s, and further schemes looked at the issue again in 1934 and 1945. Even after this, John Gold noted that still ‘endless schemes involving civic and entertainment clusters came and went.’ This section will focus on the civic centre schemes that developed from 1964, with the Central Library seen as part of a civic centre masterplan. This masterplan was devised as a result of collaboration; City Architect J.R. Sheridan-Shedden provided overarching direction, and responsibility for the design of the central island site (including the Central Library design), was from Birmingham architect John Madin. Not all parts of this masterplan were implemented, but the Central Library part did materialise, and provided another important example of the promotion and development of traffic architecture that accommodated traffic in central Birmingham. One key aspect of the planning of the Central Library was that the site was planned for the Inner Ring Road to run directly underneath it. The Civic Centre masterplan of 1965 stated:

The Ring Road passes under this site in the form of a tunnel and wherever possible the siting of heavy buildings over it has been avoided. The shape of the site has been determined by the proposed gyratory road systems which limit both pedestrian and vehicular accessibility.

Planning documents (Figure 3:4) produced for the Central Library site highlighted the integrated nature of the project; the proposed section of the Inner Ring Road (marked with dotted lines) ran directly beneath the site. This showed that the site was viewed, planned, and framed in reaction to the proposed path of the Inner Ring Road. It

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57 LBA: BCC/1/AG/37/1/31, Civic Development Sub-Committee Minutes and Reports [hereafter CDSc], CDSc Minutes, 26 April 1965.
58 LBA: BCC/1/AG/37/1/31, CDSc, ‘City of Birmingham City Architect’s Department Civic Centre Development Revised Master Plan - Report to General Purposes (Civic Development Sub-) Committee’, 26 April 1965, f.4.
highlighted the intertwined planning process of the development of the Inner Ring Road and the development of the Central Library.

On 6th August 1965, a circular from the Ministry of Housing and Local Government was issued that stated the ‘immediate importance to local authorities… to co-operate to the fullest extent possible in slowing down expenditure on capital projects.’

The circular also requested local authorities to only pursue projects ‘urgently needed for industry or housing or public health’, and warned that non-essential projects, which may be ‘desirable’ yet not essential, should be put on hold for time being, which the Ministry stated included ‘town centre re-development.’

Pressures were exerted on local government to limit spending, and this presented a problem for the Corporation in convincing Whitehall that the proposals of the civic centre masterplan were essential. The Corporation in 1965 requested a loan of £2,438,953 from central government to construct the Central Library.

As the Corporation had been warned that ‘non-essential’ developments would fail to attract central government funding, the Corporation had to present an argument that stated that the development was essential to the development of the city centre.

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60 Ibid.
The Corporation achieved this by linking together construction of the Central Library with construction of the final section of the Inner Ring Road. In February 1966, the Ministry of Housing and Local Government stated that more funding would be allocated for ‘commercial developments.’ This was because previous funding had been directed towards developments that contributed towards ‘raising the national housing programme.’ The Ministry believed that this priority had now been achieved and funding could be released for projects of different priorities. It stated that one of the priorities for future funding would be ‘schemes which are closely tied to other approved investment programmes, particularly urban roads.’

TNA: HLG 131/65, Brief for Minister’s Meeting with Alderman Watton and the Town Clerk about Redevelopment Schemes in Birmingham 2.45pm on Thursday 3rd March, February 1966.
Government, Richard Crossman, visited Birmingham in March 1966 to discuss ways in which the financial restrictions were to be changed. Birmingham Corporation was requested (like all other local authorities) to prioritise their planning proposals, and remove anything that (in the short-term) was neither:

Necessary to support economic growth at present lacking (e.g. in development areas or new towns); or a prerequisite of large scale housing (e.g. in new estates or town expansions); or inextricably tied up with important road schemes which have already got a firm place in the road programme.  

Ten schemes that Birmingham had submitted were addressed, but the Minister stated that ‘on the information so far given us not many of the schemes will, as they stand, satisfy the criteria we shall be expected to apply.’ The Central Library section of the civic centre site did meet the stipulations set out by the Ministry of Housing and Local Government, in that it was ‘inextricably tied up with important road schemes which have already got a firm place in the road programme.’ In September 1966, the Corporation’s Civic Development Sub-Committee stated that:

The construction of the ring road tunnel from Suffolk Street to Great Charles Street is, however, dependent upon the old library being demolished and your sub-committee are concerned about the effect of the restrictions on civic building upon the inner ring road in this area. The importance of the Inner Ring Road cannot be over-stressed in view of the anticipated growth in traffic in the next few years.

In a separate report Alan Maudsley (who replaced Sheridan-Shedden as City Architect in 1966) wrote:

The phasing of building operations in Paradise Circus is intricately linked with the building of the Inner Ring Road system

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63 Ibid.
64 Ibid.
65 Ibid.
and the gyratory road around the Circus incorporating the ‘Bus Interchange Point. A programme has been worked out with the City Engineer which plans for a start on building the Library by June 1968, and completion by June 1971, thus allowing the demolition of the existing Library to make way for the last link in the road system.\textsuperscript{67}

The Corporation argued that the Inner Ring Road could not be completed without the demolition of the old library, and the construction of the new Central Library. Special dispensation was requested from Whitehall to proceed with this part of the Civic Centre site. Alderman Frank Griffin, Chair of the Civic Development Sub-Committee, commented: ‘We regard the Inner Ring Road scheme of high importance to the city because of the continuing traffic congestion. The completed parts of the Ring Road have made a considerable contribution to the relief of congestion.’\textsuperscript{68} The Corporation was fully supportive of the importance of the Inner Ring Road and its potential to combat traffic problems. The consideration of the construction of a piece of traffic architecture in the form of an integrated site allowed the Corporation to progress with a development that may otherwise have been further delayed by financial constraints from central government. The importance argued by the Corporation regarding completing the Inner Ring Road encouraged central government to release funding to be directed to the development of the Central Library. Central government financial commitment to urban road construction increased rapidly during the late 1960s; in 1964 £159,500,000 was spent on new road construction and improvement, yet by 1971 it more than tripled to £504,300,000.\textsuperscript{69} By linking together the Central Library development with more urban road construction in central Birmingham, the Corporation successfully attained the funding required to develop this section of the proposed civic centre site.

The Central Library exemplified the new ‘traffic architecture’ in the city as it was designed for the Inner Ring Road to run directly underneath the site. In the Civic Centre masterplan of 1965, architects Sheridan-Shedden and Madin stated with regards to the ‘principles of circulation’ of the site:

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\textsuperscript{68} ‘Ring Road Hold-Up if New Library Cannot Be Built’, \textit{Birmingham Mail}, 3 August 1966.
\end{flushleft}
In view of the multi uses proposed, a comprehensive design with a multi-level solution and complete segregation of vehicles and pedestrians has been adopted. There are two main levels throughout the site. Cars, buses and service vehicles will circulate on the lowest level. Points of access and access for vehicles have been fully discussed with the City Engineer and Surveyor and, in view of the heavy traffic on the surrounding roads, these have been kept to a minimum.70

Maudsley (Sheridan-Shedden’s successor) and Madin elaborated further on the Central Library design scheme, and the siting of the library, in a report in July 1966:

Provision has been made for this circulation [of pedestrians] by raising the buildings above pedestrian level and by providing secondary circulation at an upper level ... the main pedestrian level will be a paved concrete deck covering the ‘bus interchange area and service area. Stops and ramps from Chamberlain Place will span the road and provide a continuous pedestrian paved area between the Library, Council House, and Town Hall. Escalators will carry people direct from the ‘buses to the deck under the Reference Library block.71

To illustrate these two statements, the diagram below (Figure 3:5) was prepared for the design.

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70 LBA: BCC/1/AG/37/1/31, CDSc, City of Birmingham City Architect’s Department Civic Centre Development Revised Master Plan - Report to General Purposes (Civic Development Sub-) Committee, 26 April 1965, f.4.
The design showed a desire to segregate pedestrians, and users of the library, from the Inner Ring Road which ran beneath the development at the lowest level. A multi-level solution had been sought, providing deck access and facilitated by escalators. It offered a logical solution to the site presented, in which a road had ‘bisected’ the site. Madin was a firm advocate of architects’ responsibility to plan buildings that accommodated motor cars. In the 1965 BBC documentary *Six Men*, Madin elaborated on the role of the architect:

> I would say that most importantly, you see into the future. If you look down there and you see these narrow streets, and you realise that in ten years time there will be twice as many cars on the road down there as there is at present, and in twenty years time three times as many cars. This really emphasises the problems we have to face in the urban renewal of our great cities and urban conurbations. Buchanan has showed the example of how you can

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treat the area north of Oxford Street… and it means a completely different thinking.\textsuperscript{73}

Madin believed that the issue of motor car usage was only going to grow in the future, and showed an appreciation for the work of Buchanan. Evidence of Madin’s belief in this was shown in his work on the Central Library. The multi-level design of the library, with pedestrian only access and separation from the road, was indicative of what Buchanan had recommended in \textit{Traffic In Towns}.\textsuperscript{74} This aspect of the design was the very essence of traffic architecture; Madin was given the task of designing a building that had to be integrated into the road network, yet he planned the architecture to allow all users, both driver, and pedestrian, to use the space accordingly. There was no desire to fight the presence of the motor car, or the road; instead Madin planned for the successful integration of building and Inner Ring Road.

It has been suggested that the proposal for a bus station underneath the Central Library was ‘a radical concept for a city so wedded to the car.’\textsuperscript{75} However, there can be no denying that the Corporation’s first priority was the motor car. This priority was verbalised in 1966, when Chairman of the Public Works Committee Alderman Denis Thomas boldly argued that ‘in my view an awful lot of nonsense is talked about preventing its [the motor car’s] access to city centres. Experience shows that where people have motor cars they will use them in preference to other forms of transport.’\textsuperscript{76} The planned incorporation of a bus interchange into the multi-level design of the site however represented an understanding, at least in the planning stage, from the Corporation that there still needed to be provision for other transport modes. It showed willingness from the designers to produce architecture accessible to users of different mobility groups. Regarding pedestrian movement, the Corporation considered the installation of ‘moving pavements’ to the Central Library site. Measuring 80 yards long and moving at speeds of two and a half miles per hour, the moving pavements would have been located on pedestrian straights in the Paradise Circus development. The Chairman of the Public Works Committee in 1968, Alderman Charles Simpson, said that ‘we believe that walking distances in the city centre are such, now that the city has grown so

\textsuperscript{73} \textit{Six Men – Portraits of Power in a Modern City} [television] (British Broadcasting Corporation [hereafter BBC], 1965).

\textsuperscript{74} For detailed discussion of \textit{Traffic In Towns} see Gunn, ‘The Buchanan Report’.


\textsuperscript{76} ‘Giving a City a New Heart’, \textit{Birmingham Post}, 21 April 1966.
much, that the introduction of moving pavements would be welcomed by pedestrians."\textsuperscript{77} This was another idea that conjured up transatlantic images; the \textit{Birmingham Post} published a picture of a ‘moving pavement’ from Dorval Airport in Montreal to show readers what the installation could look like.\textsuperscript{78} It was another idea that planned on making Birmingham a more automated city. The ‘moving pavements’ never materialised however, as in 1968 concerns were raised regarding the safety of escalators and the lack of precautions to stop people becoming trapped on them.\textsuperscript{79}

The Central Library represented a clear embodiment of traffic architecture in Birmingham. It was enabled to be constructed because of the need for the Inner Ring Road to be completed, and once this decision was made, the design was then shaped to incorporate the Inner Ring Road into the site. A multi-level, decked building was created, one that separated the pedestrian from the rush of the traffic below. It was an example of architecture that aimed to satisfy different groups within the city. Pedestrians could access the site safely without the risk of motor traffic; bus passengers could be dropped off directly underneath the library and through escalators be transported into the pedestrian zones above; the flow of motor car traffic was unimpeded, and merely travelled beneath the pedestrians above.

\textbf{Traffic Flow and Service Tunnels}

A number of traffic architecture techniques were adopted in Birmingham to try and aid the flow of traffic in the city centre. A further example were the plans for service road tunnels beneath central Birmingham. The construction of service tunnels was seen as one potential method of removing commercial traffic from the main road network. This would allow the private motor car more space on the road networks above ground, and further facilitate access of the motor car. Two principal examples of this were the constructed tunnel which ran beneath the Big Top shopping site, and the planned (but ultimately unrealised) tunnel to run beneath New Street.

\textsuperscript{77} ‘Next, a Moving Pavement’, \textit{Birmingham Post}, 23 May 1968.
\textsuperscript{78} Ibid.
\textsuperscript{79} ‘New Safety Look at ‘Moving Pavement’’, \textit{Birmingham Mail}, 14 December 1968.
Construction of the Big Top commercial development began in 1955, and was the result of a partnership between the property speculators Jack Cotton and Ravenscroft. It was one of the first substantial commercial developments in post-war Birmingham, and included a fourteen-storey office block. By the time of its completion in 1959, some of the most valuable shops in the country were located on the site. Property journalist Oliver Marriott commented in 1967 on the importance of the Big Top, suggesting that ‘retailers in the best pitch in Birmingham take as much money per square foot as in almost any street in Europe.’\textsuperscript{80} One of the plans developed by the Corporation in February 1954 for traffic access to the Big Top site was the development of an underground tunnel, planned exclusively for goods vehicles ‘as a means of easing road traffic congestion.’\textsuperscript{81} Service vehicles would filter off of the Inner Ring Road and into the tunnel, the theory being that the removal of commercial traffic from the Inner Ring Road would increase traffic flow for other drivers above ground. Owners of the shops located in the Big Top site were asked to contribute to the funding of the service tunnel. However they expressed concerns that the tunnel would prove a ‘white elephant’ and asserted that ‘the principle of carrying out an experiment at somebody else’s expense is quite wrong.’\textsuperscript{82} The Corporation nevertheless moved ahead with the idea and approval was granted for construction of the service tunnel in March 1954. Manzoni believed that the service tunnel would act as a ‘show piece’ for Birmingham: ‘I want people in this country to see it and go and do likewise.’\textsuperscript{83} It would be another example of how the Corporation utilised road construction, and associated developments, to demonstrate civic pride.\textsuperscript{84} The idea of using ground-level ‘loading bays’ for the goods vehicles serving the Big Top shops had been considered by the Corporation, but Manzoni believed this disadvantaged the public, building developer and landowners as it would ‘sterilise the land’ and ‘such a scheme would use up what, in the centre of a big city, was most valuable frontage.’\textsuperscript{85} A representative of Hortons’ Estates Ltd presented evidence from the objecting property owners of the site, and commented that as the Corporation did not restrict the parking of private motor cars ‘as many other towns had done’, one of the ‘anxieties’ of the Corporation was to remove goods vehicles from the streets ‘so that more parking space

\textsuperscript{80} Marriott, The Property Boom, p. 137.
\textsuperscript{81} ‘Tunnels Plan to Beat Road Congestion’, \textit{Birmingham Mail}, 8 February 1954.
\textsuperscript{82} Ibid.
\textsuperscript{84} For more discussion of the development of civic pride in Birmingham, see Chapter Seven.
is available for private cars or that shoppers will be able to go to the central area leaving their car at the kerb.’ The property owners of the Big Top site argued that they were put under ‘extremely onerous [financial] burdens for the sake of the car owners.’\textsuperscript{86} This was an interesting position; car owners were potential customers, and easier access (due to the removal of some good vehicles from the central road network) could have resulted in more opportunity to visit businesses on the Big Top site. It suggested that commercial businesses in Birmingham during the mid-1950s did not attach as great an importance to motor car access as the Corporation.

It was clear that what Manzoni believed was beneficial for the ‘motor city’ was a bolder solution towards traffic management. Service tunnels, Manzoni argued, would provide the best levels of access for goods vehicles to easily access properties, but also to help ease congestion above on the Inner Ring Road. This decision failed to pass without contestation though, and showed that commercial interests in Birmingham were overridden in the interests of private automobility. This first service tunnel was proclaimed a success however; \textit{The Times} in 1964 reported that ‘the [goods] vehicles have managed to avoid the worst of the city-centre traffic. During unloading and waiting they have hindered not a soul.’\textsuperscript{87} The Ministry of Housing and Local Government also noted that the tunnel to the Big Top site had been successful.\textsuperscript{88}

The triumph of the first underground service tunnel encouraged the Corporation to propose the construction of a second service tunnel in 1964. This second service tunnel was planned to run from the existing Big Top service tunnel under the important shopping streets of High Street and New Street (Figure 3:6).

\textsuperscript{86} ‘Qualified Approval of ‘Big Top’ Subway’, \textit{Birmingham Post}, 26 March 1954.
\textsuperscript{87} ‘Who Pays?’ is Question over City Service Tunnel Plan’, \textit{The Times}, 18 November 1964.
\textsuperscript{88} TNA: HLG 144/10, Internal note from A. Sylvester-Evans to Mr. Parkinson, 22 June 1964.
Once again, the debate resurfaced regarding who should pay for the new service tunnel. The Corporation was keen for either the Ministry of Transport, or Ministry of Housing and Local Government to contribute, but Whitehall did not share this sentiment. Throughout 1964 and 1965, there existed an impasse between Birmingham Corporation and central government which ultimately resulted in the termination of the project. The Corporation argued that the service tunnel was the very essence of Buchanan’s traffic architecture principles, and was the sort of project that was being suggested by government approval of *Traffic In Towns*. In numerous letters to the Ministry of Housing and Local Government, Chairman of the Public Works Committee Denis Thomas emphasised this argument. In September 1964 Thomas argued that a ‘great financial burden that would arise from schemes developed on the Buchanan thesis will have to be shared by Central Government if there is to be rapid progress.’

Again in October 1964, Thomas repeated:

> In the light of the Buchanan Report and the support given to it by the Government I should have expected a more ready response to a scheme of this character, than has been forthcoming. The Buchanan Report publicised certain ideas … for dealing with traffic in City centres, but the implementation of these ideas is a matter primarily of finance and this was not made clear in the Report or in discussions in Parliament.

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89 TNA: HLG 144/10, Letter from D. S. Thomas to Sir Keith Joseph (Minster of HLG), 3 September 1964.
90 TNA: HLG 144/10, Letter from D. S. Thomas to Sir Keith Joseph (Minster of HLG), 7 October 1964.
Thomas believed local authorities were misled and that without central government funding for traffic architecture schemes such as the service tunnel, the Buchanan Report was redundant. The Minister for Transport Ernest Marples argued that the decision to decline central government funding for the service tunnel was taken due to concerns over the tunnel’s ‘limited traffic value’; instead the service tunnel should be funded by the property developer as it was the traders and business firms within the site who would have been the direct beneficiaries.\textsuperscript{91} This represented a difference of opinion from Manzoni, who argued that by diverting goods traffic to a dedicated service tunnel, the outcome was to provide more road space for the private motor car above ground. The Corporation remained concerned that Marples disagreed with the proposal. Denis Thomas complained that as the Buchanan Report had been accepted by the Minister, ‘one [was] entitled to expect that when a scheme of equal if not more imagination comes along the Minister [would] not fob it off.’\textsuperscript{92} An editorial from the \textit{Birmingham Post} summed up the local feeling of frustration:

\begin{quote}
To suggest that a scheme which it is claimed will relieve congestion in the city centre is not of a high priority comes strangely from a man who has been stressing the importance of the Buchanan Report. Mr. Marples has surely not forgotten that the need for urgent action was a vital part of Professor (sic) Buchanan’s advice.\textsuperscript{93}
\end{quote}

Central government did not dislike the idea of a service tunnel in principle. A letter to Birmingham M.P Dennis Howell from the Ministry of Housing and Local Government praised the tunnel, and said that it would ‘take some 500 vehicles off the surface street each day. This would undoubtedly be a step towards Buchanan’s goal of segregation.’\textsuperscript{94} The justification however, for refusal of grant money from central government was made clear:

\begin{quote}
But in itself it is only a small step and the cost is very high. The Central Government has got to take account of priorities and to insist on a good return for the tax payers’ money. On this national
\end{quote}

\textsuperscript{91} ‘Marples Blocks Birmingham’s £2m Tunnel Plan’, \textit{Birmingham Post}, 11 September 1964.
\textsuperscript{92} Ibid.
\textsuperscript{93} ‘Mr. Marples Declines’, \textit{Birmingham Post}, 11 September 1964.
\textsuperscript{94} TNA: HLG 144/10, Draft letter for Minister to send to Mr. Denis Howell M.P., (unknown date).
test this project simply does not compare with others … just because the scheme takes account of Buchanan principles, as every urban scheme should, does not mean I must give a classified road grant to it.\textsuperscript{95}

The Ministry of Housing and Local Government believed its argument was improved further as Corporation officials, in a visit from the Ministry to Birmingham in October 1965, told the deputation that the service tunnel ‘would only remove some vehicles from New Street; it would not enable it to be pedestrianised or lead to any comprehensive traffic solution for the central area.’\textsuperscript{96} The deadlock remained unresolved, though there were suggestions from Whitehall that the Corporation could attempt to ‘go it alone’, and one consideration was to attempt to get contributions from the developers of New Street.\textsuperscript{97} Alderman Thomas commented in 1966 that ‘we shall go ahead with this tunnel plan – Government backing or not. There is no question of that. We cannot turn back.’ He argued that ‘the die was cast when the Government gave us an Act of Parliament to carry out the tunnel on the Big Top site.’\textsuperscript{98} This comment showed the intent of some individuals within the Corporation to further enhance the ‘motor city’; the New Street service tunnel was part of a network originally started in 1954, and the Corporation wished to complete the scheme. Despite not gaining approval for central government funding, the New Street service tunnel was another example of the way in which Birmingham Corporation attempted to use different forms of traffic architecture to facilitate the flow of the motor car in the city. It was another idea with transatlantic influences; the Ministry of Housing and Local Government commented that ‘we know that the Americans favour this method even where land values are not high.’\textsuperscript{99} There was as much to be read into the Corporation’s plans and proposals that were rejected as there were the proposals that were successfully implemented. It showed the intent of the Corporation, and the ideas that individuals such as Manzoni and Thomas thought were necessary for the city to progress into a truly mobile city in the later twentieth century.

\textsuperscript{95} Ibid
\textsuperscript{96} TNA: HLG 144/10, Deputation from Birmingham Corporation 22\textsuperscript{nd} October 1965: Brief for Parliamentary Secretary on City Service Tunnel, September 1965.
\textsuperscript{97} TNA: HLG 144/10, Deputation to Parliamentary Secretary 22\textsuperscript{nd} October 1965 Brief, October 1965, f. 4.
\textsuperscript{98} ‘Door Open for Tunnel Grant’, \textit{Birmingham Post}, 9 October 1966.
\textsuperscript{99} TNA: HLG 144/10, Internal Note from A. Sylvester-Evans to Mr. Parkinson, 22 June 1964.
Conclusion

Traffic architecture was urban planning for a new age. Guy Ortolano stated that planning in the 1960s was characterised by ‘affluence, automation and leisure’. The planning of Birmingham city centre for the facilitation of the motor car was further evidence of this. Traffic architecture was utilised as a method of addressing the redevelopment of the city centre at the same time as reconfiguring the central road network and promoting new commercial areas. John Gold argued that the Inner Ring Road ‘was not often a ring road at all.’ This perfectly described the Birmingham Inner Ring Road; it was part of (if not the central part) of Birmingham Corporation re-branding the city as a city for the motor car. The Inner Ring Road’s function was not to simply move traffic around the centre, but also to provide new commercial opportunities and pedestrian spaces (The Ringway Centre and subways); its purpose was to create new ways for pedestrians to access civic sites (Central Library and bus interchange); and it was to provide for uninterrupted traffic flows (service tunnels removing part of the slower goods traffic).

The Inner Ring Road allowed different pressures to shape Birmingham city centre. Improved road communications had also been demanded by the Birmingham business community. This aligned with the notion that a city that flowed freely with traffic was a prosperous and healthy city; the Public Works Committee proclaimed that with ‘an easy flow of traffic around the City Centre and with the provision of car parking facilities, people with their car will be attracted to Birmingham to do their shopping and transact their business.’ Commercial pressures, and the new era of affluence and leisure referred to by Guy Ortolano, were satisfied through new offices and shops that lined the ring road. Political pressures were evident in the negotiations between local and central government; Birmingham Corporation at times wished to pursue ideas (for example the New Street service tunnel) that Whitehall refused to contribute to financially. This led to tensions in which the Corporation accused the central government of not supporting the principles of the Buchanan Report. It was also indicative of the stop-start nature of central government road expenditure through the 1950s and 1960s.

101 Gold, Practice of Modernism, p. 123.
102 Cherry, Birmingham, p. 201.
103 City of Birmingham Public Works Committee, Inner Ring Road Scheme.
The chapter has highlighted a number of different aspects of traffic architecture, but importantly they all formed part of one over-arching strategy; facilitating the flow and access of the car in Birmingham. Peter Mandler argued that city centres ‘were to be made ‘liveable’ not by preserving the familiar … but by projecting a vision of modern vitality’, with urban motorways ‘providing the sense of ‘movement’ which was thought necessary to keep city centres alive.’ This was exemplified in Birmingham. The decision makers in the Corporation during the mid-1950s firmly believed that mass ownership of the car was imminent, and the Corporation planned for this accordingly. Planning for the facilitation of the motor car allowed the Corporation to create their interpretation of a modern city. The evidence presented in this chapter showed the Corporation, even before the publication of the Buchanan Report in 1963, examining ideas of how to rebuild the city and integrate it with the motor car. Though only a number of case studies have been examined here, other developments such as the Bull Ring Centre, and multi-level junctions in the city centre, add further weight to this. Birmingham Corporation considered integrated road and architecture solutions from the passing of the Bill for the Inner Ring Road in 1946. The Corporation required private developers to fund frontages on the first section of the Inner Ring Road in order to help finance the future development of further sections of the road.

Piecemeal attempts were made to provide for pedestrians, but it was clear that this group’s needs were seen as secondary to the primary aim of free flowing traffic. The subways, despite being planned favourably with shops and good lighting, still took the pedestrian beneath the Inner Ring Road. Bus passengers were considered in developments such as the Central Library, where the Corporation recognised that even in a motor city planned for the private car, there still needed to be consideration for other transport users. These however were secondary considerations to the primary goal of constructing developments that aided the free-flow of the private motor car. The Corporation wanted first and foremost to create a new modern city, one that has been described as ‘transatlantic modernity.’ The city experienced a similar reconfiguration of the city as had been common in 1920s America, where Peter Norton emphasised ‘a new kind of city street – a place chiefly for motor vehicles’ had arisen, and that up to the

104 Mandler, ‘New Towns for Old’, p. 221.
105 Sutcliffe & Smith, History of Birmingham, p. 479.
1960s, American cities were ‘planned solely for the car [with] little alternative for citizens in the city.’\textsuperscript{106} The fact that Birmingham was labelled the ‘Las Vegas of the Midlands’ in 1969 suggested that its transatlantic influence was realised, and a city centre had developed that aimed to facilitate the rise of the private motor car over the other users of the city centre.

\textsuperscript{106} Norton, \textit{Fighting Traffic}, pp.7-8.
Chapter 4 – Roads, Slum Clearance and Blight

The issue of clearing slum housing was one which challenged British cities throughout the twentieth century, and was a problem that cities struggled to address. The number of designated slum dwellings nationally in 1939 was 472,000, yet by 1954 this had grown to 847,000. Housing departments were ‘unable to keep pace with the continuing deterioration of substandard working class housing.’\(^1\) The magnitude of the task that faced British cities was highlighted by the fact that, between 1955 and 1975, three million people were displaced by redevelopment, and the ‘majority’ of these people ‘were rehoused on mass housing estates in inner and core city areas.’\(^2\) Slum clearance was not a new issue in the early and mid-twentieth century; slums of the industrial cities in particular had ‘been on the national conscience for nearly a century’ before the end of the Second World War ushered in a sentiment that ‘these ills could be cured.’\(^3\) This chapter analyses the issue of slum clearance in Birmingham after the Second World War, and examines the ways in which this was aligned to the Corporation’s strategy of transforming Birmingham into a ‘motor city.’ It is important to establish the link between the redevelopment of Birmingham’s slums and road building and development within the city as both processes demanded substantial resources for completion.

It is not the purpose of this chapter to recall in its entirety the slum clearance and municipal house building undertaken by Birmingham Corporation in this period.\(^4\) The chapter will initially focus on the five designated central redevelopment areas, where slums were cleared and new neighbourhoods built. These redevelopment areas were important as they represented the first substantial slum clearance undertaking in post-war Birmingham; approximately 30,000 dwellings across 14,000 acres were located within these redevelopment areas, of which 60 per cent were back-to-back and 65 per cent were without separate sanitary accommodation.\(^5\) The chapter will examine the planning

\(^1\) Gold, *Practice of Modernism*, p. 173.
process behind these developments, and the decisions taken regarding roads and the redevelopment areas’ connectivity within the ‘motor city’. The second part will discuss the consequences of the slum clearance programme on journey to work patterns and compensation practices. The third part will consider issues of housing and road construction more generally, and analyse the impact road construction had the creation of planning blight in Birmingham through a case study of the proposed, but ultimately rejected, Coventry Road elevated ‘skyway.’ What was the impact of road construction, or the threat of road construction, on residents’ homes?

**Planning for Slum Clearance and Automobility**

Many of the slum clearance plans implemented after 1945 were products of planning and deliberation from before the Second World War, such as the redevelopment of the Duddeston and Nechells area of Birmingham which dated back to 1937. Shortly after the outbreak of war however, the Ministry of Health instructed Birmingham Corporation to cease all slum clearance activities immediately. Clearance orders already confirmed were halted in the event that existing accommodation was required to replace houses potentially destroyed by air attack. The end of the war did not result in an immediate resumption of slum clearance either, as there was a ‘desperate shortage of accommodation and even a slum house was better than being homeless.’

The Minister of Health Aneurin Bevan stated in 1949 that slum clearance could not be resumed until the needs of homeless families had been met. This policy did not change until the election of the Conservative government in 1953, when a White Paper entitled *Houses – the Next Step* argued that local authorities needed to refocus attention on resuming slum clearance activities.

The Birmingham Corporation Act of 1946 committed the Corporation to a substantial slum clearance programme that encompassed five central areas (Figure 4:1); Duddeston and Nechells, Gooch Street, Ladywood, Bath Row, and Summer Lane. The housing conditions within these five areas were distinctly poor compared to the rest of the city; 58 per cent of the city’s back-to-back housing were located in these five areas, 60 per cent

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of the city’s housing without internal water supply, 53 per cent of the city’s housing without separate W.C accommodation, and 27 per cent of the city’s housing with a bath.\footnote{9} Approximately 30,000 ‘substandard houses’ were committed to be purchased and demolished by the Corporation within these five redevelopment areas.\footnote{10}

**Figure 4:1 - Location of Central Redevelopment Areas in Birmingham.**

\small
\begin{flushleft}
\end{flushleft}

\footnote{9}{Figures are taken from Appendix 1 statistical table, found in Manzoni, H. J., ‘Redevelopment of Blighted Areas in Birmingham’, *Journal of the Town Planning Institute* (1955), p. 99.}
\footnote{10}{Manzoni, ‘Redevelopment of Blighted Areas in Birmingham’, p. 92.}
By December 1938 ‘tentative proposals’ had been outlined by Manzoni (and confirmed by the Public Works Committee) relating to the comprehensive redevelopment of the four other areas.\textsuperscript{11} The five areas did not completely address Birmingham’s slum problem; despite the five redevelopment areas addressing ‘the largest aggregations of slum houses’, there still remained ‘some 25,000 (slum houses) scattered about in the central areas and a few even in the suburban districts’.\textsuperscript{12} The historian Roger Smith highlighted that despite very poor conditions in the five redevelopment areas, ‘several other areas outside the scheme had conditions equally as bad.’\textsuperscript{13} City Architect (1953-1962) Alwyn Sheppard-Fidler stated that the redevelopment areas were selected ‘to correspond as closely as possible with the areas of maximum overcrowding as shown in the Housing Survey of 1946, [and] also to fit in with the new road scheme for the centre of the city.’\textsuperscript{14}

**Figure 4:2 - Condition of central ward housing in Birmingham, 1946.**

<table>
<thead>
<tr>
<th></th>
<th>% Back-to-Back</th>
<th>% Without Internal Water Supply</th>
<th>% Without Separate W.C. Accommodation</th>
<th>% Without Baths</th>
<th>Total Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central Redevelopment Areas</strong></td>
<td>56.9</td>
<td>12.9</td>
<td>62.5</td>
<td>74.8</td>
<td>29,763</td>
</tr>
<tr>
<td><strong>Central Wards excluding C.R.A’s</strong></td>
<td>26</td>
<td>7.6</td>
<td>41.4</td>
<td>57.2</td>
<td>6,363</td>
</tr>
<tr>
<td><strong>Central Wards including C.R.A’s</strong></td>
<td>50.6</td>
<td>12</td>
<td>58.8</td>
<td>71.6</td>
<td>36,126</td>
</tr>
<tr>
<td><strong>Whole City</strong></td>
<td>10.3</td>
<td>2.3</td>
<td>12.3</td>
<td>28.7</td>
<td>286,611</td>
</tr>
</tbody>
</table>


Housing conditions in the five central redevelopment areas were clearly poor. Sheppard-Fidler’s admission that areas were selected for comprehensive redevelopment to allow

\textsuperscript{11} LBA: BCC/1/AO/1/1/89, PWC, Notes of Conference of Representatives of the Public Works and Estates Committees re: Five Years Housing Programme, 15 December 1938, p. 3.

\textsuperscript{12} Manzoni, ‘Redevelopment of Blighted Areas in Birmingham’, p. 97.


for the development of the Corporation’s road schemes warrants further investigation. It offered an insight into the ways in which important actors within the Corporation linked together slum clearance and road construction. The Corporation’s Development Plan, submitted to the Ministry of Housing and Local Government in 1960, stated that ‘in the course of rebuilding the five redevelopment areas … the greater part of this [Middle Ring Road] will be constructed and dual carriageways will be provided throughout.’ This demonstrated (and substantiated Sheppard-Fidler’s claim) that a clear link was made by the Corporation between the redevelopment of the five former slum areas, and the construction of a substantial part of Birmingham’s new road programme. All five of the Corporation’s central redevelopment areas were situated in proximity of the proposed Middle Ring Road. It was no coincidence that the five areas identified by Manzoni for comprehensive redevelopment could be utilised in the Corporation’s road plans. In 1941 Manzoni lamented the state of the central roads in Birmingham:

An almost complete lack of suitable and obvious ring roads by-passing this congested area, by-passes which, by their construction and obvious direction, should appear to drivers to be the most convenient roads on which to travel. This position will be remedied very largely when the outer and inner ring roads are complete … but it is certain that by itself it will not have the desired effect of clearing sufficiently the central areas although undoubtedly it will accomplish much in this direction.\footnote{LBA: BCC/1/AO/1/1/94, PWC, Manzoni, H. J., Central City Planning: Preliminary Report, presented to Public Works (Emergency Sub-) Committee, 16 October 1941, p. 7.}

Manzoni presented his finalised road plans to the Corporation in January 1952, in preparation for submission in the Development Plan. The plan claimed to ‘deal exhaustively with remedies for the city’s traffic problem’ and stated that the road proposals were based on three concentric ring roads, thirteen radial roads, and new link roads.\footnote{‘New Ring Roads to Streamline Traffic Flow in Birmingham’, Birmingham Post, 3 January 1952.} The Corporation’s Development Plan showed Manzoni’s determination to implement ‘the most impressive system of urban motorways.’\footnote{Meller, H., Towns, Plans and Society in Modern Britain (Cambridge, 1997), p. 81.} Manzoni planned to rid the central areas of congestion, and to encourage traffic onto newly built ring roads to improve traffic flow. This linked back to slum clearance as the compulsory acquisition

\footnote{City of Birmingham, Development Plan: Statement (Birmingham, 1960), p. 12.}
of the five redevelopment areas, in prime positions around the central area, enabled Manzoni to assume control of large swathes of land. Manzoni planned for these areas to be linked together by a new ring road. John Gold commented that the selection of areas of a town or city centre as a ‘slum’ meant that this designation could ‘help smooth the way for undertaking clearance and redevelopment, especially in boroughs short of land or keen to remodel their town.’ The redevelopment areas identified were certainly slums, but they were also selected strategically to allow the implementation of the road programme that Manzoni insisted was vital to the future prosperity of the city.

This desire from Manzoni for the Corporation to assume control of large parcels of land, and redevelop them comprehensively, was something that had to be influenced at legislative level. Prior to 1944, Manzoni suggested that ‘suitable legislation’ was not in place to ‘guide or facilitate’ the comprehensive developments he wished to pursue within Birmingham. Instead, as Manzoni later admitted, ‘legislation had to be consciously and deliberately influenced.’ Manzoni and the Public Works Committee in 1943 corresponded with the Expert Committee on Compensation and Betterment, otherwise known as the Uthwatt Committee, in an attempt to influence future policy to suit their comprehensive redevelopment needs, and produce legislation that allowed the Corporation to compulsorily acquire large parcels of land as one. Manzoni argued in March 1943 that the ‘vesting of development rights in the State should apply to all land, whether undeveloped or developed.’ The existing proposals, that vested development rights in the State for undeveloped land alone, created ‘difficulties and uncertainty concerning all developed land’ according to Manzoni. This developed land, Manzoni argued, constituted ‘by far the greatest problem of reconstruction’, and thus if a Corporation could not compulsory purchase such land then this would result in ‘hesitation in carrying out the desirable [planning] ideal laid down by Lord Reith of “planning boldly.”’ The Public Works Committee concurred, and in 1943 stated its view that ‘all land, developed as well as undeveloped, should be brought under control by a system which, from an appointed day, vests development rights in the State.’

19 Gold, Practice of Modernism, p. 173.
21 Ibid, p. 90.
22 TNA: HLG 81/17, City of Birmingham, Extract from Report of the Public Works Committee to the City Council, 9th March 1943, p. 4.
A deputation from Birmingham Corporation visited the Ministry of Town and Country Planning in July 1943; Alderman Byng Kenrick argued the Corporation’s position that the ‘purchase by the State of “development rights” in undeveloped land, failed to meet the problems of re-development with which the City Council were confronted.’ Further correspondence was exchanged between Manzoni and the Ministry over the next six months. The Ministry expressed an interest in his views, and replied that ‘if by now you have managed to draw up any statement clarifying and explaining your scheme, we should indeed be glad to have it.’ Ultimately, in January 1944, the Ministry informed Manzoni that ‘for your private ear … we are likely to adopt another course of action’ to the one he had proposed. Manzoni, by lobbying for extensive legislative rights to compulsorily acquire large parcels of land for reconstruction, gained the attention of Whitehall as an expert on matters of post-war redevelopment. Manzoni subsequently contributed to the Advisory Panel on Redevelopment of City Centres from June 1943 to August 1944, and this work contributed directly to the Town and Country Planning Act of 1944, otherwise known as the ‘Blitz and Blight Act.’ According to Manzoni, Birmingham Corporation had been waiting for ‘just this very Act.’ The Town and Country Planning Act of 1944 presented local authorities with the ability to compulsorily purchase large pieces of developed land, under the justification of reconstruction and ‘planning boldly.’ This provided Manzoni with the mechanism to instil his vision for the future in the city; by acquiring five redevelopment areas, the land could be utilised to not only build new housing and clear slum properties, but also to provide the necessary space to remodel and rebuild the road system.

Manzoni’s approach to the central redevelopment areas was to plan them to serve as ‘new towns.’ In a report that detailed plans for the Duddeston and Nechells scheme in 1937, Manzoni argued:

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23 TNA: HLG 81/17, Ministry of Town and Country Planning, Note on Deputation from Birmingham City Council received by the Minister on July 21st 1943.
27 The central redevelopment area of Summer Lane was later renamed Newtown. The renaming of Summer Lane and other central redevelopment areas (Gooch Street to Highgate, and Bath Row to Lee Bank) was suggested as ‘an early attempt to humanise the redevelopment process and to give a more sympathetic identity to the new districts created,’ from Cherry, *Birmingham*, p. 170.
The area is fortunately large enough to be dealt with as a small town or self-contained community and provision has had to be made for all the usual amenities required by so large a population as can be re-accommodated on the site.28

This view advocated large-scale, comprehensive redevelopment, and set an important blueprint for how the Corporation was to address the redevelopment of its slum areas. Sheppard-Fidler commented in 1955 that the new residential units’ ‘requirements of land for ancillaries, which are at present non-existent or inadequate’ placed a substantial demand for space within the new layouts.29 The decision to create five ‘new towns’ allowed Manzoni scope to remodel the layouts of the areas to suit his vision for Birmingham. The Duddeston and Nechells site, for example, was around 267 acres in size, with 6,827 houses in total; 4,920 (72 per cent) were declared ‘unfit or congested’ by the Medical Officer of Health for Birmingham in the spring of 1937.30 Manzoni suggested redeveloping the site as a whole and replacing the over-crowded slum housing with a new road system, increased open spaces, and new vertically-built housing. He proposed a new road layout, which replaced a ‘superfluous’ layout that ‘cannot be adapted to a comprehensive re-building scheme,’31 consisting of ‘nearly 11 miles of existing streets, mostly narrow and badly planned.’32 The main street would be replaced by a new 110-ft wide arterial road, proposed by Manzoni as the focal point of the road network for the new layout. The new layout was alleged to save ’18 acres … over the existing layout and … this corresponds roughly to the area of new open spaces.’33 Manzoni produced a further report in 1943, in which the arterial road running through the scheme was proposed to be widened to 150ft. Manzoni called it a:

Fast through traffic route … [and] throughout its length of 1,400 yards there will be no direct access on the highway from the frontage buildings, and subways will be provided at appropriate

29 Sheppard-Fidler, ‘Post-War Housing in Birmingham’, p. 43.
positions for the use of pedestrians who, in consequence, will have no need to cross the flow of traffic.\(^{34}\)

Manzoni also argued the need for only one junction, in the form of a ‘modified clover leaf [junction] involving overbridges to eliminate cross traffic whilst causing no check to the main road traffic.’\(^{35}\) He expressed a desire to run a free-flowing, wide arterial road through the heart of a new redevelopment area (see Figure 4:3 – the shaded arterial road can be seen splitting the site).\(^ {36} \) Manzoni admitted that ‘this traffic route forms a backbone of the scheme dividing the area into two parts.’\(^ {37} \) The internal estate roads, Manzoni argued, were ‘planned in such a manner that their use by through traffic will be disadvantageous.’\(^ {38} \) There was a vision in the layout of the new road system to introduce uninterrupted, free-flowing traffic directly through the redevelopment area, and to speed traffic flow around all the central areas.

The idea for splitting the Duddeston and Nechells site with an arterial road provoked concern within the Ministry of Town and Country Planning in 1949. Criticisms of the road layout centred on the proposed new ‘parkway’ (arterial road):

The parkway is accepted as an established proposal, but it will seriously affect the intercommunication between the two neighbourhoods. Through traffic using other main roads in the neighbourhoods will interfere with residential amenities. The City Engineer has, since the submission, agreed to reduce the width of the parkway from 150 to 80 ft.\(^ {39} \)

\(^ {34} \) LBA: BCC/1/AO/1/1/95, PWC, Manzoni, H. J., Duddeston and Nechells Redevelopment Area, Report to PWC, 27 May 1943, p. 4.

\(^ {35} \) Ibid, p. 4.

\(^ {36} \) Manzoni, ‘Redevelopment of Blighted Areas’, p. 93.

\(^ {37} \) LBA: BCC/1/AO/1/1/95, PWC, Manzoni, H. J., Duddeston and Nechells Redevelopment Area, Report to PWC, 27 May 1943, p. 4.

\(^ {38} \) Ibid, p. 4.

Manzoni was restrained by central government regarding his road plans and vision for new central housing areas within Birmingham. The Duddeston and Nechells plans from 1937 and 1943 showed that Manzoni increased the arterial road width from 110ft to 150ft, but subsequently the Ministry’s unease meant the road width had to be scaled back. Buoyed by the powers vested in the Corporation by the Town and Country Planning Act 1944, Manzoni attempted to remodel the central redevelopment areas as self-contained communities that would embrace and facilitate motor traffic, and this caused some concern in central government. The Ministry of Town and Country Planning rebuffed Manzoni’s attempt to implement an American-style clover leaf junction between the A47 and Great Lister Street, calling it ‘complicated … extravagant and unnecessary.’

The Ministry was particularly concerned that Manzoni ran the risk of isolating the residents of these new neighbourhoods:

The 15,000 people proposed for this redevelopment area will be isolated by physical barriers from other residential areas … we

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40 Ibid, p. 5.
therefore consider it unfortunate that the A47 should be realigned so as to split rather than skirt or avoid the area. Separate neighbourhoods are proposed on either side of the parkway, but in an isolated residential area such as this, they must be dependent on each other for facilities, particularly as the Library, Secondary School and Baths will be shared. The parkway will form a barrier to easy intercommunication despite the provision of a pedestrian bridge and five subways to connect the two neighbourhoods.41

The parkway embodied one of Manzoni’s main planning priorities: the implementation of a free flowing traffic network. It was proposed that inhabitants of the redevelopment area would be housed either side of the new parkway; it proposed the creation of two smaller neighbourhoods, but with amenities only provided for one. Manzoni attempted to address the issue of residents crossing the parkway, but pedestrian movement was deemed secondary to the free flow of traffic.42 The Ministry of Housing and Local Government in May 1949 reaffirmed that ‘we think that the proposed pathway through the centre of the area is unfortunately sited … but consider it is too well an established proposal for us to press for amendments.’43 This highlighted a certain level of impotence on behalf of the Ministry; they wished to curtail Manzoni’s ambitious plans to drive the parkway through the site, but acknowledged they could not amend this due to its ‘established’ nature in the plans. It also possibly suggested that the Ministry were not as ambitious as Manzoni regarding planning for the motor car. Manzoni attempted to plan for the motor car in these areas, and facilitate its assimilation into urban living. There was a degree of compromise between the two parties. Manzoni agreed to curtail the width of the parkway, from 150ft to 80ft, but refused to remove it from the scheme altogether. It was a point of principle for the way he believed the layouts of redevelopment areas should be arranged regarding connectivity; to facilitate the free, uninterrupted movements of the motor car.

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41 Ibid, p. 4.
42 This was a similar experience to city centre redevelopment. See Chapter Three on Traffic Architecture for further details of how attempts to accommodate pedestrians in central Birmingham were often considered secondary to the free flow of motor car traffic.
The new road layouts that Manzoni proposed in the five redevelopment areas were all part of a wider vision for these areas. In the Duddeston and Nechells plans, for example, Manzoni argued that the introduction of a new road layout meant that it saved 20 acres of space in the layout; this ‘single fact, the saving of 20 acres, more than any other, was a vital factor of encouragement to further active consideration in those early days of the idea.’ Sheppard-Fidler commented that in the Ladywood redevelopment area, the only way to accommodate ancillary services and new roads was ‘by eliminating existing but redundant roads.’ Manzoni argued that the previous layouts were inefficient and unsafe, and there existed an ‘unsatisfactory street layout, which results in dangerous intersections and building plots of uneconomic shape.’ Central to Manzoni’s plans for redevelopment was a new road layout, not only to speed through the uninterrupted flow of traffic, but to open up more space within the redevelopment areas for features such as open space and park/riverways. The residential units were designed in a new way to achieve this. The density of the existing development at Duddeston and Nechells in 1937 was around ‘70 or 80 houses to the acre’, whereas Manzoni asserted that it should be closer to twelve houses to the acre for the ‘modern standard for cottage property’. Although it was feasible to build to around ten houses per acre, he was concerned that this would result in the area becoming ‘congested in appearance [with] an enclosed and somewhat drab aspect.’ This could be avoided, according to Manzoni, by ‘building vertically rather than horizontally.’ Initially in Duddeston and Nechells, six twelve-storey tower blocks were built at a deliberately high density as this ‘provided for the operations of rehousing necessary to clear succeeding units’ within the slums.

The Public Works Department and Manzoni produced a film entitled Redevelopment, first screened in 1956, which claimed the plans for the five redevelopment areas were ‘based upon the conception of residential areas built around well-defined centres in close and constant relationship to broad wedges of open space.’ Manzoni pointed to the adoption of ‘Radburn’ principles, which he argued had previously

45 Sheppard-Fidler, ‘Post-War Housing in Birmingham’, p. 44.
49 Sheppard-Fidler, ‘Post-War Housing in Birmingham’, p. 36.
50 MACE: City of Birmingham Central Areas Redevelopment [film] (City of Birmingham Public Works Department, 1956).
been the preserve of developments on the perimeter of towns and cities, where the ‘pressures of land uses [was] in an outward direction.’\textsuperscript{51} \textit{Redevelopment} stated:

In adapting [Radburn] principles for central areas of towns where pressures are inwards, a cellular form of development where the central open space, surrounded by residential units, linked by a ring road, is necessary.\textsuperscript{52}

‘Radburn’ principles often incorporated ‘decentralized, self-contained settlements, organized to promote environmental considerations by conserving open space, harnessing the automobile, and promoting community life.’\textsuperscript{53} It has been suggested that the key influences of Manzoni and his vision for these redevelopment areas was that of Le Corbusier; Phil Jones argued that slum clearance and road building in Birmingham mirrored that of Le Corbusier’s \textit{Plan Voisin} which ‘envisaged the almost total destruction of the right bank of Paris to be replaced with a complex of 18 crystalline skyscrapers set amid huge parks bordered by massive new motor highways.’\textsuperscript{54} This point had some validity, but it is also important that Manzoni’s adoption of Radburn principles is recognised as having played a key part in the development of his vision. The new road networks presented the motor car with a free-path straight through the heart of these neighbourhoods. Coupled with the decision to build vertically, this opened up the possibility of open, green spaces to be realised in the new developments. One of the key points of Manzoni’s redevelopment proposals for the slum areas was a vast increase in the provision of open spaces to replace the ‘derelict, insanitary and badly crowded together’ houses that previously existed.\textsuperscript{55} The Duddeston and Nechells plan proposed 22 acres of open space to be incorporated into the new site in the form of gardens, parks and playing fields.\textsuperscript{56} The total amount of open space in the five central redevelopment areas increased from 22.3 acres to 215.6 acres.\textsuperscript{57} The Corporation later released a further short film entitled \textit{Breathing Space} (1964) which extolled the virtues of the need for former slum areas to be rebuilt with sufficient open space. The film, directed by Manzoni

\textsuperscript{51} Ibid.
\textsuperscript{52} Ibid.
\textsuperscript{56} Ibid, p. 11.
\textsuperscript{57} Geeson & Rodgers, ‘Comprehensive Redevelopment in Birmingham’, p. 27.
and the Public Works Department, stressed that ‘new life is beginning, where there were slums, there will be grass and trees. The old dusty heart of the city will become refreshed and renewed.’\textsuperscript{58} A link between roads and the ‘environment’ was created.

The plans for the five redevelopment areas highlighted Manzoni’s attitudes towards redevelopment. The decision to advocate comprehensive redevelopment allowed him to address two problems at once; clearing the slums, and implementing a re-configured road network. The ability to comprehensively clear the slums allowed Manzoni scope to implement a new road network in the redevelopment areas, to the perceived benefit of the future motor car users of the whole city. The new road networks worked to de-clutter central areas previously beset by overcrowding and congested streets. The adoption of tower blocks, coupled with the new road networks, allowed the opportunity to open up green spaces of the central areas that were seen as vital to the wellbeing of residents. It was clear however that the redevelopment plans for the former slum areas were underpinned by the desire of Manzoni to utilise the space provided to further his ‘motor city’ ambitions.

**Consequences of Comprehensive Redevelopment**

Inevitably, such a large-scale redevelopment programme had a number of consequences on the social fabric of central Birmingham; a number of contemporary studies were undertaken in an attempt to analyse the impact of the slum clearance programmes on the residents of the central redevelopment areas.\textsuperscript{59} This part will instead focus some of the repercussions of road construction in the central redevelopment areas, rather than analyse issues of housing.

The comprehensive redevelopment approach to slum clearance adopted by the Corporation required more than solely acquiring slum housing and building new properties. The first part of this chapter explained that the entire layout of areas was altered in the redevelopment, and this therefore necessitated the acquisition of any

\textsuperscript{58} MACE: *Breathing Space* [film] (City of Birmingham Public Works Department, 1964).
property in the redevelopment area that stood in the path of such reconfiguration. Under the Compulsory Purchase Order (CPO) from Birmingham Corporation in 1947, all rights of property in the area were vested in the Corporation. All parts of the CPO could not be cleared and redeveloped at once, and thus many properties retained their pre-CPO functions until they were required by the Corporation for a particular phase of redevelopment. One such example of this was the People’s Chapel, of Summer Lane redevelopment area (which was later renamed Newtown). The People’s Chapel fell under a CPO in June 1947, and under standard compensation practices at this time, this meant that compensation granted to the West Midland Baptist (Trust) Association (owners of the land of the People’s Chapel) was calculated as £50,025 (the value of the property’s worth at that time).\(^60\) The People’s Chapel however was not considered for redevelopment by the Corporation until April 1957. The Corporation allocated a new site for the Chapel in September 1958, and the Chapel’s owners were informed that April 1961 was the target date when the Corporation would begin work on the site. However, the West Midland Baptist (Trust) Association did not consider this a fair compensation value for their property upon vacation of the premises in 1959, and this resulted in a test case in the court of law regarding compensation values for CPO acquired land. The argument was proposed that the People’s Chapel did not vacate and hand over the premises to the Corporation for immediate redevelopment in 1947 at the ‘notice to treat.’

The Baptist Trust Association demanded that compensation was paid on the value of the premises at the point of development commencing (not from the ‘notice to treat’ in 1947), which was £89,575.\(^61\) A number of the Lords who debated the case agreed with this assessment. Lord Justice Salmon stated ‘it would be shocking and unjust if compensation was to be taken as at the date of the notice to treat.’\(^62\)

The Court ruled in the favour of the West Midland Baptist Association, but the case was appealed by Birmingham Corporation in the House of Lords. Birmingham Corporation had acted by the letter of the law, however Lord Reith suggested that a re-examination of this law was needed which ‘now in many cases [caused] serious injustice.’\(^63\) Lord Donovan stated that if Birmingham Corporation was allowed to acquire

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\(^60\) ‘Fairer Compensation for Church’, The Times, 27 October 1967.

\(^61\) Ibid.

\(^62\) Ibid.

property in 1969 at 1947 values ‘it is almost a mockery to describe what it will pay as “compensation.”’ 64 All Lords present acted to dismiss the appeal, and concluded that:

The date for assessing compensation for land compulsorily acquired under the rule applicable where the owner wishes to reinstate his property elsewhere is no longer to be the date of the notice to treat but the earliest date at which a reasonable owner could have begun reinstatement. 65

The immediate implication in this test case for Birmingham Corporation was that they were now required to pay the higher amount of compensation to the West Midland Baptist Association. Nationally however, this ruling had wider implications. In an internal Ministry of Transport note, it was said that ‘no doubt this [ruling] will cause a great stir in the appropriate quarters of MHLG and Valuation Office.’ 66 The Treasury received an internal letter from the Valuation Office which commented that ‘the situation has been radically changed by the decision of the House of Lords,’ and that the Valuation Office had taken the view that they ‘must proceed on current and future cases in accordance with the House of Lords judgment.’ 67 The Valuation Office also concluded that ‘there can be no question that the effect of the decision will be to increase substantially acquiring authorities’ land acquisition costs so long as values continue to increase.’ 68 This test case meant that the whole cost of comprehensive redevelopment increased dramatically. Corporations could no longer acquire land at the ‘notice to treat’, hold it for redevelopment potentially decades later while occupants remained in the premises, and not pay compensation cost for when the property was actually required for redevelopment. The test case resulted in CPOs becoming more expensive and troublesome, and made the future of comprehensive redevelopment a more difficult task to justify economically.

A further consequence of the comprehensive slum clearance programme in Birmingham was the large spatial shift of the location of residents; between 1952 and

64 Ibid, p. 16.
65 ‘Compensation Not to be Assessed at Date of Notice to Treat’, The Times, 16 July 1969.
66 TNA: MT 105/361, Date of Assessing Compensation, Note from Entwistle to Page (MoT), 17 July 1969.
1960, around 12,000 families were moved from ‘unfit houses due for demolition.’ In 1960 June Norris, a researcher based at the University of Birmingham, conducted a social survey which examined the ‘vast upheaval’ this movement of housing had upon the lives of those forced to move from central redevelopment areas. Norris highlighted that many residents were relocated away from central areas to post-war estates on the periphery of the city (Figure 4:4). Norris examined journey to work patterns for workers from 179 families who had moved out of central redevelopment areas. After residents had moved to new housing away from central redevelopment areas, journey to work times increased substantially:

<table>
<thead>
<tr>
<th>Table 4:1 - Journey to work times of families who relocated away from central redevelopment areas, 1952-1960</th>
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<tr>
<td><strong>Men</strong></td>
</tr>
<tr>
<td>Before Move</td>
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<td>10 minutes or less</td>
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69 Norris, Human Aspects of Redevelopment, p. v.
Figure 4:4 - Map showing relocation of tenants cleared from central slum areas in Birmingham, 1952-3.

In the five central redevelopment areas, the total population dropped from 102,896 before slum clearance was undertaken to 56,996 upon completion of redevelopment. In Chapter Two I argued that despite housing decentralising in Birmingham, industry generally was more reluctant to move away from established networks towards the centre of Birmingham. The initial round of slum clearance undertaken by the Corporation in the five central redevelopment areas resulted in a loss of 50,000 residents from the central areas. This had important repercussions for transport usage in the city; journey to work times were vastly increased, and thus workers became more reliant on public transport or the motor car for travel as the option to walk to work became increasingly unrealistic.

**Road Plans and Housing Blight: The Coventry Road Skyway**

A further way to assess the relationship between road construction and housing in the ‘motor city’ is through examining the impact of road plans on the creation of planning blight and uncertainty for local residents. In 1960, the Public Works Committee recommended a proposal to construct a twenty-foot high elevated highway (Skyway) along Coventry Road, an important radial route from Yardley (a ward in the middle ring of the city) to the city boundary at Sheldon. The Skyway planned to be constructed a mere fifty feet away from the front of properties, at an estimated cost of £3.5 million. Consideration had been given to the construction of an urban motorway at ground level consisting of four carriageways; two for local traffic, and two central carriageways for express traffic between the city boundary and the proposed Outer Ring Road. This was rejected as ‘great confusion would be caused at road junctions by the entry of two-way local roads,’ and Manzoni argued there was ‘no satisfactory solution for the treatment of the junctions’ with a ground level expressway. There was no opportunity for vehicles to cross from one side of the road to the other; ‘with one-way traffic flow along the local service roads, a considerable detour would often be necessitated by traffic wishing to pass from a side road on one side of [the expressway] to another side road opposite.’ This highlighted a crucially important consideration for Manzoni in planning road

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70 Geeson & Rodgers, 'Comprehensive Redevelopment in Birmingham', p. 27.
71 TNA: MT 122/48, Birmingham Corporation, Report of General Purposes Committee to City Council Meeting, 6 December 1960, p. 73.
72 Ibid, p. 72.
73 TNA: MT 122/48, Ministry of Transport, Correspondence from Divisional Road Engineer (Midlands Section) to Minister for Transport, 22 September 1960.
improvements for the Coventry Road radial route; the main priority of the road was that traffic flow should be unhindered. Manzoni stated that the aim of the Skyway was to ensure motor cars could travel between the city centre and Birmingham Airport (located in Elmdon) in ten minutes. The Skyway was planned to link with a conventional dual carriageway at Sheldon, at the city boundary, which would form a link past Coventry and through to the M1. 

The problem of ‘blight’ of properties soon became a pressing worry for local residents, and concerns were expressed at a number of public meetings hosted by the Corporation. Approximately 1,200 Coventry Road residents attended a public meeting in October 1960, and one local resident protested that ‘since this overhead scheme has been announced all houses are unsaleable.’ Councillor Denis Thomas, Chairman of the Public Works Committee, promised residents: ‘you will be paid full market value for your house if you sell to the Corporation – and we are prepared to buy any houses which the owners wish to sell now.’ A local estate agent probed this practice by questioning the ability of the Corporation to adequately compensate homeowners: ‘I think there would almost certainly be a difference between what an independent valuer thinks and what the District Valuer considers a house is worth.’ Compensation to households would also have to consider more than just the properties that lined the Skyway. There were 347 properties affected by the proposals and although only one would be required for demolition, 114 would be ‘physically affected’ (e.g. gardens or forecourts required for road construction), and 232 ‘would not be physically affected but… would be affected from the point of view of amenity.’ Progress on the Skyway was slow as discussions regarding the value of compensation produced no agreement for terms of compensation. A ‘difference of opinion’ between the Government valuer and Corporation officials was

74 ‘Council Promise on Stilted Road’, Birmingham Post, 5 October 1960.
75 TNA: MT 122/48, Ministry of Transport, Note on the Proposal to Construct an Elevated Road in Coventry Road, Birmingham, p. 1.
76 ‘Blight’ is a circumstance where the value of land/property is negatively affected by an external influence; for example ‘the allocation of land in a development plan for a school or for a road will probably reduce the value of houses on the land or even make them unsaleable’; Cullingworth, B., & Nadin, V., Town and Country Planning in the UK (London, 2006), p. 174.
77 ‘Council Promise on Stilted Road’, Birmingham Post, 5 October 1960.
78 Ibid.
79 Ibid.
80 TNA: MT 122/48, Ministry of Transport, Note on the Proposal to Construct an Elevated Road in Coventry Road, Birmingham, p. 20.
a problem. The uncertainty of the progress of road construction, according to Thomas, resulted in values of property depreciating ‘fairly substantially’ along the road.

Local residents did not resent the idea of road construction; the Sheldon and Yardley Citizens Council (which claimed to represent 1,000 residents of properties which bordered Coventry Road) wrote to the Ministry of Transport in December 1960 and stated that ‘this Association is 100 per cent in favour of a speedy programme of road construction, so that our traffic problems can be solved. In fact we have been campaigning, in vain, for many years for a dual carriageway to be completed along the whole length of the Coventry Road.’ The Citizens Council was sceptical of the benefits of the Skyway however. Their concerns were that the two-mile long stretch of elevated roadway would be a waste of money, and resources would be better directed towards constructing a dual carriageway for the entire length of Coventry Road. The major local housing issue, though, was that the uncertainty of progress of the Skyway reduced the values of housing. In order for the Corporation to proceed with construction, a Ministry of Transport financial grant was required. Over the next couple of years however, the Ministry was reluctant to provide the financial assistance necessary for construction to begin. In May 1962, the Ministry of Transport stated that one reason for the lack of progress was that they had been ‘prevented from making a realistic assessment of the proposal by the absence of accurate and up to date information on traffic volumes.’ Even with this information provided, Ernest Marples suggested that ‘the most I could do at this stage would be to indicate my willingness to consider the scheme for [a] grant.’

No decision had been taken on the status of the scheme by 1964, and the Sheldon and Yardley Citizens Council once again wrote to Ernest Marples to petition against a new approach by the Corporation to attain a grant for the Skyway:

While you accept the Buchanan Report [published the previous year], we suggest that he did not propose roads to be built as high

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81 TNA: MT 122/48, Birmingham Corporation, Letter from D. S. Thomas (Chairman of Public Works Committee) to Ernest Marples (Minister of Transport), 12 July 1961, p. 2.
as occupied houses, with the consequent loss of value and the risks to health and happiness to the occupants.\textsuperscript{85}

The Corporation had still not provided the Ministry for Transport with the requested traffic volume data, and thus the Citizens Council were assured that until this information was received there would be no progress regarding any decisions on whether the scheme should receive a grant.\textsuperscript{86} Councillor Thomas of the Public Works Committee however suggested that the Ministry of Transport had put ‘all sorts of difficulties in our way’ and that approval was unlikely.\textsuperscript{87} The impasse between the Corporation and Ministry of Transport remained. In April 1965 Councillor C. A. Collett was reported to have:

Raised the question of the overhead roadway with the Ministry because he had received complaints that the Corporation’s plans were affecting the selling price of properties bordering the Coventry Road … [and] Building Societies were refusing to give full mortgage cover.\textsuperscript{88}

Even for properties that attracted interest in the housing market, buyers were unable to complete transactions as building societies were reluctant to offer mortgage terms on blighted properties. Collett, rather mischievously, had claimed that the Ministry had informed him that the Skyway would receive no grant assistance; the Ministry were forced to write to the Corporation and explain that no decision had in fact been made and Collett had made a number of assumptions based on a conversation with a member of the Divisional Road Engineer’s staff.\textsuperscript{89} The issue Collet raised was certainly a valid concern for local residents. The Corporation would not begin to purchase housing from local residents until they received approval of financial assistance to construct the Skyway. Additionally any resident who attempted to sell their property privately while the uncertainty surrounded the Skyway development found that prices were dropping due to the potential impact of the elevated road on the urban environment. Some thirteen years late by 1973, uncertainty still surrounded road development along Coventry Road. The Structure Plan proposed that the construction of the Coventry Road Expressway should

\textsuperscript{85} TNA: MT 122/49, Sheldon and Yardley Citizens Council, Letter to Ernest Marples, 4 January 1964.  
\textsuperscript{86} TNA: MT 122/49, Ministry of Transport, Letter to Sheldon and Yardley Citizens Council, 4 February 1964.  
\textsuperscript{87} ‘Clearing the Car Cities’ Bottleneck’, \textit{Birmingham Post}, 6 October 1964.  
\textsuperscript{88} ‘City Skyway Again Rejected’, \textit{Birmingham Post}, 13 April 1965.  
\textsuperscript{89} TNA: MT 122/49, Ministry of Transport, Letter to D. S. Thomas, 4 May 1965.
be completed by 1981 at a cost of £5,763,000. The structure plans of the early 1970s were however later criticised for being ‘overambitious’; they still reflected the spirit of the ‘growth conscious 1960s’ rather than the susceptible economic climate brought about by the oil shocks of 1973. The West Midlands County Council, established in the local government reorganisation in 1974, assumed strategic responsibility for the road network of the region. During his time as County Council Leader from 1974 to 1977, Stanley Yapp scrapped fifteen major planned road improvements, including the proposed construction of the Skyway. Yapp argued that ‘conditions and traffic movements have altered since these schemes were drawn up. The necessity for some of these new roads is no longer justified.’ A justification for the definitive scrapping of the Skyway was that it would ‘remove the blight’ that had affected properties bordering Coventry Road since the project’s original launch in 1960.

**Conclusion**

This chapter has further demonstrated the influence that road building, and the creation of the ‘motor city’, had on the redevelopment of post-war Birmingham. The previous chapter highlighted that city centre redevelopment and road building were inseparable; this chapter has argued that policies of slum clearance and road building also merged. The acquisition of large swathes of land under the slum clearance programme, made possible by compulsory purchase orders, afforded Manzoni the scope to implement further sections of his grand road plans for the city. The previous chapter showed that the city centre was redeveloped with motor car access firmly at the forefront of considerations. Equally, connectivity between the five central redevelopment areas (through the Middle Ring Road) was an important factor in the redevelopment of the area layouts. The redevelopment of slum clearance areas was another method utilised by Manzoni in his pursuit of creating the ‘motor city.’

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92 Smith, R., ‘Major Road Schemes to be Scrapped’, *Birmingham Mail* (date unknown).
93 Ibid.
There were also wider housing issues, beyond solely slum clearance, regarding road construction in Birmingham. Housing blight, as evidenced by the case of the planned Coventry Road Skyway, became a factor in the 1960s. Historians have analysed public revolts against road construction in cities such as London, Miami and Baltimore. However, these protests were usually against the development of any road construction due to its perceived negative effects on local neighbourhoods. In the Birmingham case, however, the backlash against the Skyway from local residents was not primarily due to demolition of property or destruction to the local neighbourhood; indeed residents petitioned for the development of a ground level expressway instead, showing there was not an anti-roads agenda. The main issue was the effects the Skyway would have on property prices. Historical studies regarding the links between delayed road plans and the negative effects they had on property values is under-researched, and the conclusions of this chapter offer only the beginnings of such research. The protracted decision making process surrounding the development of the Coventry Road Skyway, from its original proposal in 1960 to its ultimate rejection in the mid-1970s, created uncertainty for local residents. This uncertainty manifested itself in a depreciation of housing prices, as reported by a number of local officials.

Chapter 5 - Public Transport

In 1952 public transport held a prominent role in British mobility patterns; 60 per cent of passenger journeys were undertaken by either motor bus or rail and only 26 per cent by motor car. Only fourteen per cent of British households owned a car in 1951. The situation though was markedly different less than two decades later; in 1970, 52 per cent of British households owned one or more motor cars, and bus and rail travel accounted for just 24 per cent of total passenger journeys. A significant change in mobility patterns in Britain occurred, and shifted away from public transport towards private travel. It is therefore important to analyse what decisions were made surrounding public transport from 1945 to 1973. Historical analysis of this national trend, from scholars such as Geoff Vigar and David Starkie, provided valuable overviews of the changes in central government public transport policies. One problem that Vigar identified was that very little attention had been afforded to local transport planning, possibly because of a belief that transport policy was often highly centralised and therefore ‘local policy is merely a manifestation of central dictat.’ Vigar stated that, even if this was true, ‘critical examination’ of local practices still needed to be undertaken.

A small number of local public transport policy studies exist; Colin Pooley, Jean Turnbull and Mags Adams have extensively studied Glasgow and Manchester from the 1920s to the 1960s, with particular reference to the tramways, while Russell Haywood investigated Manchester’s local railway network in the second half of the twentieth century. London has also unsurprisingly attracted special attention as the capital city; for example Theodore Barker and Michael Robbins produced a double-volume history of London transport. There also exists a popular local history field that, sometimes nostalgically, details the types of trams and buses operated in certain areas. These are often accompanied by introductory (yet nonetheless informative) chronological histories.

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2 Ibid, pp. 396-398.
5 Ibid, p. 42.
of operations. Yet there is a lack of local history studies, of a similar nature to the works of Pooley et al that investigate local policy-making processes and experiences of public transport. Little has been written that delves into different local contexts that existed from 1945 to 1973. It would be reasonable to suggest a hypothesis that the local public transport context in Birmingham, a proclaimed ‘motor city’, was different from cities which had less focus on the proliferation of the motor car within their boundaries.

The investigation of the role of cycling and walking as an alternative mobility option to the motor car is developing amongst historians. Colin Pooley and Jean Turnbull’s study of Manchester and Glasgow argued that, in the 1930s and 1940s especially, cycling was ‘an important means of travelling to work for many people.’ One of the problems of studying these aspects of urban movement is that source material is often difficult to obtain. Barbara Schmucki suggested that problems exist for the historical examination of walking in the city as traffic planning only became interested in pedestrian patterns and behaviour in the late 1970s. Erika Hanna argued that similar problems existed regarding ‘seeking the bicycle in the archive’; for example Hanna found that ‘very little effort was made to collect statistical data relating to cyclists or cycling journeys in Dublin.’ In Birmingham, the limited statistical data that does exist did not suggest overwhelming bicycle usage for travelling to work. In 1937, employees at the Austin Motor Works at Longbridge (south-west Birmingham) and the Castle Bromwich Aero Factory (north-east) were surveyed on their method of travelling to work, and only 13.5 per cent stated that they used a pedal cycle. This was lower than the figures for motor car usage (14 per cent). The problem with these figures was that the two factories surveyed were located towards the outskirts of the city, whereas a substantial amount of employment in Birmingham during the 1930s and 1940s was located in the centre of the city. For example, in 1941 35.8 per cent of employment was found in the central wards, and of this group 79.9 per cent travelled less than two miles to travel to work. If this is compared to the Selly Oak, Northfields and Kings Norton grouping (where the Austin Motor Works was located), only 8.2 per cent of the city’s employment was located here.

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11 Hanna, ‘Seeing Like a Cyclist’. 
and just 47.2 per cent of this group travelled less than two miles to travel to work.\textsuperscript{12} These figures suggest there may have been a substantial difference in mobility patterns; as more people lived closer to their work in the central wards, this in turn may have been more conducive to bicycle usage and walking. No statistics exist to examine this theory however, and the Corporation’s \textit{Development Plan} of 1952 even cited the survey of workers at Longbridge and Castle Bromwich as a means of justifying its transportation policies, despite the spatial limitations already described above.\textsuperscript{13} The usage of bicycles and walking in the city is certainly an area for future research. Individuals such as David Adams, through oral histories, and Phil Jones, through analysis of the actual practice of riding a bicycle in Birmingham today, are beginning to explore this.\textsuperscript{14} This chapter however will focus solely on public transport, due to the difficulty of sources explained here.

The ‘motor city’ strategy created a number of important questions regarding the mobility of the citizens of Birmingham from 1945 to 1973. The central question for this chapter is how successful was public transport in Birmingham from 1945 to 1973, and was it a viable alternative to the motor car? The chapter will analyse three different themes; the concurrent stories of the demise of the tramway and trolley bus networks and the rise in popularity of the motor bus network; the almost permanent struggle of the nationalised railway network in Birmingham; and the alternative public transport schemes that were proposed and investigated but ultimately not implemented.

**The Demise of the Tramways and the Rise of the Motor Buses**

One of the most important developments in public transport in post-war Birmingham was the abandonment of the fixed route tramcar and trolley bus and the rise in patronage of the motor bus. By 1953 the tramcars and trolley buses of Birmingham had been gradually decommissioned, which left motor buses as the only Corporation managed public transport in the city (Figure 5:1).\textsuperscript{15} The shift of patronage from trams to buses began in

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\textsuperscript{12} Bournville Village Trust, \textit{When We Build Again} (Birmingham, 1941).
\textsuperscript{15} Despite the tramways abandonment in July 1953, statistics provided are for financial years. Therefore, operation of the tramways from April 1953 – July 1953 fell under the statistics for financial year ending 1954.
the inter-war period. The tramcars were the dominant mode of travel in terms of passenger journeys made until around 1937, but from this point onwards the tramcar went into long-term terminal decline as the motor bus attracted more passengers. It is therefore necessary to assess the reasons for the decline of the tramcar and the rise of the motor bus. The trolley bus was never considered a viable alternative to the tramcar, so why was this form of public transport rejected by the Corporation?

**Figure 5:1 – Thousands of passenger journeys made by Birmingham Corporation public transport, 1935-1954.**

![Graph showing passenger journeys made by Birmingham Corporation public transport, 1935-1954.]


The final tramway routes in Birmingham ceased operations in July 1953, the decision having been made by the Transport Committee in July 1949 to close the remaining routes. Earlier closures of routes had occurred in July 1936 and January 1939, but by July 1949 the Transport Committee deemed that ‘the whole of the remaining tramways’ were now ‘unremunerative.’

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17 LBA: BCC/1/BE/1/1/19, Transport Committee [hereafter TC], Report to Council, 5 July 1939, p. 2.
Table 5:1 - Profit/Loss figures for Birmingham Corporation Transport tramway and motor bus operations, 1937/8 – 1948/9.

<table>
<thead>
<tr>
<th>Profit / Loss (£)</th>
<th>1937/8</th>
<th>1938/9</th>
<th>1947/8</th>
<th>1948/9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tramway</td>
<td>176,729</td>
<td>138,893</td>
<td>-143,226</td>
<td>-180,289</td>
</tr>
<tr>
<td>Motor Bus</td>
<td>355,449</td>
<td>360,750</td>
<td>579,236</td>
<td>495,420</td>
</tr>
</tbody>
</table>


The accounts for the transport department highlighted the decrease in financial viability of the tramway operations in Birmingham by the late 1940s. The tramways however produced a profit in the 1930s when decisions to close parts of the tramway network were taken. This decision, which allowed the motor bus to prosper unchallenged in ‘motor city’ Birmingham, was not a product of the ‘Brave New World’ sentiment that dominated British town planning policy by the end of the Second World War, but was instead a development of earlier inter-war ideas.\(^\text{18}\) It is important to therefore analyse why the Corporation decided to abandon parts of the tramway network in the 1930s.

One of the issues that influenced the Tramways and Omnibus Committee to recommend the abandonment of three tramway routes in April 1936, and two further routes in January 1939, was that the cost of maintaining the network started to concern the Corporation. Birmingham Corporation Transport General Manager A. C. Baker stated in April 1936 that to replace tracks on Warwick Road and Stratford Road would cost around £59,000 over the next twelve to eighteen months, and around £120,000 worth of track would have to be re-laid ‘in the next few years.’\(^\text{19}\) City Surveyor Herbert Manzoni, appointed in 1936, spared no time in utilising this debate to promote diverting the necessary resources for tramway improvement to the motor bus service. Manzoni advised Baker that the tramway routes that required upgrading in 1936 could be converted back to roadways for only £35,000.\(^\text{20}\) The Tramways and Omnibus Committee also stated

\(^{18}\) Larkham & Lilley, ‘Plans, Planners and City Images’.

\(^{19}\) LBA: BCC/1/BE/1/1/16, Tramways and Omnibus Committee [hereafter TOC], Report for the Consideration of the Tramways and Omnibus Works Sub-Committee, 7 April 1936, p. 1.

\(^{20}\) Ibid, p. 2.
that there were ‘254 tramcars of an obsolete design which are not considered to be in keeping with present day requirements and have been in service since 1907.’ The City Council agreed with Manzoni that the investment required to maintain and upgrade the tramway service was uneconomical. The success of the motor bus service in the 1930s (see profit figures in Table 5:1) encouraged the Corporation to decide in July 1936 to begin closing tramway on the routes that fell into disrepair, and replace these routes with additional motor bus services. The (newly named) Transport Committee presented the case in January 1939 for abandoning further routes, and reported to the City Council that it would cost £125,000 to replace the ‘obsolete type’ of tramcars on the routes with ‘modern’ cars. Instead, the Corporation approved the purchase of fifty new motor buses at a cost of £105,000. The Transport Committee stressed clearly that ‘there would be no possibility of earning sufficient revenue to cover the cost of reconstruction and renewal of tramcars’ due to low receipts on the Stetchford routes. The route’s receipts were only 14.06d per car mile for the financial year 1937/38, with this below the average receipts for the whole of the tramways for the same period of 15.76d per car mile. From 1937/8 to 1938/9, the tramways gross revenue had fallen by £40,549, while the motor bus revenues increased by £85,918. Expenditure on tramways remained ‘almost the same,’ and the tramways ran 944,603 less service miles than the previous year. It cost the department the same amount of money to operate and maintain the tramway services, despite the fact the trams ran fewer miles. The motor bus offered an alternative to the financially drained tramway services that, after the expense of purchasing the motor bus, did not incur additional costs such as track maintenance.

It was not solely financial justifications that resulted in the abandonment of tramways in Birmingham. A notion existed in urban planning since at least the eighteenth century that a healthy city was a city where there was free circulation of water, air or people. There was evidence of this concept still influencing town planning in the first half of the twentieth century; by the early 1930s in Britain, tramways were perceived as

21 LBA: BCC/1/BE/1/1/16, TOC, Report to City Council, 7 July 1936
22 LBA: BCC/1/BE/1/1/18, TC, Report to Present to City Council, 10 January 1939, p. 1.
23 Ibid., p. 1.
24 Ibid., p. 1.
a blockage to the free movement of motor vehicles. The Royal Commission on Transport of 1931 reported that the tramways of Britain were typically:

In a state of obsolescence, and cause much congestion and considerable unnecessary danger to the public … it will be to the advantage of the inhabitants of the towns, where they exist, to get rid of them.²⁸

This congestion argument was echoed in Birmingham. At a meeting of the City Council in January 1939 the Dudley Road group of tramways were abolished. The Transport Committee suggested that the abandonment of this tramway route would ‘considerably facilitate the flow of traffic at Five Ways, where the operation of tramways at present interferes with the working of the one-way traffic scheme.’²⁹ In September 1950, the Corporation argued that traffic congestion would be relieved in the city centre when trams were removed from Dale End, Martineau Street and Corporation Street.³⁰ This was not an experience unique to Birmingham; Colin Pooley and Jean Turnbull argued that in the mid-1930s similar debates occurred in Manchester, where the tramway was denounced as ‘inflexible and unable to respond to changing patterns of demand … because their presence occupied a large proportion of urban road space.’³¹ The tramways in Birmingham were viewed as not only a cause of congestion, but as a slower service compared to the motor bus. A motor bus to Rubery (in the South-West outer ring of Birmingham) from the city centre took thirty-five minutes, whereas the same journey by tram took forty-three minutes.³² The tramway in Birmingham was perceived to be a slower form of public transport that also hindered the free flow of traffic in the 1930s.

Resources existed that could have been invested into the tramway network. In August 1948 the Corporation placed an order with Crossley Motors for 260 double-deck buses in a contract worth over £1 million; it was heralded as ‘the largest single order of its kind ever placed by a British municipality with one manufacturer.’³³ Prominent figures within the Corporation showed little desire to invest such sums in the ailing tramway network. In February 1949, Transport Manager Baker said ‘Birmingham is not

²⁸ Briggs, History of Birmingham, p. 249.
²⁹ Ibid, p. 4.
³⁰ ‘More Birmingham Tram Services To Go: Less Congestion’, Evening Despatch, 10 September 1950.
³¹ Pooley & Turnbull, ‘Coping with Congestion’, p. 85.
³² Sutcliffe & Smith, History of Birmingham, p. 412.
a tramway city.'

He argued that due to the ‘narrow, twisting thoroughfares and small city centre’ track gauges had to be adopted that were smaller than the standard sizes, which resulted in ‘a restriction on carrying capacity and on comfort.’ Upon the closure the final tramway route in July 1953, chairman of the Transport Committee Harry Watton proclaimed ‘we are rid of a burden,’ and stated that the ‘nostalgic sentiment of the passing of the trams was not shared by his committee.’

An idea had gathered momentum in the 1930s that tramways were an antiquated method of transport, and presented an ‘inappropriate image for a modern city.’ The statements of people such as Baker and Watton echoed this viewpoint.

From 1953 the demise of the tramways resulted in the motor bus being the sole Corporation operated public transport undertaking in Birmingham. The flexibility of the motor bus did not only influence the abandonment of the tramways, but also ensured that the trolley bus in Birmingham was never considered as a serious alternative. A limited discussion about the operation of trolley buses occurred in the 1930s; the Transport Committee suggested that the advantages of the trolley bus was its ability to deliver a comfortable, silent ride, and also that it emitted no exhaust fumes and used ‘home-produced fuel.’ The disadvantages stated however were particularly damning:

The disadvantages of trolley buses, however, are their lack of mobility, being route-bound in a similar manner to tramcars. Present-day traffic conditions, brought about by the spread of the population, demand mobile vehicles which can be rapidly transferred from one route to another.

The inflexibility of routes which could be operated, much like the tramways, marked the downfall of the trolley bus in Birmingham. The Transport Department, as early as 1936, gave some consideration to the trolley bus but Baker dismissed the idea. The Transport Committee argued that the trolley bus was less reliable than the motor bus; in 1937/38 the defects per 10,000 miles was 2.331 for trolley buses compared to 0.797 for motor

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35 ‘We are Rid of a Burden’, *Birmingham Mail*, 4 July 1953.
36 Pooley & Turnbull, ‘Coping with Congestion’, p. 84.
37 LBA: BCC/1/BE/1/1/18, TC, Report to Present to City Council, 10 January 1939, p. 1.
buses. The cost of a motor bus operation was deemed less than that of a trolley bus operation:

Table 5:2 - Comparison of estimated costs per mile for operation of trolley bus and motor bus services in Birmingham, 1939.

<table>
<thead>
<tr>
<th></th>
<th>Trolley Bus (d.)</th>
<th>Motor Bus (d.)</th>
<th>Difference (d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rates</td>
<td>.641</td>
<td>.123</td>
<td>.518</td>
</tr>
<tr>
<td>Overhead Maintenance</td>
<td>.303</td>
<td>-</td>
<td>.303</td>
</tr>
<tr>
<td>Fuel</td>
<td>1.975</td>
<td>1.3</td>
<td>.675</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>1.496</td>
</tr>
</tbody>
</table>

Source: LBA: BCC/1/BE/1/1/18, Transport Committee, Report to Present to City Council, 10 January 1939, p. 2.

The Transport Committee in June 1949 reported that the department operated trolley buses on two routes in the city (Nechells and Coventry Road) ‘so as to gain experience of these vehicles.’ The Committee however rebuffed further potential usage of the trolley bus in the city’s public transport operations:

The results [of running the trolley buses on the two routes] have not been such as to influence your Committee in extending the use of this type of vehicle, and the continued operation of such a small number of trolley buses within a large motor omnibus system is uneconomical.40

The economic deficiency of the trolley bus was reiterated once more, but what was evident was that there was never really any desire from the Transport Department to incorporate the trolley bus into the public transport operations. Economic reasoning provided a useful mechanism for the rejection of claims to operate more trolley buses, but instead it seemed that even from the 1930s, reports produced by the department all pointed towards a public transport future that operated solely around the motor bus. The inflexibility of track-based Corporation operated public transport was clearly of substantial concern to the Transport Department, and the freedom afforded by the motor

bus to operate on flexible terms was preferred. There were no efforts to find a way to make the trolley bus part of a successful public transport operation.

It could also be suggested that the Transport Department awaited a central government ‘green light’ to announce the final closure of the tramways in 1949 (that also marked the end of the trolley bus in the city). The Ministry of Transport had prior to 1949 ‘intimated to the Municipal Passenger Transport Association that … it had been the policy of the Ministry of recent years to favour the adoption of trolley buses in preference to motor buses.’

Minister of Transport Leslie Burgin was an advocate of the trolley bus, and in 1937 visited the Commercial Motor Show at Earls Court where he ‘rejoiced to see the number of trolley-buses in the show.’ The *Glasgow Herald* reported:

Tramways, said the Minister, were a cause of traffic congestion, but there was the problem of substituting for an electric tram, which indirectly burnt British coal, a trolley bus which used petrol or diesel oil. He hoped that the great municipal undertakings would think very carefully of the advantages of trolley buses.

Rationing of petrol supplies during the Second World War meant that motor bus services had to be reduced, and emboldened the Ministry’s positive stance towards the electric trolley buses. The situation changed in 1949 when the Ministry of Transport no longer granted favourable status to the trolley bus; this was possibly due to the forthcoming relaxation of rationing of petrol in May 1950. The Transport Committee reported:

The question has been reviewed recently and it has been decided that in future Transport Undertakings who propose to discontinue tramway systems shall be free to choose in substation whichever type of vehicle they prefer.

This verdict presented the Transport Department with the opportunity to proceed with the adoption of the motor bus as the sole public transport mode. The decision from the Transport Committee to adopt the motor bus as the sole mode of Corporation public transport had important repercussions for the later development of the ‘motor city.’

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41 Ibid, p. 3.
42 ‘Minister of Transport on Road Problems’, *The Glasgow Herald*, 5 November 1937.
44 LBA: BCC/1/BE/1/1/23, TC, Annual Statement and Accounts 1948-1949, p. 3.
the motor bus did not require a track to operate, the replacement of the ‘extensive’ tram networks meant that ‘the release of street capacity for other vehicles was quite considerable.’ There was no competition to motor transport, and this afforded the motor bus (and subsequently motor car) room to prosper. This was not a situation unique to Birmingham; London abandoned its trams in 1952, Liverpool in 1957, and Sheffield in 1960. Glasgow was one of the last cities to abandon the tramways in 1962. Colin Pooley and Jean Turnbull suggested that the motor bus ‘complemented the tram network’ in Glasgow, rather than competed with it, and this may be part of the reason why it survived into the 1960s as one of the last British tramway systems. There was no such desire to integrate in Birmingham. When the Stratford Road group of tramways were abandoned in 1936, the Tramways and Omnibus Works Sub-Committee reported that ‘at the present time seven services of motor buses operate along the Stratford Road requiring for the maximum service 103 buses.’ Different modes of public transport served the same routes. The rise of the motor bus as the sole method of public transport across British cities reinforced certain values regarding the usage of road space. The marginalisation of the tramways and trolley buses excluded pedestrians and cyclists from urban road space, which resulted in the motor car dominating urban transport policy. There was no sense of a shared street space; the tramways and trolley buses were denounced because they were perceived blockages to the free flow of motor traffic. The motor bus cleared the street of obstacles to motor traffic such as fixed route public transport. This coupled with an expanded road investment programme in post-war Birmingham, created conditions for the motor car to dominate the road with minimal competition for space.

The Railways’ Struggles and the Shift towards Integrated Transport Services

The demise of the tramways and trolley buses in Birmingham meant that there was no Corporation operated public transport services to compete with the motor bus. It is for this reason that investigation of the railways in Birmingham is important in this period; as Anthony Sutcliffe and Roger Smith noted, ‘only the railways’ could supplement the

45 Starkie, *The Motorway Age*, p. 15.
46 Ibid, p. 15.
47 LBA: BCC/I/BE/1/1/1/16, TOC, Report to City Council, 7 July 1936, p.2.
48 Pooley & Turnbull, ‘Coping with Congestion’, p. 89.
The nationalised railway network was managed by the British Transport Commission until 1962 when it was replaced by the British Railways Board. Birmingham’s influential Public Works Committee, and individuals such as Manzoni (and later his successor Neville Borg) could thus not directly manage the railways to suit their ‘motor city’ ambitions. Manzoni did not have a great interest in the prosperity of the railways in Birmingham either; in 1940 he said that ‘unfortunately, the layout of the railway system is very meagre, and its use had probably tended to diminish rather than increase with the improving facilities for trams and omnibuses.’

The railways in Birmingham by 1948 were in a poor condition; the West Midlands Group on Post-War Planning and Reconstruction in 1948 concluded that the passenger stations throughout the whole urban region were ‘out-of-date, inefficient, indifferently served and unprepossessing,’ and required urgent large-scale rebuilding. Three suburban railway lines had fallen into disuse over the previous twenty years, which showed the problem of suburban rail in Birmingham attracting passengers. The railways in Birmingham were in a parlous state with regards to passenger transport even before the onset of the Second World War, which put further strain on the railway network as ‘few resources could be spared for their upkeep.’

The British Transport Commission attempted to reinvigorate the ailing passenger transport lines in the Birmingham network with the introduction of Diesel Multiple Units in 1956. These were deemed to offer passengers ‘far greater comfort and … far less noise’ than steam trains. The DMU introduction resulted in an initial improvement in passenger journeys, but this increase was not sustained into the mid-1960s:

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51 West Midlands Group, *Conurbation*, p. 256.
52 Ibid, p. 69.
54 ‘B’ham Line Test with Diesels’, *Birmingham Mail*, 12 December 1955.
Table 5:3 - Rail passenger journeys on Diesel Multiple Unit services in Birmingham network, 1955-1964.

<table>
<thead>
<tr>
<th>Route</th>
<th>1955</th>
<th>1961</th>
<th>1964</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birmingham – Walsall – Rugeley</td>
<td>447,000</td>
<td>834,000</td>
<td>547,000</td>
</tr>
<tr>
<td>Birmingham – Lichfield</td>
<td>449,000</td>
<td>1,716,000</td>
<td>937,000</td>
</tr>
<tr>
<td>Birmingham – Redditch</td>
<td>285,000</td>
<td>352,000</td>
<td>262,000</td>
</tr>
<tr>
<td>Birmingham – Walsall via Penns</td>
<td>200,000</td>
<td>252,000</td>
<td>59,000</td>
</tr>
<tr>
<td>Birmingham – Tamworth - Dudley</td>
<td>264,000</td>
<td>321,000</td>
<td>261,000</td>
</tr>
</tbody>
</table>


The services struggled to attract passengers during off-peak periods; by 1964 these services alone lost over £1,000,000 a year.\(^{55}\) It was not just the DMUs that struggled to attract passenger numbers in the early 1960s but all services across the Birmingham network:

Table 5:4 - Tickets issued at the principal Birmingham railway stations, 1960-1965.

<table>
<thead>
<tr>
<th>Year</th>
<th>New Street</th>
<th>Snow Hill</th>
<th>Moor Street</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>1,588,000</td>
<td>1,421,000</td>
<td>136,000</td>
<td>3,145,000</td>
</tr>
<tr>
<td>1961</td>
<td>1,522,000</td>
<td>1,312,000</td>
<td>120,000</td>
<td>2,954,000</td>
</tr>
<tr>
<td>1962</td>
<td>1,466,000</td>
<td>1,089,000</td>
<td>106,000</td>
<td>2,661,000</td>
</tr>
<tr>
<td>1963</td>
<td>1,254,000</td>
<td>1,000,000</td>
<td>96,000</td>
<td>2,350,000</td>
</tr>
<tr>
<td>1964</td>
<td>1,328,000</td>
<td>1,048,000</td>
<td>97,000</td>
<td>2,473,000</td>
</tr>
<tr>
<td>1965</td>
<td>1,256,000</td>
<td>1,100,000</td>
<td>85,000</td>
<td>2,441,000</td>
</tr>
</tbody>
</table>


One of the main reasons for this decline was that as the city expanded and suburbanised in the 1920s and 1930s, railway provision failed to adapt to meet this new demand. The new municipal estates on the outskirts of the city were served primarily by the motor bus as there was no expansion of tramway routes into the new estates, as noted earlier in this chapter. A similar analysis can be applied to suburban rail services for

Birmingham; for example, for residents of Kingstanding (one of the largest municipal estates built between 1919 and 1939, with 4,802 houses), the nearest stations were located approximately two to three miles away at Perry Barr and Erdington, which required a long walk that could take anywhere from thirty minutes to one hour. This presented the motor bus with an initial advantage for passengers; people did not have to walk far to catch the motor bus that travelled directly into the estate, but they faced a lengthy walk to get to a train station. The *West Midlands Transport Study* analysed the walking time from households to the nearest railway station; in Central Birmingham 51.3 per cent of households were over a thirty minute walk away from the nearest station, in Smethwick/Harborne (West – middle ring of city) this rose to 59.3 per cent, and in the Rubery/Northfield district (South-West - outer ring of city) the number rose again to 61.4 per cent.\(^{56}\) In neighbouring smaller towns such as Walsall and Wolverhampton, 70 per cent and 85.5 per cent respectively of households were located more than a thirty minute walk from a railway station.\(^{57}\) The *West Midlands Transport Study* also found that 59 per cent of railway passengers walked to railway station (24 per cent used the motor bus, 12 per cent motor car).\(^{58}\) The problem for the railways in Birmingham was that while the motor bus adapted its routes to serve the new estates, the railways could not adapt its routes so easily. This was not a situation unique to Birmingham. In Manchester around 22,000 council houses were built between 1955 and 1973 in overspill estates on the fringes of the city, where the estates were:

In locations with poor access to the rail network or, even where they were in an area that nominally enjoyed a railway service, they were located well away from the nearest station and at this time no thought was given to opening a new one.\(^{59}\)

A lack of integration between town planning and transport planning caused serious problems for the railways. The Corporation’s *Development Plan* of 1960 made only one reference to railways and this regarded the redevelopment of New Street Station; instead Manzoni detailed the future road building programme of ring roads and arterial

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56 *West Midlands Transport Study*, p. 116.
A lack of planning between housing and transport produced what K. R. Sealey called ‘ludicrous situations’ that merely promoted road transport as the only realistic choice for residents. The sprawling urban form of Birmingham, which developed initially from the 1920s and 1930s but continued after 1945, was not conducive to the promotion of rail transport. The West Midlands Transport Study concluded that the low-density spread of population made suburban rail uneconomical, as ‘only where heavy flows of traffic are carried to and from areas of concentrated population or employment are urban and suburban railways successful.’ The British Transport Commission did not have the financial capabilities to operate such lines through low-density suburbs; there were losses nationally of £86.9 million in 1961, and by 1962 two hundred branches with a mileage of 1,500 miles had been closed. There was not the financial wherewithal to operate the suburban railway lines or to invest in new stations and infrastructure that linked isolated new estates to the network.

It was against this backdrop of crippling losses for the British railway system as a whole that The Reshaping of British Railways was published in 1963, otherwise known as the Beeching Report. The report recommended cuts of up to £148 million per annum in British Railways’ budget which resulted in mass closures of lines and stations across the entire British network. The suburban passenger services of the entire network produced a gross revenue of only £39.8 million in 1961, which was £25 million short of covering the total costs of running the services. Beeching concluded that suburban services (apart from in London) were ‘serious loss makers, and it will not be possible to continue them satisfactorily without treating them as a part of a concerted system of transport for the cities which they serve.’ Stopping passenger services that linked the rural communities with each other and one or two nearby major towns or cities also attracted severe criticism in the Beeching Report, and large-scale closures of lines and stations were recommended. Closures would account for an annual train mileage of 68 million, and the route mileage closed to passenger traffic would be 5,000; this would...

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60 Haywood, Railways, Urban Development and Town Planning in Britain, p. 102.
61 Sealey, ‘Road and Rail Transport in Britain’, p. 303.
62 West Midlands Transport Study, p. 197.
66 Ibid, p. 58.
result in an £18 million net improvement for British Railways. Beeching justified these recommendations for closures on the basis that:

- Rail stopping services and bus services serve the same purpose.
- Buses carry the greater part of the passengers moving by public transport in rural areas, and, as well as competing with each other, both forms of public transport are fighting a losing battle against private transport.

Beeching questioned whether the stopping services met as much as 10 per cent of the ‘total and declining demand for public rural transport,’ while these services accounted for around 40 per cent of the total passenger train mileage of the railways as a whole. The rise in motor car ownership clearly concerned Beeching, and he argued that the stopping services could not compete alongside motor bus services. Beeching stated that motor buses were cheaper to run than the stopping services, and should therefore be the mode of transport to link rural areas with surrounding towns and cities. It was a recommendation that placed further emphasis on road building and motor transport as being able to wholly satisfy cities’ transport problems.

The result of the Beeching Report was a decimation of passenger railway services across the country, and Birmingham and the surrounding area were no exception. Closures within the wider urban region affected passengers who travelled into Birmingham from commuter towns. Councillor T. E. Cowlishaw of Rugeley Urban Council condemned the closure of the Rugeley to Walsall line, and called the decision ‘ridiculous.’ He argued that ‘if Rugeley town station is closed, overspill people who still have to travel to Birmingham will be greatly inconvenienced.’

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68 Ibid, p. 15.
69 Ibid, p. 16.
70 Beeching stated that at a density of 5,000 passenger miles per route mile, passenger traffic on the stopping services would lose £4,400 per mile per annum. An hourly bus service that ran to the same density would make a profit of £700 per mile per annum; Ibid, p. 17.
71 The Birmingham New Street – Sutton Park – Walsall passenger route was recommended to be withdrawn, and the following routes were recommended to be ‘modified’: Birmingham New Street – Leicester London Road – Nottingham Midland, Birmingham New Street - Sutton Coldfield – Lichfield City, Birmingham New Street – Redditch, Birmingham New Street – Worcester Shrub Hill
72 Source located in Library of Birmingham ‘Railways’ newspaper cutting collection, where the date was missing for this entry; ‘Snow Hill is likely to close’, Birmingham Mail (date unknown – approximately March 1963).
G. G. Nicholls expressed worry that ‘the rail service is essential to residents because there is no direct bus service to Birmingham.’ A. J. Cox, Chairman of Kenilworth Urban Council, called the closure of the Kenilworth station a ‘severe blow’ and added that ‘Kenilworth is growing rapidly and many people living here travel to Birmingham, Coventry or Leamington every day. It is difficult to see how they will manage without a train service.’ Conditions were created in which people who commuted into Birmingham for work needed to find new modes of travel. The options were a bus service if one existed, or to use a private motor car. This placed further strains on the road network not only in Birmingham, but surrounding the city too.

Aside from mass closures of routes and stations, another solution suggested by Beeching was the ‘co-ordination of suburban train and bus services and charges, in collaboration with municipal authorities.’ Beeching envisioned no possible way for suburban rail services to survive without a more holistic overview of transport services within the cities which they operated, and argued that ‘it will not be possible to continue them satisfactorily without treating them as part of a concerted system of transport for the cities which they serve.’ This belief in greater integration was not shared by the Ministry of Transport in correspondence with Birmingham Corporation just a year before publication of the Beeching Report. In April 1962, the General Purposes Committee discussed a proposed closure of a Birmingham Snow Hill to Dudley rail line with the British Transport Commission. Chairman Harry Watton suggested to the British Transport Commission’s Consultative Committee that the possibility of removing bus services on the route should have been explored, on the grounds of preventing further congestion on Birmingham’s roads. Watton reported that the Consultative Committee had replied that they were not required to ‘have regard to considerations of road safety or congestion, neither was it expected to retain services to avoid a monopoly of services passing to road operation.’ Members of the General Purposes Committee expressed grave concern with this viewpoint: Watton argued that ‘any transport organisation that can put on paper that it is not concerned about road safety or congestion on the roads is not speaking for me as a taxpayer’, and Councillor E. J. James said that he ‘could not

73 Ibid.
74 Ibid.
75 The Reshaping of British Railways, p. 59.
76 Ibid, p. 58.
77 ‘Road and Rail Link Plea’, Birmingham Post, 11 April 1962.
remember a time when the council had been less a master of its transport than it was now. A fear existed that if the British Transport Commission closed the Birmingham to Dudley line, then this would have forced more passengers onto Birmingham’s road network already suffering serious congestion.

A deputation of Birmingham Members of Parliament (Labour’s Dennis Howell and George Wigg, and Conservative Julius Silverman) visited the Minister for Transport Ernest Marples in July 1962 to discuss rail closures and concerns that decisions regarding rail closures took place in a ‘vacuum.’ A suggested remedy from Wigg was the instigation of a travel survey for Birmingham and the surrounding area. The Ministry however were concerned that Wigg’s approach seemed to be that ‘before rail closures take place there should be a study of transport facilities in the area affected.’ The Ministry also believed that Wigg favoured ‘the integration of all transport facilities in a given area.’ The ideas of Howell and Wigg in particular, the Labour politicians on the deputation, were given little consideration by the Ministry:

No doubt what the deputation fear is that when Dr. Beeching has completed the traffic studies later this year there will be far reaching closure proposals which may affect their constituencies. No one knows whether the closure proposals which will follow the completion of the studies will affect commuter services. Closures must of course be on a large scale if the country is to have a railway system designed to meet present day needs rather than a Victorian colossus … We do not want to link rail closures and transport surveys. In particular we do not want to lend support to any suggestion that closures must await overall transport surveys. It is important to get on with the closure process and surveys are not necessary for it.

The Ministry of Transport did not wish to initiate anything that could slow-down the railway closure process. It predicted that Beeching would call for large scale closures of

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78 Ibid.
80 TNA: MT 97/536, Brief for the Minister about Rail Closures and Area Transport Surveys in the West Midlands, 27 July 1962, p. 1.
82 Ibid, pp. 2-3.
railway lines and assumed that ‘traffic previously carried by rail will be picked up by other transport’ with few problems.\textsuperscript{83} This differed from the experiences of individuals such as Councillors Watton and James at the local level. There were also different views on the solutions to transport management after the Beeching Report. Wigg and Howell were strong advocates of the integration of transport services, yet the Ministry for Transport found this unpalatable:

Mr. Wigg and Mr. Howell might suggest that the logical answer to both closure and conurbation problems is to put all transport services under a single control and provide an integrated service. We don’t think so. Road and rail services run on a commercial basis can give users the choice at a fair price.\textsuperscript{84}

The view expressed from the Conservative government was that consumers would decide which services or modes of transport were desirable, and it was not the job of the government to encourage one sector or another. Correspondence from Birmingham Corporation pursued the matter of integration, and the Town Clerk T. H. Parkinson wrote to the Ministry of Transport in October 1962 stressing that the City Council were ‘in favour, in the interest of the travelling public, of a fully integrated passenger transport system for the Midlands (road and railways).’\textsuperscript{85} Once again, the Ministry resisted, and asserted that ‘integration of public transport services in Birmingham would, at first sight, be a step unacceptable to the Government.’\textsuperscript{86} The Ministry also rejected any potential deputation from Birmingham to discuss such matters further, and an internal departmental note dismissively said that ‘they couldn’t have anything to tell us yet about area surveys, while we don’t want to hear what they have to say about integration policy.’\textsuperscript{87} The Ministry replied to Parkinson in late November 1962, highlighting their stance regarding integration of passenger transport services: ‘Our general policy for transport rests on the belief that co-ordination can best be achieved by allowing the consumer to choose between services offered on a fair competitive basis.’\textsuperscript{88} It was this type of viewpoint that

\textsuperscript{83} Ibid, p. 3. 
\textsuperscript{84} Ibid, p. 4. 
\textsuperscript{85} TNA: MT 97/536, Letter from T. H. Parkinson to Ministry of Transport, 26 October 1962. 
\textsuperscript{86} TNA: MT 97/536, Bird, R. H., Loose Minute: Transport Integration in the Birmingham Area, November 1962. 
\textsuperscript{87} TNA: MT 97/536, Sheaf, P. R., Loose Minute: Transport Integration in the Birmingham Area, 12 November 1962. 
\textsuperscript{88} TNA: MT 97/536, Draft letter to T. H. Parkinson from Ministry of Transport, 23 November 1962, p. 2.
led to the Smeed Report of 1964, which recommended road pricing as the most effective method of managing traffic, being so thoroughly dismissed by the Ministry of Transport. According to David Rooney, the Smeed Report ‘could not have been less welcome’ for Marples as it ‘flew in the face’ of a political truism that motorists resented being taxed.\textsuperscript{89} It was believed that the free market would determine the success of different modes of transport, not controls through mechanisms such as road pricing.

It was only after the publication of the Beeching Report that the Ministry of Transport became slightly more receptive to the idea of integrating passenger transport services. In May 1963, internal communications within the Ministry debated integration:

The idea of co-operation between the Railways and municipal bus operators is one that is put forward in the Railways Report. The question is how is this to be organised and should we or should we not intervene in it ... This case highlights a problem which is going to strike us before very long, namely, how do we set about bringing together road, rail and other public transport plans for the main conurbations?\textsuperscript{90}

In September 1963, after the publication of the Buchanan Report, Marples and the Ministry finally conceded the need for the integration of passenger transport services in the large conurbations. In an internal Ministry memorandum, the opinions of Marples were made clear:

Against this background (of Beeching and Buchanan reports stressing ‘the long term problems of transport in our cities and the need for adequate planning, bringing in both roads and public transport’) the Minister has decided that we ought to go for sound and comprehensive transport surveys in each of the main conurbations to provide the right basis for decisions on future road development and the balance between private and public transport.\textsuperscript{91}

\textsuperscript{90} TNA: MT 97/536, Note from Madge to Goad re: Passenger Transport in Birmingham, 10 May 1963, p. 2.
\textsuperscript{91} TNA: MT 97/536, Letter from D. C. Haselgrove to J. Else, 25 September 1963.
The West Midlands conurbation was given permission in December 1963 to undertake a comprehensive traffic study regarding the area’s traffic conditions. This was an important step towards integration of passenger transport services that came with the establishment of the West Midlands Passenger Transport Authority in 1968. It was significant because the traffic study was required to detail how the people of the West Midlands used, or perhaps more pertinently did not use, public transport. The foreword to the West Midlands Transport study stated that ‘this work has given considerable guidance on the potential growth of travel demands in the West Midlands, and has provided a basis for developing an integrated transportation system for the area.’\textsuperscript{92} Without the recommendation of the Beeching Report for integration of passenger transport services however, it is reasonable to assume that Marples’ Ministry of Transport would have continued to refuse to establish transport surveys in conurbations outside of London. Widespread rail closures may well be the most famous repercussion of the Beeching Report, but the recommendation for integration was something that must also be noted in helping local authorities, such as Birmingham, achieve their goal of passenger transport integration. Harry Watton said that ‘the Beeching report on road passenger integration has been welcomed by the City,’ and it was because of the promotion of integration.\textsuperscript{93} This shift towards integration ensured that for Birmingham Corporation the management of the railways was no longer made without due consideration to the motor bus networks within the conurbation.

The West Midlands Passenger Transport Authority, established in 1968, stated that it was ‘necessary to ensure that road and rail services will be planned in such a manner as to be complementary to one another rather than in competition.’\textsuperscript{94} This was an important shift in transport policy; the domination of the car in the ‘motor city’ was challenged, and public transport was required to undertake a more significant role. The Corporation’s \textit{Structure Plan} of 1973 centred its transport policies on the revitalisation of railway services into Birmingham, and was not as focussed on the motor car as the \textit{Development Plan} of 1960 had been. The motor bus operations however endured bad

\textsuperscript{92} Letter from Freeman, Fox, Wilbur Smith and Associates to the Technical Committee of the West Midlands Transport Study, 1 January 1968, reproduced in \textit{West Midlands Transport Study} (Birmingham, 1968).

\textsuperscript{93} TNA: MT 97/536, Letter from Harry Watton to J. Else, 10 April 1963.

congestion due to a lack of ‘special facilities,’ such as bus lanes, and this meant buses
were not spared ‘from the worst effects of congestion points’. The solution was to
improve local rail services; numerous bus routes were planned to be modified ‘to serve
many suburban railway stations and reduce services which at present compete with rail
services.’ The Structure Plan argued that the only way to overcome congestion on the
roads was to organise public transport more efficiently, and not make it compete on a
modal basis. The answer was not simply to build more roads and let the market decide,
as had been the attitude of the Ministry of Transport before the Beeching Report.

Unrealised Schemes

A number of public transport rapid transit schemes for implementation in Birmingham
were investigated during the ‘motor city’ era, but all failed to materialise. There exists
an extensive field of literature that examined the futuristic nature of town planning in the
1950s and 1960s, but the little scholarly work that focuses solely on the unrealised public
transport schemes is restricted to study of new towns such as Milton Keynes and
Washington. This thesis has suggested that existing public transport provision in
Birmingham was neglected in favour of allocating resources towards road construction.
It is therefore necessary to assess whether the rejection of numerous public transport
schemes in Birmingham was because the Corporation were instead more in favour of
implementing other policies that promoted motor car use in the city.

In the 1940s, only two underground systems operated in Britain; the London
Underground which opened in 1863, and the Glasgow Subway opened in 1896.
Liverpool opened an underground cross-city centre link (with three new stations) in 1977,
and Newcastle tunnelled part of its Metro service underground in 1980. Underground
railways had been investigated in Birmingham; an eleven-mile tube railway system for

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96 This literature in this field is restricted to analysis by Guy Ortolano’s on the failed plans to introduce a
monorail system in the new town of Milton Keynes, and Dominic Sandbrook’s on the hovercraft in
97 Haywood, R., ‘Britain’s National Railway Network: Fit for Purpose in the 21st Century?’, *Journal of
north-east Birmingham was proposed in 1948, at a suggested cost of £13,750,000.\textsuperscript{98} It was estimated that the tube railway was capable of making £350,000 per annum, based on 57,000 passengers per day at an average fare of 4d. After operating costs and loan charges were taken into account, Manzoni calculated that the system would produce annual losses of £831,800, and the tube railway was rejected due to these economic deficiencies.\textsuperscript{99} The notion of rapid transit provision did not subside completely within the Corporation; in July 1950 Councillor F. F. Griffin presented a further system of ‘tube and electric railways’ to the Public Works Committee.\textsuperscript{100} The Public Works Committee deferred undertaking further consideration of such a project ‘pending a report by the City Surveyor upon the desirability and practicability of the proceeding with such a scheme at the present time.’\textsuperscript{101} Manzoni though was vehemently against the implementation of tube railways in Birmingham. In 1952, he discussed the feasibility of tube railways in an article from the \textit{Birmingham Post}:

I took a length [of proposed track] through the most populous areas… and if we could have got everyone living within half a mile of the stations, which were frequently placed, to use the tube and not the buses, the cheapest fares on the tubes would have been 4d a mile. On economics alone, I am quite certain we could never have tubes … No tubes pay; it would be hopelessly uneconomic. It might help solve the traffic problem, but the methods we are trying to use – the new areas and development – will solve the problems anyway.\textsuperscript{102}

This was a significant statement from Manzoni, as it showed a total faith in road construction as the ultimate answer to the city’s traffic problems. In a report regarding traffic conditions in the city centre presented to the Traffic Advisory Committee in 1950, Manzoni and Chief Constable E. G. Dodd concluded that ‘we are of the opinion that the only solution to the traffic problem in the City Centre is the construction of the Inner Ring

\textsuperscript{98} Macmorran, J. L., \textit{Municipal Public Works and Planning in Birmingham: A Record of the Administration and Achievements of the Public Works Committee and Department of the Borough and City of Birmingham 1852-1972} (Birmingham, 1973), p. 63.
\textsuperscript{99} Ibid, p. 63.
\textsuperscript{100} LBA: BCC/1/AO/1/1/115, PWC, Minutes, 27 July 1950.
\textsuperscript{101} Ibid.
\textsuperscript{102} ‘Investigation of Tube Scheme’, \textit{Birmingham Post}, 1 November 1952.
Without the support of the influential Manzoni, the proponents of tube railways and rapid transit struggled to gain significant attention from other members within the Corporation.

In June 1956, a five-man delegation visited Chicago, Pittsburgh, Washington, Philadelphia and New York to ‘investigate highway and car parking development, including facilities available for mass transit.’ Manzoni visited America to analyse how specialist aspects of his plans for the Inner Ring Road in Birmingham, such as flyovers and sunken roads, were utilised in America. Manzoni stated in January 1956 that ‘before we do this [build the Inner Ring Road] we are going to see how they have tackled these problems in America.’ The delegation were informed a month later of a need to broaden their investigation, as Birmingham Corporation’s Traffic Conference suggested that an electric traction system in Philadelphia should also be studied. The Traffic Conference consisted of representatives of ‘interest committees’ such as the Public Works, General Purposes, and Transport Committees. In practice though, the Traffic Conference was dominated by the Public Works Committee where Manzoni had such considerable influence. The report of the delegation was presented in March 1957, and argued that ‘traffic in this country was likely in 10 or 15 years to approach the intensity of that in American cities.’ The small section of the report dedicated to the study of American rapid transit facilities argued that ‘the use of the earlier rapid transit systems [in America] had declined with the growth of private cars because private car owners are apparently willing to spend very large sums in parking fees for the privilege of individual transport.'

103 LBA: BCC/1/CC/1/1/5, Traffic Advisory Committee, Report from Manzoni titled Traffic City Centre, 2 October 1950, p. 12.
104 Members of the delegation were Manzoni, Chairman of the Public Works Committee Frank Price, Chairman of the Town Planning Sub-Committee Dennis Thomas, and two officers who reported to the Public Works Committee; LBA: BCC/1/AO/1/1/144, PWC, Report of the Delegation who visited America to the Public Works Committee: Traffic Facilities – Interim Report, 28 March 1957, p. 1.
109 Ibid, p. 11.
The report claimed that the will of the ‘public’ was to own and use private motor cars. This viewpoint had long been espoused by Manzoni; for example in January 1955 he said that ‘I see no reason why traffic in this country should not reach the proportions of traffic in America’. The delegation’s report reinforced the view that the transport method of choice for the residents of Birmingham would be the motor car:

Undoubtedly there is a large population which travels into and out of the City each day who could possibly be persuaded to keep their cars off the roads, provided there was an adequate rapid transit system. However, no one should be misled into assuming that the provision of rapid transit facilities would diminish the number of road vehicles travelling to the city centre.

It was argued that this was because the number of vehicles per head of the population would ‘constantly increase’ to approximately one in three by 1972, and thus the Corporation should plan for this increased demand for motoring. The claim that rapid transit facilities would fail to entice large numbers of passengers away from the motor car was not entirely without foundation; for example passenger journeys on the London Underground decreased from 720 million in 1948 to 692 million in 1958. In the late 1950s such evidence hardly suggested that rapid transit was a popular form of transport that should be adopted by other Corporation’s across Britain.

The delegation studied a rapid transit system which ran along a central reservation on the Congress Highway in Chicago, but rejected such a scheme for Birmingham. This was because Birmingham (unlike Chicago) was ‘short of land and the existing and planned central reservations may have to be used for carriageway provision,’ though what this carriageway provision entailed was not discussed. This led to the conclusion that ‘a rapid transit system of the electric track type must go underground in order to utilise land to its best advantage.’ As previously discussed, Manzoni rejected the economic

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112 Ibid, p. 12
113 Passenger journeys on the London Underground continued to fall during the 1960s and 1970s. In 1968, there were 655 million journeys undertaken, and by 1978 this decreased further to 568 million; Halsey, A. H., & Webb, J., Twentieth-Century British Social Trends (Basingstoke, 2000), p. 441.
feasibility of an underground electric railway in 1948. The report instead suggested that ‘limited stop buses’ – express bus services with faster journey times due to reduced number of stops - were the method of mass transit ‘recommended by some of the Authorities in America.’ No firm recommendations, however, were made regarding the implementation of a rapid transit system.

A conference between representatives of the Public Works Committee and Transport Committee was convened in September 1957 to discuss the potential for rapid transit facilities in Birmingham. The notion of rapid transit was not dismissed; instead influential figures at the meeting suggested it was a vital requirement for the future of Birmingham. The Chairman of the Public Works Committee, Councillor Frank Price, warned that people had ‘no conception of the traffic problem that would be created by one person in four running a car.’ Price cited examples of ‘jamming traffic’ in America, where car ownership was higher, and suggested that it ‘became essential, therefore, that people should be persuaded to use other forms of transport.’

Manzoni, however, warned that ‘the difficulty was that people would use their own cars unless some other more convenient method of transportation was available … if a bus could travel faster than a car, it would follow that passenger traffic would be attracted to this kind of service.’ Manzoni argued that the one method of rapid transit that Birmingham could utilise was an ‘express omnibus service on motor-ways.’ This framed rapid transit in a certain context; Manzoni was happy to investigate road-based rapid transit, but decided rail or underground systems were uneconomic. Manzoni firmly argued that road construction was still the ultimate solution to the city’s traffic problems. He suggested that for the cost of a rapid transit system (of approximately £15 million) ‘considerable improvement could be made to some of the major roads into the city.’ It was this belief from key decision makers in the city such as Manzoni that meant rapid transit of an electric or underground rail variety did not attract further attention in Birmingham.

One of the main reasons that discussion of rapid transit schemes were discussed within the Corporation was because of the persistence of influential Councillor William

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116 LBA: BCC/1/AO/1/1/146, PWC, Notes of a Conference held between Representatives of the Transport and Public Works Committee, 20 September 1957, p. 3.
118 Ibid, p. 5.
Bowen, one of the few individuals within the Corporation who believed in a non-roads solution to rapid transit. On the 5th January 1954, the City Council passed a resolution that warned that ‘it would seem impracticable for very many years to come to construct the inner ring road,’ and therefore other schemes to alleviate congestion should be investigated. This led to the establishment of a Traffic Conference, under the chairmanship of Bowen, who was an enthusiastic supporter of electric railway rapid transit systems. Bowen wrote a trio of articles for the Birmingham Post in December 1954 on the subject of passenger transport services in the city. He commented glowingly about the Toronto underground system: ‘in accelerating and braking the modern streamliners equal the finest automobile.’ Toronto allocated the system its own reserved track and did not force the rapid transit system to run along the roads; Bowen claimed the light electric railways were ‘no longer a nuisance, but a solution, so far as traffic congestion is concerned.’ Bowen used his final article to publicise an electric railway system he had planned for Birmingham, to run from Rubery in the South-West, to Tyburn in the North-East, via an underground tunnel in the city centre (Figure 5:2). In a different approach from Manzoni, Bowen believed that there was a need to search for ‘a new approach to our passenger transport problem, as a necessary complement to the Inner Ring Road Scheme.’ The desired solution to public transport issues in Birmingham was not, in Bowen’s opinion, the further provision of roads and buses; there needed to be an alternative that replaced the old tramways with a modern light railway system. In February 1956 Bowen officially presented his plans to the Traffic Conference that he chaired, where it was decided further detailed investigation of the scheme was required from Manzoni. Manzoni recommended rejection of the scheme on financial grounds in January 1957, with the scheme estimated to cost £15,000,000. This was a figure that Bowen contested, and he claimed his scheme was ‘much simpler and I shall

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119 Bowen was a powerful figure within the Corporation. From 1950-1952 he was group leader of the Labour Party, and was an influential figure within the General Purposes Committee. This allowed an opportunity for Bowen to present his ideas to a committee capable of influencing debate within the Corporation; Sutcliffe & Smith, History of Birmingham, p. 406.
122 Ibid.
make a determined fight [for the scheme] when the matter is considered by the General Purposes Committee.¹²⁴

Clearly evident were distinct ideological clashes; Manzoni and his supporters on the Public Works Committee wished to focus on road building and possibly rapid bus transit, whereas Bowen believed a dedicated separate rapid transit system was the only way to alleviate future pressures on the road system. The General Purposes Committee in November 1957 admitted defeat regarding the scheme due to the fact that construction of the first part of the Inner Ring Road finally looked a reality. The General Purposes Committee stated:

> It would be very difficult at this stage to justify to the Minister [of Transport] the need for the construction of the suggested electric transit system until the extent of the traffic problem which will [be known] when the Inner Ring Road scheme is completed can be ascertained.¹²⁵

¹²⁴ ‘No Move Yet on City Rail Plan’, *Birmingham Mail*, 30 January 1957.
This opinion aligned with a view stated by Manzoni in April 1957, when he warned the Traffic Conference that ‘any approach to the Minister to give consent to an electric transit system might detract from efforts to complete the Inner Ring Road.’ The General Purposes Committee finally relented to the pressures for road building in Birmingham. Key figures, such as Manzoni, had argued that this was the main answer to the city’s transport problems. Anthony Sutcliffe and Roger Smith concluded that the main ‘defect’ of Bowen’s plans for rapid transit were that they came too late, and by the time Bowen

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could present firm plans, progress was underway on the Inner Ring Road. This is true to an extent, but the other crucial defect of the scheme was that it did not fit in with the ideological reconstruction of the city in the view of important figures such as Manzoni, who had rejected schemes of a similar nature since 1948. Manzoni had little desire to lend support to any other project that could deflect resources away from completion of the Inner Ring Road, such was the complete faith in the road building strategy the city undertook.

From the mid-1960s however it was evident that progress had to be made regarding rapid transit, as even when the roads of the city were fully modernized traffic was still congested throughout the city. This was perhaps partly down to the influence of Neville Borg, who replaced Manzoni as City Engineer in 1963. Borg still presided over the development of major road schemes such as the final stages of the Inner Ring Road and the Aston Expressway, but he also believed that public transport had a more important role to play in the city than was ever credited by Manzoni. In 1970, Borg argued that public transport systems were vital for absorbing future growth of journeys in British cities. Without this shift to a more prominent public transport network, ‘an enormous highway programme, with all that is involved in the way of money, disturbance and impact on the structure of towns’ would be required to accommodate travel demand and reduce ‘congestion, inefficiency, and nuisance.’ The West Midlands Transport Study of 1968 highlighted that an important shift had taken place away from road construction:

It will probably be physically and financially impossible to provide highways sufficient to cope with the ultimate unfettered demands of car users. Therefore, a parallel situation with that in America will arise unless the motor car is contained. In this, public transport has an important part to play.

No firm proposals were suggested regarding rapid transit, however the study did recommend that ‘rapid transit systems, particularly of the fixed track type, require special

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operational circumstances if they are to be economic, and such conditions are perhaps worthy of investigation for the A.38 route north and south of Birmingham.’ This complemented another of the study’s recommendations, that ‘additional limited stop and express [bus] services could be introduced’ which would have average speeds not significantly less than that of the motor car in order to be attractive to potential passengers. This idea was similar to Manzoni’s from the 1950s.

Figure 5:3 - Passenger journeys made by Birmingham Corporation motor bus services, 1955-1969.

Borg made some attempts to facilitate the motor bus as a rapid transit option, in response to falls in passenger journeys made by the motor bus in the 1960s (Figure 5:3). In November 1966, the Public Works Committee first discussed the idea of ‘bus only’

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132 Ibid, p. 201.
lanes. The Rush-hour express bus services were introduced in April 1967 on the route from Rubery to the city centre, which were ten minutes quicker than the stopping services. Accompanying this service, a park and ride scheme was set up at Rubery and Northfield to enable motorists to leave their cars on the outskirts of the City and complete their journey by the express bus service. The scheme was not an initial success; Councillor Bernard Zissman (Chair of the Traffic Sub-Committee of the Public Works Committee) stated the experiment ‘has not been as successful as we had hoped.’ Zissman added:

> Until congestion gets so bad and parking so difficult that motorists cannot get into the city or cannot park when they do get in, park-and-ride is going to be difficult to achieve … there is still space in the city for a motorist to park his car once he does get in.

Zissman believed that given the choice, motorists would still prefer the comfort and convenience of their own private transport rather than an express bus. Patronage of the service rose by around 600 passengers between the first and second week. It was found that these were not new passengers attracted away from their motor cars, but instead existing bus passengers who changed from one service to another. Zissman suggested that a car park needed to be instead located around one and a half to two miles away from the city centre to make the scheme work. He argued this would entice more motorists to make the final part of their journey into the centre by motor bus. The unsuccessful experiment with park and ride and express bus services showed that rapid transit solely by motor bus failed to persuade the motorists of Birmingham out of their cars. One reason for its lack of success was that motorists were ‘reluctant to use the buses for fear of leaving their car unattended for long periods.’ The Corporation did not employ a permanent security guard for the car parks, and the only form of security came from police patrols which, according to the Road Improvement and Traffic Sub-Committee, only visited the car parks from ‘time to time.’

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135 LBA: BCC/1/AO/14/1/1, Public Works (Road Improvement and Traffic Sub) Committee, Note on Park and Ride Scheme, 3 April 1967.
137 Ibid.
139 LBA: BCC/1/AO/14/1/1, Public Works (Road Improvement and Traffic Sub) Committee, Note on Park and Ride Scheme, 3 April 1967.
Such failures inspired the Corporation to seek further guidance on matters of rapid transit. In October 1969 transportation engineers De Leuw, Chadwick and O hEocha were commissioned to undertake a *Rapid Transit Study* for Birmingham. The study aimed:

- to examine potential for developing public rapid transit networks
- … so as to improve standards of travel between residential zones, the City Centre and other major places of employment in the City, with recognition being given to the need for the private car and public transport to complement each other in such an overall network.\(^{140}\)

De Leuw, Chadwick and O hEocha were instructed to examine both express bus services and railways (whether through the improvement of existing suburban lines or construction of new rapid transit facilities).\(^{141}\) A change in central government subsidies for public transport provision made the investigation of rapid transit a worthwhile exercise. The Transport Act 1968 stated that ‘the cost of fixed facilities and property could be eligible for a grant of up to seventy-five percent.’\(^{142}\) Previous rapid transit schemes had been rejected in Birmingham partly due to financial constraints, but this change in legislation influenced the Corporation to reassess whether rapid transit could be operated in the city. The conclusions of the *Rapid Transit Study* were the opposite of the rapid transit ideas suggested by Manzoni; further road-building and rapid bus transit was rejected, while rail rapid transit was recommended. The study investigated the possibility of rapid transit provision in one particular corridor of movement in Birmingham, termed the ‘A38 corridor’, which ran from Four Oaks in the North of the city to Redditch in the South, via the city centre. The study worked on the assumption that by 1981, there would be 424.4 million passengers who used the rapid transit system annually between Four Oaks and Redditch. The report stated, rather bluntly, that:

\(^{140}\) LBA: BCC/1/AG/1/1/57, General Purposes Committee [hereafter GPC], Report to City Council, 7 October 1969.


A motorway to carry the same number of people by motor car, at average occupancy rates, would require 10 lanes in each direction in the first case (24,000 persons per hour per track) and 28 lanes in each direction in the latter (64,000 persons per hour per track).  

Express bus services were rejected for use on the existing general purpose roads, as it was believed a very limited improvement of travel time would not outweigh ‘the high financial and social cost to provide reserved lanes for express buses.’

The report stated:

It is not considered feasible to reserve existing lanes for the exclusive use of buses, and thus reduce the capacity to handle other traffic. Reserved lanes would have to be constructed as additions to the existing carriageways. This would incur property acquisition and undesirable environmental effects, in addition to construction costs.

There was also concern regarding the destruction of trees, and it was argued that in many urban areas there existed ‘a great deal of public concern over the community impact and environmental effects of projects such as motorways and rapid transit lines.’ The consultant engineers stated that the large-scale road construction of the 1950s and 1960s was no longer feasible in the 1970s. Instead, a rapid rail system that followed a new route through the city centre, which also made use of some existing railway tracks in the northern and southern edges of the route, was deemed most suitable. New rail stations to serve the route were said to require ‘less property and would cost less to construct than a busway station.’ Feeder buses that were completely separated from car traffic were envisaged to be pivotal to supplying the rail stations, alongside ‘kiss and ride’ facilities (where passengers could be quickly dropped off and picked up by private motor car, with limited waiting times).

This report’s recommendations were symptomatic of the changing attitudes towards automobility in Britain in the 1970s. A reaction against the unchecked expansion

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144 Ibid, p. 4.
145 Ibid, p. 42.
146 Ibid, p. 64.
147 Ibid, p. 51.
of the motor car had started to gather momentum, as we shall also see in other chapters.\textsuperscript{148} This was not just in Birmingham; in London the ‘Homes before Roads’ anti-roads movement was established in 1970 to protest against the Greater London Council’s plans for the development of the Ringway urban motorway system.\textsuperscript{149} In London as in Birmingham, public transport alternatives were sought to the motor car. In 1973, the Transport Research Assessment Group (formed in 1967 by the then Ministries of Transport and Technology) published \textit{Opportunities in Automated Urban Transport}. It argued that:

\begin{quote}
Public transport cannot at present offer the same service [as the motor car] but the steady increase in the number of cars not only reduces progressively their advantages, it also makes the public transport using the same roads less and less dependable and efficient.\textsuperscript{150}
\end{quote}

In order to address this, the report studied various automated transport systems, such as minitram and cabtrack. It could be argued that these sorts of publications, alongside the \textit{Birmingham Rapid Transit Study} represented a technical rejection of the road-building agenda, and signified the growing disillusion with the ideas of motor cities.

**Conclusion**

This chapter has demonstrated the persistent struggles of public transport in the early years of mass car ownership, but also noted a shift in opinion back in favour of public transport towards the end of the study period in the early 1970s. The timeline was not unique to Birmingham; Peter Hall and Carmen Hass-Klau argued that a change occurred in British transportation policy in the late 1960s ‘away from planning for the free use of the private car, and toward the promotion of public transport.’\textsuperscript{151} Highway proposals drawn up by the Committee of the West Midlands Highway Authorities in 1959 formulated a programme that was estimated to cost £85 million; by 1967 only one-sixth

\textsuperscript{148} See Chapter Six on Public Health and Pollution. The case study of the opening of the Gravelly Hill interchange, and the negative reaction it provoked in nearby residents, highlighted the development of such negative attitudes towards the motor car.

\textsuperscript{149} For analysis of the reaction against urban motorways in London, see Hall, \textit{Great Planning Disasters}, ch. 3.


of this programme had been completed (and the remaining costs of the other five-sixths increased to £130 million).\textsuperscript{152} The Birmingham conurbation was only second to Greater London in terms of mass car ownership.\textsuperscript{153} Despite this high expenditure on road building, and high levels of mass car ownership, Birmingham still experienced the same reaction as other British cities (where less money had been spent, and levels of car ownership were lower) in beginning to move away from a transport system that relied on the motor car. The late 1960s however still heralded a call for greater attention to public transport in Birmingham, as this chapter has shown. There was a desire for integration of public transport services, and serious investigations were undertaken into alternatives such as rapid transit by the 1970s. Despite vast expenditure on road construction for the benefit of the motor car, there was still a demand for better public transport provision by the late 1960s and early 1970s; the Corporation’s Structure Plan of 1973 surveyed 3,850 residents, and claimed that 80 per cent of respondents believed that ‘the use of the private car should be restrained and improvements made to public transport’, and 90 per cent believed a new system of public transport needed to be provided.\textsuperscript{154}

Planners and politicians of the city began to reject the notion of a ‘motor city’ by the late 1960s and early 1970s, despite the high investment and resources devoted by the Corporation in attempting to create a city suitable for the motor car. Residents also expressed dissatisfaction, as the resident’s protest to the opening of Gravelly Hill interchange in Chapter Six and the fears of drivers on the new roads in Chapter Seven shows. This chapter has demonstrated that individuals within Birmingham Corporation, such as Councillors Watton and Bowen, pushed for alternatives to planning merely for the proliferation of the motor car. The problem was that decision making powers from the 1940s to the 1960s were generally held in the Public Works Department, which in turn enacted the ‘expert’ advice of Herbert Manzoni.\textsuperscript{155} In an interview with Anthony Sutcliffe, Manzoni elaborated on the role of the expert within the Corporation:

Take a matter of town planning. Now from whom would you expect the solutions to come but from the paid officers? After all,

\textsuperscript{152} Buchanan, \textit{The Conurbations}, p. 36.
\textsuperscript{153} Vehicles with licenses current, per 1,000 population: London 187, West Midlands 186, South East Lancashire 164, Merseyside 153, West Yorkshire 172, Tyneside 148, Central Clydeside 87; Buchanan, \textit{The Conurbations}, p. 96.
\textsuperscript{154} City of Birmingham, \textit{Structure Plan} (Birmingham, 1973), p. 66.
\textsuperscript{155} Cherry, \textit{Birmingham}, p. 199.
the laymen are not expert in these matters. They become a little 
bit expert by their service on Committees over a period. But when 
they become expert, they almost always come to the same 
conclusions independently as the officer does.156

John Gold argued that ‘the engineers’ ring roads and radial schemes drove the town 
planning agenda in many cities’ up to the 1960s.157 It is no surprise therefore that public 
transport struggled to prosper from the 1940s to the late 1960s, when the planning 
mechanisms were dominated by the City Engineers who, along with the Ministry of 
Transport, ‘relied on road building programmes to solve urban traffic problems.’158 It 
would be harsh to say public transport was mismanaged in Birmingham, but it was not 
afforded the same attention and importance as road building and the motor car were by 
the key decision makers such as Manzoni. Efforts were made to try and address this in 
the Corporation’s Structure Plan of 1973; its transport strategy focussed upon the 
 improvement of suburban rail instead of road building. This suggested that the highpoint 
of the ‘motor city’ experiment was over, with a call for greater investment of resources 
into public transport networks which had struggled through the 1950s and 1960s in 
Birmingham.

156 LBA: LSC, Sutcliffe, A., ‘Transcripts of Interviews with Prominent Birmingham People: Interview with 
157 Gold, Practice of Modernism, p. 69.
158 Ibid, p 68.
Chapter 6 – Public Health and Pollution

The early 1970s were characterised by increases in ‘environmentalism’; in 1970 the Council for Europe held a European Conservation Year, the Department of the Environment was established in Whitehall, and the ‘tirelessly apocalyptic’ environmental magazine The Ecologist was first published.¹ The pressure group Friends of the Earth was founded in the United Kingdom in 1971 (two years after its inception in America).² Events such as the Torrey Canyon oil spill in 1967 developed an environmental awareness amongst Britons; the environmental historian John Sheail argued that this ‘symbolic landmark … showed how vulnerable Britain was to the “forces of supposed progress.”’³ Rising television ownership meant that environmental disasters were visualised in living rooms across Britain for the first time.⁴ It was at this point that cars, of which there were 11,515,100 in Britain in 1970, attracted increasing amounts of attention regarding its impact on the environment.⁵ The first report of the Royal Commission on Environmental Pollution, published in 1971, acknowledged that ‘the condition of transport by road, rail and water of potential pollutants needs further investigation.’⁶ This chapter will present two central arguments; firstly that while the issue of motor car pollutants gained increasing publicity in the early 1970s, the concern did not originate at the period and, secondly, that anxieties were not about the impact of car pollutants on the ‘environment’ but instead concerned public health.

Historical analyses of public health in twentieth century Britain have tended to be restricted to the rise in popularity of smoking or the tarring of roads.⁷ Discussions of the environmental and public health effects of noise and air pollution caused by motor cars have focussed on the experiences of the United States, Canada and mainland European

² Sheail, J., An Environmental History of Twentieth-Century Britain (Basingstoke, 2002), p. 147.
⁴ In 1957, 48.1% of households held a black and white television license, by 1967 this had risen to 88.1%, from Halsey & Webb, Twentieth-Century British Social Trends, p. 640.
⁵ British Road Federation, Basic Road Statistics (London, 1975), p. 2
⁶ Royal Commission on Environmental Pollution, First Report (London, 1971), p. 34
countries, with Britain largely under-researched. An overview of the development of public health concerns regarding the motor car in post-war Britain is therefore required. This chapter will firstly analyse the influences behind the development of public understanding of motor car pollution in Britain, and examine how the issues of lead, air and noise pollution attracted attention throughout the 1950s and 1960s. The second section will consider the responses of central government to these growing environmental concerns, particularly through research into the electric car. Finally, through a case study of the opening of the Gravelly Hill interchange in 1972, the chapter will investigate resident protests in Birmingham in the face of the fear of motor car pollutants. How did officials of the ‘motor city’ of Birmingham respond to the growth in environmental and public health concerns regarding the motor car in the early 1970s?

A source of anti-car protest by the early 1970s that this chapter does not focus on was road safety. Traffic accidents increased from 167,000 per year in 1950 to 262,000 in 1973. From 1950 to 1973, the number of deaths per year from road accidents increased from 5,012 to 7,406, and the number of people ‘seriously injured’ per year increased from 49,000 to 89,000. The examination of central government’s role in road safety has been explored by historians such as William Plowden and Joe Moran. There is, however, a need for histories of local authority attitudes and actions towards road safety issues. Road safety became a prominent concern and cause for protest for some residents in the 1970s, and was a further example of the general public’s rejection of ‘motor city’ ideals. Local histories of responses to road safety concerns will provide a useful area of study for future


10 Hamer, Wheels Within Wheels, ch. 8; Moran, ‘Crossing the Road in Britain’; Plowden, Motor Car and Politics.

11 The press in Birmingham reported a number of examples of road safety protests. For example in 1969, a group of residents painted their own zebra crossing on Princip Street in Newtown, in reaction to fears for child safety in the area. In 1974, a group of parents and local officials blockaded a stretch of carriageway along Nechells Parkway in protest over a lack of safety barriers between the carriageway and open green space used by children; ‘Do-It-Yourself Crossing Stops the Traffic’, Birmingham Mail, 26 June 1969; ‘Mothers Blockade Road in Safety Protest’, Birmingham Mail, 26 November 1974.
research. The last section of this chapter, however, focuses only on resident protest that arose in response to public health concerns from motor car pollution.

**The Development of Research**

In August 1907, an article appeared in the medical journal *The Lancet* which voiced public health concerns regarding pollution caused by motor vehicles. The anonymous author warned that ‘not only does the motor engine at times give off offensive fumes which are easily visible, but it also discharges unseen gases which, though apparently inoffensive, are decidedly poisonous.’¹² Early legislation related to the motor car was concerned only with managing the visible exhaust emissions. The Road Traffic Acts of 1930 and 1947 attempted to address ‘emissions of visible vapours, sparks, ashes and grit.’¹³ The Motor Vehicles (Construction and Use) Regulations in 1951 required every motor vehicle to be ‘constructed, maintained and operated in such a way as to prevent avoidable emission of smoke or visible vapour,’ with failure to comply with these regulations punishable by police action under the Road Traffic Acts. It was understandable that legislation regarding exhaust emissions focussed on visible exhaust smoke; industrial smoke control had been a considerable problem in Britain since the nineteenth century. A substantial concern existed regarding ‘the effect that smoke had on human health’ and respiratory diseases such as tuberculosis, bronchitis and asthma were ‘serious public health problems in late nineteenth-century Britain.’¹⁴ A Ministry of Health Committee reported in 1920 that ‘noxious gases and smoke’ were an ‘evil’ to be tackled, and suggested that ‘air pollution was no longer regarded as an inevitable consequence of industrialisation.’¹⁵ A report which investigated the London smog of 1952 from the Committee on Air Pollution argued that there was a ‘clear correlation between the pollution by smoke and sulphur dioxide, and the daily death rate in Greater London at that time.’ The report pointed to the evidence of the Emergency Bed Service, where at the height of the smog 492 applicants were received, compared to 293 applicants during the influenza epidemic in 1951. In total 390 people were subsequently admitted

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to hospital; the report concluded that respiratory disease nearly quadrupled and heart disease figures rose to three times the normal numbers. Industrial smoke emissions received the majority of blame for causing the smog; in response the Committee on Air Pollution tentatively suggested that smoke from motor vehicle exhausts ‘add[ed] seriously to the pollution in densely populated areas’ but acknowledged that more research was required. Public health concerns that had developed during the process of restricting industrial smoke emission started to be applied to visible motor vehicle exhaust emissions.

Research into air pollution caused by motor vehicles was therefore largely confined to investigation of the visible exhaust smoke in the 1950s. The Motor Industry Research Association (MIRA) started to develop ‘an active interest’ in exhaust smoke emissions in 1956, and the following year an Advisory Panel was established by MIRA to ‘test and approve standard apparatus for the measurement of smoke emission.’ In the same year, a representative of the Department of Scientific and Industrial Research’s Fuel Research Station presented a paper at a conference which argued that although air pollution from motor vehicles was minor compared to burning coal in domestic fires, industrial furnaces and boilers, the fumes emitted from vehicles at ground-level posed a danger as there was ‘little time for dispersal before the polluted air is inhaled.’ The Warren Spring Laboratory, which replaced the Fuel Research Station in 1959, continued the research into smoke from diesel exhausts (Figure 6:1): ‘large numbers of heavy lorries emit dense smoke, and methods of removing smoke from exhaust gas are accordingly being studied.’

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Figure 6:1 - Investigation of ‘pollution over pavements and the position of exhaust pipes’ at Warren Spring Laboratory, 1959.


One of the reasons for the increased research into visible fumes from diesel exhausts was that lung cancer diagnoses increased at an alarming rate in the first half of the twentieth century. Lung cancer was a ‘relatively rare disease’ at the beginning of the twentieth century. From 1930 to 1945 however, lung cancer incidences in males aged over 45 increased six-fold. Researchers analysed what factors had changed in people’s environments in an attempt to establish the causation of the rise in lung cancer in the first half of the twentieth century. In 1930 Maurice Davidson, an assistant physician to Brompton hospital, published one of the earliest books on the subject of lung cancer. Davidson stated that it seemed ‘reasonable to suppose that for an explanation of the increase in primary carcinoma of the respiratory tract we must look to some factor which

since the period of the (First World) war has begun to operate in greater degree."\textsuperscript{24} The increase in smoking was one obvious factor to consider; at the beginning of the twentieth century adult males consumed 0.5 kilogrammes of tobacco per annum (via cigarettes), yet by the 1940s this had increased to 4.1 kilogrammes.\textsuperscript{25} Motor car ownership in Britain had, however, also vastly increased from 8,465 in 1904 to 2,257,873 in 1950, and therefore seemed an obvious factor to consider. The Medical Research Council operated a dedicated Air Pollution Research Unit, and one of its aims was to investigate the ‘health hazards of emissions from motor vehicles.’ In the Council’s \textsl{Annual Report} from 1960-1961, it stated that ‘the exhausts of motor vehicles have often been suggested as a cause [of lung cancer], though as yet there is no evidence of increased liability to lung cancer among those who are exposed to high concentrations of motor exhausts.’\textsuperscript{26} By 1966, researchers at MIRA were confident enough to report that ‘diesel-engine smoke, while more apparent than the invisible emissions of the petrol engine, is probably much less important from a health point of view.’\textsuperscript{27} Visible exhaust emissions began to be considered as a nuisance rather than a public health risk. Instead, by the start of the 1960s, research shifted away from visible motor car pollutants towards invisible ones. The three main invisible pollutants (Table 6:1) that were subjected to increased scrutiny were carbon monoxide, hydrocarbons and nitrogen oxides.

\begin{table}[h]
\centering
\begin{tabular}{|l|l|}
\hline
\textbf{Motor Vehicle Pollutant} & \textbf{Risk to Health} \\
\hline
\textbf{Carbon Monoxide} & Affects the oxygen-carrying ability of blood, depriving the heart of oxygen. \\
\hline
\textbf{Hydrocarbons} & Can cause eye irritation, respiratory inflammation and permanent lung damage \\
\hline
\textbf{Nitrogen Oxides} & Can thicken the small arteries in the lung, affecting blood flow. \\
\hline
\end{tabular}
\caption{Health problems caused by motor vehicle pollutants.}
\end{table}


\textsuperscript{24} Bartrip, ‘Tarred Roads or Tobacco?’, p. 145.
\textsuperscript{25} Halsey & Webb, \textsl{Twentieth-Century British Social Trends}, p. 119.
The catalyst for the shift into research of invisible pollutants was the introduction of air pollution legislation in the United States in response to the Los Angeles smog episodes of the 1940s and 1950s. In 1943, Los Angeles first experienced thick smog across the city, but it was not until 1950 that Californian biochemist Dr. Arlie Haagen-Smit confirmed the link between automobile exhaust fumes and smog conditions. It was a case unique to Los Angeles: due to its poor natural ventilation and very high consumption of petrol, polluted air stagnated across the city. The smog, created by motor cars, visually demonstrated that invisible exhaust emissions produced some unpleasant and/or dangerous elements into the atmosphere. In 1961, the World Health Organisation stated that:

If hydrocarbons from automobile exhausts are the cause of a major problem in Los Angeles, then the problem can appear in other cities as soon as the number of automobiles becomes large enough, and in all cities the number is steadily rising.

Haagen-Smit’s revelation that the Los Angeles smog was caused by motor vehicle exhaust emissions ensured that air pollution researchers became more aware that invisible motor car emissions were a serious environmental concern. A 1957 Organization for Economic Co-operation and Development (OECD) study of American settlements, examined respiratory diseases in urban and rural areas (Table 6:2).

Table 6:2 - Sample of American settlement types – inhabitants (per 100,000 people) likely to suffer from respiratory disease, 1957.

<table>
<thead>
<tr>
<th>Settlement Type</th>
<th>Inhabitants (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Urban Settlement (100,000+)</td>
<td>120.65</td>
</tr>
<tr>
<td>Minor Urban Settlement (&lt;50,000)</td>
<td>95.12</td>
</tr>
<tr>
<td>Rural Settlements</td>
<td>78.15</td>
</tr>
</tbody>
</table>


The OECD study linked car emissions with health problems; it was proposed that the greater the population of an area, the more car usage there was, and thus more respiratory diseases occurred. This link between car emissions and health risks was made elsewhere in the United States. Ralph Nader, a lawyer and anti-car campaigner, in 1965 wrote that since 1950 independent researchers had accumulated ‘increasingly specific evidence that the tens of millions of little pollution factories on wheels do serious harm to the health and safety of the American people.’ Nader used the slogan ‘drive as you breathe’ to highlight the link between motor cars and carbon monoxide poisoning. The Times in 1970 stated that Nader had ‘carved out an influence greater than of many senators or any of the well-heeled big businesses who proliferate in Washington.’ The Los Angeles smog and subsequent research into motor car pollution, regarding its effect on public health, spread knowledge that the car created environmental problems in the United States and internationally.

The Los Angeles smog resulted in a rise in state legislation that aimed to control the problem. In 1960, the California Motor Vehicle Pollution Control Act was passed, and this resulted in the creation of the Motor Vehicle Pollution Control Board. The Act required the installation of one of two ‘certified’ anti-pollution devices, and ‘new vehicles were not to be registered in the state after one year following certification unless equipped with a certified device.’ This had major repercussions for British car manufacturers; if they wished to continue to export cars to the state of California, then the cars would have to meet newly established anti-pollution specifications. MIRA highlighted the significance of these developments in their Annual Report of 1960-1961:

Recent legislation in California directed towards the reduction of pollutants in exhaust gases is likely to lead to a compulsory fitting of exhaust devices to reduce the amount of carbon monoxide and hydrocarbons emitted by motor vehicles. British vehicles exported into the Los Angeles area would be affected by this

31 Nader, Unsafe at Any Speed, p. 151.
32 For an example of the influence of Nader see McDonald, I., ‘Ralph Nader – Champion of US Consumers’ Rights’, The Times, 26 January 1970. McDonald argued that Nader’s criticism of General Motors’ Corvair model in Unsafe at Any Speed was so forceful that within a year of publication sales of the model had dropped 70 per cent, and by 1970 the model had to be discontinued entirely.
legislation. M.I.R.A. is reviewing the implications of the legislation, and arranging to provide a compressive test installation which will enable the Association to test exhaust devices according to the Californian requirements.34

The United States had grown considerably as an export market in the late 1950s for foreign car manufacturers; in 1955 only 0.8 per cent of all car registrations in the United States were from foreign cars, yet by 1958 the figure had increased ten-fold to eight per cent. By 1959, 31 per cent of British car manufacturers’ total exports were to the United States.35 MIRA received approval from the State of California in 1963 as an ‘authorised test laboratory in connection with its regulations relating to atmospheric pollution’, and was in the process of receiving similar recognition from the State of New York. Austin Dodd, a Senior Research Engineer at MIRA, was questioned whether research into air pollution was ‘jumping the gun’ as there was no legislation in the United Kingdom regarding air pollution from motor cars. Dodd stated that ‘this is true, but the important thing is exporting cars and we have to meet legislation in other countries … there is a distinct possibility legislation will follow in Europe also.’36 The impetus to British research in invisible motor vehicle exhaust emissions was a direct result of a need to protect ever-more lucrative export markets.

36 MACE: Pollution Caused by Cars [television], ATV Today (17 March 1969).
It was not until the mid-1960s however that the issue of researching the impact of invisible exhaust emissions in the British context gathered momentum. MIRA admitted in 1966 that while they had been ‘active in the field [of air pollution] for some time’ their research to that point had solely focussed on providing assistance to British manufacturers in meeting US legislation.\footnote{MIRA, Twenty-First Annual Report 1965-1966 (Uxbridge, 1966), p. 14.}

It was the central government funded Warren Spring Laboratory that reoriented its research programme in 1966 towards ‘increasing attention to the measurement of concentrations of carbon monoxide emitted from petrol engines in busy [British] streets.’\footnote{WSL, Annual Report 1966 (London, 1967), p. 10.} The rhetoric regarding invisible pollutants became increasingly emotive in the latter years of the 1960s; in 1967 Warren Spring Laboratory stated that carbon monoxide was now considered ‘to be the greatest potential hazard in this country,’ and in 1968 it indicated that ‘the exhaust from petrol engines … is potentially dangerous because of the lethal concentrations of carbon monoxide.’\footnote{WSL, Annual Report 1967 (London, 1968), p. 9; WSL, Annual Report 1968 (London, 1969), p. 63.} For all the increased warnings though, research proved inconclusive regarding the effects of the invisible pollutants. Kerbside research undertaken by Warren Spring Laboratory in 1967 in...
Birmingham, Cardiff, Enfield, Glasgow, Manchester and Portsmouth found that concentrations of carbon monoxide in the air, taken from a point three metres above the kerb, only exceeded the warning level of 30 parts per million for less than one per cent of the time.\(^\text{40}\) The laboratory continued research into invisible exhaust emissions into the 1970s, however, as researchers sought to further understand the issue.

Conflicting conclusions were not uncommon. In 1967 for example, *The Guardian’s* science correspondent Anthony Tucker published a number of articles surrounding the issues of lead pollution and motor car pollution.\(^\text{41}\) Tucker cited evidence from research undertaken in the United States in the article, and stated that ‘most of the scientific pressure for a detailed examination of the situation has come from the United States where some of the early sinister surprises were uncovered.’\(^\text{42}\) Additionally, Tucker used findings from examinations of children carried out in London and Manchester; it was noted that in Manchester, a recent study found that some children had blood lead levels over the 0.4ppm limit that was recommended.\(^\text{43}\) The experience and research of the United States (as reported by Tucker) stimulated further debate of the issue in Britain. A Ministry of Health internal note from 1967, however, advised that Tucker’s case was ‘somewhat overrated.’\(^\text{44}\) The memo concluded:

This is the subject in which research is at presently actively proceeding. There is certainly no room for complacency. While at present the evidence points towards an adequate margin of safety, I agree that the levels of atmospheric pollution must obviously be watched carefully.\(^\text{45}\)

The Ministry of Health pointed to research from the Medical Research Council’s Air Pollution Research Unit which suggested the streets of London were safely within the limits of the California recommended standard on air pollution. The Ministry of Health’s approach stressed that while research from the United States suggested levels of lead pollution from motor vehicles were not being breached, there was not a case to answer. This did not deter Tucker’s ‘campaign’; one article warned the government that they


\(^{42}\) Ibid.

\(^{43}\) Ibid.

\(^{44}\) Ibid.

\(^{45}\) TNA: MH 154/437, Memo from J. E. Macoll to Sir Ronald Russell, 10 August 1967.
based their decisions on information that was ‘out of date and dangerously misleading.’  

Tucker argued that:

> It seems that the figures on lead absorption being used by the Government in its approach to a decision on whether or not to reduce lead levels in petrol are based not on any new study but on a rehash of old and even irrelevant measurements.

Central government, Tucker asserted, based its reasoning ‘not on new studies by the Air Pollution Unit of the Medical Research Council – as has been implied – but on measurements made in Fleet Street (in 1962) and on an estimate of lung absorption … published in 1969 by Doctor Gordon Stopps of Du Pont.’ Du Pont were manufacturers of tetraethyl lead, and Tucker highlighted that ‘recent estimates made by scientists outside industry [are] considerably higher.’ Tucker claimed that central government policy was too heavily influenced by ‘questionable’ research produced by businesses whose interests were to not confront the issue of removing lead from products. The historians Gerald Markowitz and David Rosner highlighted that in the 1920s General Motors had developed an ‘interlocking directorate relationship with the Du Pont Company and the petrochemical industry [and] sought to develop a fuel it could patent and profit from.’ In 1924 General Motors and Du Pont created the Ethyl Gasoline Corporation to produce and market the leaded gasoline they had developed.

Markowitz and Rosner argued that by the 1960s, the lead industry ‘had controlled research and had undermined and obscured the work of those who suggested lead produced acute poisoning in workers and children.’ Research into the health effects of lead pollution was seemingly still a murky world of claim and counter-claim in the 1960s, with big business at the centre of attempting to determine the agenda regarding the safety of their products.

The issue of noise pollution was another public health concern, and research had been undertaken since the late 1940s. MIRA commenced investigations into the measurement of noise from motor vehicles in 1948, and established a Joint Advisory Panel on Noise in 1957. This early research focussed on reducing noise for people within

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47 Ibid.
48 Ibid.
50 Ibid, p. 112.
the car rather than the impact of noise upon the wider environment; for example the research of MIRA in 1959 regarding noise centred on improving conditions for passengers in the back seats of vehicles as ‘the sound-pressure level in a saloon car [was] greater in the rear than in the front passenger head position.’\textsuperscript{51} MIRA’s \textit{Annual Report} from 1968 was their first report to show recognition of the wider effects of noise pollution:

\begin{quote}
Noise is one of the chief bugbears of any modern technological society, although the damage it does is difficult to assess except when it leads to actual physiological defects of hearing. The motor vehicle plays a significant part in the production of noise, causing discomfort both to occupants of vehicles and to those outside them such as pedestrians, office workers, etc.\textsuperscript{52}
\end{quote}

The growth in understanding of noise pollution as a problem not just for drivers, but for pedestrians and other non-car users was undoubtedly developed through the investigations of the Committee on the Problem of Noise (also known as the Wilson Committee). The Wilson Committee’s report was a landmark moment in the history of noise pollution; Britain was one of the first countries to recognize the important of noise pollution, and the publication of the Wilson Committee’s report ‘marked the first step in the legislative process.’\textsuperscript{53} The Wilson Committee’s final report, published in 1963, was the result of a questionnaire issued to local authorities by the Committee in 1960 which asked what issues local authorities experienced regarding noise, and where the problems originated from. The completed questionnaires received from 72 authorities reported 2350 complaints, including 454 from factories, 446 from entertainment and advertising, and 498 from motor vehicles.\textsuperscript{54} These results showed that there was a substantial concern about noise pollution across Britain, of which noise from motor cars featured prominently. Subsequent studies confirmed these fears; the London Noise Survey of 1961 found that motor vehicle noise predominated at 84 per cent of the places where measurements were taken, and in total 36 per cent of people in Inner London were disturbed by road traffic noise at home.\textsuperscript{55} These findings led the Wilson Committee to conclude that ‘in London (and, no doubt, in other large towns) road traffic is, at the present

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time, the predominant source of annoyance from noise, and no other single noise is of comparable importance.\textsuperscript{56} The Wilson Committee’s final report dedicated an entire chapter to noise from motor vehicles. One of the problems the report cited was that although all noise (except from slamming vehicle doors) produced by single vehicles was covered under the Motor Vehicles (Construction and Use) Regulations 1955, and in the Road Traffic Acts of 1930 (and later consolidated in 1960), enforcement of this by the police had proven problematic due to the ‘absence of defined, measurable, standards of what constitutes excessive noise.’\textsuperscript{57} Police officers ‘rarely attempted’ to enforce existing regulation on motor car noise, unless confronted by glaringly obvious defects such as a noisy car having a defective silencer, or not possessing one at all.

The Wilson Committee were uncertain on the health effects of noise pollution. In the report’s conclusion, it stated that there was little evidence to ‘support the view that noise causes mental or nervous illness,’ but what noise did produce was ‘a substantial amount of annoyance … [caused by] thoughtlessness and carelessness.’\textsuperscript{58} In an attempt to address this nuisance, the report recommended implementing regulations on noise levels: all motor vehicles (except motor cycles) should not exceed 85 dBA, with motor cycles being allowed 90 dBA.\textsuperscript{59} It was acknowledged that, although these values were above the ‘acceptable values’ of experiments, they were a compromise ‘between what is desired by the public and what is technically possible, at a reasonable cost.’\textsuperscript{60} This was a trade-off with the motor industry; the Society of Motor Manufacturers and Traders had raised concerns that manufacturers of sports cars and motor cycles would be confronted with costs ‘that might rise very steeply and indeed prohibitively’ if lower noise values had been used, which would have effectively lead to these vehicles being ‘banned from the roads.’\textsuperscript{61} The Wilson Committee were unwilling to be seen as placing what could have been construed as unreasonable restrictions on British motor manufacturers, hence the higher noise limits were adopted. This was perhaps an understandable attitude; while British car manufacturers’ share of world trade in cars averaged 24 per cent in the late 1950s, by the mid-1960s it had decreased to 19 per cent. Germany had overtaken Britain

\textsuperscript{56} Noise, Final Report, p. 133.
\textsuperscript{57} Ibid, p. 42.
\textsuperscript{58} Ibid, pp. 132-133.
\textsuperscript{59} Ibid, p. 51.
\textsuperscript{60} Ibid, p. 51.
\textsuperscript{61} Ibid, p. 49.
as Europe’s leading source of car production in 1956, and competition from the US and Japanese markets placed further strain on British car manufactures.\textsuperscript{62} The Wilson Report was not only important nationally, but also exercised considerable influence throughout Europe. The historian Stefan Krebs highlighted that the Wilson Report, along with studies from Germany, France and Italy, was presented at a meeting of the Permanent International Association of Road Congresses in 1967.\textsuperscript{63} This international organisation of road experts and authorities concluded that the majority of the causes of noise originated from vehicles, not the surface of the road, and therefore the only way to address the issue was to manufacture vehicles which made less noise.\textsuperscript{64} There was a European-wide impetus towards addressing noise pollution from motor vehicles.

This section has demonstrated substantial shifts in the understanding of pollution caused by motor vehicles during the 1950s and 1960s. It was not until the early 1960s that air pollution research was re-oriented away from visible to invisible pollutants, and initially the focus of reducing noise from motor vehicles was for the benefit of the users of the motor car rather than the wider environment. It has also highlighted the lengthy research process behind noise and air pollution caused by motor vehicles and the influences that underpinned it. Economic considerations, rather than an overwhelming public health fear, often contributed substantially to important developments in research; for example the shift from MIRA to study invisible pollutants in the early 1960s was undertaken to ensure British motor manufacturers developed technology to enable their cars to meet strict anti-pollution legislation for export in the United States. This was perhaps understandable as MIRA was largely funded by British motor manufacturers, but even the government-funded Warren Spring Laboratory displayed a similar economic underpinning to addressing motor vehicle pollution. In 1966, the laboratory stated that ‘it has recently been estimated that air pollution costs Great Britain £350 million annually, quite apart from any losses due to its effect on health.’\textsuperscript{65} Concerns from the general public did not drive research in this period; a chief mechanical engineer within the Ministry of Transport, in an internal note in 1963, argued that ‘there is no large weight of public opinion against the pollution from petrol engines as the extent of the danger is not always

\textsuperscript{62} Church, R., \textit{The Rise and Decline of the British Motor Industry} (Basingstoke, 1994), p. 44.
\textsuperscript{63} Krebs, ‘Standardizing Car Sound – Integrating Europe’, p. 30.
\textsuperscript{64} Ibid, p. 30.
realised, and even when it is realised it is assumed to be inevitable.\textsuperscript{66} Colin Buchanan in \textit{Traffic in Towns} (1963) echoed similar sentiments. Research into the impact of exhaust fumes in Britain was proceeding, but Buchanan believed it was at too slow a pace, and a ‘rapid advance’ would only occur ‘if public opinion were alerted to the present nuisance.’\textsuperscript{67} The publication of works such as Rachel Carson’s \textit{Silent Spring} (1963) were more influential in arousing a sense of public concern regarding invisible pollutants; before Carson’s death in 1964 one million copies had been sold worldwide, and in 1970 \textit{The Guardian} labelled the book’s impact in Britain as ‘immense.’\textsuperscript{68} It was not until the late 1960s and early 1970s though that public concern demanded action on pollution. The early 1960s rhetoric of technology and progress was replaced by the end of the decade with a need to protect the environment from the ‘worst excesses’ of this growth.\textsuperscript{69} The influences behind research into motor car pollution in the 1950s and early 1960s were largely economic and in order to satisfy legislation in the United States, not demanded by the general public.

**The Electric Car and the Attitudes of Whitehall**

Colin Buchanan admitted in \textit{Traffic in Towns} that ‘little research has been carried out into environmental standards’ of streets with regards to the motor car.\textsuperscript{70} In 1964, Minister of Transport Ernest Marples established the \textit{Cars for Cities} study, and the final report was published in 1968. The aim of \textit{Cars for Cities} was to investigate how motor cars could be adapted to the city, rather than the Buchanan Report which suggested how towns could be adapted to the motor car.\textsuperscript{71} Two chapters were devoted to noise and air pollution within \textit{Cars for Cities}. The report stated that exhaust emissions caused concerns over ‘the effects on the health, performance and well-being of drivers, pedestrians and others who are exposed to the day-to-day levels of pollution caused by vehicle exhausts.’\textsuperscript{72} It was argued that to reduce carbon monoxide emissions significantly, the adoption of

\textsuperscript{66} TNA: MT 102/29, Note from H. Perring to Mr. Ivimy, 3 April 1963.
\textsuperscript{69} Sheail, ‘Torrey Canyon’, p. 503.
\textsuperscript{70} Buchanan, \textit{Traffic in Towns}, p. 49.
\textsuperscript{72} Ibid, p. 74.
smaller cars in towns, known as ‘citycars’, should be investigated. These were cars designed for one or two people (Figure 6:3), rather than four or five people that were accommodated in a Fiat 500 or Mini Cooper. The idea of ‘citycars’ was not favourably received by motoring interests; the *Daily Express* review of the Motor Show of 1967 featured an article that complained that small cars were prone to poor performance and akin to ‘a sedan chair on Kart wheels.’

**Figure 6:3 - Example of a two-seater ‘town car’ measuring 89 inches long, by Eric J. Roberts, 1967.**


The major problem for the ‘citycar’ idea was that it required a new road infrastructure of its own to produce any benefits. Members of the *Cars for Cities* steering group, which included British motor industry leaders such as Sir George Harriman of the British Motor Corporation and Sir William Lyons of Jaguar, argued that ‘little benefit from reducing the size of vehicles can be realized without making changes in traffic conditions – in particular by segregating smaller vehicles from larger vehicles.’ The *Cars for Cities* report therefore recommended the implementation of ‘a new network of lightweight “overways” criss-crossing Britain’s cities on stilts and reserved exclusively (for

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city cars). William Plowden, however, highlighted that this recommendation directly contradicted a second Ministry of Transport report (released on the same day as *Cars for Cities*) entitled *Better Use of Town Roads*, which ‘recommended keeping cars out (of city centres) through road-pricing.’

*Cars for Cities* also suggested further investigation of electric cars as a potential method for addressing air and noise pollution. Electric cars were renowned for their quietness, in addition to the fact they did not emit harmful pollutants into the atmosphere. Yet the electric car was deemed incapable of ‘making a significant contribution’ in the short term due to ‘performance limitations.’ The potential appeal of the electric car had not gone unnoticed in Whitehall; during the late 1960s Minister of Technology Anthony Wedgwood Benn attempted to persuade fellow government ministers of the merits of the electric car. In June 1967, Benn wrote to Barbara Castle at the Ministry of Transport and enthusiastically praised Ford’s experimental ‘Commuta’ electric car. Benn declared himself ‘immensely impressed’ with the vehicle, which had the ability to reach speeds of up to forty miles per hour. Castle was less impressed however, and queried whether it was ‘really likely that many people are going to buy it except as a toy or a curiosity’ due to its limited range of forty miles. The merits of electric cars were not disputed, and Castle reiterated ‘I am as keen as you to encourage the manufacture of electric powered road vehicles to replace the existing noisy and dirty cars and lorries.’

The Working Party on Electric Vehicles was established in July 1968 to investigate the issue further, and published its findings in January 1969. The limitations of available batteries to power the vehicles was an immediate problem:

> Now, and for at least the next five years, only lead-acid battery vehicles will reach the market. They cannot provide comparable performance to [internal combustion engine] vehicles, and except for small town cars of very limited performance, all electric

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75 Plowden, *Motor Car and Politics*, p. 419.
76 Ministry of Transport, *Cars for Cities*, p. 69.
77 TNA: MT 149/39, Letter from Tony Benn to Barbara Castle, 28 June 1967.
vehicles are likely to be more expensive in terms of real costs than the equivalent [internal combustion engine] vehicles.\textsuperscript{79}

A number of members of the motor industry demonstrated an enthusiasm for attempting to develop a suitable battery and a marketable electric car. The motor vehicle components company Joseph Lucas, based in Birmingham, in 1967 announced a joint research programme with General Dynamics of America in a project to develop and produce a zinc air battery capable of powering electric cars.\textsuperscript{80} Doctor William Arrol of the Lucas research department stated that to be ‘fully acceptable, a town car would have to be able to do sixty to eighty miles on a charge’ and that the company aimed to attempt to produce a suitable battery within three to five years.\textsuperscript{81} In the same year the British Motor Corporation announced a separate partnership with Lucas to develop an ‘electric town car’ to be developed within two years.\textsuperscript{82} Enfield released the ‘465’ electric car in 1969, but was again limited to the same performance restrictions as the Ford ‘Commuta’.\textsuperscript{83} Benn was frustrated that despite the efforts of the Ministry of Technology and British companies such as Lucas and Enfield, other departments did not share their enthusiasm for the electric car; in January 1970 he pleaded with Minister of Transport Fred Mulley that ‘it would be tragic if, despite the initiative shown by a British firm, the Americans and Japanese gained a major lead on us.’\textsuperscript{84} Mulley, like his predecessors Castle and Richard Marsh, rejected Benn’s plea to drop purchase tax on electric vehicles in an attempt to stimulate the market into mass electric car production. Instead, Mulley argued that ‘a substantial reduction in pollution and noise could be achieved in conventional vehicles by improvements in design.’\textsuperscript{85} By 1970 though, Benn started to attract support from other individuals within Whitehall; Lord Kennet, a Junior Minister in the Ministry of Housing and Local Government, wrote to the government’s Chief Scientific Advisor Solly Zuckerman querying why out of ‘seven research projects into electric cars by private industry … six have been allowed to die?’\textsuperscript{86} This was the crux of the matter, as without a breakthrough in battery design to allow for longer operation times, the electric

\textsuperscript{80} ‘Lucas Electric Car Link is with General Dynamics’, \textit{The Times}, 31 January 1967.
\textsuperscript{81} MACE: Batteries for Electric Cars [television], \textit{Midlands News} (30 January 1967).
\textsuperscript{82} \textit{Electric Cars} [online film, ID: 2035.30], (British Pathe, first broadcast 26 November 1967), www.britishpathe.com/video/electric-cars/query/wildcard [accessed 1 September 2014].
\textsuperscript{84} TNA: MT 149/40, Letter from Tony Benn to Fred Mulley’, 8 January 1970.
\textsuperscript{85} TNA: MT 149/40, Letter from Fred Mulley to Tony Benn’, undated.
car could never establish itself as a realistic purchase option for British motorists. Progress was not forthcoming however, and in 1971 Ford donated its ‘Commuta’ electric car to the Science Museum:

> We feel that we know everything there is to know about the design of the car itself. Now we must wait for the vital breakthrough in the electric car’s battery development so that it will have a range and energy source that one day may herald the true city car.\(^87\)

Lucas successfully developed a small electric bus for Greater Manchester Transport in 1975, but a lack of development in battery research again hindered any larger-scale development of electric cars; the development of a sodium sulphur battery required for operation of electric cars over long distances was not reported to be expected until at least the 1980s.\(^88\)

The lack of interest in the electric car from within Whitehall, except from individuals such as Benn and Kennet, was partially a result of a scepticism that developed in central government regarding the impact of the motor vehicle on air pollution. The Department of the Environment established a Central Unit on Environmental Pollution in 1969, which presented a White Paper entitled *The Protection of the Environment: The Fight Against Pollution* to Secretary of State for Local Government and Regional Planning Anthony Crossland in May 1970. The aim of the White Paper was to analyse ‘man’s impact on his environment, and specifically [about] the pollution of his environment.’\(^89\) This report downplayed the impact of air pollution caused by the motor car. The Los Angeles smog was referred to, and the fact that British exports to the United States had to be fitted with a special after-burner system that added £30-40 to the price of the car, in order to meet American air pollution guidelines. However, the White Paper conceded:

> In Europe, due to the difference in climatic conditions, air pollution from petrol-engined (sic) vehicles presents a different and less acute problem, and the development of a completely


pollution-free car might not be the most sensible use of resources.\textsuperscript{90}

\textit{The Fight Against Pollution} cautioned against the effects of carbon monoxide emissions and lead pollution on public health. The Central Unit on Environmental Protection argued that there was ‘no evidence that the carbon monoxide in our streets has any adverse effects on health or environment,’ and that the amount of lead emitted into the air from exhaust fumes was ‘trivial’ and in fact less than the amount people who worked in factories breathed in. \textsuperscript{91} The White Paper instead recommended that the government should continue to monitor emission levels, and aim ‘progressively to reduce and where feasible eliminate the substances in vehicle exhausts which are harmful to the environment’. The wording of this suggested that that although there was awareness that air pollution could present a serious issue, it would only be addressed if proven beyond doubt to be harmful. Anthony Crossman validated this approach in a statement to the House of Commons in June 1974:

> The sources of pollution and the ways in which pollutants affect the environment are immensely complex and need painstaking monitoring. In this country a good deal of systematic information is already recorded, but it has been hard to produce an overall picture of the state of the environment. Our current information is derived from too many different sources; there are still gaps in it; and in certain cases there have been positive barriers to obtaining or publishing the required facts.\textsuperscript{92}

It appeared that the government was not willing to impose further environmental modifications to motor cars, that would raise prices, unless absolutely necessary; for example if British car manufacturers fitted improved carburettors in order to reduce carbon monoxide emissions by 10 per cent (the OECD guideline), it would have cost £8 per vehicle. At a time of struggle for the British car industry, central government was wary of placing further environmental regulations on car manufacturers that would have increased the costs of production.\textsuperscript{93}

\textsuperscript{90} Ibid, p. 11
\textsuperscript{91} Ibid, p. 12.
\textsuperscript{92} Crossland, A., 17 June 1974, \textit{HC Debs.}, 875, cols.94-167.
\textsuperscript{93} From 1965 to 1970, British car exports rose by only one third, whereas imports rose at a rate of around three and a half; Full figures: United Kingdom exports of cars & taxis: 1965 – 250,289; 1970 – 327,689.
This cautious approach to the environment changed however by the time a study of public opinion was published by the Department of the Environment entitled *Pollution: Nuisance or Nemesis* in May 1972. The tone of the new report was more serious and demanding than the previous White Paper of 1970. The report argued the only solution to motor vehicle pollution would be the replacement of the internal combustion engine with a non-polluting one, but bemoaned a lack of progress in research towards electric cars. The notion that ‘mankind must perhaps become reconciled to less personal mobility than that currently enjoyed in developed countries’ represented a substantial divergence from the road-building agenda of the 1950s and 1960s. *Nuisance or Nemesis* linked some hydrocarbons to lung cancer, and – again in contrast to *The Fight Against Pollution* – stated that the problem of lead pollution was only going to rise with ‘substantial quantities of lead … being discharged into the city atmosphere by cars.’

The report criticised the lack of legislation on motor vehicle emissions, complained that anti-smoke regulations were not adequately enforced, and insisted that ‘all road users in Britain are only too aware that many lorries emit far more smoke than is necessary.’

*Nuisance or Nemesis* warned, however, that it was ‘very difficult, politically, to persuade people to make sacrifices in the 1970s to avert what might be unprecedented environmental disasters in the early twenty-first century.’ Instead, it was suggested that newspapers and television would be more effective in persuading the general public of the need to address environmental issues. Dominic Sandbrook has argued that television shows such as *Doomwatch* and *Doctor Who* played a ‘central part in framing the new environmental concerns’ of the early 1970s, and non-fictional programming such as BBC’s *Horizon* and *Panorama* also broadcasted programmes on environmental issues. The public may have become more aware of environmental issues because of this type of programming, but numerous academic studies from the 1970s and 1980s suggested that the faith in mass media to effectively educate the general public and cultivate environmental concern was misplaced. Shanahan, Morgan and Stenbjerre

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95 Ibid, p. 29.

96 Ibid, p. 80.

97 Ibid, p. 82.

argued that ‘increased media attention [did] not automatically translate into changes in public attitudes’ and that behaviour did not change even when information had been successfully disseminated.99

In response to the growing public health concerns with the motor car, staunch defences were launched by vested interests such as manufacturers. The President of the Society of Motor Manufacturers and Traders Gilbert Hunt (who was also CEO and Managing Director of Chryslers UK) argued in 1972 that:

Society was in danger of regarding the car as an enemy rather than friend of man ... Yet there is a growing body of opinion that the car is anathema to society, alien to society’s needs and a veritable curse upon our environment and health … the protests are voiced by the minority, but we must be aware of clouding the true facts by unreasoned emotion.100

Instead, Gilbert pointed to the ‘expanded horizons’ and ‘freedom’ the motor car brought to people, ironically arguing it was good for people’s health as it had given the ‘working man … rapid access to health and medical facilities’, as well as allowing people to move out of crowded city centres to lower density residential developments that gave ‘a vastly improved environment’.101 Pollution by the motor car was recognised, but Gilbert argued the industry was ‘working towards a situation when complaints about exhaust emissions will be untenable’. Ralph Nader had argued that American motor manufacturers were reluctant to adopt anti-pollution technologies due to the impact on the cost of cars and their performance:

The [American] automobile industry seems to have ignored the increasing problem of air pollution because of its own economic interests. From their own point of view, automobile makers see no reason to spend money to produce a device which allows then neither to increase profits nor to effect any economies.102

101 Ibid, p. 3.
102 Nader, Unsafe at Any Speed, p. 152.
It was not too great an assumption to suggest that this analysis was also applicable to the British motor manufactures. The car manufactures designed ever more powerful motor cars that gave ‘comfort, status, mobility and vehicle performance’ higher priorities in vehicle design than exhaust emissions or fuel economy.\(^{103}\)

By the mid-1970s, there were conflicting viewpoints on automobility and the motor car; some still promoted its usage as an instrument for personal freedom, while others argued it had become a danger to health. Public health concerns with the motor car did not simply materialise in the 1970s, but had been evident for approaching two decades before attracting greater public attention and awareness in the early 1970s. There existed in Britain a steady development in the understanding of motor car pollution during the 1950s and 1960s, but still by the 1970s there was disagreements regarding the effects of motor car pollution and how central government should approach the issue. The final section of this chapter will turn to analyse this contestation in Birmingham, where competing interpretations were evident regarding the impact of the opening of the Gravelly Hill interchange on the public health of local residents.

**Birmingham: Gravelly Hill Interchange**

In June 1972 *The Times* reported that ‘unlike the fight put up by many Londoners against urban road schemes, the authorities have found little resistance to their plans in Birmingham’ to construct grand urban road schemes such as the Aston Expressway (which resulted in the loss of 1,100 houses).\(^{104}\) There was little evidence of concerns with the public health effects of the motor car from the residents of Birmingham, though there did exist a prominent research community within the region that was interested in the issue: Nuneaton based MIRA (as already discussed in the previous sections), and Longbridge based British Leyland were both active in this field. For example, in 1971 British Leyland initiated research that attempted to develop a new type of exhaust that would adhere to American regulations, due to come into effect in 1975, enabling exhaust emissions to be cut by as much as 90 per cent.\(^{105}\) Dr. John Weaving, who led the British


\(^{104}\) ‘Rapid Transit System Forecast for 1980s’ *The Times*, 8 June 1972.

\(^{105}\) MACE: Pollution Caused by Motor Cars [television], *ATV Today* (17 March 1969).
Leyland research, commented that ‘American regulations [were] terribly tough … [but] a price that’s got be paid for clean air.’106 There was no sense from local news reporters that this research should be undertaken to address the issue of pollution in the West Midlands. The closest comment came from ATV reporter Bev Smith who asked if the researchers believed air pollution would become an acute problem in big cities such as Birmingham.107

This lack of pressure from the general public though soon changed. 1972 represented the turning point in the people of Birmingham’s engagement with public health concerns caused by the construction of the ‘motor city.’ This was due to the completion and opening of the Gravelly Hill interchange, more famously known as Spaghetti Junction. The completion of this motorway interchange in May 1972 resulted in a surge of anti-car feeling from the residents of Birmingham on the basis that the new interchange was deemed hazardous to the health of nearby residents. Only two months after the completion of the interchange later there were reports conducted by Birmingham’s Chief Air Pollution and Noise Abatement Inspector Frank Reynolds regarding ‘excessive traffic noise.’108 Reynolds collected noise level samples at nineteen different sites across Birmingham, and reported:

The opening of the link has produced a sudden and severe deterioration in the environment of many hundreds of Birmingham citizens … Additionally it would appear that the opening of the Aston Expressway and the Gravelly Hill interchange has generated additional traffic along at least one of the main feeder roads to the interchange.109

At all the locations measured, average noise levels both during the day and at night had increased after the motorway opened, and residents were subjected to ‘almost continuous noise levels that were totally unacceptable and were too high by any standard.’110 Reynolds suggested that compensation should be sought by residents to soundproof homes, and if noise levels still exceeded 75 dBA at traditional dwelling houses ‘then an

106 Ibid.
107 Ibid.
109 Ibid.
110 Ibid.
offer should be made to rehouse the occupants.  It was evident that with the opening of the Gravelly Hill interchange, noise pollution became a problem for nearby residents who had previously not been subjected to such disturbances. *The Times* reported there that were ‘continuous protests from residents who have reported “nightmare conditions” since the Midlands motorway link opened in May.’ The notion of compensating residents due to public health issues caused by planning for the motor car was new territory. As discussed in Chapter Four, there was some history of resident demand for compensation in Birmingham relating to proposed construction of an elevated dual carriageway along Coventry Road called the ‘Skyway’ in the early 1960s. However local opinion was not against the idea of road-building, merely against the imposition of a towering elevated expressway in front of housing. It was questioned by residents whether this ‘eyesore’ would actually satisfy the traffic problems of the area. The motives behind opposition were not concerns about the environment or public health. The Gravelly Hill interchange was one of the first cases (along with London Westway) that resulted in a Bill being introduced to parliament in late 1972 that gave the general public a right to compensation if their homes were environmentally afflicted from urban motorway developments. The Bill was estimated to cost £60-70million per year in compensation. *The Times* reported that it was a ‘triumph for the environmentalists’ and that the ‘implications for road planners are that it may well be cheaper to skirt built-up areas rather than bulldoze through them.’ This was evident in one of the Department for the Environment’s proposals which stated that ‘powers will be provided with respect to sound insulation of dwelling where new roads and certain other highways works are excessively noisy, (with) the cost to be met by the public authorities responsible.’

In October 1972 George Canning, Chairman of Birmingham Housing Committee, stated that ‘some council houses in the Perry Barr area would have to be demolished because motorway noise was great enough to be a health hazard.’ The debate that surrounded the Bill in parliament naturally provoked responses from Birmingham MPs due to the influence of developments such as the Gravelly Hill interchange on the

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111 Ibid.
112 Ibid.
113 ‘Right to Compensation for Road and Airport Nuisance Planned’, *The Times*, 18 October 1972.
114 Ibid.
development of the Bill. Conservative MP for Birmingham Handsworth Sydney Chapman said ‘the Bill was unique and radical. It tried to grapple with the problem of reconciling public needs and individual rights. An important spin-off was that it would make those responsible for planning public structures more careful where they put them.’ MP for Birmingham Small Heath Denis Howell, in Opposition with Labour, however was less enthusiastic; he argued that the six weeks in which people had to object to new motorways was inadequate, and that within reasonable distances from motorways ‘owner-occupiers who wanted to move ought to have the right to compel local authorities to acquire their houses.’

The opening of Gravelly Hill interchange created an entirely new set of problems for nearby residents and local politicians to address. By August 1972, a previously placated group of residents became protesters because of the noise the interchange inflicted on their homes. Television interviews with residents in close proximity to the Gravelly Hill interchange produced fierce responses. One woman commented that ‘it’s too bad to live in because we know we got no respite from it, the continual noise … it’s more like a brainwashing noise we call it round here.’ Another interviewee complained that his garden (which overlooked the interchange directly) had ‘been made redundant as regards relaxation,’ while another complained that residents placed mattresses and hardwood up against windows and doors in attempts to keep the noise out. The same disgruntled resident remarked that a solution that had been suggested to them, the building of a 10ft balustrade, was also unwanted: ‘we don’t want a 10ft high wall, we’ve got enough as it is now.’ The noise pollution from Gravelly Hill interchange increased awareness within nearby residents regarding the negative externalities of the ‘motor city.’ It also brought the issue of noise pollution to the fore for residents across the city. In December 1972 a newly formed Calthorpe Park and Lee Bank Tenants’ Association, with around 600 members, demanded to speak with Neville Borg to discuss the Corporation’s plans for developing sections of the Middle Ring Road which ran in close proximity to their housing. The residents petitioned the Corporation ‘to take into account proposed Government legislation (Development and Compensation – Putting People First) which

118 MACE: Spaghetti Junction [television], ATV Today (14 August 1972).
119 Ibid.
120 Ibid.
allows for housing close to new motorway schemes to be demolished if noise levels are 
unbearably high.\textsuperscript{121} Residents of the city began to voice concern over noise pollution 
\textit{before} new road developments were occurring, rather than at the Gravelly Hill 
interchange where residents only started to express anxieties after the development had 
been completed. Noise pollution had become a worry for residents in many different 
parts of the city, not just those confined to housing located close to Gravelly Hill 
interchange. The furore of the residents who lived near the interchange encouraged 
residents from different parts of Birmingham to cast fears regarding the potential for noise 
pollution from future road developments.

The complaints surrounding noise pollution meant that attempts were made to 
appease residents and lessen the noise. One example was the establishment of a noise 
barrier in the Perry Barr region of Birmingham, located adjacent to the M6 motorway as 
it left the Gravelly Hill interchange. A Traffic Noise Propagation Survey at Perry Barr 
was undertaken by the Department of the Environment. Noise measurements were 
collected during a number of days in October 1972 ‘at the proposed site for a noise barrier, 
which is to be constructed 3m high, 600m long, along the edge of the Motorway (M6)’, 
and from residents gardens, front doors and one metre from facades of first floor 
bedrooms.\textsuperscript{122} The measurements formed ‘a basis on which to judge the effectiveness of 
a noise screen to be erected along the edge of the Motorway early in 1973’ and were to 
be compared to further measurements taken after the screen had been erected. This 
suggested that there was little or no awareness at the planning stage of the interchange 
that motorway noise was going to be a problem for local residents. One of the disgruntled 
residents surrounding Gravelly Hill interchange posed the question to a local news 
reporter: ‘surely these problems should have been thought of when they started building 
them [interchanges]?’\textsuperscript{123} The problem of noise pollution did not pass however, and in 
1974 protests were still made in parliament because of noise caused by the interchange 
and associated motorway network. Peter Snape, MP for West Bromwich East (located 
close to the interchange and link between M6 and M1 motorways), told parliament that 
his constituents:

\begin{thebibliography}{123}
\bibitem{121} ‘Noise Protest by Ringway Residents’, \textit{The Mercury}, 3 December 1972.
\bibitem{122} TNA: AT 67/214, \textit{Traffic Noise Propagation from the M6 Motorway – Perry Barr, Birmingham}, January 
\bibitem{123} MACE: Spaghetti Junction [television], \textit{ATV Today} (14 August 1972).
\end{thebibliography}
Frequently write to tell me about what they call the “living hell” on their doorsteps – the thundering traffic which makes an unbroken night’s sleep a half-forgotten memory … they tell me about the impossibility of a normal conversation due to the ever-present noise.\(^\text{124}\)

The other major environmental issue that arose in Birmingham due to the opening of Gravelly Hill interchange was lead pollution. Researchers from City Laboratory Service in Coventry had conducted an investigation from 1965-1966 into the atmospheric conditions of Warwick town centre, and found lead concentration in the air were between four and a half and six times as high as an atmosphere ‘not contaminated by petrol fumes.’ The research concluded that:

The only significant difference between the atmosphere in Jury Street [the High Street] and that at the rear [of the street] is the influence of vehicular traffic [so] it is reasonable to conclude that the greater concentrations of atmospheric lead in the air in Jury Street is due to petrol consuming vehicles chiefly the motor car.\(^\text{125}\)

Researchers in the West Midlands had already examined lead pollution caused by the motor car six years before it really started to become a public concern in Birmingham. The research at Coventry was also part of an international concern with lead pollution. In May 1971, Secretary of State for the Environment Peter Walker was worried by a report from Germany that had studied areas of dense traffic, and found that dust that contained lead was also a problem and potentially more dangerous than breathing lead through the air. Walker said:

We have no evidence to confirm these reports at present but we are undertaking intensive investigations in a number of main British centres, including London and Birmingham. We especially want to know what happens to children who play in


streets where there is a lot of traffic when they handle dust and dirt.\textsuperscript{126}

Birmingham’s prominence as a ‘motor city’ meant that it was a logical place for such investigations into motor car pollution. However, this investigation initiated in 1971 was not forced by public opinion, but by government reaction to Continental research. In November 1971 a number of local MPs also questioned central government about the delay in completion of the M6 motorway on the north-east boundary of Birmingham. Sydney Chapman, MP for Birmingham Handsworth, asked Junior Minister for the Department of the Environment Michael Heseltine ‘what steps do the Government and the local highway authorities intend to take to lessen the congestion, alleviate the pollution and minimise the number of accidents?’\textsuperscript{127} Heseltine’s response did not touch upon the issue of pollution, but this exchange showed that local MPs in Birmingham such as Chapman were worried about what was potentially occurring in their constituencies, in terms of public health issues, with the completion of the interchange and motorway network.

Frank Reynolds, Birmingham’s Chief Air Pollution and Noise Abatement Inspector, pre-empted public backlash from the opening of Gravelly Hill interchange. Writing in the \textit{Journal of the Royal Society for the Promotion of Health} in January 1972, he advised Birmingham Corporation to commission an investigation from the University of Aston into atmospheric lead levels in the Gravelly Hill interchange area ‘before and after the motorway (interchange) opens.’\textsuperscript{128} Reynolds argued that this was a ‘result of fears expressed in the technical and national press’ about lead pollution caused by motor vehicles.\textsuperscript{129} The Corporation had already been asked in December 1971 by the Department of the Environment ‘to carry out a survey of dusts throughout Birmingham, to determine the level of pollution due to lead in the vicinity of a lead works.’\textsuperscript{130} There was clearly a burgeoning research community in Birmingham concerned with lead pollution in the early 1970s. In January 1972, Reynolds was already involved in a city-wide lead pollution investigation with the University of Birmingham, and he also advised

\textsuperscript{127} Chapman, S., 4 November 1971, \textit{HC Debs.}, 825, cols. 486-496.
\textsuperscript{129} Ibid. p. 181.
\textsuperscript{130} Ibid. p. 179.
another project which looked specifically at Gravelly Hill interchange (which commenced before the opening of the interchange). Crucially this research took place due to pressure from central government and from city officials such as Reynolds who utilised research knowledge in local academic institutions. The influence of local MPs such as Sydney Chapman, who applied pressure to central government in parliament, also played an important role. Chapman questioned Eldon Griffiths, Junior Minister for Environment, on 17th May 1972 (shortly before the interchange opened) regarding atmospheric pollution around the site for the interchange:

I will hold the dubious distinction of having a constituency which is almost totally encircled by urban motorways. There is genuine concern among my constituents about the level of atmospheric pollution.131

Griffiths was questioned further by Lewis Carter-Jones, MP for Eccles, who asked if studies like those undertaken around Gravelly Hill would be extended to the whole of the country, as there was ‘considerable concern about the noise and pollution of vehicles.’ Griffiths replied that his department, and other departments in government, were ‘very conscious of the need to have effective monitoring and evaluation of all forms of environmental pollution.’132 In the early 1970s, there was a real sense in central government that pollution from motor cars was going to be an increasing issue and therefore needed to be examined in greater detail.

It was not until the actual opening of the Gravelly Hill interchange on 24th May 1972 that the local residents’ environmental concerns began to gather serious media attention. In a local news report in August 1972, Dr. Robert Butler (who was part of the research team analysing lead levels across the city initiated by Reynolds) reported that ‘the levels of lead before Christmas [1971] are higher than they are now [and] the level has in fact been dropping steadily.’133 Butler was questioned on whether the data had reached two micrograms (what the reporter defined as the dangerous level for lead in the air based on standards from the United States), but Butler stressed that for this to be dangerous it must be over a three month period; figures had been close in December 1971,

133 MACE: Spaghetti Junction [television], ATV Today (14 August 1972).
but since then the data had been lower than these values.\textsuperscript{134} Butler was also asked if there was any cause for concern for people living near the interchange. After a seemingly long pause, Butler offered a less than convincing response: ‘well at the moment it really wouldn’t appear so.’\textsuperscript{135} Some experts claimed lead pollution was not an issue in the early months of the Gravelly Hill interchange, but local residents were unconvinced. One local resident said:

People came down from universities to take blood tests with a view to examining lead content [and] took 1,000 tests, [a] week later [we] got a letter saying [they] had found that the children of certain houses [had] got a higher lead content than the adults in the family and they wanted to take further blood samples. They came and did this, [but] later there was a statement in the press saying all these samples were useless due to some fault in the equipment. No one has been down since to take new blood samples. Consequently people are worried to death!\textsuperscript{136}

Uncertainty was prevalent about the issue of lead pollution in Gravelly Hill for the residents. Despite being informed by researchers such as Butler that there was no imminent risk, residents were still unsure. Blood tests and investigations raised residents’ concerns about their neighbourhood, and only firm assurances would have been able to convince residents that the issue was under control. This uncertainty was because the experts were still developing a sufficient understanding of the problem. Butler told the local press in August 1972 that the lead pollution problem was not a cause for concern, yet in November 1972 Dr. Robert Stephens of the University of Birmingham presented a paper at the Royal Society in London which argued the opposite. Stephens warned that ‘children living in big cities risk brain damage from the large amounts of lead in dust,’ and that ‘more than 90 per cent of airborne lead came from car exhausts.’\textsuperscript{137} Experts from Birmingham presented different accounts of the risks of lead pollution caused by motor vehicles; this uncertainty fostered further concern amongst the residents who lived in close proximity to Gravelly Hill interchange.

\textsuperscript{134} Ibid.  
\textsuperscript{135} Ibid.  
\textsuperscript{136} Ibid.  
\textsuperscript{137} ‘Brain Injury Threat from Lead in Big Cities’, \textit{The Times}, 24 November 1972.
Harry Herbert, Senior Lecturer in Environmental Health at the University of Aston, presented some initial findings in October 1973 of the city-wide pollution survey that had previously been initiated by Frank Reynolds. Herbert warned that the first results showed ‘greater lead contamination near main traffic routes’ and that the ‘pollution probably originated from petro-engine vehicles.’ Public anxiety of lead pollution in Birmingham was further raised in March 1974, when new results from Gravelly Hill interchange lead pollution investigations showed that average lead content in a sample of 100 residents living close to the interchange had risen from 12.2 micrograms per 100 millilitres in 1972 to 21.0 micrograms by the start of 1974.

John Charlton, Chairman of Birmingham City Council Health Committee, summarised the problem in March 1974:

There is still a very wide divergence of opinion on all figures concerning lead levels but naturally we are concerned at the rise which has taken place, although we are not surprised that is had occurred, because we were anticipating there would be a change. So far there has been no evidence which indicates a substantial hazard for individuals.

Residents who lived near places such as Gravelly Hill interchange read conflicting accounts of the impact of lead pollution; Charlton argued that although the Corporation were concerned, and lead levels in blood were rising substantially, no evidence proved it was yet harmful to them. Understandably, public concern did not decrease after such equivocal statements from Corporation health officials, and central government was forced to respond. Department of the Environment Minister, Denis Howell, established a Joint Working Party on Lead Pollution at the Gravelly Hill interchange in March 1974. Howell later commented that the Working Party had been set up as:

I was conscious not only of the increasing concern, both locally and nationally, about lead pollution, but also that collaboration between professional people with a wide range of responsibilities was required to make rapid progress on a highly emotive topic.

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140 Ibid.
Central government impatience with a lack of progress surrounding lead pollution prompted Howell to set up the working party. Howell commented upon formation of the Working Group: ‘I think our experts will soon be talking the same language, which they were not quite doing this morning.’\textsuperscript{142} He held a conversation with local action committee chairman Reginald Dawson during a visit to local households in March 1974. Dawson expressed concerns to Howell that investigations showed blood lead levels had doubled since 1972, and asked whether they would double again in another two years. Howell replied:

One of the difficulties is that the experts disagree about the criteria. All these measurement processes and techniques are very new … getting the experts together to agree on the measurements, so that the facts are agreed and then we can draw sensible conclusions, seem to me the first essential step.\textsuperscript{143}

The new nature of the research created problems between the experts, and no expert seemed to have a definitive idea on who was right or how to progress. The Gravelly Hill research project initiated in 1971/2 between the University of Aston and City of Birmingham Health Committee ‘was the first in the UK to investigate the effect of the introduction of a major motorway interchange into a city on atmospheric lead concentrations and to attempt to relate the latter to effects on blood lead concentrations in people living nearby.’\textsuperscript{144} It was understandable that such new research produced contrasting interpretations from researchers, as there were no previous studies, work, or precedents to refer back to. By establishing the Working Group, Howell attempted to reduce confusion about the different interpretations from the experts, and to provide the residents of areas around Gravelly Hill with answers to appease their health concerns. It was an issue that needed to be addressed in Birmingham; local television news reports in May 1974 showed clips of a cyclist riding through the city centre with a mask over his mouth, as he claimed the traffic fumes made him feel ill.\textsuperscript{145} Though this was just one incident, it showed a growing concern in Birmingham with the potential impact the

\begin{flushleft}
143 MACE: Spaghetti Junction Pollution [television], \textit{ATV Today} (14 March 1974).
144 DoE, \textit{Lead Pollution: Gravelly Hill}, p. 2.
145 MACE: Pollution – Birmingham [television], \textit{ATV Today} (29 March 1974).
\end{flushleft}
‘motor city’ ideal had on residents’ health, and it was not just confined to those residents who lived near the Gravelly Hill interchange.

The establishment of the Working Party by Howell was a signal of the seriousness of the problem, but did not deter local MPs from making further representations in Parliament. In April 1974 Julius Silverman, MP for Birmingham Erdington, addressed Dennis Howell and expressed concern that in 1972 he had been informed that lead levels were ‘not currently a hazard to health.’ Silverman hoped that Howell would not be ‘as complacent as that’ when dealing with the issue. Silverman also complained that while officials within Birmingham Corporation asked how far the investigations had proceeded, people in his constituency were simply asking if they were ‘at the danger level with a level of 25 [microgrammes of lead in blood].’ Howell cautiously responded that ‘lead pollution is a matter for concern but not for alarm. It is necessary not to alarm people, although we express concern about the growth of the problem,’ and pointed to the Joint Working Party investigation that was taking place as addressing the issue. Central government attempted to keep local MPs, and thus local residents, calm while the research was completed.

In April 1974, the first report of the Joint Working Party was presented to Howell. The importance of the study was stressed as ‘nearly 400 people live within 100 metres of the Gravelly Hill interchange and nearly 4000 within 300 metres.’ The report concluded:

A small increase … in the mean blood levels of people living near the motorway has been detected, but present values remain within the normal physiological range for urban dwellers. There is no danger of these people developing clinical lead poisoning.

However, the report later added:

Present blood lead levels do not give cause for concern, but we know little about the long term exposure of people to low levels

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149 Ibid. p. 1.
of lead and much more work is necessary before substantive conclusions can be drawn.\textsuperscript{150}

Additionally, the interim report expressed concern with the methodology so far, and stated that they had encountered some ‘difficulties in interpretation’ of the results.\textsuperscript{151} This was partly because no control group had been simultaneously analysed, changes in sampling techniques had occurred, and the analyst was changed which introduced an ‘unknown error of magnitude, because results often differ markedly from laboratory to laboratory.’\textsuperscript{152} It was again another report which presented inconclusive findings, and did little to reassure the residents of Birmingham that the problem of lead pollution was on its way to being resolved.

This section has looked at the issues of noise and lead pollution in Birmingham up until 1974, and it is not the remit of this chapter to chart the issues into the late 1970s (the Final Report of the Joint Working Party was published in 1978).\textsuperscript{153} The chapter has explored the public health issues caused by the construction of the ‘motor city.’ The Gravelly Hill interchange politicised and created protesters out of a previously calm group of residents. Shortly after the opening of Gravelly Hill interchange, residents in August 1972 were interviewed by local news programmes, and summarised their ill feeling. According to one man ‘[the residents] suggested at one point we’d block the access roads if we can get no satisfaction [to our problems]’.\textsuperscript{154} The language of protest was brought to the fore. Another woman was exasperated: ‘I was just an ordinary peaceful housewife … but I’ll join anything now to get something done.’\textsuperscript{155} A local action committee group was formed, and in 1974 Vice-Chairman Reg Dawson said:

I’d like to see an immediate statement in the paper that the official danger lead level is such and such a thing. If the area is past reaching that stage, then they should clear the area of people … they’ve put in a vast motorway system in the heart of a city. The

\begin{itemize}
\item\textsuperscript{150} Ibid, p. 11.
\item\textsuperscript{151} Ibid, p. 12.
\item\textsuperscript{152} Ibid, p. 10.
\item\textsuperscript{153} The Final Report claimed that the Gravelly Hill interchange did not pose a health risk to nearby residents, and lead levels were negligible. However, a member of the Working Party, Doctor Robert Stephens, expressed concerns with some of the conclusions, and suggested that it was ‘blatantly untrue’ to suggest that there was no concern regarding lead pollution, particularly for young children in the area; Fishlock, T., ‘Top Civil Servant Shouted at Critic of Report’, \textit{The Times}, 26 July 1978.
\item\textsuperscript{154} MACE: Spaghetti Junction [television], \textit{ATV Today} (14 August 1972).
\item\textsuperscript{155} Ibid.
\end{itemize}
idea was good, at the time, but since then the experts have said never again anywhere else.\textsuperscript{156}

This prominent member of the local action committee recognised that the motorway system had its merits at one stage, and showed that these residents were not against the interchange during its planning stages in the late 1960s. This changed during the few months around the interchange’s opening, when the residents realised what was being imposed on their neighbourhood in terms of traffic noise and risks of air pollution. Gravelly Hill interchange was a focal point in Birmingham’s environmental history. This was the development that politicised many local residents, which in turn gave greater prominence to public health issues at local level through newspaper reporting and television reports. Gravelly Hill interchange was designed to be the hub of the British motorway network. However, when local residents were confronted with the motorway on their doorsteps, it acted as a catalyst to a whole new set of issues surrounding public health and the environment.

\textsuperscript{156} Ibid.
Chapter 7 – Driving in the ‘Motor City’

In the redevelopment of Birmingham for the motor car, substantial resources were allocated towards the creation of a city in which automobility prospered. The writer and journalist Jonathan Meades labelled Birmingham ‘a serial rebrander [and] the makeover of the late 50s and early 60s was the centre’s acknowledgment of what the suburbs already knew; that the car was king.’¹ This chapter analyses the experience of driving in the ‘motor city.’ Sociologists such as John Urry, Mimi Sheller and Nigel Thrift have investigated the emotive reactions experienced by drivers;² yet as Simon Gunn argues though, much as this work lacks ‘historicity.’³ Historians have begun to analyse the ways in which different mobility groups navigated the city after 1945, but there is little published on the actual experience of motorists in the urban environment.⁴ Recent historical interest in automobility has been confined to selective roads or motorways. This chapter seeks to expand this through analysing driving experiences throughout Birmingham.⁵ The depiction of Birmingham as a ‘motor city’ was promoted by numerous groups in the city such as Corporation officials and politicians, local members of the business community, and film-makers. A portrait was constructed of Birmingham’s post-war urban redevelopment as designed for the motor car. The first part of this chapter will examine the different ways in which Birmingham’s image was promoted and communicated, and will show what type of modern city was promoted. The second part of this chapter will then assess the realities of life in the ‘motor city’; did residents and drivers experiences match the images that were promoted?

Birmingham’s civic identity had long been tied together with notions of progress and modernity. David Parker and Paul Long argued that ‘Birmingham’s justifiable claim to be the world’s first manufacturing centre aligned its fortunes closely to modernity.’⁶ In the mid-19th century however, Birmingham ‘somewhat lagged behind other major provincial centres in expressing itself as a civic force.’⁷ The arrival of Joseph

³ Gunn, ‘People and the Car’, p. 222.
⁴ For pedestrians, see Moran, ‘Crossing the Road in Britain’; for cyclists see Hanna, ‘Seeing Like a Cyclist’.
⁵ Gunn, ‘People and the Car’, p. 222.
⁷ Cherry, Birmingham, p. 77.
Chamberlain into local politics addressed this issue, and a civic image of ‘progress’ developed.\textsuperscript{8} It was a spirit that Corporation officials and politicians adhered to throughout the 20\textsuperscript{th} century; from 1945 to 1973 it was believed that the modern city must be constructed as a city that facilitated the motor car.\textsuperscript{9}

\textbf{Portraits}

The \textit{Birmingham Evening Despatch} printed an article in 1958 entitled ‘It’s Brave New Birmingham,’ which lauded the planned redevelopment of the city through the construction of the Inner Ring Road and the five central redevelopment areas. Herbert Manzoni, in a moment of self-congratulation for the Corporation, boldly stated that ‘the City Council has shown tremendous courage in its plans for the future. It has tackled the problem with boldness and imagination.’\textsuperscript{10} The Corporation were continually concerned with ways in which the city was perceived as modern and progressive, and this persisted throughout the 1960s. In 1963, the Public Works Department released \textit{Ringway}, a 22-minute promotional film, which showcased the planning and construction of the Inner Ring Road. The modernity of the road was expressed through detailed descriptions of the subways, multi-level junctions, and lighting that accompanied the development; the Inner Ring Road was proudly described as a ‘city street of novel character.’\textsuperscript{11} In September 1967 a meeting was called between Corporation officials and representatives from bodies such as the Birmingham Chamber of Commerce, Birmingham Trades Council, Birmingham Mail and Post, and Birmingham Civic Society, to discuss ‘the image of Birmingham.’\textsuperscript{12} The Corporation’s Public Relations Officer advised that there were ways to showcase Birmingham as ‘both unique and far in advance of other cities.’ Officials were recommended to emphasise a number of characteristics:

Great changes and improvement in physical appearance; architecture; shopping and business development; advanced road

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\textsuperscript{8} For example, the Corporation addressed issues of sewage, energy and water supply during Chamberlain’s Mayoralty (1873-1876); Briggs, \textit{History of Birmingham}, p. 69.

\textsuperscript{9} Higgott, ‘Birmingham: Building the Modern City’, p. 151.


\textsuperscript{11} MACE: \textit{Ringway: The Birmingham Inner Ring Road Stage One} [film] (City of Birmingham Public Works Committee, 1963).

\textsuperscript{12} LBA: BCC/1/AG/1/1/54, GPC, Notes of a meeting held between representative bodies in the city and members of the General Purposes (Special Purposes Sub-) Committee regarding the image of Birmingham, 8 September 1967.
schemes; pleasant residential areas; parks and open spaces; new housing.\textsuperscript{13}

One method the Corporation embraced to communicate this modern image was through local newspaper special issues, released to commemorate events such as the start of construction work on the Inner Ring Road, and the opening of the Bull Ring shopping centre. In 1959, the \textit{Birmingham Mail} published a special supplement titled \textit{The New Birmingham}, authored by Chairman of the Public Works Committee Frank Price. The supplement was a celebration of the redevelopment of the city centre. Emotive headlines such as ‘Making a Clean Sweep to a City of the Future’ promoted the Corporation as a forward-thinking local authority that pushed the city of Birmingham into the future. The Inner Ring Road was assigned transformative status; Price boasted that ‘although primarily designed to cure our central area traffic problem, it will also be instrumental in curing our shopping cramp.’ It was claimed as ‘inevitable that value of land lying inside the boundary of the road will also be greatly enhanced.’\textsuperscript{14} The redevelopment of the city centre was bound together with the construction of the Inner Ring Road, which was seen as clearing away an old, obsolete Birmingham, and creating the conditions for a modern ‘New Birmingham.’ Price used the supplement to advertise the city to businessmen who specialised in the provision of entertainment facilities:

I am hoping those interested in the business of providing [entertainment] facilities will realise that with all the development that is going on they would be foolish to allow all the available sites to be taken and then find that it is too late to join in the future prosperity of the “New Birmingham.”\textsuperscript{15}

The language of progress continued in a celebratory edition of the \textit{Birmingham Post} in June 1963, which commemorated the opening of the Bull Ring shopping centre. The modern nature of the development was stressed; one headline boasted that ‘shoppers will find nothing quite like it anywhere else in Britain.’\textsuperscript{16} City officials enthusiastically tied

\textsuperscript{13} LBA: BCC/1/AG/1/1/54, GPC, Extract from the report of the Public Relations Officer to the Meeting of the Special Purposes Sub-Committee of the General Purposes Committee, 24 October 1967, p. 2.
\textsuperscript{14} Price, F., ‘Could You Find Your Way Around this City Centre’, \textit{The New Birmingham} (Birmingham, 1959).
\textsuperscript{15} Ibid.
together the new modern shopping centre with the development of the Inner Ring Road; Herbert Manzoni stated that construction of the Inner Ring Road had encouraged ‘major developments along its frontage and this rebuilding activity has spread widely throughout the whole of the city centre.’¹⁷ In the opinion of Manzoni, a celebration of the Bull Ring shopping centre meant a further celebration of the Inner Ring Road. In April 1971, the *Birmingham Post* issued a special issue to commemorate the official opening of the Inner Ring Road by Queen Elizabeth II. The Lord Mayor Alderman Stanley Bleyer proudly wrote that the construction of the Inner Ring Road was ‘the largest single undertaking in the city’s history,’ and that the road was a ‘quite outstanding contribution to the life of the city.’¹⁸ Manzoni again enthused that ‘no other project of comparable size has been carried out in any English town.’¹⁹ An unnamed chartered surveyor credited the Inner Ring Road for the rise in values of properties that adjoined the road, and also predicted that ‘completion of the ring road will give a new impetus to redevelopment schemes.’²⁰ A theme that ran throughout the special newspaper issues was a self-celebration of the construction of the Inner Ring Road. The special issues acted as timely reminders that Birmingham Corporation had planned ‘boldly’ for the age of the motor car.

The hosting of motoring events was another way in which the Corporation advertised Birmingham as a modern, ‘motor city.’ The Birmingham Motoring Festival was hosted intermittently throughout the 1970s, with the first festival held in 1970. An advertisement from *The Times* for the 1972 festival stated that:

> For nine days the driving industrial heart of the nation will enjoy the excitement and pleasures associated with motoring and its ancillary activities in the knowledge and pride that a large proportion of the world wide scene of motoring and motor-sport is serviced by the industries of this great City.²¹

Similar sentiments were expressed by organisers Barry Acker and Martin Hone to ATV in 1975, who argued that the aim of the festival was:

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²⁰ ‘Values Rise in Ring Road Area’, *Birmingham Post*, 7 April 1971.

Deliberately to show the rest of the world Birmingham has got a brighter image than people think … This city is a motor manufacturing city, and we want to show that we’ve got a brighter image.22

There was understandably a pride in the local motor industry; the highlight of the 1975 festival was a cavalcade of cars led around the city centre by a £9,000 brand new Jaguar XJ-S, made in Coventry.23 Hosting a motor festival was more than simply a promotion of locally-made motor cars though; as these motor cars were driven through the city streets, it also presented an opportunity to advertise the city itself. The attendance of famous motor racing drivers such as Stirling Moss and Mike Walker added to the glamour of the festival. If the aim of the festival had been to merely showcase the motor cars produced at Longbridge, then the festival could have simply mounted the cars on stationary pedestals. The motor cars were paraded round the city streets in a conscious attempt to tie together the glamour and excitement of sports cars, with Birmingham’s new, modern road network. It was an attempt to portray central Birmingham, and its post-war redevelopment, as exhilarating and modern, worthy of the expensive and glamorous motor cars gracing its streets.

The Corporation successfully hosted the Birmingham Motoring Festival throughout the 1970s, but one idea that failed to come to fruition was hosting a Grand Prix race on the city streets. One of the proponents of the idea was local businessman and nightclub owner Martin Hone, a former racing driver and an organiser of the Birmingham Motoring Festivals.24 The route proposed by Hone (Figure 7:1) showed his desire to showcase all of the major sites of Birmingham’s redevelopment from the 1950s and 1960s; the Rotunda, Bull Ring shopping centre, Ringway Centre, and Albany Hotel were all represented.

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22 MACE: Motoring Festival – Birmingham [television], *ATV Today* (8 September 1975).
23 MACE: Birmingham Motoring Festival [television], *ATV Today* (10 September 1975).
There were perceived economic benefits of hosting the motor race; the Lord Mayor Alderman Victor Turton argued that the income from motor racing which Monte Carlo received was ‘in the region’ of £2,500,000, and he estimated that an expected gain for Birmingham could be at least £750,000.\textsuperscript{25} Alderman Neville Bosworth stressed similar potential economic benefits, and stated that hosting the race ‘was an excellent thing for the City and its motor industry, particularly with this country’s forthcoming participation in the Common Market.’\textsuperscript{26} The Chairman of the West Midlands Economic Planning Council Quintin Hazell argued that ‘anything that boosts the product that Birmingham makes is right.’\textsuperscript{27} Local officials and industrialists wanted to use the motor race as an international advertising campaign for the motor industry at Longbridge. Hone also believed that there were benefits for businesses within the city centre too; the motor race would enhance Birmingham’s reputation as a ‘major tourist attraction’ and result in ‘added trade … for hoteliers, restaurateurs, shopkeepers, public transport, railways, airport and public places of entertainment.’\textsuperscript{28}

The main aim of the motor race, however, was to publicise the city. Advocates of the motor race argued that hosting the event presented an opportunity to advertise the city in a similar fashion to that of the only other two venues that hosted a city-street motor

\textsuperscript{25} LBA: BCC/1/AG/1/1/62, GPC, Minutes of a conference of representatives of the General Purposes, Public Works and Watch Committees regarding proposed motor racing in the city, 28 April 1972.
\textsuperscript{26} Ibid.
race; the glamorous locations of Barcelona and Monaco. The *Birmingham Mail* in 1974 reported that motor enthusiasts had been ‘absorbed by the story of [the] 1974 Monaco Grand Prix’, and questioned ‘could it be Birmingham … enjoying that kind of world spotlight?’ The national media referred to Birmingham’s ‘dream’ of becoming the ‘Monaco of the Midlands,’ and one city centre private development had its name changed from Bristol House to Monaco House. The Lord Mayor Victor Turton believed that Birmingham would ‘become a focal point internationally’ if it hosted the race, and the race organisers spoke of opportunities to promote television coverage across Europe, America, New Zealand and Australia. Martin Hone received an offer from the BBC to ‘promote Birmingham and the race for a period of three months before the event,’ and eight potential organisations expressed an interest in sponsoring the event (including Rothmans International who offered £150,000). Racing driver Graham Hill enthusiastically supported the idea on grounds of publicity:

> I think it shows a lot of initiative … there isn’t a road racing circuit in the country at the moment … it [would do] the city of Birmingham a power of good from the point of publicity … I think [the circuit] was quite exiting, to be racing around the city of Birmingham I think would be quite a thrill.

The proposed race was a typical example of what Peter Larkham and David Lilley termed ‘place promotion’; an event that was ‘associated with how a place [was] marketed for *external* consumption’ rather than for boosting *internal* civic pride. The main function of the proposed race was not to entertain local residents; there were even suggestions in the local media that local residents were not all enthused by the idea. One local resident, interviewed by ATV, replied that the event would be ‘all right’ if it was held on a Sunday as ‘the town’s pretty quiet on a Sunday.’ Another interviewee dismissed the idea as ‘ridiculous’, and a further resident stated that it was unsuitable ‘even on the ring road.’ The Birmingham group of the Pedestrian’s Association came out in opposition to the

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33 LBA: BCC/1/AG/1/1/62, GPC, Letter from Martin Hone to Alderman Mole, 26 April 1972.
34 MACE: Interview with Graham Hill [television], *ATV Today* (7 December 1971).
Grand Prix, and the group secretary even said that ‘the motor race plan has brought our organisation back to life … interest had been waning recently, but now we are thriving again.’\textsuperscript{37} The enthusiasm for the motor race was from a number of local councillors who believed that the prestige of a Grand Prix street race would boost Birmingham’s reputation, and from some members of the local business community who were enthused by the potential presence of a large tourism crowd in the city centre.

A further way in which the ‘motor city’ was portrayed was through television and film during the 1960s and 1970s. It was not until the mid-1960s, with the production of \textit{Crossroads} that Birmingham, as a location for either filming or setting a show in, gained national prominence. Lew Grade, the Managing Director of ATV, insisted that ‘the Midlands region should have its own continuing serial.’\textsuperscript{38} \textit{Coronation Street} had served Northern television viewers since 1960, yet there was no popular television show that depicted life in the Midlands. The content of the show was fairly unimportant for highlighting any defined image of the Midlands; standard soap storylines dominated the writing. The setting of \textit{Crossroads} however was much more important. \textit{Crossroads} was set in a motel in a fictional suburb of Birmingham; in Birmingham’s first major portrayal in a popular television drama series, the location was inextricably tied together with roads and automobility. The show’s creators originally planned to call the show \textit{The Midland Road}, which further indicated that the image the show’s creators wanted to show on television of Birmingham and the Midlands was of one attached to the motor car.\textsuperscript{39} The architectural critic and broadcaster Jonathan Meades described \textit{Crossroads} as ‘a celebration of the car, of car travel, or car parking, of the hospitality industry, of the titular motel in particular, and of motels in general.’\textsuperscript{40} \textit{Crossroads} presented, in an ‘everyday’ soap opera, a region defined by roads and the car.

\textit{Crossroads} however did not offer serious insight into Birmingham as a city, or of driving in the city. The first television show that achieved this for Birmingham was the BBC underworld drama \textit{Gangsters}, initially a \textit{Play for Today} one-off show in 1975, but

\textsuperscript{40}Meades, J. \textit{Heart By-Pass: Jonathan Meades Motors through Birmingham} [television] (BBC, 1998).
later commissioned into a full series in 1976. The show’s director Philip Saville chose Birmingham as a location for the drama because he found the atmosphere in the city ‘almost electrically exhilarating.’ Similar sentiments were echoed by producer David Rose, who enthused:

Look at the tower blocks, the mixture of races in the streets. There’s a difference in the air. It’s edgy, electric. We’re in Boom Town 1976. That’s the feeling of excitement and suspense we want to convey.

There was a desire to create a show that was exciting and fast-paced, and important members of the crew and cast suggested that Birmingham was the only British city to offer this environment. One of the show’s writers Philip Martin believed that David Rose chose Birmingham as the location for Gangsters because it offered the excitement of an American-style skyline:

I think he had the idea when he went to a meeting in London… which finished early and he went to see “The French Connection”, then came back to Birmingham on the train and saw the Birmingham skyline. Now he’d been watching the New York skyline for a couple of hours previously and he just thought that very few films or series had been done in Birmingham.

This notion of urban Birmingham conjuring senses of America was not an opinion unique to Rose; Guardian journalist Terence Bendixson wrote an evocative piece in 1969 comparing Birmingham to Las Vegas. Contemporary commentators in Birmingham captured similar senses; Keith Brace of the Birmingham Post argued that the Birmingham of 1970 had developed into ‘a sort of fun city, an intriguing mixture of industry, commerce and bohemianism, with overtones of civic eccentricity.

The creators of Gangsters exploited this ‘American’ sense of Birmingham by utilisation of a thrilling new cinematic technique: the high speed car-chase. American

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films *Bullitt* (1968) and *The French Connection* (1971) had showcased a new excitement of the car in the city to cinema-goers through high-speed car chases, and these chases were ‘marketed as one of [the films’] principal attractions.’\(^{46}\) The car chase from *Bullitt* was even shown in its entirety on the *Ed Sullivan Show* as a means of promoting the film.\(^ {47}\) The excitement of these new high-speed car chases was captured in contemporary reviews. Tom Milne, film critic for the *Observer* reviewed *Bullitt*:

> There is an 11-minute car chase which must surely be one of the most exciting ever filmed, a flurry of flying sparks and burning rubber as two cars screech at each other’s heels through the San Francisco streets, literally taking off over the roller-coaster hills and out on to the freeway for the inevitable, splendidiferous, final crash.\(^ {48}\)

Derek Malcolm of the *Guardian* reviewed *The French Connection* and praised the ‘magnificent car chase, as the detective races a train through the poor area of New York’, and even suggested that ‘it rivals that of “Bullitt.”’\(^ {49}\) The critics found a great excitement and thrill in these car chases, particularly within the city and on the freeways. *Gangsters* recreated these cinematic attributes for a British television audience. In the *Guardian’s* review of *Gangsters*, it stated that ‘everything – car chases, strip acts, slights, fights – was done at least twice.’\(^ {50}\)

Birmingham, with an evocatively-American skyline and expansive new road network (the Inner Ring Road, the Aston Expressway and Spaghetti Junction had all been completed by the time *Gangsters* was produced in 1975), provided a perfect location for a *French Connection* inspired drama. A car-chase scene that terminated underneath Spaghetti Junction was just one example of how the writers of *Gangsters* aimed to create this sort of excitement, and also to show off the city’s streets and skyline. The Spaghetti Junction interchange was highly representative of a modern city (it had only opened in 1972), and again encouraged an American perspective of the city; in a local news report on the opening of the interchange, a police traffic officer who worked on the Spaghetti

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\(^{50}\) Banks-Smith, N., ‘Gangsters on BBC1’, *Guardian*, 10 January 1975.
Junction site claimed ‘it certainly compares with the junctions I saw in Los Angeles last year.’ The decision to shoot a car-chase around this area fostered a feeling that the roads of Birmingham were exciting. The opening credits for the 1976 full series featured the main character running through one of the Inner Ring Road tunnels in the city centre, as cars drove around him as if he were not there. This again gave the impression of excitement to the new road tunnels. The road network of Birmingham was used to showcase car-chases and create backdrops for scenes of high tension.

Birmingham during the 1960s and 1970s also attracted a certain amount of interest in its redevelopment from individuals such as Ian Nairn, famous for his strong critique of post-war British planning in publications such as *Outrage* (1955). Despite this, Nairn found pleasure in some of the new underground pedestrian spaces constructed in Birmingham. He cited the Colmore Circus multi-level junction as a ‘notable example of traffic amenity as well as traffic engineering’, suggesting ‘this urban motorway has actually improved the environment.’ His *Observer* column praised Colmore Circus:

> In summer, it is a shady place to stop for a rest, all the more effective because of the bustle around; on a foggy day in winter, with the time on the *Birmingham Post* building glimmering through the murk, it seems to be one of the very few new places in Britain which is genuinely atmospheric. And at any time it is a splendid place for children, safe yet more exciting than an adventure playground because it is actually part of the city.

Nairn was enthused by the new urban spaces created to cater for free-flow of the Inner Ring Road. He had previously expressed reservations about the routing of Birmingham’s Inner Ring Road; in 1960 Nairn wrote that the Corporation had taken ‘fearful risks’ in running the road through the civic centre and the planned Bull Ring shopping centre. However, he returned to Birmingham in 1967 and noted the existence of ‘exhilarating stretches of ring road.’ The Bull Ring shopping centre was deemed a success, partly due to the fact that pedestrians were ‘both over and under’ the Inner Ring Road that had

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51 MACE: Spaghetti Junction Story [television], *ATV Today* (22 May 1972).
53 Ibid.
54 Ibid, p. 3.
split the site, and were therefore ‘constantly participating in the traffic, feeling the slope of the hill, yet in complete safety.’ Nairn’s fears from 1960, that the Inner Ring Road cutting through sites such as the Bull Ring centre would result in feelings of disconnection from the shopping centre’s users, had not, in his opinion, materialised.

Figure 7:2 - Colmore Circus multi-level junction, Birmingham, 1966.


The first part of this chapter has explored the ways various different groups portrayed the city of Birmingham during its redevelopment. It has illustrated that Birmingham was presented as a modern city redesigned for the benefit of the motor car. Commentators such as Ian Nairn, and television shows such as Gangsters, depicted Birmingham and its new road network as atmospheric places. The Corporation consistently referenced the Inner Ring Road as a marker of modernity and progress, and promoted the city extensively as a city ready for the motor car. The exploration of the city centre as a site for a Grand Prix showed the extent to which the city centre was promoted as a city centre for the motor age. The infamous Telly Savalas travelogue about

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56 Ibid, p. 11.
Birmingham from 1981 still promoted Birmingham as a modern, fast-paced city, firmly developed around motor car usage:

I found a city exciting, the modern buildings … you feel as if you have been projected into the twenty-first century …

Birmingham’s road systems are revolutionary. The Inner Ring Road, Queensway, a four-mile circuit of dual carriageways, tunnels, and overpasses, linking up with the main arteries of the city and the Aston Expressway. Yes, it’s my kind of town.57

The strong praise of Birmingham may seem indicative of a Corporation-commissioned promotional video, but it was an independent production by Ian Baim, and under no Corporation influence. The historian Joe Moran argued that one of the largest image problems in the long-term for Birmingham was ‘that it kept hymning the praises of its road system long after urban motorways had ceased to have any utopian associations.’58

The Savalas travelogue showed that it was not just the Corporation that still linked the city with the road network to argue its modernity; film-makers such as Baim also still portrayed Birmingham in this way. The consistent message that was portrayed regarding Birmingham as a city, from numerous different parties into the early 1980s, was one of modernity through automobility.

**Realities**

The city of Birmingham was promoted and portrayed as a modern city redeveloped for universal motor car usage, yet how far did the realities of driving in Birmingham during the 1960s and 1970s match this promoted vision? To analyse the trends that underpinned car ownership and usage in Birmingham, two important statistical sources exist; the West Midlands Transport Study (data collected 1964) and a report titled *A Survey of Travel Characteristics in Birmingham* (data collected 1972) undertaken by the University of Birmingham.

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Car ownership across the West Midlands in 1964 was 43 per cent, considerably higher than the 28 per cent of households that owned a car in the County of London in 1962.\(^\text{59}\) There were substantial geographical disparities though, and within Birmingham sectors on the outer edges of the city displayed substantially higher car ownership levels than central or inner city sectors.

Table 7:1 - Car ownership by housing sector and household income in Birmingham, 1964.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Car Ownership %</th>
<th>0-1000</th>
<th>1000-2000</th>
<th>2000+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Birmingham</td>
<td>23</td>
<td>72</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>Erdington (Inner)</td>
<td>31</td>
<td>61</td>
<td>36</td>
<td>3</td>
</tr>
<tr>
<td>Handsworth (Inner)</td>
<td>45</td>
<td>57</td>
<td>39</td>
<td>4</td>
</tr>
<tr>
<td>Solihull (Outer)</td>
<td>69</td>
<td>34</td>
<td>48</td>
<td>18</td>
</tr>
<tr>
<td>Sutton Coldfield (Outer)</td>
<td>74</td>
<td>34</td>
<td>50</td>
<td>16</td>
</tr>
</tbody>
</table>

The main reason attributed by the *West Midlands Transport Study* for the differences of car ownership in different sectors was household income. This was a hugely important factor in the purchase of a motor car in the 1960s; a basic Ford Cortina cost £639 in 1962, whereas the average earnings for a male semi-skilled manual worker were £581 in 1960.\(^\text{60}\)

The University of Birmingham study also found a significant disparity in car ownership between local authority and private housing. In local authority households in 1972, there were 0.45 cars per household, but much higher within private estates at 1.19 cars per household.\(^\text{61}\) The occupations of driving license owners were studied and a clear gap was evident; 71.2 per cent of managerial, professional and other non-manual workers and 75.4 per cent of foremen and skilled manual workers possessed a driving license. There was a significant drop in license ownership among semi-skilled and unskilled workers; only


\(^{60}\) Gunn, ‘People and the Car’, p. 230.

34.4 per cent possessed a driving license.⁶² A Survey of Travel Characteristics in Birmingham concluded that ‘non-manual groups predominate, indicating a positive relationship with income.’⁶³ Reasons for not owning a car also varied; 50.6 per cent of local authority housing residents cited financial factors as the major problem, but this represented an issue for just 25 per cent of private housing residents. Only 22.2 per cent of residents who lived in post-war high density inner Birmingham local authority housing (as identified by the University of Birmingham study) possessed driving licenses, which was the lowest of all residency types.⁶⁴ The residents of local authority housing in central and inner Birmingham, who perhaps had witnessed the harshest realities of the ‘motor city’ as ring roads were constructed that often ran through the heart of their communities, were not the people who benefitted most from direct usage of these new expansive motor roads.⁶⁵

Finances were not the only factor that influenced car ownership in Birmingham during the 1960s and 1970s. There existed a clear gender divide regarding the usage of a motor car. The West Midlands Transport Study analysed women’s journeys in 1964 and found only 35 per cent were made by private transport (compared to 68 per cent by men).⁶⁶ This was largely explained by the fact that there was low multi-car ownership within households; only five per cent of households within the study area owned more than one car.⁶⁷ The household car was usually required by the men for work purposes:

The high proportion of work journeys by males is important because a work journey by the main breadwinner tended to have priority over the use of a household’s car, leaving other family members to use public transport.⁶⁸

The study found that 51.6 per cent of all private transport journeys were for work purposes, significantly higher than the second highest usage of recreation at 11.4 per

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⁶² Ibid, p. 43.
⁶³ Ibid, p. 43.
⁶⁴ Ibid, p. 42.
⁶⁵ For example, the Middle Ring Road was designed to run through the five central slum redevelopment areas. See Chapter Four.
⁶⁶ ‘Private transport’ was defined as ‘car drivers, car passengers, car pool passengers, taxi passengers, motorcycle, goods vehicle passengers, and coach passengers.’ West Midlands Transport Study, p. 41.
⁶⁷ Ibid, p. 36.
⁶⁸ Ibid, p. 49.
cent. Table 7:2 shows women drivers made significantly fewer journeys for work purposes than men.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Work &amp; Education</th>
<th>Other Purposes</th>
<th>Work &amp; Education</th>
<th>Other Purposes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>200,300</td>
<td>264,100</td>
<td>526,600</td>
<td>306,200</td>
<td>1,297,200</td>
</tr>
<tr>
<td>Male</td>
<td>876,700</td>
<td>519,800</td>
<td>539,700</td>
<td>119,300</td>
<td>2,055,500</td>
</tr>
</tbody>
</table>


A Survey of Travel Characteristics in Birmingham highlighted that this situation had not changed substantially by 1972; 69 per cent of men used private transport to travel to work, compared to 34.7 per cent of women. The predominance of male usage of the household motor car reduced female participation in driving, and until households could afford more than one car this situation persisted. Colin Pooley, Jean Turnbull and Mags Adams’ suggested that in Glasgow and Manchester there were attitudinal differences between genders; women did not actively wish to drive in the 1960s and 1970s as they ‘disliked driving’ and ‘expressed real fear of learning to drive.’ This was possibly true in Birmingham’s local authority estates, where in 1972 only eight per cent of women possessed a driving license, which showed little inclination to learn to drive. This attitudinal difference was not evident across Birmingham though; within private estates 54.9 per cent of female residents possessed a driving license. It was therefore women from the more affluent, private estate households who could afford to participate in motor car usage. When questioned why they did not use a car to travel to work in 1964, only 0.4 per cent of women sampled cited the main reason as the roads were too congested, driving was too tiring, or alternative methods were healthier and less stressful. Instead, 26.7 per cent of female respondents stated it was because the household car was already

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69 Ibid, p. 41
in use by another family member.\textsuperscript{73} This suggested that female residents were not discouraged from driving by the act of driving, but instead by access. The West Midlands Transport Study instead argued that the greatest source of potential additional drivers was found in ‘the vast majority of women who at present have no licenses.’\textsuperscript{74} Research on female drivers in America found that a strong desire existed to drive a motor car; Cotton Seiler argued that the first women drivers in America ‘relished driving’s sensations of mastery, freedom, thrill and self-determination,’ and Margaret Walsh found that American women were keen to gain usage of a motor car in order to ‘manage their household successfully.’\textsuperscript{75} An article in 1972 from the Automobile Association’s quarterly magazine \textit{Drive} tentatively researched the role of female drivers in Britain, and argued that women had gained confidence behind the wheel and had started to assert their presence on the roads more authoritatively:

There’s a new breed of woman driver on the road and she takes herself seriously. She no longer borrows her husband’s car for brief shopping sprees, but drives her own vehicle over long distances with, she believes, the skill traditionally associated with men.\textsuperscript{76}

There was a growing desire to participate in automobility from women, but male dominance of the household car, for mainly work purposes, acted as a severe hindrance to this aim in households that could not afford multiple cars. John Urry argued that ‘for many women exclusion from automobility [became] a crucial issue, both because it limits their capability to work outside the home and because it makes movement through public spaces difficult.’\textsuperscript{77} Birmingham was redeveloped with motor car access at the forefront of concerns, so those without access to a motor car were locked out of full utilisation of the city.

Gender was not the only boundary to car usage in Birmingham during the 1960s and early 1970s; age also presented certain restrictions. The West Midlands Transport Study recorded the number of private transport or public transport journeys made by

\textsuperscript{73} West Midlands Transport Study, p. 54.
\textsuperscript{74} Ibid, p. 51.
\textsuperscript{76} Carter, R., ‘Women Drivers’, \textit{Drive}, 1972, p. 56.
\textsuperscript{77} Urry, Mobilities, p. 133.
residents in 1964. The most popular age groups for private transport usage among men were 25 to 44 years old (79 per cent) and 45 to 59 years old (69 per cent). Young people aged 15-24 year olds made 59 per cent of journeys by private transport, but the lowest group was those aged 59 and over who only made 53 per cent of journeys by private transport.\textsuperscript{78} An analysis of driving licenses also displayed similar trends; the licenses per head figure was largest, for both genders, in the 25 to 44 age group (0.63 licenses per head for males, 0.15 licenses per head for females). There were 0.27 licenses per head for males aged 59 or older, and the figure for females within the same age bracket was a lowly 0.03.\textsuperscript{79} The \textit{West Midlands Transport Study} suggested that this was because ‘older people were less influenced by the rapid expansion of car ownership in the previous ten years.’\textsuperscript{80} A reason for the low uptake of private transport journeys made by the 59 and over age bracket could have been that there was less need for a motor car to travel to work due to retirements. Free bus passes for pensioners in Birmingham was another factor; research conducted in Small Heath in the mid-1970s found that many pensioners in the area did not believe that owning a car was a ‘practical proposition’, and instead preferred to utilise public transport.\textsuperscript{81} In 1975, there were nine and a half million people of pensionable age living in poverty.\textsuperscript{82} The financial means to purchase a car were simply not present for many older people to participate in automobility and the ‘motor city.’

Another potentially interesting factor to consider was car ownership and usage by ethnicity; from 1951 to 1961 the number of overseas immigrants to Birmingham rose from 51,500 to 100,000.\textsuperscript{83} The transport and travel surveys unfortunately did not investigate this category, so it is hard to ascertain definitively whether immigrants to Birmingham from the 1950s participated in the ‘motor city’ ideals of car ownership and usage, or whether such groups were excluded. Tentative speculations can be made through an analysis of the number of households that owned private motor cars in different wards in Birmingham in the mid-1960s. Areas such as Handsworth and Sparkhill housed large numbers of immigrants; in 1966 33 per cent of households within

\textsuperscript{78} \textit{West Midlands Transport Study}, p. 48.
\textsuperscript{79} Ibid, p. 51.
\textsuperscript{80} Ibid, p. 51.
\textsuperscript{82} Townsend, P., \textit{Poverty in the United Kingdom: A Survey of Household Resources and Standards of Living} (Harmondsworth, 1979), p. 784. For an explanation of the reasons for the high levels of pensioner poverty in the 1970s (e.g. pension income being less than a working wage), see pp. 786-795.
\textsuperscript{83} Cherry, \textit{Birmingham}, p. 204.
Handsworth owned one or more cars, and in Sparkhill the figure were 34 per cent. Compared with other inner city wards, car ownership figures in areas with strong immigrant communities were much lower; areas with lower levels of immigrant households included Erdington, where 47 per cent of households owned one or more cars, and Perry Barr where car ownership was evident in 56 per cent of households. The Department of the Environment commissioned a study of the Small Heath area of Birmingham in the mid-1970s, where there was a strong immigrant community. The study found low levels of car ownership in Small Heath, and only 34 per cent of households owned a car in 1974 (compared with the West Midlands Conurbation average of 49 per cent from 1971). Unfortunately, it is hard to establish whether there was low car ownership in areas such as Small Heath because the immigrant communities who settled there did not wish to participate in car ownership (instead money was spent or saved on other priorities), or that car ownership was low because such areas housed families typically on low incomes (the Department of the Environment survey found that one quarter of households in Small Heath were in poverty, and 86 per cent of households had gross incomes of less than £60 per week.) It would be unfair to assertively claim immigrants in Birmingham did not participate in car ownership, but there did seem to be some correlation; several of the wards with strong immigrant communities were characterised by low car ownership figures. This seemed to represent part of a larger correlation between income and car ownership.

The chapter has already stated the significance of the motor car for male commuter purposes, but other purposes such as shopping and leisure also became more prominent by the 1970s. The London Travel Survey (1962) had forecast an increase by 1981 of only ten per cent in commuter journeys, but of 74 per cent in ‘social journeys.’ The University of Birmingham study found that by 1972, the car was an important part of household shopping patterns, particularly in households from private estates.

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85 In Small Heath, 64 per cent of the adult population had been born in the United Kingdom, compared with the 94 per cent national average. Pakistani (12 per cent) and West Indian (6 per cent) residents made up large proportions of the Small Heath adult population. Department of the Environment, Inner Area Study: Birmingham – Small Heath Birmingham: A Social Survey (London, 1975), p. 18.
86 Ibid, p. 28.
87 Llewelyn-Davies et al, Unequal City, pp. 29-30.
88 Plowden, Motor Car and Politics, p. 428.
Table 7:3 - Car usage for shopping trips, per cent by housing type in Birmingham, 1972.

<table>
<thead>
<tr>
<th>Housing Type</th>
<th>Shopping Areas</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central Birmingham</td>
<td>Other Areas</td>
<td>Local Shops</td>
<td>Other Towns</td>
</tr>
<tr>
<td>Local Authority</td>
<td>23.2</td>
<td>43.2</td>
<td>19.1</td>
<td>62.7</td>
</tr>
<tr>
<td>Private Estate</td>
<td>51.1</td>
<td>84.8</td>
<td>47</td>
<td>85.6</td>
</tr>
</tbody>
</table>


Walking and bus usage made up the shortfall in local authority households, but in the private housing estates the motor car had become firmly embedded in the shopping habits of the residents. In private housing estates, 49.1 per cent of households visited the local shops more than twice a week, and the majority by car. This placed great strain on local roads, and was a problem Peter Hall had identified as early as 1967:

> Women do go shopping more often than they need. There is the basic problem that the housewife who goes shopping by car finds it so difficult to park anywhere near the shops that she is limited in the amount of goods she can carry back to the car. Because of this, women tend to go shopping at least two to three times a week … most British housewives still choose to live to a pattern formed before the motor car came to stay.

What Hall identified appeared to occur in Birmingham; the car was used more extensively from residents of private estates for local convenience shopping than perhaps parking infrastructure and local roads could accommodate. It is also interesting that shoppers to the centre of Birmingham did not overwhelmingly use the motor car, yet developments such as the Bull Ring shopping centre were designed with car accessibility as a focal point. A promotional film from Laing Development Company Limited, the constructors of the shopping centre, proudly celebrated the ease of access by motor car:

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90 Hall, P., ‘Shopping Century 20 1/2’, *Drive*, 1967, p. 36.
If you come by car, nothing could be simpler. You just drive in off the Ringway straight into the car park reception area. As you pull up, an attendant takes over and you’re on your way. Meanwhile your car is taken by lift to the multi-storey car park above and they’ll bring it back to you again as you need it, ready to drive away.\textsuperscript{91}

Developments such as the Bull Ring shopping centre in the city centre clashed with a number of opinions expressed by Manzoni. Speaking to the Royal Institute of British Engineers in 1958, Manzoni suggested that large stores should ‘move out of cities into less congested areas to provide parking space for customers.’ Manzoni cited the experience of out-of-town shopping malls in the United States as being the only way to meet parking demand.\textsuperscript{92} Decentralised shopping facilities had started to become more commonplace from the 1920s in the United States, but the 1950s marked the decade when the scale of out-of-town shopping centres developed on a larger scale. Lizabeth Cohen argued that ‘by the early 1950s, large merchandisers were aggressively reaching out to the new suburbanites, whose buying power was even greater than their numbers,’ and that it was recognised that as American citizens had become ‘virtually inseparable’ from their cars, merchandisers realigned their locations to facilitate motor car access.\textsuperscript{93} The British experience through the 1960s instead represented a compromise between the growing demand for car usage and a desire from local authorities to retain a ‘strong’ central shopping district, perfectly exampled by the Bull Ring shopping centre. Despite Manzoni, Birmingham Corporation was steadfastly reluctant to develop out-of-town shopping centres throughout the 1960s and 1970s; in the Corporation’s Structure Plan in 1973, it stated that it would be policy ‘to oppose planning applications for shopping developments in out-of-town locations where it is considered that these would reduce the trading potential and detract from investment in existing shopping centres in the City and damage the social facilities provided in existing facilities.’\textsuperscript{94} This was a manifestation of national policy; in 1975 Secretary of State for the Environment Anthony Crosland

\textsuperscript{91} MACE: \textit{The Bull Ring Shopping Centre Birmingham} [film] (Laing Development Company Limited, 1965).
\textsuperscript{92} ‘Move the Large Stores out to the Suburbs’, \textit{Evening Despatch}, 22 January 1958.
\textsuperscript{94} City of Birmingham, \textit{Structure Plan} (1973), p. 94.
rejected plans for an out-of-town shopping centre near the National Exhibition Centre located just outside of Birmingham on the grounds of ‘preservation of the proposed green belt … and the likely adverse impact on shopping centres in Chelmsley Wood and Solihull.’ The *Guardian* reported there was an ‘undoubted wish of many people to shop by car,’ and that the rejection of the out-of-town shopping centre near the NEC meant that Britain was still without ‘a major out-of-town shopping centre in the American style.’

Central government and the major urban local authorities across Britain were reluctant to risk the economic vitality of their urban centres. Instead, through developments such as the Bull Ring centre in Birmingham and the Arndale centre in Manchester, local authorities reinforced city centres as major shopping destinations, but attempted to cater for the motor car at the same time through multi-storey car parks and redeveloped central roads. It was a compromise that struggled to flourish; for example the multi-storey car park of the Bull Ring shopping centre was closed in 1969.

This closure perhaps signified that shoppers became increasingly reluctant to negotiate the ever-more congested urban centres, and demand for out-of-town shopping centres persisted in the 1970s. Britain’s first out-of-town shopping centre, Brent Cross, was opened in 1976, and developments such as the Metro Centre in Newcastle and Meadowhall in Sheffield were opened much later in 1986 and 1990 respectively.

* A Survey of Travel Characteristics in Birmingham also found that by 1972, the car was fixed into the leisure travel patterns of Birmingham’s residents.

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Table 7.4 - Car usage for leisure activities – per cent by housing type in Birmingham, 1972.

<table>
<thead>
<tr>
<th>Leisure Activity</th>
<th>Local Authority</th>
<th>Private Estate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurants</td>
<td>53.7</td>
<td>80.6</td>
</tr>
<tr>
<td>Pubs</td>
<td>34.9</td>
<td>67.3</td>
</tr>
<tr>
<td>Clubs</td>
<td>30.3</td>
<td>71.2</td>
</tr>
<tr>
<td>Cinemas</td>
<td>33.3</td>
<td>75.9</td>
</tr>
<tr>
<td>Theatres</td>
<td>50</td>
<td>76.7</td>
</tr>
<tr>
<td>Concerts</td>
<td>50</td>
<td>88.9</td>
</tr>
<tr>
<td>Dances</td>
<td>63.4</td>
<td>93.3</td>
</tr>
<tr>
<td>Churches</td>
<td>37</td>
<td>70.8</td>
</tr>
<tr>
<td>Private Houses</td>
<td>46.7</td>
<td>69.4</td>
</tr>
<tr>
<td>Other Indoor</td>
<td>59.1</td>
<td>71.2</td>
</tr>
<tr>
<td>Sports</td>
<td>70.6</td>
<td>82.6</td>
</tr>
<tr>
<td>Other Outdoor</td>
<td>57.7</td>
<td>74.2</td>
</tr>
</tbody>
</table>


The study linked private car usage to the locations of leisure activities; 41.3 per cent of local authority households’ leisure activities were located within Birmingham, whereas this dropped to 32.6 per cent for private estate households. For private estate households, 23.5 per cent of leisure activities were located either in other towns or cities or in rural areas, compared to only 15.7 per cent for local authority households.\(^97\) The study inferred that residents of private estates, where there were higher levels of car ownership, found that the motor car broadened the horizons for leisure to a wider extent than those within local authority estates.

Local residents’ mental perceptions of central Birmingham were analysed by the Centre for Urban and Regional Studies (based at the University of Birmingham) in 1971, in a study named City Scene.\(^98\) This examined the extent to which residents identified with various different spaces in the city centre. The study was inspired by Kevin Lynch’s The Image of the City; Lynch had argued that a ‘legible city would be one whose districts

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\(^{97}\) Hobbs et al, A Survey of Travel Characteristics in Birmingham, p. 67.

\(^{98}\) There were 167 respondents to a request for participants published in the Birmingham Post in January 1971. Readers were asked to ‘join the project simply by drawing a rough map or sketch of the (central) area including in it the existing buildings, roads and other features which you consider important.’ For further details on methodology see Goodey, B., Duffett, A., Gold, J., Spencer, D., City-Scene: An Exploration Into the Image of Central Birmingham as Seen by Area Residents (Birmingham, 1971), ch. 3.
or landmarks or pathways are easily identifiable and are easily grouped into an over-all pattern.\textsuperscript{99} He believed that legibility studies were an important part of the future planning of cities, and that to understand the subject ‘we must consider not just the city as a thing in itself, but the city being perceived by its inhabitants.’\textsuperscript{100} Legibility studies were a move towards greater public involvement in the planning process; they could be used to assess the extent to which redevelopments had been successful in the creation of new spaces people related to and understood.

\textit{City Scene} found that only 10 per cent of respondents who stated that they travelled around the city centre by bus or on foot subsequently mapped a complete Inner Ring Road in their mental recollections of the city centre; of those who drove into and around the city centre, 40 per cent found that they could draw a complete Inner Ring road from mental recollection.\textsuperscript{101} This was perhaps understandable; much of the Inner Ring Road was elevated and limited to vehicular traffic.\textsuperscript{102} With the exception of the Smallbrook Ringway, which had established itself as a broad shopping area, \textit{City Scene} argued that ‘neither the new [Inner Ring Road] route nor its nodal interchanges feature significantly in our maps.’\textsuperscript{103} This suggested that many of the residents consulted in the study did not identify with the Inner Ring Road on which the Corporation had lavished vast financial outlay. This chapter has explored the ways in which the Corporation conjured a sense of civic pride in the construction of the Inner Ring Road, yet the results of this study suggested that residents did not share such sentiments by 1972. Drivers merely saw the Inner Ring Road as another road. Those who walked in the city centre were forced underground into subways that elicited senses of confusion and disorientation. A letter from one respondent stated:

\begin{quote}
Subways are so amorphous and distorted from the above ground layout one loses one’s image of ‘above ground’ in them. Indication of NSEW (North, South, East, West) side of [the] street underground labelling would help a lot. I have little trouble in London – they are labelled from street side.\textsuperscript{104}
\end{quote}

\textsuperscript{100} Ibid, p. 3.
\textsuperscript{101} Goodey et al, \textit{City-scene}, p. 46.
\textsuperscript{102} Ibid, p. 46.
\textsuperscript{103} Ibid., p. 46.
\textsuperscript{104} Ibid, p. 48.
The response suggested that merely improved signposting would have helped orientate pedestrians in the subways, but perhaps the fact that such a seemingly simple act of subway management was overlooked by the Corporation reflected a lack of detailed practical interest in the subways compared to the roads above. Chapter Three explained that the Corporation attempted to make the subways commercially attractive through the inclusion of kiosks and small shops, but it seemed that the Corporation overlooked smaller details, such as signage, to help navigate pedestrians through the underground spaces. *City Scene* concluded that ‘this inadequate marking of levels and the psychological effect of placing pedestrian routes underground while the motor traffic takes over the surface on the Inner Ring Road is a sore point.’\(^{105}\) This unease was further highlighted by David Adams, whose oral history investigations concluded that ‘some residents perceived that the patterns of flow imagined by the planners and highway engineers actually interrupted existing pedestrian routines’, and that pedestrian routines were deemed by the Corporation as secondary to the ‘unconstrained circulation of vehicular traffic.’\(^{106}\)

The underground spaces were seemingly not considered enjoyable or important parts of the city centre by those residents who used them often; only 14 per cent of respondents to *City Scene* attempted to map any ‘sub-surface or supra-surface features’ (such as subways). These results resonated with a number of stories from the local press in the late 1960s. In 1968, the *Birmingham Post* claimed the new underground pedestrian spaces caused ‘a high nuisance rating for the city’s pedestrians,’ and that the subways were impossible to use for blind people without getting lost. The ‘distorted sounds’ in the pedestrian subways made it ‘hard to tell which way the traffic is going overhead, or where the next exit will bring them out.’\(^{107}\) These new spaces, engineered to allow for the free flow of a ‘motor city’ above at street level, created entirely new sensory experiences that made navigating the city centre particularly difficult for the visually impaired. Readers’ letters to local newspapers in 1969 further highlighted unease with the underground pedestrian spaces; one letter complained that ‘women who have worked all week in factories and clean their homes at the weekend do not want to trudge up and

\(^{105}\) Ibid, p. 48.

\(^{106}\) Adams examined oral testimonies to conduct research into pedestrian routines; Adams, ‘Walking in the Modern City’, pp. 6-7.

\(^{107}\) ‘Confusion and Despair for a Blind Man in Birmingham’s Space-Age Centre’, *Birmingham Post*, 25 May 1968.
down umpteen ramps and steps.’ Another letter complained that ‘the underpasses should never have been made for pedestrians’ and that their dirt and noise made for a most unpleasant experience: ‘I was born and bred in Birmingham, but I hate going in to shop or anything else, and I get out of it as fast as I can.’ One letter called for private cars to be banned within the town centre and be replaced by special buses so that ‘mothers with children could get to town in comfort … perhaps then something would then be done to help the no-car folk.’\textsuperscript{108} Discontent developed from the late 1960s within Birmingham residents regarding usage of the subways, and thus excitement of the city centre was not a sense that appeared too prevalent within the group of pedestrians that were forced to use these spaces to safely cross the free-flowing Inner Ring Road above.

Many restrictions on the act of driving materialised through the 1960s and 1970s; the portrayal of Birmingham as a city which had constructed a new free-flowing road network that elicited feelings of excitement and freedom, did not appear a reality in practice. Local news reports suggested that some drivers felt lost when they travelled on the new road network. An ATV report from 1966 criticised the road signs in Birmingham as unclear and contradictory, and argued that the signs lacked the clarity of those used on the national motorway network. The reporter Gwyn Richards complained that despite knowing the area well, the poor signposting had confused him.\textsuperscript{109} The opening of Spaghetti Junction prompted further worries over confusion of drivers and disorientation. In April 1972, local taxi drivers participated in a guided bus tour of the new interchange, organised by Corporation officials. One taxi driver complained that ‘I’m a little confused even now … I’m going to have a practice drive round on my own before I bring passengers around.’\textsuperscript{110} When asked if the interchange would present him with any problems, a more assertive taxi driver responded, ‘not for us no, for ordinary motorists it may do a bit, they might possibly have to re-educate themselves on where they’re going.’\textsuperscript{111} This re-education process for ‘ordinary motorists’ soon occurred; for example public meetings hosted by the Royal Society for the Prevention of Accidents aimed to ‘set people’s minds at rest’ regarding usage of the Spaghetti Junction.\textsuperscript{112} The guided tours.

\textsuperscript{108} ‘Shopping is so Exhausting’, ‘Dirtiest and Noisiest’, ‘Why Weren’t We Consulted’, ‘It’s Cleaner Anyway…’, \textit{Birmingham Mail, 30 October 1969}.
\textsuperscript{109} MACE: Birmingham Road Signs [television], \textit{ATV Today} (27 April 1966).
\textsuperscript{110} MACE: Interview with Taxi Drivers [television], \textit{ATV Today} (18 April 1972).
\textsuperscript{111} Ibid.
\textsuperscript{112} ‘Spaghetti Junction Talks for Motorists’, \textit{Birmingham Mail, 27 April 1972}. 
and public meetings highlighted concerns that some local drivers had regarding the usage of this complicated-looking new network, or at least that the local authority thought they had.

The intricacies of the Aston Expressway also revealed similar concerns. The Aston Expressway consisted of seven lanes, three permanent lanes in either direction and one central ‘tidal flow’ lane which accommodated travel in either direction upon the instructions of overhead signs.

Figure 7:3 - Motorists’ illustrated guide of Aston Expressway, 1971.


An engineer who worked on the construction of the Aston Expressway told ATV that while the road was all very safe ‘technically’, he worried that drivers could not be trusted to obey the overhead signals. There was no central reservation, so drivers were relied upon to only travel in the central tidal flow lane when the overhead signals displayed that it was safe to do so. It was these sorts of worries that influenced local newspapers to

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113 MACE: Spaghetti Junction Story [television], ATV Today (22 May 1972).
advise drivers on how to deal with the ‘range of new problems about driving behaviour’ that driving along the new expressway presented. One senior police officer remarked that ‘we have to teach people to drive like engine drivers, and stay on the rails. They must get into the lane they require and stay there, and stop at red lights even if it looks that their road ahead is clear.’ A further article detailed the operation of the overhead signs, and again told motorists that they ‘must be obeyed just as unquestionably as traffic lights.’ These articles were published to address senses of nervousness about the new road. Similar articles had appeared in 1959 after the opening of the M1 in newspapers such as *The Guardian, The Times*, and the *Daily Telegraph*; special supplements focussed on ‘educating potential motorway drivers about the design and construction of the motorway, and its appropriate use.’ Newspapers acquired a role in easing motorists’ fears regarding the usage of new roads. Peter Merriman argued that motoring commentators of the 1950s and 1960s were concerned that ‘motorway driving necessitates a different set of driving practices, technologies, accessories and spatialities’ and that it was ‘strikingly different’ from driving on ‘Britain’s single-lane, single-carriageway roads.’ This had been the case for the M1 opening, and it was the same for the opening of the Aston Expressway and Spaghetti Junction. An editorial piece from the *Birmingham Mail* suggested:

> The motorist may have to be a better motorist than he has ever bothered to be. The days of slap-happy motoring, when you set off hopefully across country and waited for the signposts, have largely gone … if he is not prepared to do his homework, Spaghetti Junction could present highly concentrated opportunities for getting lost in a big way. He will also be in danger on the road because motorway speeds do not allow for dithering.

Roads such as the Aston Expressway were deemed different types of roads that motorists needed to be educated in using. Some articles however served to exacerbate fears of the unknown; an article from the *Birmingham Post* reported that a tidal flow expressway

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115 Ibid.
116 ‘The Signs which must be Obeyed’, *Birmingham Mail*, 28 April 1972.
117 Merriman, *Driving Spaces*, p. 147.
(similar to the Aston Expressway), with no central reservation, had operated in Quebec but had to be redesigned due to safety problems. From 1967 to 1970, the article reported that there had been nineteen deaths on the road, caused mainly through head-on collisions.\(^{120}\)

Senses of excitement and adventure did not overwhelmingly meet the opening of these roads from local motorists, but instead an apprehension over safety and fears of disorientation. This is not to say there was no evidence of intrigue and excitement from members of the public; for example a Burton-on-Trent coach firm ran trips to Spaghetti Junction, and a member of the West Midlands Tourist Board believed that people wanted to visit the interchange for the same reasons ‘people would probably have gone to see the Pyramids’ four thousand years ago.\(^{121}\) More prevalent though were senses of caution and worry regarding using this new road network. The ‘motor city’ demanded motorists to learn new driving skills and techniques in order successfully, and safely, to navigate Birmingham.

The Aston Expressway was also a source of some confusion and contestation between drivers and pedestrians. A news report from 1972 showed pedestrians dangerously crossing the seven-lane motorway, and a local police officer conceded that ‘Birmingham people [were] not used to urban motorways in the city.’\(^{122}\) There was uncertainty amongst local residents regarding the rules of this new road. Houses were located either side of the urban motorway, and the Corporation provided three footbridges and nine subways to facilitate pedestrian access across the road.\(^{123}\) By 1972 however, a distrust of pedestrian subways had developed within Birmingham; Alderman Harry Watton labelled them ‘filthy, unhygienic, and dangerous’, far from the praise Nairn had given them in the 1960s.\(^{124}\) It could be suggested that local residents were caught crossing the expressway at ‘road level’ because people were reluctant to use the subways. Most of the Aston Expressway though was located in a sunken road or on a viaduct, and therefore pedestrian access was virtually impossible in these areas. Jane Jacobs noted that in the

\(^{120}\) ‘The Killer Road that was Banned in Quebec’, *Birmingham Post*, 26 August 1971.
\(^{121}\) Moran, *On Roads*, p. 46.
\(^{122}\) MACE: Spaghetti Junction Story [television], *ATV Today* (22 May 1972).
\(^{124}\) See earlier in this chapter, and Chapter Three for further discussion of subways; ‘The Filthy Subways of the Second City’, *Birmingham Mail*, 4 October 1972.
United States ‘the conflicts between pedestrians and vehicles on city streets arise mainly from overwhelming numbers of vehicles, to which all but the most minimum pedestrian needs are gradually and steadily sacrificed.’ A similar process occurred regarding pedestrian provision along the Aston Expressway. Only three footbridges had been provided which meant that pedestrians were faced with an uncomfortable choice of either using the subways that many insisted were unsafe, locating one of the three footbridges on the 4170 yard long road, or illegally crossing the road at the nearest accessible point at ground level. Pedestrians who crossed the road at ground level were contesting the hierarchy of mobility groups on the urban motorway. According to Neville Borg, ‘the road follows an entirely new route cutting through a completely built-up area’, which showed the imposing nature the new motor road had on the immediate environment. Houses were located either side of this urban motorway, and perhaps it highlighted local displeasure of the new ‘expressway’ that residents challenged the supremacy of the car on their doorstep by (albeit very dangerously) crossing the road where they desired. Local residents knew that the Aston Expressway was not built for their benefit; on its opening Chairman of the Public Works Committee Councillor Harold Edwards said of the road: This will be the main leader from the centre of Birmingham, it will go direct to the motor road [motorway], and it will mean the centre of Birmingham will be communicated with every part of the country directly without having to use any of the old-fashioned, normal roads.

The Aston Expressway was a road constructed to facilitate the flow of motorway traffic that came from all parts of the country via the Gravelly Hill interchange; it was not a road designed to facilitate the flow of local intra-city travel. When viewed in this way, it is understandable that some local residents perhaps challenged this new road’s presence by crossing it illegally. The Corporation’s Deputy Road Safety Advisor, D. E. Clarke, suggested it was ignorance rather than protest that motivated pedestrian ‘indiscretions’ in the city. Clarke stated that there was an education programme within the city’s schools, but that it was ‘getting nowhere fast’ and a new campaign was needed to address the issue

of the ‘impact of the Green Cross Code … already wearing off.’\textsuperscript{128} There were clear signs of conflict between pedestrians and motorists, whether it was a sign of protest or lack of education regarding pedestrian safety on the modern road network.

**Conclusion**

Mimi Sheller argued that the ‘thrill’ of driving and the ‘joy’ of the road were not ‘simply lexicons of the advertising imagination.’\textsuperscript{129} This cannot be disputed; in Britain during the 1950s and 1960s ‘the motorway emerges as a modern spectacle, and it becomes firmly located as the site of modern motoring, the driving environment for the ‘modern motorist.’’\textsuperscript{130} Motorway service stations in the 1960s, for example, ‘were experienced as places of spectacle, dwelling, socialization and excitement by the fashionable youth of Soho, but also by families, lorry drivers and famous celebrities.’\textsuperscript{131} The M1 motorway ‘was a fully operational advert for affluence and social mobility,’ and in the 1960s ‘mobility’ itself had become an important advertising symbol, connoting affluence, personal freedom and the ability to participate in the new leisure-orientated society.\textsuperscript{132} There was an excitement and intrigue around modern motoring in Britain that was real, and far from manufactured. It was in this context that Birmingham was portrayed, by Corporation officials, local businessmen, film-makers and members of the national press, as a city of excitement and modernity, and a city that accommodated and facilitated the motor car. Many of the towns and cities of post-war Britain were anxious to redevelop as modern cities, as John Gold argued:

> Failure to grasp modernity and introduce change could leave central areas languishing, damage local businesses and condemn a town to second-class status … civic pride and place promotion were at stake as well as the need for modernisation.\textsuperscript{133}

Birmingham Corporation’s chosen method of achieving such modernity was through promoting the city as a city for the motor car, where modern ring roads and expressways

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\textsuperscript{128} ‘Bridging the Safety Gap’, *Birmingham Post*, date unknown (1971).
\textsuperscript{129} Sheller, ‘Automotive Emotions: Feeling the Car’, p. 224.
\textsuperscript{130} Merriman, *Driving Spaces*, p. 164.
\textsuperscript{131} Merriman, ‘Driving Places’, p. 159.
\textsuperscript{133} Gold, *Practice of Modernism*, p. 116.
facilitated the uninterrupted flow of motor traffic. Residents were informed by Corporation officials that their city was transformed by the construction of the Inner Ring Road, and that it had created the conditions for the ‘modern’ redevelopment of the city centre. There was a clear civic pride in the redevelopments. The pursuit of events such as motor racing in the city planned to showcase Birmingham and its redeveloped ring roads and city centre to a wider audience. Birmingham’s portrayal on television through shows like *Gangsters* also promoted Birmingham as the closest city Britain had to compare to American cities. A city of excitement and adventure, with high-speed car chases around Birmingham’s new road network.

The reality though was far removed from the promotion and imagery. The ‘motor city’ was not accessible to all; low-income households, women, and immigrant communities were all, to some extent, locked out of participation. Those who could not participate in motoring in Birmingham developed senses of resentment; for example, the usage of subways to cross the road, imposed on pedestrians so that the traffic flow above was uninterrupted, caused great concern amongst those in the city who relied on traversing Birmingham by foot. The *City Scene* study found that residents of Birmingham struggled to identify with the new redeveloped city centre, and emerged as a ‘confused space … it was a city of fragments loosely bounded by an Inner Ring Road.’ The process of driving in Birmingham was also far from an experience of freedom. Birmingham became a more automated city which commanded drivers to be more disciplined and ordered when driving; for example motorists were informed in the local press that the computer-controlled, overhead signals on the Aston Expressway had to be obeyed, and driving techniques such as lane discipline had to be mastered to successfully drive on these new roads. Reyner Banham experienced similar sensations in Los Angeles:

> These signs can be the most physiologically unsettling of all aspects of the freeway – it seems incredibly bizarre when a sign directs one into the far left lane for an objective clearly visible on the right of the carriageway, but the sign must be believed …

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there is no alternative to complete surrender of will to the instructions on the sign.\textsuperscript{136}

These were experiences of control, rather than freedom. This chapter has demonstrated a stark contrast between the representation of Birmingham’s image as a modern, exciting, ‘motor city’, and the reality experienced by residents and drivers that often owed more to fear, worry and contestation between road users. It was city redesigned for the motor car, which failed to sufficiently account for the needs of those groups unable to participate in car ownership. In Britain in the early 1970s, cities such as London and Nottingham had ‘abandoned, or at least temporarily suspended, plans to build extensive highway systems.’\textsuperscript{137} Birmingham, however, did not waver in its support for the motor car; for example the campaign for the city to host a motor race continued into the 1980s, until finally a Superprix was held in 1986. The reality of life in the ‘motor city’ though was far from one of the excitement promoted.

\textsuperscript{137}Starkie, \textit{The Motorway Age}, p. 90.
Chapter 8 – Conclusion: Automobility in Urban Britain, 1945-1973

The introductory chapter of this thesis described the development of the motor car in British society, and posed research questions that aimed to examine the link between agendas of urban planning and road building. The literature review suggested that while a substantial amount of research exists that has examined individual roads, transport patterns and road safety in Britain, there is a lack of research which focuses directly on the impact the reinvention of cities in the pursuit of automobility had on the urban development of post-war Britain. The subsequent chapters explored this relationship, and were split into two parts; Chapters Two, Three and Four examined the ways in which the city changed physically as a result of planning for the motor car, while Chapters Five, Six and Seven studied a number of the repercussions of this strategy. Birmingham Corporation planned the city for motor car usage; for example construction of the city’s flagship road development, the Inner Ring Road, began in 1957, yet only 29 per cent of British households owned a motor car in 1960. The Corporation utilised new planning laws, such as the Town and Country Planning Act 1944, which offered the opportunity for the large-scale compulsory purchase of land in order to enact policies of comprehensive city centre redevelopment and slum clearance. Road development was subsequently attached to these priorities. Herbert Manzoni ensured that new roads were allocated sufficient land in redevelopment plans, and as the city was transformed through the 1950s and 1960s, roads were at the heart of the changes. Birmingham was recast as a city for drivers yet this strategy had important repercussions for all inhabitants of the city, not merely car owners. The thesis argued that the consequences of planning a city for the proliferation of the motor car were unjust and unhealthy; public transport users were marginalised and fears regarding motor car pollution attracted ever increasing concern throughout the 1970s.

**Town Planning and Automobility**

The introduction to this thesis briefly discussed the idea that we could further understanding of the modern city if its relationship with automobility was analysed. In order to examine this, the first research question of the thesis asked ‘how far does the

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study of Birmingham stress the importance of the relationship between town planning and automobility in the pursuit of creating a modern city?’ Works such as Graeme Davison’s *Car Wars* have posed similar questions of post-war Melbourne, but as stated in this thesis’ literature review, there has been no such work which has analysed the development of the modern city in post-war Britain with the central focus on automobility. This thesis therefore addressed this gap in the literature, and argued that in order to understand the development of a modern post-war Birmingham, one has to closely appreciate the level of influence automobility exerted over policies of redevelopment. Key decision makers within Birmingham Corporation believed that a modern city could be created through a pursuit of policies which enhanced automobility.

One way in which this pursuit of modernity through automobility can be seen was through analysing the ways in which the Corporation approached important town planning priorities such as slum clearance and city centre redevelopment. The thesis argued that in the ‘motor city’ both the redevelopment of the city centre and large-scale slum clearance plans were underpinned by a road building agenda. This therefore suggested that road building in Birmingham was perhaps the most important factor in post-war redevelopment up to the early 1970s; the Corporation utilised other town planning programmes to ensure that the roads apparatus necessitated to provide a modern city re-built around the notion of automobility could be achieved. As discussed in the introduction to this thesis, one of the defining components of the modern city was that there existed a belief that the city could be completely remade, and the old city could be transformed into an entirely new city. In order to create this new, modern city in post-war Birmingham, planning for automobility (in terms of road building) provided the new urban spaces demanded by the modern city. Chapter Three of the thesis highlighted that the Corporation possessed no overarching masterplan for city centre redevelopment; the only planned change to the physical environment was the construction of an Inner Ring Road, with sites adjacent to the road leased to private developers. The city centre of Birmingham was therefore redefined by the presence of the Inner Ring Road. The important commercial developments of central Birmingham, such as the Ringway Centre, Bull Ring shopping centre and Rotunda, were all constructed as frontages to the Inner Ring Road. The Corporation utilised the Inner Ring Road as not only a means of moving traffic around the city centre, but as a method of expanding the commercial landscape of the city centre, and transforming the physical appearance of central Birmingham.
Notions of enhancing the efficient flow of people throughout the city also dominated the major redevelopments of post-war Birmingham; a further component of modernity that the decision makers within Birmingham Corporation attempted to fulfil. In order for pedestrians to access facilities on both sides of the Inner Ring Road, the Corporation created a number of pedestrian subways; the existing movements of pedestrians in the city centre were removed in order to facilitate the free-flow of motor traffic on the Inner Ring Road. Chapter Four argued that policies of slum clearance and road building merged; the five central redevelopment areas were all located in proximity to the route of the Middle Ring Road. There was a desire from Manzoni to create new communities free from the overcrowding and congestion of the slum neighbourhoods that had been replaced. New road networks were planned to increase mobility through the redevelopment areas, and with the adoption of multi-storey tower blocks there was an opportunity to increase the amount of open spaces for residents. The slum clearance plans in Birmingham were influenced by modernists such as Le Corbusier, and also by the Garden City-inspired Radburn development. Both of these influences promoted the creation of large new road networks which were largely segregated from pedestrian interaction, in order to maintain the free and speedy flow of traffic and to enable residents to move efficiently around the city by motor car.

The fact that Birmingham Corporation start to plan for automobility long before mass car ownership accelerated in Britain provides further evidence that there existed a long-term desire within the Corporation to plan, and subsequently attempt to build, a modern city based upon the principle of automobility. The road building agenda in Birmingham needs to be granted a larger emphasis in understanding the redevelopment of the city because, as explained earlier, it was an ideological undertaking that underpinned many of the major town planning developments of the 1950s and 1960s. Decisions to remould Birmingham as a ‘motor city’ were not formulated in the wartime or early post-war years, when the idea of comprehensive town planning was viewed as the answer to problems of poverty and inequality in Britain.\footnote{Cherry, Cities and Plans, p. 137; Ravetz, A., The Government of Space: Town Planning in Modern Society (London, 1986), p. 31.} The ‘motor city’ was a result of ideas with roots in the inter-war years. The slum clearance plans analysed in Chapter Four were formulated before the outbreak of the Second World War, as was the
decision to pursue a policy of eventual abandonment of the city’s tramway network that was examined in Chapter Five. Roads and the motor car were the cornerstone of Manzoni’s policies for the redevelopment of Birmingham. For example, a development of 3,500 municipal dwellings at the Lee Hall Estate was commenced by the Corporation in 1936. A central focus of this development was the introduction of what Manzoni termed a ‘town planning road’; this dual carriageway was planned to be 135 feet wide, and would form part of an arterial route which would eventually link up with other future new roads in Birmingham.\textsuperscript{140} Some twenty years before car ownership in Britain started to accelerate substantially, Birmingham Corporation was planning new housing estates with dual carriageways and motor car access firmly at the forefront of planning concerns. Birmingham was not reactive to the motor car; the Corporation’s redevelopment strategies proactively planned for the car with the belief that it was the role of town planning to ensure that the city was ready for the mass onset of motorisation. David Starkie argued that in most British cities ‘many refused to accept that car ownership would be vast’ until the publication of the Buchanan Report in 1963 established a ‘general acceptance that universal car ownership [was] a distinct possibility.’\textsuperscript{141} This was not the case in Birmingham though, where planning for mass automobility was a feature of redevelopment proposals from the 1930s. Chapter Two demonstrated the growing separation of workplace and home for residents of the city; suburbanisation increased but little pressure was exerted on industrial premises located in the city centre to relocate towards the fringes of Birmingham. An urban form developed which increasingly necessitated the use of a motor car for commuting purposes, and in Birmingham this started to develop a long time before the Buchanan Report encouraged many other British cities to start planning for the motor car.

The built environment in Birmingham was transformed by the presence of ring roads and urban motorways; Manzoni and the Corporation believed that the creation of a modern, progressive city could only be achieved by the creation of a city for the motor car. Yet it was not solely Members and Officers of the Corporation that believed that the modern city was a city represented by automobility. The ‘motor city’, as shown in Chapter Seven, was portrayed as a modern, exciting city through a celebration of its road network by architectural critics, film-makers and members of the local business

\textsuperscript{140} Manzoni, The Production of Fifty Thousand Municipal Houses, pp. 67-68.
\textsuperscript{141} Starkie, The Motorway Age, p. 40.
community. Links to motor culture, such as the hosting of motoring festivals and discussions around hosting a Grand Prix race on the city streets, further promoted a modern city through automobility. Guy Ortolano suggested that the dominant trends in British town planning during this period were ones which enhanced affluence, automation and leisure. The development of the ‘motor city’ in Birmingham embodied these attributes; automobility was viewed as a prominent ‘index of affluence’, so by attempting to create a city for the motor car Birmingham Corporation were actually planning a city for an affluent society that could afford to drive.

The second research question of the thesis asked ‘what were the priorities of Birmingham Corporation regarding transport provision?’ The clearest method for examining the priorities of the Corporation was to analyse the rationale of Manzoni, the man who was the main influence behind the development of the ‘motor city’ within Birmingham Corporation. He held town planning power in Birmingham during the formative years of redevelopment and required no persuasion to plan for the motor car. John Madin, the famous Birmingham architect behind buildings such as the Central Library, stated that ‘Manzoni was [a] road engineer. He was a fine chap, and a great friend, but it was his limitation.’ Manzoni firmly believed that to plan cities effectively for the future, this required planning for the motor car. The creation of the ‘motor city’ by Manzoni was undoubtedly well-intentioned. A crucial issue though was there were no checks to Manzoni’s plans:

The elected members relied on Manzoni’s advice. Power in Birmingham city council came to reside in the public works committee, which nominally was the decision-taking committee for the capital projects which transformed Birmingham in the twenty years after the war, but in reality that committee merely carried through Manzoni’s ideas. He, in turn, built up a trusted staff on whom he relied to carry through the series of projects.

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143 Gunn, ‘People and the Car’, p. 266.
This was symptomatic of British town planning at the time Manzoni held the position of City Engineer. The 1940s witnessed the rise of ‘rational professional experts’; a sentiment developed where professionals were viewed as experts who ‘knew best’ who need not be challenged. A key principle of British town planning in the 1940s and 1950s was a ‘meliorist belief that planning by experts could engineer into place a bright new world of convenience, efficiency and plenty.’ Manzoni was a classic example of an expert-planner. He was reluctant to waver from his philosophy of planning for the future prosperity of the city through planning for automobility; for example, the discussion in Chapter Five of a number of public transport schemes rejected by the Corporation showed Manzoni stubbornly reluctant to examine the merits of diverting resources away from the road building agenda. One interesting conclusion, which the thesis does not fully answer, was that there appeared to be a shift in attitude away from the ‘motor city’ ideal when Manzoni retired as City Engineer in 1963 and was replaced by Neville Borg. Chapter Five suggested that Borg possessed a more positive approach towards the benefit of public transport schemes; a comprehensive Rapid Transit Study was initiated in 1969 during Borg’s tenure as City Engineer. It would however have been difficult for Borg to scale-back the road construction plans either already underway, or ratified in the Corporation’s Development Plan from 1960. Manzoni had committed the Corporation to a large programme of ring road and urban motorway construction. Examination of the Corporation’s Structure Plan (1973) in Chapters Two and Five, showed a significant shift in policy away from road building towards a more favourable approach to public transport.

The third research question of the thesis queried ‘what was the impact of the Corporation’s ‘motor city’ strategy and increases in motor car ownership on the quality of life of citizens in Birmingham?’ The shift in urban policy away from comprehensive road schemes was partly a result of the failure of the ‘motor city’ to enthuse the general public; planning for the motor car resulted in substantial repercussions for the quality of life for all residents. Chapter Six argued that the construction of the Gravelly Hill motorway interchange near housing acted as a catalyst for anti-car protests from a number of citizens.

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of residents. Chapter Seven showed that a number of groups, such as women, retired persons, and those from low-income households tended to be restricted from participating in motor car use. Yet Chapter Five highlighted that public transport provision declined in Birmingham throughout the 1950s and 1960s; the mobility options for non-car owners became more restricted as the ‘motor city’ developed. The needs of pedestrians were also deemed secondary to the free flow of motor traffic in Birmingham and Manzoni argued that pedestrians were an ‘interference to traffic flow.’

The discussion of subways in Chapters Three and Seven showed that these urban spaces were disliked by pedestrians, but throughout the ‘motor city’ period the main priority was ensuring the free flow of motor traffic rather than pedestrian amenity. The backlash against road building and mass automobility in the 1970s was one which was evident across Britain. Chapter Seven also highlighted that the ‘motor city’ in fact led to a rise of feelings of unease and tension among some drivers when they experienced some of the new road developments such as the Aston Expressway and Spaghetti Junction. The reaction against automobility in Birmingham by the early 1970s was an issue of social justice; the Corporation had dedicated nearly three decades towards improving the experience of driving in the city, yet many groups remained marginalised from participation in mass automobility. The abstract ‘driver’ had dominated the Corporation’s planning agenda, yet in 1971 55 per cent of households in Birmingham did not own a motor car. The Corporation had pursued the creation of a city for drivers, yet by the early 1970s this had failed to materialise.

Unlocking ‘Motor Cities’

This thesis has argued that the planning of post-war Birmingham so overwhelmingly in favour of private motor car owners produced inequalities from which it has taken thirty to forty years to recover. In Birmingham, the Inner Ring Road began to be viewed as a ‘concrete collar’ that restricted further growth of the city centre in the late twentieth century. Parts of the Inner Ring Road were demolished in the early twenty-first century.

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149 Starkie, The Motorway Age, p. 91.
and chunks of concrete from one of the multi-level interchanges were ‘sold off… like pieces of the Berlin wall to symbolize the liberation of the pedestrian from the tyranny of the motor vehicle.’

The Bull Ring shopping centre, connected directly to the Inner Ring Road, attracted criticism as a ‘classic case of inhuman post-war planning, subjugating people to the needs of traffic,’ and plans to redevelop the site to be more favourable to pedestrians began in 1987. The new ‘Bullring’ shopping centre was opened in 2003 after the shopping centre of the 1960s was finally demolished. The Central Library was also scheduled for demolition in 2015; a £500 million commercial development was earmarked for the site with the aim of ‘prioritising people over cars with shops, offices, restaurants and a new hotel.’ This marked a further attempt from the City Council to distance the city from developments of the 1960s and 1970s. The planning of Birmingham in the late twentieth and early twenty-first centuries was subsequently dominated by pedestrianisation in a ‘symbolic effort to undo the image of ‘motor city.’”

Substantial resources have been apportioned by civic leaders since the 1990s in an effort to undo the ‘motor city’ reputation of Birmingham. In the introduction to this thesis, it was argued that historical research into the impact of planning for the motor car on the urban environment has important conclusions that can be applied to urban planning today. It has been estimated that between 2010 and 2030, there will be 400 new cities constructed in China, and tens of millions of Chinese people will move from rural to urban centres by 2050. If the new cities of the developing world yield to the private motor car and plan ‘motor cities’, as was the experience of Manzoni and Birmingham Corporation in the post-war era, then civic leaders could potentially be faced with the same costly exercise that the officials of post-1973 Birmingham have had to contend with in undoing the ‘motor city.’ The thesis offers a cautionary warning to the future development of urban centres; it is unsustainable to plan expansively for the motor car.

156 Dennis, K., & Urry, J., After the Car (Cambridge, 2009), p. 23.
There are a number of areas that future research may be directed towards in order to further develop our understanding of the links between automobility and city planning. There certainly needs to be greater historical analysis on the role of cyclists and motorcyclists in the ‘motor city.’ In the introduction to Chapter Five, it was argued that a paucity of statistical sources made it difficult to fully examine the role of cycling in Birmingham from 1945 to 1973. It may be that questionnaires or interviews of non-drivers who lived in Birmingham during this period would be required to try and gain understanding of the challenges and practices of the cyclist or motor-cyclist navigating a city designed for the motor car. This could be tied together with an examination of road safety in Birmingham during the ‘motor city’ years. From 1962 to 1963, Manzoni undertook an experiment on behalf of the Ministry of Transport on the effects of ‘dipped headlights’ on road safety on the city’s roads. It would be interesting to ascertain if the motivations for Manzoni’s trials were to improve safety for motorists, or whether there was an understanding that the increased motor traffic in Birmingham was a danger to pedestrians. There were also a number of studies by the Ministry of Transport’s (Midland) Regional Road Safety Units; it would be useful to examine the relationship between Whitehall and Birmingham Corporation regarding road safety.

A historical analysis of urban housing prices would offer a further interesting perspective on the ‘motor city.’ House prices could be collected and mapped across the city from the 1950s to the 1970s, and a number of questions could be explored. In areas where new roads were constructed, or even planned to be constructed, what was the effect on house prices specifically (this would have been particularly useful for Chapter Four)? Did housing on routes that suffered with congestion lose value and become less desirable as the ‘motor city’ developed? Did housing that found itself well located to new interchanges, or closer to the new motorway network, suddenly experience a rise in property values due to strong commuter locations, or did housing lose value due to increased noise from the nearby traffic? This sort of analysis would offer an economic

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perspective regarding the impact of the motor car on cities in Britain. It would offer another insight into examining what groups of people financially gained or suffered as a result of the development of the motor city. More affluent housing towards the outskirts of the city could potentially have seen increases in value due to better connectivity for commuting, whereas houses in the central areas of urban areas could have lost value due to increased congestion as more cars converged on the city centres. This hypothesis could be tested through a rigorous examination of housing prices from the 1950s to early 1970s.

The thesis has demonstrated that Birmingham was redeveloped on the assumption that it would be the will of the public to own a motor car. The implications of this strategy cannot be underestimated, and it was this sentiment that underpinned the redevelopment programme of Birmingham until the early 1970s. There was no plan for city centre redevelopment, except for the construction of the Inner Ring Road and leasing of adjacent sites. Vast amounts of slum properties were cleared and replaced with high-rise flats encircled by the Middle Ring Road. The Aston Expressway and Gravelly Hill interchange directly linked the centre of Birmingham with the national motorway network. The Corporation rejected policies that questioned the road building agenda; for example numerous public transport rapid transit schemes were rejected due to economic unfeasibility, yet financial resources continued to be committed towards reinforcing automobility through the construction of more roads. These policies were ultimately unsustainable, and reactions against the ‘motor city’ arose from residents over issues such as motor car pollution. By 1973, the motoring utopia that Birmingham Corporation and Herbert Manzoni attempted to create failed to materialise.
Appendices

Appendix A: Timeline of Important Developments in Birmingham, c. 1937-1978

1937 – Public Works Committee recommends first Redevelopment Area (Duddeston & Nechells)
1943 – Corporation approves Inner Ring Road scheme
1945 – Public Works Committee designates four other areas (Newtown, Highgate, Lee Bank, Ladywood) as Redevelopment Areas
1945 – Inner Ring Road scheme submitted to Central Government as part of Birmingham Corporation Act
1946 – Inner Ring Road approved with passing of Birmingham Corporation Act 1946
1948 – Conurbation published by West Midlands Group on Post-War Reconstruction and Planning
1949 – Transport Committee approves decision to begin removal of tramways
1952 – Corporation submits Development Plan to Central Government
1953 – Tramway operations cease in Birmingham
1956 – Government approval for construction to begin on Inner Ring Road
1956 – Public Works Committee delegation visits United States of America to study road designs
1957 – Ministry of Transport grants approval for construction to begin on Inner Ring Road
1959 – Birmingham’s first pedestrian subway (Hurst Street – Hill Street) opened
1960 – Development Plan approved by Central Government
1960 – First section of Inner Ring Road opened
1962 – Ringway Centre opened
1964 – Bull Ring Shopping Centre opened
1965 – Public Works Committee approves Aston Expressway
1967 – Redevelopment of New Street Railway Station completed
1968 – Construction begins on Aston Expressway & Gravelly Hill Interchange
1969 – Construction of new Central Library begins
1969 – Corporation commissions Rapid Transit Study
1970 – M5 (J1 (M6) – J3 (Quinton)) opened
1970 – Inaugural Birmingham Motoring Festival held in the City Centre
1971 – M6 (J5-J6) opened
1972 – Inner Ring Road officially opened by Queen Elizabeth
1972 – M6 (J6-J7) & Gravelly Hill interchange opened
1972 – Aston Expressway opened
1972 – Clearance programme for Redevelopment Areas completed
1972 – First city centre pedestrianisation scheme implemented
1972 – Snow Hill Railway Station closed
1973 – Corporation publishes *Structure Plan*
1974 – Central Library opened
1974 – Department of the Environment establishes Joint Working Party on Lead Pollution at the Gravelly Hill interchange
1978 – Construction problems on Inner Ring Road revealed

**Appendix B: Timeline of National Developments in Transport Policy**

1944 – Town and Country Planning Act 1944 (‘Blitz and Blight Act’) passed.
1946 – *Design and Layout of Roads in Built-up Areas* published.
1950 – Petrol rationing abolished
1958 – Preston By-Pass opened (Britain’s first motorway)
1963 – *The Reshaping of British Railways* (Beeching Report) published
1963 – *Traffic in Towns* (Buchanan Report) published
1963 – *Noise: Final Report* (Wilson Committee) published
1964 – *Road Pricing: The Economic and Technical Possibilities* (Smeed Report) published
1968 – Transport Act 1968 passed (advocated creation of Passenger Transport Authorities)
1973 – London Ringways proposals abandoned after *Homes before Roads* campaign

**Appendix C: Birmingham Corporation Public Works Committee Chair**

*Chair of Public Works Committee:*
1944-1947 Alderman W. S. Lewis
1847-1952 Alderman G. W. H. Griffith
1952-1953 Councillor F. B. Watson
1953-1959 Alderman F. L. Price*
1959-1966 Alderman D. S. Thomas
1966-1968 Alderman C. V. G. Simpson
1968-1969 Alderman A. E. Shaw
1969-1972 Councillor H. S. Edwards

* Price, Frank
Frank Price was elected to Birmingham City Council in 1949, and appointed Chairman of the Public Works Committee in 1953. He later became Lord Mayor from 1964-1965, and the Birmingham Labour Leader in 1966. Price was a strong ally of Herbert Manzoni and a vociferous supporter of road building in Birmingham; Anthony Sutcliffe and Roger Smith recalled the story of how a ‘forceful’ Price contributed to the granting of central government approval for construction to begin on the Inner Ring Road by ‘making it clear that he would raise the issue at every conference and meeting that [the Minister of Transport] attended, until Birmingham’s needs were recognised.’¹⁵⁹ Price was part of the Public Works Committee that visited the United States of America in 1956 to study road systems and other transport schemes.

Appendix D: Biographical Notes of Birmingham Corporation City Engineers and Surveyors, 1945-1973

Manzoni, Herbert
Herbert Manzoni was appointed City Engineer and Surveyor in 1935, and was perhaps the most dominant force in the redevelopment of Birmingham over the next three decades until his retirement in 1963. He had previously been Deputy City Surveyor (1929-1935). During Manzoni’s tenure, he was responsible for planning and constructing the Inner Ring Road, and initiating a vast slum clearance programme in five central redevelopment areas. An important characteristic about Manzoni was his importance as a national expert on planning matters; for example he had been involved in the drafting of the Town and Country Planning Acts of 1944 and 1947, and sat on numerous central government studies relating to road building such as the Design and Layout of Roads in Built-up Areas (1946). He was a prominent member of the West Midlands Group on Post-War Reconstruction

¹⁵⁹ Sutcliffe & Smith, History of Birmingham, p. 408.
and Planning, and contributed to the publication of *Conurbation* (1948). Manzoni’s position as a figure of expert authority over planning and traffic management issues meant that he was unchallenged over such issues during his time as City Engineer and Surveyor.

**Borg, Neville**

Neville Borg was appointed as Herbert Manzoni’s successor as City Engineer and Surveyor in 1963. He had held previous posts within the Corporation such as Redevelopment Officer (1953-1955), and Deputy City Engineer and Surveyor (1955-1963). A number of important road schemes in Birmingham were undertaken during Borg’s tenure as City Engineer, such as the Aston Expressway and completion of the Inner Ring Road. Borg was responsible for writing the Corporation’s *Structure Plan* (1973), which marked a shift away from the domination of the motor car and road building in Birmingham’s transport policies that had dominated the previous *Development Plan* (1960) written by Manzoni.

**Appendix E: Central Government Important Personnel Tenures**

**Minister of Transport:**

1945-1951 Aldred Barnes (Labour)
1951-1952 John Maclay (National Liberal)
1952-1954 Alan Lennox-Boyd (Conservative)
1954-1955 John Boyd-Carpenter (Conservative)
1955-1959 Harold Watkinson (Conservative)
1959-1964 Ernest Marples (Conservative)
1964-1965 Thomas Fraser (Labour)
1965-1968 Barbara Castle (Labour)
1968-1969 Richard Marsh (Labour)
1969-1970 Fred Mulley (Labour)
1970 John Peyton

**Secretary of State for the Environment**

1970-1972 Peter Walker (Conservative)
1972-1974 Geoffrey Ripon (Conservative)
1974-1976 Anthony Crosland (Labour)
Bibliography

i) Archival Material

   a) Library of Birmingham Archives (LBA)

   BCC/1/AG/1, General Purposes Committee Correspondence, Minutes and Reports.

   BCC/1/AG/37, Civic Development Sub-Committee Correspondence, Minutes and Reports.

   BCC 1/AO/1, Public Works Committee Correspondence, Minutes and Reports.

   BCC/1/AO/11, Redevelopment Committee Correspondence, Minutes and Reports.

   BCC/1/AO/14, Road Improvement and Traffic Sub-Committee Correspondence, Minutes and Reports.

   BCC/1/BE/1, Tramways and Omnibus Committee (later Transport Committee) Correspondence, Minutes and Reports.

   BCC/1/CC/1, Traffic Advisory Committee Correspondence, Minutes and Reports.

   b) Library of Birmingham Local Studies Collection


c) Media Archive for Central England (MACE)


Birmingham Councillors Walk through City Centre [television], *ATV Today* (18 January 1971).

Birmingham Environmental Study Group [television], *ATV Today* (10 October 1972).

Birmingham Motor Race [television], *ATV Today* (17 June 1971).

Birmingham Motoring Festival [television], *ATV Today* (10 September 1975).

Birmingham Motoring Festival [television], *ATV Today* (20 June 1972).

Birmingham Road Building [television], *ATV Today* (16 October 1968).

Birmingham Road Signs [television], *ATV Today* (27 April 1966).

*Breathing Space* [film] (City of Birmingham Public Works Department, 1964).

Car Park Pollution [television], *ATV Today* (4 March 1977).

Car Tax Report on Birmingham’s City Centre Streets [television], *ATV Today* (23 June 1975).

Castle Vale Housing Estate [television], *ATV Today* (25 July 1974).

*City of Birmingham Central Areas Redevelopment* [film] (City of Birmingham Public Works Department, 1956).

Interview with Bernard Zissman [television], *ATV Today* (10 March 1971).

Interview with Birmingham Couple [television], *ATV Today* (23 August 1972).
Interview with Graham Hill [television], *ATV Today* (7 December 1971).

Interview with Taxi Drivers [television], *ATV Today* (18 April 1972).

Lead Poisoning Scare [television], *ATV Today* (28 May 1974).

Motoring Festival – Birmingham [television], *ATV Today* (8 September 1975).

Official Opening of the Aston Expressway [television], *ATV Today* (1 June 1972).

Pollution – Birmingham [television], *ATV Today* (29 March 1974).

Pollution Caused by Cars [television], *ATV Today* (17 March 1969).


*Ringway: The Birmingham Inner Ring Road Stage One* [film] (City of Birmingham Public Works Department, 1963).

Rising Parking Meter Charges [television], *ATV Today* (26 March 1976).


Spaghetti Junction [television], *ATV Today* (14 August 1972).

Spaghetti Junction Lead Pollution Scare [television], *ATV Today* (25 May 1978).

Spaghetti Junction Pollution [television], *ATV Today* (14 March 1974).

Spaghetti Junction Story [television], *ATV Today* (22 May 1972).

Tyburn Road Controversy [television], ATV Today (19 October 1973).

Vox Pops on Parking Meters [television], Midlands News (19 September 1962).

d) The National Archives (TNA)


AN 193/3, British Transport Commission and British Railways Board, Birmingham New Street Station redevelopment: general papers including finance reports, minutes of meetings, submissions and estimates, 1959-1963.


AY 24/1-20, Department of Scientific and Industrial Research, Warren Spring Laboratory Annual Reports, 1960-1980.

CAB 124/823, Cabinet Office, Deputation from Birmingham City Council on post-war reconstruction, 1944.


COU 6/128, Countryside Commission, M40 London-Oxford- Birmingham motorway: correspondence with local authorities, DOE, RCU and CPRE; notes of site inspections, including joint inspection by DOE advisory Committee on Landscape Treatment of Trunk Road; notes of meetings and report of working party set up by DOE to consider environmental aspects of M40 proposals, 1972-1980.


HLG 81/3-6, Expert Committee on Compensation and Betterment, Proceedings and papers, 1941.

HLG 81/17, Expert Committee on Compensation and Betterment, Development rights scheme: proposals by Birmingham City Council for application of scheme to develop land, 1943-1944.


HLG 156/749, Department of the Environment, Steering Committee on Environmental Lead in Birmingham: Joint Working Party on Lead Pollution around Gravelly Hill, Birmingham; Central Unit on Environmental Pollution; investigation results; sub-clinical lead effects by departments of psychiatry and environmental medicine (USA); lead pollution papers; blood lead concentrations in Birmingham pre-school children; investigation findings, 1978-1980.

HLG 156/763, Department of the Environment, Birmingham Inner Area Study: details of individual projects within study; reports of progress and supporting comments, 1973-1976.


MT 105/361, Ministry of Transport Date of assessment for compensation rule 5: House of Lords decision; West Midland Baptist Trust V Birmingham Corporation; meeting and correspondence concerning legal ruling; cases not settled; date of assessment will be date of taking entry or date of reaching agreement, 1969-1970.


MT 147/91, Transport Ministries, West Midlands PTA: consultations with local authorities on setting up of Passenger Transport Authority, 1968.


e) *Heritage Motor Centre Archive, Gaydon.*


f) British Library, London.


ii) Newspaper Articles


‘750ft. Block Will be Colourlit’, Birmingham Post, 8 April 1959.


‘Birmingham International Motoring Festival’, The Times, 8 June 1972.


‘City Opens First Ring Road Subway’, *Birmingham Post*, 8 April 1959.


‘Compensation Not to be Assessed at Date of Notice to Treat’, *The Times*, 16 July 1969.

‘Complete Rebuilding of our Cities Envisaged’, *Birmingham Post*, 21 May 1954.

‘Confusion and Despair for a Blind Man in Birmingham’s Space-Age Centre’, *Birmingham Post*, 25 May 1968.

‘Council Promise on Stilted Road’, *Birmingham Post*, 5 October 1960.

‘Defects May Mean Doubled Repair Bill for Ring Road’, *The Times*, 20 March 1978.


‘Investigation of Tube Scheme’, *Birmingham Post*, 1 November 1952.


‘Minister is ‘Impressed by its urgency’’, *Birmingham Mail*, 21 November 1955.

‘Minister of Transport on Road Problems’, *The Glasgow Herald*, 5 November 1937.


‘Move the Large Stores out to the Suburbs’, *Evening Despatch*, 22 January 1958.


‘No Move Yet on City Rail Plan’, *Birmingham Mail*, 30 January 1957.


‘Planning After the War’, *The Times*, 18 July 1941.


‘Right to Compensation for Road and Airport Nuisance Planned’, *The Times*, 18 October 1972.

‘Ring Road Hold-Up if New Library Cannot Be Built’, *Birmingham Mail*, 3 August 1966.

‘Road and Rail Link Plea’, *Birmingham Post*, 11 April 1962.


‘Start in Summer on Inner Ring Road’, *Birmingham Post*, 23 February 1956.


‘The Killer Road that was Banned in Quebec’, *Birmingham Post*, 26 August 1971.

‘The Signs which must be Obeyed’, *Birmingham Mail*, 28 April 1972.


‘Values Rise in Ring Road Area’, *Birmingham Post*, 7 April 1971.

‘We are Rid of a Burden’, Birmingham Mail, 4 July 1953.

‘‘Who Pays?’ is Question over City Service Tunnel Plan’, The Times, 18 November 1964


**iii) Contemporary Published Material**

‘Discussion: The Inner Ring Road, Birmingham’, *Institution of Civil Engineers Proceedings*, 22, no. 1 (1962).


‘With this Ringway…’, *Drive* (1971).


City of Birmingham Public Works Committee, *Inner Ring Road Scheme*, (Birmingham, 1957).


**iv) Secondary Published Material**


Cherry, G., Birmingham: A Study in Geography, History and Planning (Chichester, 1994).


Cherry, G., The Politics of Town Planning (Harlow, 1982).

Church, R., The Rise and Decline of the British Motor Industry (Basingstoke, 1994).


Clarke, D., Fiction and the Automobile Culture in Twentieth-Century America (Baltimore, 2007).


Gregory, D. G., Green Belts and Development Control: A Case Study in the West Midlands (Birmingham, 1970).


Hasegawa, J., *Replanning the Blitzed City Centre* (Buckingham, 1992).


Hoare, T., *The Location of Industry in Britain* (Cambridge, 1983).


Hubbard, P., *City* (Abingdon, 2006).


Jones, P., ‘Performing the City: a Body and a Bicycle take on Birmingham, UK’, *Social and Cultural Geography*, 6, no. 6 (2005), pp. 813-830.


Lee, D., Regional Planning and the Location of Industry (London, 1980).

Lewis, T., Divided Highways: Building the Interstate Highways, Transforming American Life (New York, 1997).


Sheail, J., *An Environmental History of Twentieth-Century Britain* (Basingstoke, 2002).


Smith, R., ‘Housing in Birmingham Immediately After the End of the Second World War’, *History of Birmingham Project – Research Paper No. 4 (The Housing Environment – No. 1), University of Birmingham School of History* (Birmingham, no date given, likely approx. 1966/7).


Urry, J., Mobilities (Cambridge, 2007).


v) **Websites & Other Media**

   i) **Websites**


ii) Other Media


*Heart By-Pass: Jonathan Meades Motors through Birmingham* [television] (British Broadcasting Corporation, 1998).

*Six Men – Portraits of Power in a Modern City* [television] (British Broadcasting Corporation, 1965).