

APPLYING CO-ORDINATION  
DISCOURSE IN PRACTICE: THE  
LONDON & NORTH EASTERN  
RAILWAY AND RAIL-BUS  
INTEGRATION, 1923-1939

by

TIMOTHY JOHN EADES

A thesis submitted to the University of  
Birmingham for the degree of MA by  
Research

Department of History  
School of History and Cultures  
College of Arts and Law  
University of Birmingham  
September 2020

UNIVERSITY OF  
BIRMINGHAM

**University of Birmingham Research Archive**

**e-theses repository**

This unpublished thesis/dissertation is copyright of the author and/or third parties. The intellectual property rights of the author or third parties in respect of this work are as defined by The Copyright Designs and Patents Act 1988 or as modified by any successor legislation.

Any use made of information contained in this thesis/dissertation must be in accordance with that legislation and must be properly acknowledged. Further distribution or reproduction in any format is prohibited without the permission of the copyright holder.

## **Abstract**

The effectiveness of the response of Britain's railways to the growth of road competition during the interwar period has long been debated by historians. This thesis will examine the matter through a case study of the London & North Eastern Railway's attempt to co-ordinate its passenger train business with the activities of the territorial bus companies after 1928. This shows railway officials did have a plan to mitigate their financial difficulties, as the replacement of unremunerative rural passenger trains with associated buses was the main objective of the LNER's investment in the territorial bus firms. Ultimately, however, although the partnership did bring some benefits, the idea of replacing local passenger trains with buses was not achieved. Historians have not previously explained the non-withdrawal of local trains by looking at the dynamics of substituting one mode of transport for another. It was perceived complications with this aspect of the policy on the few occasions where it was done which prevented wider implementation. Amongst the difficulties encountered were practical issues with the substitute buses running to railheads and perceived low demand for the replacement rail-bus integration arrangements. Nevertheless, the nature of the reaction of railway officials to these problems does support those historians who argue they failed to properly understand the finances of their network, and overly focused on the technical aspects of their business.

*To the memory of my Grandad Heinz*

## **Acknowledgements**

Many people have helped me while writing this thesis. I would like to thank the staff at the University of Birmingham library, the National Archives, the Modern Records Centre at the University of Warwick, and the Search Engine Archives at the National Railway Museum. Special thanks must go to the volunteers at the Bus Archive in Droitwich Spa, who showed great hospitality during the research phase of this thesis, and to Peter Jacques in particular, who drew my attention to documents which had only just arrived and had not yet been catalogued. I must express my greatest gratitude to Julian Greaves for his continuous advice and guidance during the development of this thesis. Finally, I must thank my family and friends for the support they have given me during this time.

## **Contents**

<i>Abstract</i> .....	ii
<i>Acknowledgements</i> .....	iv
<i>List of Tables</i> .....	vi
<i>List of Maps</i> .....	viii
<i>List of Abbreviations</i> .....	ix
<b>INTRODUCTION</b> .....	1
<b>CHAPTER 1: THE DECISION TO APPLY FOR ROAD POWERS</b> .....	19
a) <i>Emergence of the LNER's Bus Policy</i> .....	20
b) <i>Co-ordination Discourse and the LNER's Bus Policies</i> .....	27
c) <i>The Decision to Partner with the Territorial Bus Companies</i> .....	33
<b>CHAPTER 2: THE RESULTS OF THE LNER's PARTNERSHIP WITH THE TERRITORIAL BUS COMPANIES</b> .....	44
a) <i>Financial Results</i> .....	47
b) <i>Successful Integration Arrangements</i> .....	59
c) <i>Continued Development of Trunk Coach Services by the Associated Bus Companies</i> .	68
d) <i>Non-withdrawal of Local Trains</i> .....	73
<b>CHAPTER 3: WHY WAS MODAL SPECIALISATION NOT SUCCESSFUL?</b> .....	85
a) <i>The Market Niches of Trunk Coach Services</i> .....	85
b) <i>Linkages between Local Train Routes and the Wider Network</i> .....	87
c) <i>Contributory Revenue</i> .....	94
<b>CHAPTER 4: LNER PASSENGER POLICY AFTER THE FAILURE OF MODAL SPECIALISATION</b> .....	104
a) <i>Fare Policy</i> .....	105
b) <i>Service Policy</i> .....	112
<b>CONCLUSION</b> .....	120
<b>Bibliography</b> .....	126

## **List of Tables**

Table 1: Comparison of the LNER's subscription in bus undertakings between the first full year of railway involvement and 1938.....	p. 54
Table 2: Proportion of shares in LNER associated territorials belonging to the bus holding companies and the railways, 1937.....	p. 55
Table 3: Dividend received by the LNER from its associated bus companies, 1930-1938.....	p. 56
Table 4: Independent bus firms acquired by LNER associated bus companies, 1920-1938.....	p. 57
Table 5: Major extra shares purchases by the LNER in the associated bus companies, and the reason why extra finance was required by the bus companies, 1930-1937.....	p. 58
Table 6: Interavailability between the LNER and West Yorkshire Road Car, 1936-1940.....	p. 61
Table 7: List of special event bus feeder services operated in the LNER's York District, 1930-1935.....	p. 65
Table 8: Comparison of road and rail fares on the London-Warrington-Blackpool route, 1936.....	p. 70
Table 9: LNER third class trunk passenger traffic between selected stations in June 1932 and 1933.....	p. 72
Table 10: Decline in passenger traffic from selected York District country stations, 1923-1934.....	p. 75
Table 11: Number of passengers using each train stopping at each station on selected North Eastern Area rural railway routes, 1938.....	p. 76
Table 12: Revenue and estimated operating expenses on selected North Eastern Area branch lines, 1938.....	p. 77
Table 13: Estimated cost of running passenger trains on the Bradford-Shipley branch, 1930.....	p. 78
Table 14: Through rail-bus tickets issued for use on LNER trains and connecting West Yorkshire Road Car services, 1936-1937.....	p. 81
Table 15: Annual passenger and parcels revenue on LNER local train services before withdrawal, services withdrawn on various dates between 1930 and 1933.....	p. 82
Table 16: Savings made by replacing local passenger trains with buses by 1931.....	p. 83
Table 17: Usage of stations on the Church Fenton-Wetherby-Leeds line (but excluding these junctions) in 1938, and how many passengers buying more expensive tickets did it to earn half of each station's revenue.....	99

Table 18: Comparison of ordinary WYRC fares for selected town-to-town and village-to-town journeys which competed with LNER train services, 1931 and 1938.....p. 107

Table 19: West Yorkshire Road Car workman’s fares which competed with LNER train services, 1931 and 1938.....p. 108

Table 20: Comparison of ordinary trunk West Yorkshire Road Car fares over selected routes, 1931 and 1938.....p. 109

Table 21: Types of tickets issued at selected North Eastern Area stations near West Yorkshire Road Car bus routes, 1938.....p. 111

Table 22: Examples of train service reductions on LNER local routes during the 1930s.....p. 113

Table 23: LNER all-stations stopping trains on local routes which competed with West Yorkshire Road Car buses, 1922 and 1938.....p. 115



**List of Maps**

Map 1: West Yorkshire Road Car's Operating Area, 1938.....p. 46  
Map 2: Location of railway and bus stations in Leeds, 1946.....p. 62  
Map 3: Present day satellite image showing the locations of Darlington railway station and Grange Road.....p. 90

## **List of Abbreviations**

- BA** Bus Archive
- BAT** British Automobile Traction Company Limited
- BET** British Electric Traction Company
- GNoSR** Great North of Scotland Railway
- GWR** Great Western Railway
- LMS** London, Midland & Scottish Railway
- LNER** London & North Eastern Railway
- NA** National Archives
- NER** North Eastern Railway
- NUR** National Union of Railwaymen
- RAS** Railway Air Services
- SR** Southern Railway
- T&BAT** Tilling and British Automobile Traction
- TC** Traffic Commissioners
- WYRC** West Yorkshire Road Car
- YA-TC** Yorkshire Area Traffic Commissioners

## **INTRODUCTION**

During the First World War, Britain's railway companies were placed under government control. The efficiency improvements this enabled created a consensus that some sort of unified control should continue in peacetime. Various proposals, including nationalisation, were considered, but the government eventually decided to retain private ownership, and amalgamate the 120 railway companies into four groups, completing a trend towards greater combination which had started in the nineteenth century. After the Railways Act of 1921 was passed, these groups took over the network in 1923, excepting a few small light railways which remained independent. The four companies were the Southern Railway (SR), radiating south from London; the Great Western Railway (GWR), radiating west from London; the London, Midland & Scottish Railway (LMS), radiating north-west from London; and the focus of this thesis, the London & North Eastern Railway (LNER), radiating north from London to serve Eastern England, the East Midlands, Yorkshire, the North East, and Scotland. These companies would run the network until the railways were eventually nationalised after the Second World War in 1948.<sup>1</sup>

Though this grouping aimed to give the companies a territorial monopoly, the duplication of lines could not be completely eliminated, and competition survived between many places. Likewise, because the lines of pre-grouping railways were not split between the amalgamated companies, their networks intercrossed frequently, and each group owned some tentacles stretching into another's territory (one of the

---

<sup>1</sup> Aldcroft, Derek H., *British Railways in Transition: The Economic Problems of Britain's Railways since 1914* (London, 1968), pp. 30-31, 39-42; Biddle, Gordon, 'Light Railways', in Biddle, Gordon and Simmons, Jack (eds.), *The Oxford Companion to British Railway History: From 1603 to the 1900s* (Oxford, 1999), p. 264; Bonavia, Michael R., *The Four Great Railways* (Newton Abbot, 1980), pp. 24-25, 48-49, 60-61, 78-79, 202.

LNER's tentacles even entered Wales). The 1921 Act, in exchange for reducing inter-railway competition, also imposed several statutory obligations on the grouped companies and introduced new controls over charges. These controls should have enabled the railways to earn an annual net revenue equal to that generated in 1913. However, in no year before 1939 did the 'Big Four', as the railways became known, earn this standard revenue, either as a whole or individually.<sup>2</sup> Overall, the Big Four's net receipts between 1922 and 1938 fell from £44.5 million to £27.1 million.<sup>3</sup>

Though the economic problems affecting heavy industry were a significant factor in this decline, the most important reason was the revolutionary growth of motorised road transport during the period. Before 1914 the railways almost held a monopoly over inland transport. The only significant exceptions were the carriage of some heavy and bulky freight by canal and coastal shipping, and the use of horse-drawn vehicles and street tramways for short-distance and urban transport. Between 1918 and 1939, however, the number of motorised vehicles of all types in Britain increased from 350,000 to three million.<sup>4</sup> This rapid growth, Aldcroft comments, 'produced significant changes in the economic and social life' of Britain, as the railways had previously done.<sup>5</sup> While the car and lorry were important components of this revolution,<sup>6</sup> with the

---

<sup>2</sup> Butterfield, Peter, 'Grouping, Pooling and Competition: The Passenger Policy of the London & North Eastern Railway, 1923-39', *The Journal of Transport History*, 7, 2 (1986), pp. 22-23; Bonavia, *Four Great Railways*, pp. 60-61; Aldcroft, *British Railways in Transition*, pp. 42-48; Crompton, Gerald, 'Efficient and Economical Working'? The Performance of the Railway Companies, 1923-1933', *Business History*, 27, 2 (1985), pp. 223-224.

<sup>3</sup> Aldcroft, *British Railways in Transition*, p. 48.

<sup>4</sup> *Ibid.*, pp. 55, 58, 87; Aldcroft, Derek H., *British Transport since 1914: An Economic History* (Newton Abbot, 1975), p. 30.

<sup>5</sup> Aldcroft, Derek H., and Dyos, Harold J., *British Transport: An Economic Survey from the Seventeenth Century to the Twentieth* (Leicester, 1969), p. 333.

<sup>6</sup> Gibson, Thomas, *Road Haulage by Motor in Britain: The First Forty Years* (London, 2001), *passim*; O'Connell, Sean, *The Car and British Society: Class, Gender and Motoring, 1896-1939* (Manchester, 1998), *passim*.

railways losing significant amounts of merchandise freight to road hauliers,<sup>7</sup> the bus had the greatest impact on daily life.<sup>8</sup>

Before 1914, the nascent motor bus industry had focused on replacing urban horse buses, with only a few rural services. The technical problems associated with the pioneering stage had been overcome by 1914, however, and to expand the industry only required staff with the expertise to drive and maintain the vehicles. This initial shortage was filled after 1918 by soldiers who had been trained in mechanics. They could set themselves up as operators by using their demobilisation gratuity to purchase either ex-military vehicles, or the buses being sold with deferred payment terms by manufacturers to stimulate business after the war. The reserve of spending power built-up during the conflict created a new demand for travel which fuelled the growing bus industry, and by the end of the 1920s a nationwide network had developed, with several territorial bus companies emerging.<sup>9</sup> The number of passenger miles travelled on buses and coaches in Britain increased from 3,457 million to 19,037 million between 1920 and 1938.<sup>10</sup>

While many bus routes did not compete with trains, this expansion, along with that of private cars, did abstract passengers from the railways, particularly on local journeys in rural areas, as the bus could collect passengers nearer to people's homes than the station and offered cheaper fares.<sup>11</sup> In the LNER's York District, it was reported that the number of train journeys made for lengths less than 10 miles had declined from

---

<sup>7</sup> Aldcroft, *British Railways in Transition*, p. 58.

<sup>8</sup> Barker, T.C., 'Slow Progress: Forty Years of Motoring Research', *The Journal of Transport History*, 14, 2 (1993), p. 158.

<sup>9</sup> Hibbs, John, *The History of British Bus Services* (Newton Abbot, 1989), pp. 69-79.

<sup>10</sup> Aldcroft, *British Railways in Transition*, p. 56.

<sup>11</sup> Davies, Reginald Arthur Murray, 'Public Passenger Transport in Inter-war Britain: The Southern Railway's Response to Bus Competition, 1923-39', PhD Thesis, (2014), University of York, pp. 59, 61.

29,172,999 in 1921 to 16,709,933 in 1925, a drop of 43 percent.<sup>12</sup> This was a major reason behind the fall in the Big Four's passenger receipts from £109.4 million in 1920 to £75.3 million in 1938, and the number of passenger journeys from 1670 million to 1236 million.<sup>13</sup>

Historians have been critical of the Big Four's response to the growth of road competition for both passengers and freight. Aldcroft, whose work aimed to elucidate upon the background to the economic problems faced by British Railways in the 1960s, argues railway officials lacked vision. He claims they should have applied a price discrimination policy, introducing higher fares and rates to push unprofitable traffic or traffic which was highly susceptible to road competition off the trains; to maximise revenue where the railway was little affected by competition; and lowering prices between points 'where traffic flows were dense and profitable' but which were 'vulnerable'. Aldcroft criticises railway managers for instead implementing all-round reductions, and argues they 'interpreted their legal obligations too rigidly'. He claims that government restrictions did not prevent them from adopting 'a scientific pricing policy' or force them to continue running loss-making local services. Furthermore, he argues that despite the technical improvements the railways did make, they could have done more to electrify a greater proportion of lines, to introduce more diesel locomotives, to provide larger goods wagons, and to eliminate private freight wagons which required excessive shunting.<sup>14</sup>

Later historians have been more sympathetic to interwar railway managers. In 1981, Bonavia, after interviewing several retired Big Four officials, pointed out that much

---

<sup>12</sup> National Archives (NA) RAIL 390/2045/1: Annual Report: York District Passenger Manager, 1925, p. 34.

<sup>13</sup> Aldcroft, *British Railways in Transition*, pp. 48, 51.

<sup>14</sup> *Ibid*, pp. xvi, 61-83.

criticism is thrown on them by writers with the benefit of hindsight, and that the situation needs to be viewed from the perspective of the time.<sup>15</sup> Bonavia's suggestion has led to historians such as Crompton and Scott offering more nuanced views. Crompton argues that the railways did try to find efficiency savings, but government legislation was a more significant impediment to the Big Four than previously thought.<sup>16</sup> Likewise, Scott points out that not only did the railways try to attract more traffic through service competition, but also lobbied the government to remove their regulatory handicaps.<sup>17</sup> Edwards has attempted to revise Aldcroft's criticism of railway costing techniques. Edwards argues that it was actually quite difficult to use normal accounting methods to apportion the costs of complex railway operations, and that the 'tacit' engineering means of costing preferred by railway officials were a reasonable substitute. Furthermore, Edwards has found that the LMS's management did try to use these engineering costing techniques to improve the efficiency of their business.<sup>18</sup> Quail, however, has reinforced Aldcroft's argument. He argues that continued allegiance by British Railway officials in the 1950s to the costing and pricing practices inherited from the Big Four made them unable to identify and withdraw loss-making facilities, and caused the financial crisis that was only resolved by the extreme retrenchment of the Beeching era.<sup>19</sup>

---

<sup>15</sup> Bonavia, Michael R., *Railway Policy Between the Wars* (Manchester, 1981), pp. vii, ix.

<sup>16</sup> Crompton, 'Efficient and Economical Working', p. 228, 234-235.

<sup>17</sup> Scott, Peter, 'British Railways and the Challenge from Road Haulage: 1919-39', *Twentieth Century British History*, 13, 2 (2002), p. 102, p. 109.

<sup>18</sup> Edwards, Roy, 'Conceptualising Cost: The Analysis of Management Information on Britain's Railways, c. 1935-56', *Contemporary British History*, 13, 3 (2008), pp. 72-81; Edwards, Roy, 'Job Analysis on the LMS: Mechanisation and Modernisation c. 1930-c.1939', *Accounting, Business and Financial History*, 20, 1 (2010), pp. 91-105.

<sup>19</sup> Quail, John, 'Accounting's Motive Power- the Vision and Reality for Management Accounting on the Nationalised Railways to 1959', *Accounting, Business and Financial History*, 16, 6 (2006), pp. 419-446.

One limitation of much previous research into interwar railways is that it has focused on freight instead of passengers, as more of the Big Four's revenue came from this traffic.<sup>20</sup> Aldcroft does discuss both the passenger and freight angle but tends to focus more on the latter.<sup>21</sup> There are other exceptions. Recently, several historians have studied the publicity material developed by the Big Four in response to increased road competition for passengers.<sup>22</sup>

With regards to more material competitive policies, Davies has studied the integration of the passenger railway and bus services on the SR. He argues that this railway intended to replace lost local train revenue with dividends from the territorial bus companies, in which they invested, and that little attempt was made to integrate services on-the-ground. However, as Davies concedes, out of the Big Four, the SR's finances were least affected by the challenges of the interwar period. Instead of relying on the declining heavy industries, this railway earned most of its revenue from the

---

<sup>20</sup> Edwards, Roy, 'Shaping British Freight Transport in the Interwar Period: Failure of Foresight or Administration, 1919-34' in Roth, Ralf and Divall, Colin (ed.), *From Rail to Road and Back Again? A Century of Transport Competition and Interdependency* (London, 2016), pp. 77-90; Divall, Colin, 'Conceiving Distribution in the United Kingdom: The (London and) North Eastern Railway's Discursive Response to Road Haulage, 1921-39' in *ibid*, pp. 91-108; Harcourt, Keith, 'Railway Containers in the United Kingdom and Europe during the 1920s and 1930s' in *ibid*, pp. 109-132; Scott, 'British Railways and the Challenge from Road Haulage', *passim*; Edwards, 'Conceptualising Cost', pp. 72-81; Edwards, Roy., 'Is Management Accounting just what Management Accountants do? Implicit Cost Analysis on Britain's Railways c. 1923-1939', *Accounting, Business and Financial History*, 8, 3 (1998), pp. 331-349; Edwards, 'Job Analysis', pp. 91-105; Edwards, Roy, 'Divisional Train Control and the Emergence of Dynamic Capabilities: The Experience of the London, Midland and Scottish Railway, c. 1923- c. 1939', *Management and Organizational History*, 6, 4 (2011), pp. 391-410; Edwards, Roy, "Keeping unbroken ways": The Role of the Railway Clearing House Secretariat in British Freight Transportation, c. 1923- c. 1947', *Business History*, 55, 3 (2013), pp. 479-497; Crompton, 'Efficient and Economical Working', pp. 222-235; Walker, Gilbert, *Road and Rail: An Enquiry into the Economics of Competition and State Control* (London, 1947), *passim*.

<sup>21</sup> Aldcroft, *British Railways in Transition*, pp. 47-88.

<sup>22</sup> Divall, Colin, 'Civilising Velocity: Masculinity and the Marketing of Britain's Passenger Trains, 1921-39', *The Journal of Transport History*, 32, 2 (2011), pp. 164-191; Divall, Colin and Shin, Hiroki, 'Cultures of Speed and Conservative Modernity: Representations of Speed in Britain's Railway Marketing', in Fraser, Benjamin, and Spalding, Steven D. (eds.), *Trains, Culture and Mobility: Riding the Rails* (Lanham, 2012), pp. 20-24; Medcalf, Alexander, "'What to Wear and Where to Go": Picturing the Modern Consumer on the Great Western Railway, 1921-1939', in *ibid*, pp. 55-80; Medcalf, Alexander, "'We Are Always Learning': Marketing the Great Western Railway, 1921-39', *The Journal of Transport History*, 33, 2, (2012), pp. 186-211; Thompson, Josef Evan Matthew, "A Master Whose Heart is in the Land": Picturing the Tourist Utopia of the Great Western Railway, 1897-1947', PhD Thesis, (2011), University of York, *passim*.



large commuter network around London, which was not as badly affected by road competition as other services, and was suitable for electrification.<sup>23</sup> With regards to the direct replacement of specific rail services with buses, Davies does not believe this was a key aim of the railway's investment, and only offers a few suppositions for why officials did not pursue this policy on a more widespread basis.<sup>24</sup> Butterfield has considered why more rural train routes were not withdrawn by the LNER, and similarly concludes that officials simply lacked a strategy to deal with the problems of local lines.<sup>25</sup>

This thesis will test the effectiveness of the Big Four's management by looking in more detail at the linkages between their bus investments and the matter of local train withdrawals, using the LNER as a case study. In 1928 the Big Four were granted road powers by Parliament; and the railways proceeded to gain a stake in the bus industry. They did this by purchasing a half-interest in the territorial bus companies, who by the end of the 1920s had established substantial fleets and networks as a result of the combination of the industry after its initial growth.<sup>26</sup> In contrast to Davies and Butterfield, I shall argue the main aim of this investment was to enable the replacement of rural passenger trains with buses, thirty years before this task was eventually completed by Beeching.<sup>27</sup> LNER officials decided to attempt this as they recognised the practical benefits buses held over trains on local routes (which can be defined as stopping services linking settlements to nearby towns),<sup>28</sup> yet they wished to ensure

---

<sup>23</sup> Davies, 'Public Passenger Transport', pp. 201-214.

<sup>24</sup> Ibid, pp. 144-145.

<sup>25</sup> Butterfield, Peter, 'Branch Lines, Wayside Stations and Road Competition', *The Journal of Transport History*, 16, 2 (1995), p. 179-194.

<sup>26</sup> Aldcroft, *British Railways in Transition*, pp. 85-86; Bagwell, Philip S., *The Transport Revolution: 1770-1985* (London, 1988), p. 215; Hibbs, *British Bus Services*, pp. 71-79.

<sup>27</sup> Loft, Charles, *Government, the Railways and the Modernization of Britain: Beeching's Last Trains* (London, 2006), p. 3, p. 19.

<sup>28</sup> Fenelon, K.G., *The Economics of Road Transport* (London, 1925), p. 195.

the vehicles were associated with the railway, so they could retain their status as Britain's leading transport provider.<sup>29</sup> It was intended, as stated by Harverson, the Assistant Passenger Manager of the LNER's North Eastern Area, that these replacement buses would run to the junctions where local trains had previously connected with trunk rail services.<sup>30</sup> Furthermore, local train withdrawals were linked to attempts by LNER officials to persuade their partner bus companies to curtail their trunk coaches in favour of trains, which were considered to be more efficient on trunk routes (which can be defined as fast services moving passengers over longer distances).<sup>31</sup>

The railway's partnership with the territorial bus companies did bring some service benefits for passengers,<sup>32</sup> however, the ultimate aim of establishing a high level of modal specialisation was not achieved.<sup>33</sup> Only a limited number of rural passenger trains were withdrawn.<sup>34</sup> To understand this, it needs to be recognised that for LNER officials, their plans for local routes could not be separated from its concern with the wellbeing of the trunk network. This follows Roth's argument that transport history can only be properly evaluated by thinking about how each part related to a wider

---

<sup>29</sup> Filarski, Ruud, in cooperation with Mom, Gijs, *Shaping Transport Policy: Two Centuries of Struggle Between the Public and Private Sector- A Comparative Perspective* (Den Haag, 2011), pp. 135-136; Hey, Kevin, 'Transport Co-ordination and Professionalism in Britain: Forging a New Orthodoxy in the Early Inter-war Years', *The Journal of Transport History*, 31, 2 (2012), p. 36.

<sup>30</sup> Bonavia, Michael R., *A History of the LNER II: The Age of the Streamliners, 1934-39* (London, 1990), p. 68; Smith, David Norman, *The Railway and its Passengers: A Social History* (Newton Abbot, 1988), p. 88; Household, Humphrey, *With the LNER in the Twenties* (Gloucester, 1985), p. 125; Harverson, P.A., 'Passenger Transportation- Its Past, Its Present and Its Future', *Journal of the Institute of Transport*, Vol. 11, No. 4, (February 1930), p. 189.

<sup>31</sup> Edwards, 'Implicit Cost Analysis', p. 343; Fenelon, *Economics of Road Transport*, p. 195; Bonavia, *Four Great Railways*, p. 158.

<sup>32</sup> Fenelon, K.G., 'British Railways Since the War', *Journal of the Royal Statistical Society*, 96, 3 (1933), p. 398.

<sup>33</sup> Thuroid, Peter, *The Motoring Age: The Automobile and Britain, 1896-1939* (London, 2003), p. 178; Bonavia, *Four Great Railways*, pp. 157-158.

<sup>34</sup> Loft, *Beeching's Last Trains*, p. 19.

network.<sup>35</sup> We need to remember that a key feature of the scheme was the replacement of local rail services with buses running to railheads on the mainline. An analysis of the creation of these intermodal connections reveals that they faced several real or perceived problems, such as practical difficulties in running buses to stations, a concern they may not comply with 'reasonable facilities' regulations, perceived low demand, and industrial relations considerations.<sup>36</sup> Furthermore, the LNER's interest in replacing local trains with buses was reduced by the failure of the parallel attempt to persuade the associated territorials to curtail trunk coach services. However, these issues were not as insurmountable as they initially appeared, but the framework through which LNER officials evaluated the economics of their network caused them to overact. To explain why, it is necessary to consider the evolution of railway economics while the network was being established during the nineteenth century. During this period, Cain and Channon have observed that the large size of the railways meant that control over business decisions fell away from shareholders, and into the hands of the salaried technical officials required to operate the network; thereby becoming the first modern businesses in Britain.<sup>37</sup> This group was led by the general manager, and included traffic managers, line superintendents, and engineers. While ensuring enough surplus was earned to placate the shareholders, this group did not directly benefit from profit growth and therefore had different objectives to those paid a dividend. Railway managers were often more concerned with increasing their personal power than profit maximisation, and to achieve this focused on encouraging the material growth of their companies, even when investments could not be fully

---

<sup>35</sup> Roth, Ralf, 'Rails and Roads between Competition and Interdependency: A Long and Winding Relationship with Many Innovations that Failed', in Roth and Divall, *From Rail to Road and Back Again?*, p. 72.

<sup>36</sup> *Ibid*, pp. 11-16.

<sup>37</sup> Davies, 'Public Passenger Transport', p. 16.

justified financially.<sup>38</sup> This trend was further encouraged by the complexity of identifying the actual cost of carrying each traffic type. With costing techniques still being developed, officials could not apportion joint and fixed costs between different traffics and routes. Therefore, during the nineteenth century officials tended to compete with other railway systems by expanding in a rather unguided fashion, leading to a proliferation of superfluous facilities, such as uneconomic rural branch lines, a massive internalisation of ancillary facilities, duplication of mainline routes, and the provision of excessive extra services to customers.<sup>39</sup>

These trends had two effects on the LNER's ability to implement rail-bus substitution after 1928. Firstly, it led to the railway inheriting several concepts about railway economics based on the averaging of costs, such a "what the traffic will bear" or "cross-subsidisation", which had emerged during the nineteenth century to justify the development of their unwieldy network. However, these concepts were no longer suitable in the competitive transport environment of the interwar era.<sup>40</sup> With regards to rural passenger train routes, these unremunerative services were justified with the theory of contributory revenue. This was the income supposedly created for the trunk railway by passengers starting or finishing their journeys on local trains, with it being wrongly believed that this revenue warranted the retention of a feeder service that could not cover its running costs.<sup>41</sup> Edwards, who is otherwise fairly sympathetic to 'tacit' means of assessing costs, does admit they hindered attempts to plan co-

---

<sup>38</sup> Cain, P.J., 'Railways 1870-1914: The Maturity of the Private System', in Aldcroft, Derek H., and Freeman, Michael J., (eds.), *Transport in Victorian Britain* (Manchester, 1988), pp. 112-113; Channon, Geoffrey, *Railways in Britain and the United States, 1830-1940* (Aldershot, 2001), pp. 43-45;

<sup>39</sup> Aldcroft, *British Railways in Transition*, pp. 1-18, 21-22, 46; these points are supported by more recent mathematical analysis, see Crafts, Nicholas, Mills, Terrence C., Mulatu, Abay, 'Total Factor Productivity Growth on Britain's Railways, 1852-1912: A Reappraisal of the Evidence', *Explorations in Economic History*, 44, 4 (2007), pp. 608-634.

<sup>40</sup> Edwards, 'Conceptualising Cost', pp. 78-79; Aldcroft, *British Railways in Transition*, pp. 20, 22.

<sup>41</sup> Sanderson, S.F., *Railway Commercial Practice* (London, 1952), p. 135.

ordination. However, he does not specifically identify theories about contributory revenue as the most significant factor.<sup>42</sup>

Williams has suggested that the loss-making Whitby-Loftus branch line was kept open by the LNER because of the importance of through passengers, mostly summer holiday traffic from Middleborough to the coast which meant the railway was heavily used at this time of year. However, this cannot be taken as a typical example of the railway's interest in contributory revenue on inland rural lines.<sup>43</sup> Likewise, though Davies notes contributory revenue as a possible factor preventing the withdrawal of more typical rural passenger trains,<sup>44</sup> he does not discuss how officials came to believe that this revenue could not be maintained by connecting bus services. This occurred because the continued belief of LNER officials in contributory revenue prevented them from correctly evaluating the effects of rail-bus substitution in the few cases where it did occur.

Secondly, Diemel, in his survey of intermodal connections in Europe during the nineteenth and twentieth centuries, notes that transport planners often developed perfect "engineering" plans for integrated transport networks, but failed to consider the commercial realities of implementing their ideas.<sup>45</sup> Events on Britain's railways after 1928 provide another example of this trend. Divall has already discussed how these themes manifested on the LNER with regards to their road freight policies. However,

---

<sup>42</sup> Edwards, 'Implicit Cost Analysis', p. 345.

<sup>43</sup> Williams, Michael Aufrere, 'The Whitby-Loftus Line: 'a more spectacular example of a loss-making branch would be hard to find'. Is this really the case?', *Journal of the Railway & Canal Historical Society*, No. 216 (2013), pp. 43-46.

<sup>44</sup> Davies, 'Public Passenger Transport', p. 145; Loft notes concerns about contributory revenue were also expressed by people opposing the Beeching cuts of the 1960s, Loft, *Beeching's Last Trains*, p. 7.

<sup>45</sup> Diemel, Hans-Liuder, 'Why so late? Questions concerning Intermodality of Transport Junctions', in Diemel (ed.), *Unconnected Transport Networks: European Intermodal Traffic Junctions 1800-2000* (Frankfurt, 2004), pp. 14, 30.

he only considers the matter from a discursive perspective, not with regards to how they affected actual business strategies.<sup>46</sup>

LNER officials, who gained their positions because of their technical know-how, internalised the “engineering” idealism of beliefs about “transport co-ordination”, which argued each type of traffic should only be carried by the “most suitable” mode. Now, rather than developing more rural routes, which were seen as unprofitable, there was a desire to create a “perfectly balanced” transport network overseen by the railways, inspired in part by the reconstructionist ideas which emerged in the aftermath of the First World War. This idealistic means of viewing the technical development of their network distracted officials from properly reassessing older theories about contributory revenue. Therefore, it created the rather paradoxical situation whereby a belief designed to justify the withdrawal of services, actually derailed the implementation of this objective.

The situation of the LNER made its officials particularly susceptible to holding onto outdated beliefs about railway economics or technocratic idealism, though similar trends do seem to have occurred on other railways.<sup>47</sup> The LNER had the worst financial position out of the Big Four railways.<sup>48</sup> Its net revenue between 1923 and 1938 fell by 58 percent from £14 million to £6.7 million, compared to a fall of 32 percent from £39.8 million to £27.1 million for the Big Four as a whole.<sup>49</sup> The LNER’s troubles were caused by heavy industry in the North East being hit particularly hard by the

---

<sup>46</sup> Divall, ‘Conceiving Distribution’, pp. 91-106.

<sup>47</sup> For info about the bus policies of the other Big Four see Davies, ‘Public Passenger Transport’, *passim*; Davies, Ashton, ‘The Co-ordination of Transport’, *Journal of the Institute of Transport*, Vol. 11, No. 6, (April 1930), pp. 251-266; Semmens, Peter, *A History of the Great Western Railway 1: Consolidation, 1923-29* (London, 1990), pp. 84-89; Semmens, Peter, *A History of the Great Western Railway 2: The Thirties, 1930-39* (Cambridge, 1988), p. 70.

<sup>48</sup> Stevens, W.J., *The Future of British Railways: A Plea for Co-operation* (London, 1938), p. 77.

<sup>49</sup> Bonavia, *Four Great Railways*, pp. 177-178; Aldcroft, *British Railways in Transition*, p. 48.

depression, and the historical financial weakness of its predecessors in the southern half of its network and in Scotland. Furthermore, any money that was available for investment needed to be shared with the freight side of the business, with 61 percent of the LNER's receipts coming from this source, compared to 58 percent on the LMS, 56 percent on the GWR and 26 percent on the SR.<sup>50</sup> It might be assumed that the LNER's greater financial troubles would make its officials keener to apportion costs and re-evaluate ideas about the economics of their network, however, the personal statements of officials suggest they actually swung further into technocratic idealism.

The explanation for this response lies in the LNER's unique decentralised organisational structure. The other three railways adopted a departmental organisation, in which under the General Manager were several functional departments covering different aspects of railway administration, the line of authority leading down from the department heads to managers for each department in each area or district. Discussions between departments about policy was done only at head office; local department managers did not talk amongst themselves (other than for daily operating purposes), only with superiors and subordinates within their department.<sup>51</sup>

The LNER was different as it adopted a decentralised structure. The LNER was a longitudinal combination of the pre-grouping companies serving the east of Britain, and it was decided that the departmental system was unsuitable for a network with such a wide geographical spread. Furthermore, the standardisation of practice over the networks of former constituent companies, though saving money in the long term,

---

<sup>50</sup> Bonavia, *Four Great Railways*, pp. 57, 62-63.

<sup>51</sup> Bonavia, Michael R., *The Organisation of British Railways* (London, 1971), pp. 26, 28-29; Bonavia, *Railway Policy*, p. 11.

had a high initial cost. LNER officials therefore felt it better to allow the practices of its various predecessor railways to continue as long as they did not damage any business. The railway was split into four areas; the Southern Area included the lines of the Great Central, Great Northern, and Great Eastern Railways which radiated out from London; the North Eastern Area covered the North Eastern Railway (NER) and the Hull & Barnsley Railway; the Southern Scottish Area covered the North British Railway; and the Northern Scottish Area covered the Great North of Scotland Railway (GNoSR), with the two Scottish areas later being merged. Departmental committees were established to organise policies between these areas. Each area had its own Divisional General Manager, and underneath worked departmental officers dealing with each aspect of railway operation within the region. The areas were subdivided into smaller units for local management. This loose means of organisation meant regional officials had more freedom to suggest ideas to their superiors.<sup>52</sup> However, this created a situation whereby policy was led by discussions amongst regional managers, with head office merely responding to suggestions made by these officials. This freedom reinforced the tendency of technical managers to search for “engineering” solutions to their problems, rather than by properly reassessing the finances of their railway.

Chapter 1 will discuss the origins of the LNER’s bus policy. It will consider the pre-grouping railways involvement in other modes during the nineteenth century, when they were used to feed the train network. It will then look at the LNER’s attempt to adapt the benefits of buses to local trains during the 1920s, and how this led to them

---

<sup>52</sup> Bonavia, *Four Great Railways*, pp. 55-58, 62; Bonavia, *Railway Policy*, p. 3; Bonavia, *Organisation of British Railways*, pp. 29-30; Hughes, Geoffrey, *LNER* (London, 1987), p. 128; NA RAIL 390/57: Suburban & Road Traffic Committee, *passim*.



moving towards wanting to replace these rail services with railway owned buses, as was already happening in America. This was linked to a decision to partner with the existing territorial bus companies, rather than operating vehicles directly. This chapter will also show how the railway's decision to move to substituting local railways with buses, fitted with wider ideas discussed during the 1920s about transport co-ordination and functional specialisation, and was tied to a parallel plan to persuade the bus companies to curtail trunk coaches. Chapter 2 will consider the actual results of rail-bus integration. Financially, this arrangement between the railway and the bus companies was successful. Likewise, with regards to minor forms of integration, such as interavailable tickets, arrangements for special traffic, combined publicity, and basic physical connections between the train and bus networks, much was achieved; along with a parallel plan to provide lorries to carry parcels in connection with passenger trains. However, when it came to the tasks required to implement modal specialisation, such as the withdrawal of associated trunk coach services and local trains, little was achieved by the railway's partnership with the bus companies.

Chapter 3 will explain why little progress was made. Ultimately, the economic theories been followed by LNER officials were incompatible with the realities, or perceived realities, of the train and bus networks. Associated bus companies were not prepared to curtail remunerative trunk coach services. With regards to the non-withdrawal of local trains, though industrial relations considerations played a part, the main issue was the LNER's belief in contributory revenue causing them to overreact to apparent problems with rail-bus connections. Chapter 4 will demonstrate that the result of the effective abandonment of rail-bus substitution was the creation of a network in which the logic of modal specialisation was half-applied. Though legislative controls over intermodal fare competition removed the pressing need for the LNER to pursue modal

specialisation, railway officials applied different policies on each route type depending on how they were classified within the co-ordination framework.

This thesis will not engage in debates about whether the LNER's decision to become involved in the bus industry through the purchase of shares in the territorial companies was the most effective means of integrating the two networks. Ponsonby points to examples of non-associated transport firms serving stations, such as taxis, to claim that to achieve integration trains and buses did not have to be under joint control.<sup>53</sup> The inability of LNER officials to implement co-ordination was caused more by problems with the establishment of rail-bus connections, not the structure of their relationship with the bus industry. While some of the troubles facing integration were caused by territorial bus companies prioritising their interests above co-ordination, similar issues would have occurred if the LNER had negotiated ad-hoc connections with operators who remained fully independent. Likewise, if the LNER directly operated its own buses, the other practical problems with running buses to stations, and the issue of perceived low usage, would still have occurred.

This thesis will also not encompass a discussion about whether the public would have benefitted from modal specialisation, this being a rather complex question. The removal of competition would have cut services and may have increased prices.<sup>54</sup> Alternatively, modal specialisation may have lowered prices if it reduced costs. Neither will this thesis consider the political negotiations surrounding the passage of the 1928 Act, which have already been analysed by Davies.<sup>55</sup>

---

<sup>53</sup> Ponsonby, G.J., *Transport Policy: Co-ordination through Competition* (Westminster, 1969), pp. 51, 55-56.

<sup>54</sup> Fenelon, K.G., *Transport Co-ordination: A Study of Present-Day Transport Problems* (London, 1929), pp. 82-83; Johnston, Kenneth H., *British Railways and Economic Recovery: A Sociological Study of the Transport Problem* (London, 1949), p. 102.

<sup>55</sup> Davies, 'Public Passenger Transport', pp. 72-82.

Most primary sources used in this thesis come from two archives. The National Archives (NA) holds documents from the Big Four, while the Bus Archive (BA) in Droitwich Spa is an important depository of documents from the bus industry, though it also collects some papers relating to other transport modes. From the National Archives, there are the minutes of the LNER's Suburban and Road Transport Committee,<sup>56</sup> which discussed road transport policy on behalf of the board of directors; the minutes of the LNER's Passenger Managers Conference, where the passenger managers from each of the railway's regional divisions met to discuss policy; and the reports of the York District Passenger Managers and the North Eastern Area Passenger Managers about the situation on-the-ground. From the Bus Archive, a helpful resource is the minute book of the Standing Joint Committee held between representatives from the LNER and LMS and one of their associated bus companies, the West Yorkshire Road Car Company (WYRC). These minutes, along with the York District and North Eastern Area reports, mean events in Yorkshire will frequently be used as a case study.

Sources which illustrate the personal opinions of LNER officials have also been helpful. These include the statements of the General Manager, Sir Ralph Wedgewood, at the Parliamentary Committee convened to discuss the Railway Road Powers Bill in 1928; the speeches of railway officials at the Institute of Transport (whose journal can be accessed in the University of Birmingham's library); and their writings in the company's staff magazine (accessed at the National Railway Museum). Statements of exactly how train and bus networks changed, or did not change, are provided by railway timetables (available at the NA, though I have mostly used re-prints of

---

<sup>56</sup> Hughes, *LNER*, p. 128.

Bradshaw's Guides), and bus timetables (found at the BA, these also contain information about fares). Furthermore, the LNER's reaction to proposed developments of the bus network is illustrated by the *Notices & Proceedings* of the Traffic Commissioners, held at the BA.

This thesis will not discuss the attitude of bus managers as much as that of railway officials, as fewer documents have survived from the territorial companies. Most mentions of the LNER in bus paperwork (other than the Standing Joint Committee minutes) are merely statements of finance received from the railway, with little information about how territorial bus managers perceived their new partners. The greater variety of document types from the railways, and the qualitative discussion found in them, means this thesis will focus on the railway's perception of their relationship with the bus companies. What can be said about the associated bus companies, is that because their businesses were mostly profitable during the interwar era, they did not need to encourage moves towards modal specialisation, unlike the railways who saw such concepts as offering a solution to their problems. The associated bus companies do seem to have been interested in some on-the-ground integration, but only in the same way they would look to find other means of attracting passengers (such as by serving a hospital or industrial site), and were not prepared to give the railways special priority.

## **CHAPTER 1: THE DECISION TO APPLY FOR ROAD POWERS**

### **Introduction**

On the 3<sup>rd</sup> August 1928, after submitting a private bill to Parliament, the Big Four received the right to operate road services under the Railways (Road Powers) Act.<sup>1</sup> This chapter will show that LNER officials had applied for road powers because they intended to replace local train services in rural areas with buses. It will start by demonstrating that LNER officials truly recognised the benefits buses offered over trains, by considering the historical, cost, technical, and international influences on their bus policy; and by showing that a similar trend occurred with regards to other transport modes. It will then consider some of the intellectual ideas supporting co-ordination, explaining the emergence of this trend from the post-1918 reconstructionist ideal and the rationalisation movement in wider industry, what this theory meant, how it influenced the LNER's bus policy, and how it was tied to a parallel attempt to curtail trunk coach services. Then it will be explained how this recognition of the practical benefits of buses over trains was linked to the Big Four's decision to break their policy of increasing the level of direct control over subsidiary activities, by investing in existing territorial bus companies. Financial limitations, the need to calm public concerns about railway monopoly, and government restrictions all influenced this decision, but there was also a belief amongst LNER officials that co-ordination could only be successful if they worked with experienced bus managers.

---

<sup>1</sup> Davies, 'Public Passenger Transport', p. 82; as statutory undertakings the railways could only perform the functions granted to them by Parliament, Chester, D.N., *Public Control of Road Passenger Transport: A Study in Administration and Economics* (Manchester, 1936), p. 34.

### **a) Emergence of the LNER's Bus Policy**

Railways officials had never considered their businesses as just being focused on the running of trains. Unlike railways elsewhere in the world, British railway companies in the nineteenth century preferred to directly involve themselves in ancillary activities, instead of using outside suppliers. They built their own locomotives and rolling stock, managed hotels, and provided their own catering facilities.<sup>2</sup> With regards to the internalisation of locomotive construction, research by Channon reveals that this fits the trend of railway officials prioritising issues other than profit maximisation, and was led by the chief mechanical engineers who wished to enhance their power and status by having control over the construction of their designs.<sup>3</sup> It can be inferred that commercial and operating managers also wished to protect their professional status, by using direct control of the facilities required by customers to guarantee them a satisfactory service.

Bonavia notes that this culture of providing a 'comprehensive service' extended to involving the railway in other transport modes.<sup>4</sup> During the nineteenth century this mostly involved using other modes to feed the railway. With regards to the canals purchased by the railways during the nineteenth century, though some companies did purposely try to divert traffic from boats to trains, other pre-grouping networks ran them properly as they realised canals provided a means to stretch into the areas of competing lines.<sup>5</sup> Likewise, investment in sea shipping and docks enabled the pre-

---

<sup>2</sup> Bonavia, *Four Great Railways*, p. 154.

<sup>3</sup> Channon, *Railways in Britain and the United States*, pp. 283, 293.

<sup>4</sup> Bonavia, *Four Great Railways*, pp. 154-155.

<sup>5</sup> Bagwell, *Transport Revolution*, pp. 148-151; Turnock, D., 'The Historical Geographer's Approach to Railway History: The Relations between Railways and Canals', in Ambler, R.W., (ed.), *The History and Practice of Britain's Railways: A New Research Agenda* (Aldershot, 1999), pp. 44-45; for an example of one of the LNER's predecessors running canals properly see Hadfield, Charles and Biddle, Gordon, *The Canals of North West England: Volume II* (Newton Abbot, 1970), pp. 441-442.

grouping railways to serve international traffic flows. The LNER inherited from its predecessor companies 41 miles of quayside and 400 water acres, along with North Sea ferry services from Harwich and the Humber. On the roads, the pre-grouping companies had recognised the importance of road haulage operations for providing a door-to-door freight service, and therefore this activity was increasingly brought in-house throughout the nineteenth century. In 1923 the LNER inherited a fleet of 198 vans and lorries, 6,989 horse-drawn vehicles and 5,189 horses.<sup>6</sup>

Indeed, railway involvement in buses did not begin in 1928, for the pre-grouping companies had used these vehicles to feed passengers to trains since the earliest days of the railways.<sup>7</sup> Initially, horse-buses were used to provide first and last-mile transport between stations and nearby villages and towns. They were mostly run by private operators, with the LNER's timetable in 1900 listing 32 horse-bus owners who provided road transport to and from stations, though the railways did operate some directly.<sup>8</sup> After the invention of the motor bus, however, the railways internalised the development of feeder services, as they had the financial resources to become 'pioneers' of this initially expensive technology, with 5 of the LNER's predecessors investing in these vehicles.<sup>9</sup> This move also reflected a new role for railway owned buses. Officials realised that motorised vehicles offered a means to extend their

---

<sup>6</sup> Bonavia, *Four Great Railways*, pp. 154-156; Hughes, *LNER*, pp. 126-128, 131-134.

<sup>7</sup> Hughes, *LNER*, p. 126; the legal position of these services was somewhat unclear, Chester, *Public Control of Road Passenger Transport*, p. 34.

<sup>8</sup> Hibbs, *British Bus Services*, pp. 36-37; NA RAIL 967/44: North Eastern Railway Time Tables: For May and June 1900, p. 15; for examples of horse buses operated directly by the railways see Hibbs, *British Bus Services*, p. 27; Gordon, D.I., *A Regional History of the Railways of Great Britain: Volume V: The Eastern Counties* (Newton Abbot, 1977), p. 146; Holt, G.O., *A Regional History of the Railways of Great Britain: Volume X: The North West* (New Abbot, 1978), p. 153; Grinling, Charles H. (with supplementary chapters by Borley, H.V., and Ellis, Hamilton), *The History of the Great Northern Railway: 1845-1922* (London, 1966), p. 458.

<sup>9</sup> Ellis, Hamilton, *British Railway History: An Outline From the Accession of William IV to the Nationalization of Railways: 1877-1947* (London, 1959), p. 263; Hibbs, *British Bus Services*, pp. 69-70; Cummings, John, *Railway Motor Buses and Bus Services in the British Isles: 1902-1933: Volume One* (Oxford, 1978), pp. 117-120.

network into rural areas without building expensive new lines. For example, the NER's first motor bus between Beverley and Brandesburton was introduced in 1903 after the railway dropped a light railway scheme with an estimated expenditure of £74,000, which could not be justified by expected traffic levels.<sup>10</sup>

During the 1920s, the difficulty local passenger trains faced in competing with bus services made LNER officials move from merely looking for ways to feed the railway with other modes, to considering the outright replacement of the railway. The lower cost of running road services had enabled the bus companies to win traffic from the railways with cheaper fares. For example, in 1925 the return Harrogate-Leeds rail fare was 4s 6d, while the bus fare was only 2s 6d.<sup>11</sup> These savings were made both in infrastructure and fuel. As Wedgewood explained to Parliament, buses did not require stations or signal boxes, which meant their use would allow the railways to expand service levels with a lower wage increase than if they ran more trains.<sup>12</sup> Likewise, Bell, the LNER's Assistant General Manager, explained at the Institute of Transport in 1930 that buses could run more frequently, but used only 1 gallon of petrol for every 8 miles, while 50 lbs of coal was burnt by steam locomotives every mile.<sup>13</sup>

To compete the railway initially tried fare cuts (discussed more in chapter 4), but this could not solve the structural disadvantages local trains faced, and the LNER then tried to adapt local trains to provide the same benefits as buses. Firstly, the railway tried to emulate the regular interval services provided by bus companies. Between

---

<sup>10</sup> Hibbs, *British Bus Services*, p. 64; Hoole, Ken, *North Eastern Railway Buses, Lorries & Autocars* (Knaresborough, 1969), pp. 10-12; for another example of one of the LNER's predecessors running buses as an alternative to building new rural lines, see Vallance, H.A., *The Great North of Scotland Railway: The History of the Railways of the Scottish Highlands- Vol 3* (1989), pp. 117-127.

<sup>11</sup> Davies, 'Public Passenger Transport', p. 61; Bus Archive (BA): Uncatalogued: Report on Road Motor Transport in Relation to the Railways, Railway Clearing House, 29<sup>th</sup> July 1925, p. 23.

<sup>12</sup> NA RAIL 1124/226, p. 302.

<sup>13</sup> Bell, Robert, 'The Changing Conditions of Trade and Transport', *Journal of the Institute of Transport*, Vol. 12, No. 2, (December 1930), pp. 68-70.



1929 and 1933 hourly interval train services were introduced on the Hull-Hornsea and Hull-Withernsea routes, and half-hourly intervals on the Brough-Beverley and Darlington-Saltburn routes.<sup>14</sup> Secondly, as buses could collect passengers close to their homes, the LNER tried to improve the railway's physical accessibility. Therefore, the staff magazine noted in 1929 that halts were being opened to serve communities that had previously 'enjoyed no rail facilities'.<sup>15</sup> Examples in the North Eastern Area include Redcar East and Springhead Halts in 1929, and Hawthorn Tower and Blackhall Colliery Halts in 1936.<sup>16</sup>

Thirdly, the LNER began operating steam railcars.<sup>17</sup> These were 'self-propelled passenger units', with the engine and passenger space in one vehicle.<sup>18</sup> Wedgewood explained to Parliament that steam railcars offered cost advantages like those of bus transport. The combination of the engine and passenger accommodation in one unit lowered operating costs, and the heavy staffing requirements of locomotive and coach trains were reduced by the fireman being able to carry out the guard's duties.<sup>19</sup> It was hoped these lower costs would allow the railways to provide the expanded service level offered by buses. As Naisby, the North Eastern Area's Passenger Manager, explained in 1928, as the costs of steam railcars were a third lower than traditional trains, the LNER could run services later in the evening.<sup>20</sup> The LNER brought 85 steam

---

<sup>14</sup> Bonavia, *Four Great Railways*, pp. 80, 101-102; NA RAIL 390/2045/3: Annual Report: York District Passenger Manager, 1929, p. 33; NA RAIL 390/2045/5: Annual Report: York District Passenger Manager, 1933, p. 45.

<sup>15</sup> Booker, Frank, *The Great Western Railway: A New History* (Newton Abbot, 1980), p. 112; *London & North Eastern Railway Magazine*, Vol. 19, No. 5, (May 1929), p. 258.

<sup>16</sup> NA RAIL 390/2045/3: Report for 1929, p. 34; NA RAIL 390/1950: North Eastern Area: Passenger Department Annual Report, 1936, p. 29.

<sup>17</sup> Fenelon, *Transport Co-ordination*, p. 28; Bonavia, *Railway Policy*, p. 130.

<sup>18</sup> Harris, Michael, 'Railcars', in Simmons and Biddle, *Companion to British Railway History*, p. 411.

<sup>19</sup> Hughes, *LNER*, p. 52; NA RAIL 1124/226: Minutes of Proceedings: Railway (Road Transport) Bills, 26<sup>th</sup> April 1928 to 10<sup>th</sup> May 1928, Vol. 1, p. 298.

<sup>20</sup> *LNER Magazine*, Vol. 18, No. 9, (September 1928), p. 456.

railmotors between 1925 and 1928, and continued experiments started by the NER with a petrol railbus, simply a bus on rails, and three diesel railcars.<sup>21</sup>

These improvements to local railway services, however, failed to solve the LNER's problems, as practical difficulties meant they were unsuitable for widespread application. Naisby noted the need to run 'trains of varying speeds' over the same tracks, made interval services difficult to introduce.<sup>22</sup> Additionally, interval timetables involved the running of some lightly loaded trains, but the LNER's financial situation discouraged officials from making this commitment. For this reason, the interval timetables around Hull were abandoned in 1930.<sup>23</sup> With regards to intermediate halts, Wedgewood explained to Parliament that these lowered 'the throughout speed of the trains'.<sup>24</sup>

More importantly, these adaptations did not re-attract passengers to the railway. During the 1920s, the York District reported that bus competition caused the revenue earned by the railbuses to decline, and in 1934 it was noted that diesel units running on Hull-Selby-Pontefract and Hull-York services were little used.<sup>25</sup> Some halts were successful, Redcar East even being upgraded to a normal station in 1936.<sup>26</sup> In general, however, Wedgewood informed Parliament that halts were unpopular. He explained further that because stations were still often located 'at some distance from the centre of population', any improvements to local rail services could not enable the railway to compete successfully with buses running into village centres. Therefore, by 1929

---

<sup>21</sup> Allen, Cecil J., *The London & North Eastern Railway* (London, 1966), p. 130; Hoole, *Buses, Lorries & Autocars*, pp. 43-48, 55-61.

<sup>22</sup> *LNER Magazine*, Vol. 18, No. 9, p. 455.

<sup>23</sup> NA RAIL 390/2045/4: Annual Report: York District Passenger Manager, 1930, p. 32.

<sup>24</sup> NA RAIL 1124/226, p. 298.

<sup>25</sup> NA RAIL 390/2045/1: Annual Report: York District Passenger Manager, 1924, p. 19, Report for 1925, p. 19; NA RAIL 390/2045/2: Annual Report: York District Passenger Manager, 1927, p. 39; NA RAIL 390/2045/6: Annual Report: York District Passenger Manager, 1934, p. 25.

<sup>26</sup> NA RAIL 390/1950, p. 29.

Wedgewood had concluded that only the use of buses by the LNER, to feed people from these villages to stations, would restore railway passenger numbers.<sup>27</sup>

Initially, the LNER intended to purchase its own buses, and the plans from this early stage clearly illustrate that railway officials had a strong understanding of the benefits offered by more flexible road transport.<sup>28</sup> 1929 the LNER considered investing in six buses to be operated by Scarborough District Motors between Bridlington and Flamborough village and cliffs, as Flamborough station was located some distance away.<sup>29</sup> The LNER also understood that buses could take passengers into town centres, while stations tended to be in a less central location, and therefore purchased a bus operator in Carlisle in 1929 to gain usage of the bus stand 'in the principal street'.<sup>30</sup> The LNER also hoped to continue the (not entirely accurate) pre-grouping policy of using buses to access new traffic sources. The railway purchased Carthorpe and District Motor Omnibus Services in 1928 to begin serving an area 'remote from the Railway'.<sup>31</sup> Likewise, the failure of experiments with interval services, led to the LNER realising that these could be easier provided with on the roads, with Naisby explaining in 1928 that the 'smaller unit' meant bus operators were 'able to give a frequent and regular service, run on an interval basis'.<sup>32</sup>

The decision to try and replace local trains with buses was reinforced by similar developments abroad. British railways were not alone in buying buses to combat competition, this also happened in France, Belgium, the Netherlands, Switzerland,

---

<sup>27</sup> Davies, 'Public Passenger Transport', pp. 76, 144; NA RAIL 1124/226, pp. 298-299.

<sup>28</sup> Fenelon, *Economics of Road Transport*, p. 195; Davies, 'Public Passenger Transport', p. 59.

<sup>29</sup> NA RAIL 390/1701: Memorandum: Development of Road Services in N.E. Area, 1929, p. 7.

<sup>30</sup> NA RAIL 390/1613/4: Road Motor Services, Carlisle. Mrs Wallis, 26<sup>th</sup> June 1929, p. 2.

<sup>31</sup> Albitreccia, A., and Wohl, Paul, *Road and Rail in Forty Countries* (London, 1935), pp. 396-397; NA RAIL 390/1613/3: Carthorpe and District Motor Omnibus Services. Mr Clifford J Naylor, 3<sup>rd</sup> January 1928, p. 2.

<sup>32</sup> *LNER Magazine*, Vol. 18, No. 9, p. 455.

Italy, Germany, and most significantly, the United States. In 1930, a total of 32 US railroads moved around 75 million passengers in 3,000 motor coaches, over a bus system of 57,000 miles.<sup>33</sup> Bell pointed out at the Institute of Transport in 1930 that the replacement of unremunerative local train routes with cheaper bus services had taken place on both sides of the Atlantic.<sup>34</sup> In 1929 he provided data about the savings generated for one railroad by this policy, commenting that the Boston & Maine had saved a quarter of million dollars annually by replacing 200,000 passenger train or railcar miles with buses.<sup>35</sup>

This new readiness to consider replacing the railway with other modes was not just reflected in bus policy.<sup>36</sup> After becoming involved in buses in 1928, the Big Four also investigated how aviation could be integrated with trains to offer new conveniences to the public, with Parliament granting air powers in 1929. While the LNER was an investor in the subsidiary airline formed by the Big Four in 1934, Railway Air Services (RAS), they did not request any flights to be operated on their behalf. They did, however, establish integrated facilities with independent airlines and the RAS flights operated for the LMS. Most importantly, the LNER began to realise that planes were better at providing services across water than traditional train-ship journeys. Through tickets were sold at Newcastle enabling passengers to travel by train to Carlisle, and then by the LMS's RAS flight to the Isle of Man; and by train to Glasgow and then by Scottish Airways Ltd to the Scottish isles. The LNER also started to use aeroplanes

---

<sup>33</sup> Davies, 'Public Passenger Transport', pp. 119-120; Filarski with Mom, *Shaping Transport Policy*, pp. 134-137; Albitreccia and Wohl, *Road and Rail in Forty Countries*, pp. 405, 409, 412, 415, 418, 420; Bell, Robert, 'The Study of Transport Problems', *Journal of the Institute of Transport*, Vol. 12, No. 5, (March 1931), p. 258.

<sup>34</sup> Bell, 'Changing Conditions of Trade and Transport', p. 70.

<sup>35</sup> Bell, Robert, 'Transport Developments in 1928', *Journal of the Institute of Transport*, Vol. 10, No. 8., (June 1929), p. 398.

<sup>36</sup> Davies, 'Public Passenger Transport', p. 216.

as an alternative to express trains for passengers in a hurry, with it being arranged with North Eastern Airways Ltd in 1938 for passengers to use return train tickets for travel on their London-Scotland flight, upon payment of a supplement.<sup>37</sup>

With regards to the railway's road haulage operation, as well as increasing the mechanisation of this operation, the LNER and the other Big Four moved towards diverting more merchandise freight from rail to road by implementing a system of zonal collection and delivery, whereby lorries would take goods from central railheads to its final destination, instead of the deliveries being sent to hundreds of small stations. The LNER also expanded the use of road-rail containers, and in 1935 purchased with the other three railways, the hauliers Cater Paterson and Pickfords.<sup>38</sup>

#### **b) Co-ordination Discourse and the LNER's Bus Policies**

Though the LNER's substitution policy was based on an understanding of the solid practical benefits of buses, it was also influenced by more idealistic ideas about the development of transport networks. Channon has observed that interwar British railway officials were technically very competent and enterprising, but because they gained their positions through engineering and operating skill they were less adept at dealing with the financial or commercial aspects of their networks.<sup>39</sup> Indeed, this is why their predecessors before 1914 had focused on competing with other pre-grouping companies with technical and material developments, rather than by fully evaluating the cost of running their networks. During the 1920s this tendency caused LNER

---

<sup>37</sup> Aldcroft, Derek H., 'The Railways and Air Transport, 1933-9', in Aldcroft, Derek H., *Studies in British Transport History, 1870-1970* (Newton Abbot, 1974), pp. 226-229; NA RAIL 390/1950, p. 39; NA RAIL 390/1952: North Eastern Area: Passenger Department Annual Reports, 1938, pp. 26-27.

<sup>38</sup> Hughes, *LNER*, pp. 65-66, 126-128; Bonavia, *History of the LNER II*, pp. 77-78; Semmens, *History of the Great Western Railway 2*, pp. 66-67.

<sup>39</sup> Channon, *Railways in Britain and the United States*, p. 50.

officials to internalise theories about the creation of “perfect” co-ordinated transport networks.<sup>40</sup>

Transport co-ordination was linked to the ‘re-constructionist ideas’ prominent after the First World War, when it was argued that peacetime ‘national efficiency’ could be improved by the sort of ‘collectivist action’ which helped Britain survive the conflict.<sup>41</sup>

In industry, this thinking developed into the concepts of ‘industrial rationalisation’ or ‘reorganisation’, which became prevalent within British economic thought during the interwar era.<sup>42</sup> This movement argued that the problems of British industry could be solved by merging businesses into larger units to improve efficiency.<sup>43</sup> As the Liberal

Industrial Inquiry put it in 1928:

the old conditions of competition, which often involve waste and effort, the uneconomic duplication of plant and equipment, and the impossibility of adopting the full advantages of large-scale production. In modern conditions a tendency towards some degree of monopoly in an increasing number of industries is, in our opinion, inevitable and even, quite often, desirable in the interests of efficiency.<sup>44</sup>

During the interwar years, this thinking led to the emergence of combines and cartels which dominated their markets, trade associations that fixed prices, quotas, and even purchased and destroyed excess capacity, the placing of utility services under the control of state owned-public corporations, and government intervention to impose reorganisation schemes on struggling heavy industries and agriculture.<sup>45</sup>

---

<sup>40</sup> Divall, ‘Conceiving Distribution’, p. 93, 105; Davies, ‘Public Passenger Transport’, p. 27.

<sup>41</sup> Hey, ‘Transport Co-ordination and Professionalism’, p. 25.

<sup>42</sup> Greaves, Julian, *Industrial Reorganisation and Government Policy in Interwar Britain* (Aldershot, 2005), pp. 3-4.

<sup>43</sup> Pollard, Sidney, *The Development of the British Economy, 1914-1990* (London, 1997), p. 79.

<sup>44</sup> Liberal Industrial Inquiry, *Britain’s Industrial Future* (1928), pp. 93-94, quoted in *ibid*, p. 80.

<sup>45</sup> Pollard, *Development of the British Economy*, pp. 51-56, 65, 78-81.

In transport, these ideas about improving efficiency by ending competition manifested through “co-ordination”.<sup>46</sup> Hey notes this concept ‘assumed almost reverential status’ within intellectual discussions about the sector during the 1920s.<sup>47</sup> The work of the Railway Executive Committee in organising activity on the home front, and Eric Geddes’s achievements with military transport on the Western Front, were particularly influential.<sup>48</sup> The ideals of co-ordination were formulated by the Institute of Transport, a professional association formed in 1920 to enable transport thinkers, such as managers from private companies, government officials, and academics, to hold intellectual debates about the sector. It was argued that if wasteful intermodal competition ended, and different transport modes were integrated, it would reap advantages for customers and the country, as companies could focus on providing better and cheaper services in the sectors their mode was most suited at serving.<sup>49</sup> As Geddes, who had become the first Minister of Transport and the first President of the Institute of Transport, argued, it was necessary to:-

...harmonise the operation of the different agencies as between themselves in the interests of the community as a whole. Under a system of competition not only did one railway or one dock strive to divert traffic from another, but trams sought to wrest traffic from railways, railways to wrest traffic from canals, coastal service to wrest traffic from both, and so on. In future our efforts will be, I hope, to encourage each agency of transport to undertake that part of the total work which it, owing to its own special qualities, can most efficiently and economically perform.<sup>50</sup>

---

<sup>46</sup> Davies, ‘Public Passenger Transport’, p. 125; Thuroid, *Motoring Age*, pp. 175-176; Edwards, ‘Implicit Cost Analysis’, pp. 334-335.

<sup>47</sup> Hey, ‘Transport Co-ordination and Professionalism’, p. 34.

<sup>48</sup> Ibid, p. 26; for more information about the work of the REC, see Bagwell, Philip, and Lyth, Peter, *Transport in Britain: From Canal Lock to Gridlock* (London, 2002), pp. 70-71; for more information about the work of Geddes in France, see Grieves, Keith, *Sir Eric Geddes: Business and Government in War and Peace* (Manchester, 1989), pp. 27-39.

<sup>49</sup> Hey, ‘Transport Co-ordination and Professionalism’, pp. 28-40; Divall, ‘Conceiving Distribution’, p. 99; Edwards, ‘Implicit Cost Analysis’, p. 343.

<sup>50</sup> ‘President Address’, *Journal of the Institute of Transport*, Vol. 1, No. 1, (April 1920), p. 6.

This thinking led to the principles of a rail-road functional specialisation framework being defined. In 1929, K.G. Fenelon, an economics lecturer at the University of Edinburgh and prolific writer on transport issues,<sup>51</sup> defined the 'economic spheres' of railways and roads. He argued that as railways had a speed advantage, they were better at serving trunk passengers and freight, and were also better at carrying heavy and bulky freight. Road vehicles, meanwhile, were better at serving local traffic as they offered greater flexibility by not being restricted to running along tracks, could collect passengers nearer their homes and drop them off closer to town centres than the stations, could carry freight directly from its origin point to its destination, and could run a more frequent service as the number of services was not restricted by the capacity of tracks and signalling systems.<sup>52</sup>

The ideal of each mode only being used to carry the most suitable traffic influenced government policy to a certain extent. In the immediate aftermath of the First World War, while reconstructionist ideals were still potent, co-ordination thinking had led to the formation of the Ministry of Transport in 1919.<sup>53</sup> This department was needed, according to a memorandum to the cabinet from Major-General Baird, as 'to obtain the maximum of efficiency, every conceivable means of transport must be co-ordinated and adopted so as to give the best service possible'.<sup>54</sup> However, strong Parliamentary opposition on behalf of various vested interests led to many of the powers of the new ministry being removed, and thereafter co-ordination theory was only given 'lip service' by the government.<sup>55</sup> For example, they never implemented anything as thorough as

---

<sup>51</sup> Fenelon's works include Fenelon, *Economics of Road Transport*; Fenelon, *Transport Co-ordination*; Fenelon, 'British Railways Since the War', pp. 381-437.

<sup>52</sup> Fenelon, *Transport Co-ordination*, pp. 19-20, 27-32.

<sup>53</sup> Hey, 'Transport Co-ordination and Professionalism', p. 25; Bagwell, *Transport Revolution*, pp. 227-230.

<sup>54</sup> Quoted in Bagwell, *Transport Revolution*, p. 230.

<sup>55</sup> Bagwell, *Transport Revolution*, pp. 230-234.



the restructuring proposed by the 1931 Royal Commission on Transport, which concluded:

if a state of affairs could be reached whereby every passenger travelled, and every ounce of goods was consigned, by the most economical route and form of transport, many of our present transport difficulties would disappear. Over lapping and unnecessary services would be eliminated; there would be a complete “controlled monopoly” of all transport agencies; the rail, the road, the canal and the coastwise ship would convey just those passengers and goods for which each was best adapted.<sup>56</sup>

Nevertheless, co-ordination theory continued to have some influence over government responses to transport issues, as it was used to justify policies that lessened intermodal competition. The Road Traffic Act of 1930 and the Road and Rail Traffic Act of 1933 introduced licensing for bus operators and lorry hauliers respectively, and both were justified as aiding ‘the elimination of unnecessary services’.<sup>57</sup> In 1933 the London Passenger Transport Board was formed to remove ‘unnecessary and wasteful competitive services’ by taking control of almost all public transport modes within the city (except the services of the mainline railway, though receipts earned by the Big Four from passengers within the city were pooled with those from the board).<sup>58</sup>

For transport economists and railway officials, however, a belief in co-ordination theory remained potent throughout the 1920s. It chimed with their practical experience of dealing with road competition, discussed in the previous section, and offered the

---

<sup>56</sup> Ibid, p. 234; *Royal Commission on Transport. Final Report. The Co-ordination and Development of Transport*, 1931, 20<sup>th</sup> Century House of Commons Sessional Papers, Paper Number: Cmd. 3751, Vol. 17, p. 141.

<sup>57</sup> Bagwell, *Transport Revolution*, pp. 250-251, 255-256; quote from the Road Traffic Act, 1930 [20 & 21 Geo. 5. Ch. 43], p. 62, accessed at [http://www.legislation.gov.uk/ukpga/1930/43/pdfs/ukpga\\_19300043\\_en.pdf](http://www.legislation.gov.uk/ukpga/1930/43/pdfs/ukpga_19300043_en.pdf) [25th February 2019]; likewise the Road and Rail Traffic Act, 1933 stated that ‘the licensing authority’ should ‘take into consideration any objections...by persons who are already providing facilities, whether by means of road transport or any other kind of transport, for the carriage of goods for hire or reward in the district, or between the places, which the applicant intends to serve, on the ground that...if the application were granted’ the extra vehicles would be ‘in excess of requirements’, [23 & 24 Geo. 5. Ch. 53], p. 15, accessed at [www.legislation.gov.uk/ukpga/1933/53/pdfs/ukpga\\_19330053\\_en.pdf](http://www.legislation.gov.uk/ukpga/1933/53/pdfs/ukpga_19330053_en.pdf) [25th February 2019].

<sup>58</sup> Quote from Davies, ‘Public Passenger Transport’, p. 125; Hibbs, *British Bus Services*, pp. 194-195.

railway the possibility of retaining control over local transport even as this shifted to the roads. LNER officials hoped that by controlling the modal shift process in league with their partner bus companies, by replacing rural trains with associated buses, they could gain status by being seen as developing both local bus and trunk rail services together within their integrated transport network.<sup>59</sup>

This is illustrated by the way LNER officials attended the Institute of Transport and engaged in the discourse about finding the most efficient means of moving each traffic type.<sup>60</sup> As Bell claimed in 1930, ‘fortunate will be the land where a wise measure of control holds a fair balance between rail, road, water and air carriers, permitting each class of traffic to use the means of transport which can handle it in the cheapest and most suitable way’.<sup>61</sup> In 1935 he specifically explained that a ‘division of travel’ was emerging with an increasing proportion of ‘Short distance traffic’ going by road, while railways worked ‘to consolidate their hold on long distance traffic’.<sup>62</sup>

Indeed, co-ordination theory also protected trunk railway services by contending that “unsuitable” long-distance road services should be curtailed in favour of the “more suitable” mainline railway. Though railway officials were prepared to withdraw local trains in favour of buses, they did insist that trains were superior on trunk routes. As Selway, the Southern Areas Passenger Manager, explained at the Institute of Transport in 1939, express trains offered a more ‘rapid’ and ‘comfortable’ service.<sup>63</sup>

---

<sup>59</sup> Hey, ‘Transport Co-ordination and Professionalism’, p. 36.

<sup>60</sup> Davies, ‘Public Passenger Transport’, pp. 27, 62 201.

<sup>61</sup> Bell, ‘Changing Conditions of Trade and Transport’, p. 72.

<sup>62</sup> Bell, Robert. ‘Transport Developments in 1934’, *Journal of the Institute of Transport*, Vol. 16, No. 8, (June 1935), p. 321.

<sup>63</sup> Fenelon, *Transport Co-ordination*, pp. 19-20; Selway, C.J. responding to Redman, Colonel A.S., ‘Passenger Transport by Road in Relation to Railway Services’, *Journal of the Institute of Transport*, Vol. 20, No. 5, (March 1939), p. 198.

### **c) The Decision to Partner with the Territorial Bus Companies**

At this point, it is necessary to define the difference between the territorial bus companies, who the railways partnered with, and the independent operators. The territorials were large firms, owning over 100 vehicles, who normally (but not necessarily) belonged to a bus holding company (see below). They owned 40 percent of Britain's buses and carried between 50 percent and 60 percent of bus passengers in 1933. They emerged by expanding in a widening circle from their hometowns, until they met another territorial, which led, after a period of friction, to an area agreement between the two companies. Within the area marked by the agreement, the territorials were free to develop bus services without facing competition from other territorials (though there was still room for the shape of the border to be rationalised, as discussed in the next chapter). If there was demand for travel across a boundary, joint bus services operated by vehicles and staff from both companies could be established, which enabled the territorial bus companies to diversify into the operation of trunk coach services.<sup>64</sup>

Most territorial bus firms in England were subsidiaries of two large holding companies, the British Electric Traction Company (BET) and Thomas Tilling Limited. BET had been formed by an electrical engineer in 1896, and initially used buses to feed its tram operations. It operated road transport through a subsidiary, the British Automobile Traction Company Limited (BAT). The other main combine, Tilling, was formed in 1847 as a London horse-bus firm. During the 1920s, these two organisations expanded

---

<sup>64</sup> Aldcroft and Dyos, *British Transport: An Economic Survey*, p. 339; Chester, *Public Control of Road Passenger Transport*, pp. 39-40, 45; Hibbs, *British Bus Services*, pp. 72-73, 169, 173; Healey, Keith, *Yorkshire Coaching Pools* (Glossop, 2003), p. 5; for examples of local joint bus services see *Omnibus Timetable: West Yorkshire Road Car Co Ltd: July 1st 1938 until further notice*, pp. 41, 51-53, 56-58, 91, 101-103, 167-168, 178-180.

across England by purchasing territorial companies. A third firm, the National Omnibus and Transport Company Limited, which had grown from an operator of steam buses in London, also developed into a smaller but still significant holding company during this period. To minimise competition, Tilling and BAT merged, forming Tilling and British Automobile Traction (T&BAT) in 1928, and they bought the National group in 1931.<sup>65</sup> In Scotland, a dominating combine emerged between 1929 and 1932, when the Scottish Motor Traction Company expanded beyond its hometown of Edinburgh by acquiring other firms in the central belt.<sup>66</sup>

Though area agreements removed competition between the large bus companies, independent bus companies still operated within their territories. These independents were a number of small firms owning fewer than 5 vehicles. Even though 90 percent of bus operators came into this category, and despite independents owning 40 percent of the country's buses, only 15 percent of bus passengers outside London travelled on their services.<sup>67</sup> The remaining bus services were operated by some local authorities, who usually began bus operations to expand or replace an authority owned tram network.<sup>68</sup> Neither the territorials nor the independents ran services within London, excepting trunk coach services from outside the city, as the London Passenger Transport Board held a monopoly over bus operations within its boundary.<sup>69</sup>

---

<sup>65</sup> Birks, John A., with Beetham, Tony, Brittan, Yvonne, and Dickie, Keith A.S., *National Bus Company, 1968-1989: A Commemorative Volume* (Glossop, 1990), pp. 14-17; Hibbs, *British Bus Services*, pp. 49-51, 58, 76-77; Singleton, John, 'Ribble Motor Services and Co-operation in the Inter-war Bus Industry', *The Journal of Transport History*, 16, 2 (1995), p. 118.

<sup>66</sup> Hibbs, *British Bus Services*, pp. 84, 186.

<sup>67</sup> *Ibid*, pp. 72-73; Aldcroft and Dyos, *British Transport: An Economic Survey*, p. 340.

<sup>68</sup> Aldcroft and Dyos, *British Transport: An Economic Survey*, pp. 338-339.

<sup>69</sup> Hibbs, *British Bus Services*, p. 194.

The LNER's decision to start substituting local trains with buses instead of just using them as feeders, was connected to a decision to partner with these territorial bus companies to provide the new services instead of running the vehicles themselves. It was decided that the railways would enter into agreements with the territorials instead of independent operators because their size simplified the process.<sup>70</sup> More significant were the factors which caused railway officials to want to partner with private bus companies in the first place, instead of running their own direct services. The railways did attempt to apply for road powers for freight haulage in the early 1920s. However, they were prevented from having these included in the 1921 Railway Act due to parliament feeling the granting of new powers required a separate bill. Then a private bill promoted by the LMS in 1922 was withdrawn due to the Ministry of Transport insisting that road freight rates be the same as the rail rate. Discussions about another application were started by the Big Four in 1925, but it would not be until 1928 that road powers were granted.<sup>71</sup>

During this period LNER officials became aware of the successes of the emerging bus industry.<sup>72</sup> They contrasted the practice of private operators with that of railway owned buses, as some of the services started by the pre-grouping companies to feed their networks continued to run after the grouping, though the legal position of these was unclear.<sup>73</sup> The case of the Beverley-Brandesburton bus service inherited from the

---

<sup>70</sup> Davies, 'Public Passenger Transport', p. 210; some local integration arrangements were established between the LNER and non-associated operators if the associated companies did not run near particular stations. For examples see BA 028561: West Yorkshire Road Car Co. Ltd: Minute Book: Standing Joint Committee: Minute 174; NA RAIL 390/2045/5: Report for 1933, p. 52; NA RAIL 390/2045/6: Annual Report: York District Passenger Manager, 1935, p. 28; NA RAIL 393/33: Closing of Branch Lines for Passenger Traffic, 1931.

<sup>71</sup> Davies, 'Public Passenger Transport', pp. 67-68, pp. 70-72; Fenelon, *Economics of Road Transport*, pp. 193-194.

<sup>72</sup> Divall notes this point regarding the LNER's evaluation of lorry operators, Divall, 'Conceiving Distribution', p. 97-98.

<sup>73</sup> See footnote 1 in this chapter.

NER shows how ineffective this directly operated route was at competing with the private operators which emerged during the 1920s. A 1924 York District report explained that alongside lower fares, the private competitors on this route offered a 'more frequent and quicker' service than railway buses.<sup>74</sup> Regarding frequency, the Brandesburton bus only offered four journeys each way in the summer of 1925.<sup>75</sup> This timetable had clearly been written in the manner of local railway schedules, based on one locomotive and coaches shuttling between two points with no regard to regular intervals.

Similarly, during the 1920s railway officials observed the rapid rate of technical development within bus fleets, with the vehicles used on the LNER's directly operated services quickly becoming obsolete.<sup>76</sup> This explains why independent competitors were faster on the Brandesburton route. A similar problem occurred in Durham. Here, the LNER reported in 1928 that the ex-NER buses built between 1919 and 1921 could not compete with more modern and faster vehicles operated by private firms.<sup>77</sup> In general, the bus services inherited from the NER and the GNoSR generated a loss of £19,577 between 1922 and 1926, while private bus operations were highly profitable.<sup>78</sup> Indeed, the awareness amongst LNER officials of the strengths of private operations meant that even before 1928 they began to reverse their policy of internalising control over ancillary activities. After the grouping, the LNER choose not to continue the direct operation of tourist buses from Scarborough station, arranging for an independent to

---

<sup>74</sup> Bonavia, *Railway Policy*, p. 95; NA RAIL 390/2045/1: Report for 1924, p. 29.

<sup>75</sup> Hoole, *Buses, Lorries & Autocars*, p. 14.

<sup>76</sup> Hibbs, *British Bus Services*, p. 142.

<sup>77</sup> NA RAIL 390/1613/2: Passenger Road Motor Services: Durham District, 31<sup>st</sup> May 1928, p. 1.

<sup>78</sup> Hoole, *Buses, Lorries & Autocars*, p. 62; *Returns of the Capital, Traffic, Receipts, and Working Expenditure, Etc. of the Railway Companies of Great Britain, for the Year 1923*: Table A.2: Financial Statements of Railways formed under Part I of the Railways Act, 1921: Account No. 11: Receipts and Expenditure in respect of Omnibuses and other Passenger Vehicles not running on the Railway; *Railway Returns, 1923-1927*: Table B.5: Revenue, Receipts and Expenditure of the Railway and Ancillary Businesses.

operate them; in 1925 the Beverley-Brandesburton bus was sold to the Newington Company; and 1927 the ex-GNoSR buses to Fraserburgh, Roseheartly and New Aberdour were sold to a local operator.<sup>79</sup>

Therefore, by 1928 railway officials recognised they needed to access the services of existing bus managers to efficiently administer the road component of an integrated transport network.<sup>80</sup> As Herbert Walker, the SR's General Manager, said, 'We are not busmen and we never will be. We want to employ the professionals to run our investment'.<sup>81</sup> This view was shared on the LNER, in 1929 Naisby emphasised the importance of 'securing the old [bus] management'.<sup>82</sup> This attitude is reflected by the structure of the LNER's first investments in outside bus companies after 1928. For a brief period, before negotiations with T&BAT were complete, the railway purchased shares in several medium-sized bus companies, as a potential alternative arrangement, and where possible arranged for previous managers to continue their involvement.<sup>83</sup> For instance, it was agreed with Messrs. O & C Holdsworth of Hebble Motor Services,<sup>84</sup> that they would remain in charge for a year after railway control began, with the LNER and LMS being able to extend this contract.<sup>85</sup> Furthermore, the railway placed these firms under the control of the ex-Great Central Railway cartage subsidiary, Thompson McKay, presumably to ensure they were managed by officials with experience in road operations (albeit on the freight side).<sup>86</sup>

---

<sup>79</sup> Hoole, *Buses, Lorries & Autocars*, pp. 14, 21; Vallance, *The Great North of Scotland Railway*, p. 171.

<sup>80</sup> Davies, 'Public Passenger Transport', p. 97.

<sup>81</sup> Walker quoted in Bonavia, *Railway Policy*, p. 101.

<sup>82</sup> Naisby, J.T., responding to Hornsby, Thos., 'Characteristic Features of the Transport Facilities of the North Eastern Area of the London and North Eastern Railway', *Journal of the Institute of Transport*, Vol. 10, No. 9, (July 1929), p. 435.

<sup>83</sup> Davies, 'Public Passenger Transport', p. 92; Chester, *Public Control of Road Passenger Transport*, p. 37.

<sup>84</sup> This company was later reclassified as a territorial.

<sup>85</sup> NA RAIL 390/57: Minute 10.

<sup>86</sup> Hughes, *LNER*, p. 126; NA RAIL 390/57: Minutes 2, 7, 11, 19.

Other factors influenced the LNER's decision to partner with the territorials. This investment offered the financially troubled LNER better value, for they could access the knowledge of experienced bus managers at a lower cost than by establishing their own services.<sup>87</sup> The LNER could avoid the expense of establishing a large vehicle fleet in a short time, a task most territorials had done gradually over at least a decade. One report about planned railway owned services revealed that ordering 60 buses would cost £72,380.<sup>88</sup> By comparison, the average size of the LNER's initial investment in each associated company, who already owned large fleets and the facilities needed to maintain them, was only £98,052 (calculated from the price paid by the LNER for its initial interest in each territorial, see table 1 in the next chapter). By November 1928, the LNER's Traffic Committee decided that 'coming to terms with local bus proprietors' was preferable to running 'services for which otherwise new buses would have to be put on by the Company'.<sup>89</sup>

The LNER also noted that private firms did not face the same staffing costs as the railway. A 1937 report complained that during the 1920s, the wages and working conditions of the workers on the buses inherited from the pre-grouping companies were 'subject to regulation', while private firms were free from such limitations.<sup>90</sup> Agreements between the railways and the unions meant railway workers were guaranteed an eight-hour day and 48 hour week, along with national standards for pay and conditions. Alternatively, the mostly unorganised bus workers, had before 1930

---

<sup>87</sup> Bonavia, *Railway Policy*, p. 99; Plummer, Alfred, *New British Industries in the Twentieth Century: A Survey of Development and Structure* (London, 1937), p. 135.

<sup>88</sup> Davies, 'Public Passenger Transport', p. 86; Jenkinson, Keith A., *Northern Rose: The History of West Yorkshire Road Car Co. Ltd* (Bradford, 1987), pp. 4-18; NA RAIL 390/728: Traffic Committee Memorandum dated 24<sup>th</sup> October 1928, p. 3.

<sup>89</sup> Chester, *Public Control of Road Passenger Transport*, p. 35; NA RAIL 390/728: Extract from the minutes of the Traffic Committee, dated 29<sup>th</sup> November 1928.

<sup>90</sup> Davies, 'Public Passenger Transport', p. 86; NA RAIL 393/68: Memorandum on Co-ordination of Passenger Road & Rail Services, 1937, p. 4.



tended to work longer hours, had no paid holiday, no guaranteed week, and the bus companies frequently used casual labour.<sup>91</sup> Lastly, the LNER wished to avoid the cost of developing consumer loyalty, with Naisby noting in 1929 that allying with existing bus firms meant 'the goodwill of the passengers' towards the incumbent operator could be maintained.<sup>92</sup>

Investing in existing bus firms also helped the LNER's public relations more widely by appeasing concerns about the Big Four using road powers to create a transport monopoly, for despite the effect road transport had on railway business, nineteenth century concerns about this survived.<sup>93</sup> As one Conservative MP argued in 1928 the 'Bill will give the railway companies the power to squeeze out every small motor-bus company'.<sup>94</sup> That these concerns influenced the LNER is illustrated by Wedgewood's reassurances in the *Railway Newsletter* in 1929 that 'there will not be, any all-round attack on the omnibus interests', as the railways had decided to enter into a 'partnership with existing road transport companies'.<sup>95</sup>

This policy was also made desirable by the restrictions Parliament inserted into the Road Powers Bill to allay fears about railway monopoly. The Big Four had to notify the Minister of Transport whenever they introduced a new bus route; could not withdraw services until a notice was published and objections heard; the charges and fares for the use of railway road services had to be kept for public inspection at railway stations

---

<sup>91</sup> Crompton, 'Efficient and Economical Working', p. 229; Temple, Richard, "A difficult and peculiar section': Provincial Bus Company Workers, 1934-47', *Labour History Review*, 78, 2 (2013), pp. 200-202.

<sup>92</sup> Sherrington, C.E.R., *The Economics of Rail Transport in Great Britain: Volume II: Rates and Services* (London, 1937), p. 292; Naisby, responding to Hornsby, 'North Eastern Area', p. 435.

<sup>93</sup> Bonavia, *Four Great Railways*, p. 157; Davies, 'Public Passenger Transport', pp. 86-87; Cain, 'Railways 1870-1914', p. 107.

<sup>94</sup> Hansard (Commons), fifth series, vol. 214, col. 315, 28<sup>th</sup> February 1928.

<sup>95</sup> Quoted in *The Times*, 1<sup>st</sup> January 1929, p. 9.

or depots; and interested parties could request that the Railway Rates Tribunal review these rates.<sup>96</sup>

Therefore, in October 1929 T&BAT agreed to allow the railways to purchase an interest in their subsidiaries, and a similar agreement was reached in Scotland with Scottish Motor Traction; an agreement had already been reached with the relatively smaller National group in February.<sup>97</sup> It should be noted that while the LNER invested in the territorials to construct a transport network that utilised both modes equitably, and respected the experience of their partner managers, the bus companies were less interested in co-ordination. They only agreed to partner with the railways because they perceived the Big Four to be more powerful than they were in reality. As United Automobile Services informed its shareholders in 1929, they should partner with the railway because they 'were faced with the possibility of keen competition' from LNER buses, even though the actual competitive threat from railway owned vehicles was weak.<sup>98</sup>

A few historians have claimed the Big Four were not interested in co-ordination when they decided to invest in bus transport. Savage and Barker argue that the Big Four were more concerned with the need 'to protect themselves from road competition' than with co-ordination.<sup>99</sup> Furthermore, Davies, in his study of the SR, claims that this railway was only interested in receiving a dividend from the territorials.<sup>100</sup>

However, these historians fail to realise that these factors were tied to the plan to implement co-ordination. The LNER did wish to restrict the development of

---

<sup>96</sup> Hibbs, *British Bus Services*, p. 100; Fenelon, *Transport Co-ordination*, pp. 76, 88-89.

<sup>97</sup> Hibbs, *British Bus Services*, pp. 100-104; Hibbs, John, 'Buses', in Simmons and Biddle, *Companion to British Railway History*, p. 62.

<sup>98</sup> Davies, 'Public Passenger Transport', p. 203; Chester, *Public Control of Road Passenger Transport*, pp. 35-36; BA B02119/017561: United Automobile Services: Letter dated 21<sup>st</sup> June 1929.

<sup>99</sup> Savage, C.I. and Barker, T.C., *An Economic History of Transport in Britain* (London, 1974), p. 167.

<sup>100</sup> Davies, 'Public Passenger Transport', pp. 169-170.

independent operators. This is illustrated by its request for the railway owned Emmerson's company to introduce a bus running alongside the Bellingham-Hexham railway in 1929 'to combat existing road competition'.<sup>101</sup> However, LNER officials did not wish to limit the growth of road transport itself, as illustrated by the finance provided by the railway to associated bus firms for improving bus services discussed in the next chapter. They just wanted it to be developed as part of their integrated transport network.

Likewise, it is true the LNER was interested in the dividends they would receive from the associated companies. In 1927, a York District report commented on how United Automobile Services had paid a dividend of 10 percent and were to carry forward around £19,000 into the next year. The LNER, on the other hand, was only able to pay its preferred stockholders a  $\frac{1}{4}$  percent dividend in 1928, while the deferred stockholders did not receive anything after 1925.<sup>102</sup> However, LNER officials believed profits could be increased *through* integration. For a start, railway buses would take business away from the independent buses. It was also hoped that the replacement of local trains with road services would lower costs, would offer a more flexible service to entice rural people to travel more, and would generate mainline revenue by linking more communities to the network.<sup>103</sup>

### **Conclusion**

This chapter has explained why LNER officials decided to replace local trains with buses in 1928. Their pre-grouping predecessors had longed recognised the benefits other modes offered for connecting their network to places beyond the reach of the

---

<sup>101</sup> NA RAIL 390/57: Minute 56.

<sup>102</sup> NA RAIL 390/2045/2: Report for 1927, p. 44; Bonavia, *Four Great Railways*, p. 178.

<sup>103</sup> *LNER Magazine*, Vol. 18, No. 9, p. 455.

tracks. Indeed, by the start of the twentieth century, they had begun using early motor buses as an alternative to expanding the rural railway network. Increased competition from road transport after 1918, with its low cost and cheap fares, led to the LNER trying to compete by adapting train services to provide some of the service benefits of buses. These included experimenting with railmotors, running regular interval services, and opening halts. However, the failure of these adaptations to compete effectively led to the LNER realising that buses offered a significantly superior local transport service, by being able to run closer to villages and town centres and by being better able to offer interval timetables. Therefore, they decided to replace local trains with railway owned road vehicles; with officials also thinking about how aeroplanes and lorries could provide a better service than trains in certain circumstances. Furthermore, LNER officials considered rail-bus substitution a “modern” idea because it had already occurred on American railways, and as they had internalised into their thinking intellectual ideas about the creation of a perfect transport network.

These theories about co-ordination emerged from the reconstruction ideals of the post-1918 period and from the rationalisation ideals influencing wider industry, and held that Britain’s transport network should be restructured so that each type of traffic was only carried on the most efficient mode. By being seen as leading this process, railway managers hoped they could retain their position in the new multi-modal transport environment, as it provided a means to withdraw loss-making local train services and offered a justification to halt the development of trunk coach services. The recognition of the technical superiority of buses on local routes, reinforced by the LNER’s comparison of its poorly performing directly controlled buses with the successes of the private operators, also helped railway officials gain respect for the expertise of existing bus managers. These men had in just over a decade established large bus fleets and

enough consumer loyalty to persuade Parliament to insert restrictions into the Railways (Road Powers) Act to protect bus firms against imagined railway domination. The LNER therefore decided to partner with the territorial bus companies to ensure that the buses intended to replace the local railway were managed properly. However, though recognising the technical benefits buses held over trains, the framing of the LNER's otherwise practical aims through the idealism of co-ordination theory, distracted officials from considering the more complex financial factors affecting the implementation of their plans.

## **CHAPTER 2: THE RESULTS OF THE LNER'S PARTNERSHIP WITH THE TERRITORIAL BUS COMPANIES**

### **Introduction**

This chapter will discuss what was actually done with regards to co-ordination. It will begin by discussing the successful elements of the railway's involvement in the territorial bus companies. The LNER invested in its associated bus companies to ensure their networks provided a suitable alternative to withdrawn local trains; and the growth encouraged by this railway finance enabled the LNER to receive an increasing dividend from the territorials. Likewise, some integration arrangements were successful, namely ticket interavailability, the provision of combined facilities for special passenger traffic, combined publicity, and some of the (admittedly more superficial) arrangements for buses to run to railway stations. A parallel policy, the provision of alternative lorry facilities for parcels and miscellaneous freight after the withdrawal of local trains, was also successful. Nevertheless, little was done with regard to applying the principles of modal specialisation in practice. The railway could not persuade its associated bus companies to curtail trunk coaches; and the LNER only cut a limited number of local train routes, even though these rail services generated a large loss and the railway had made a start on arranging alternative bus facilities to move passengers to mainline railheads, such as buses running to stations and through rail-bus tickets.

Overall, by 1938 the LNER had invested around £2.4 million in 15 territorial bus companies (see table 1). Overall, the Big Four held an interest in 19,500 buses out of the 41,500 in use in Britain, 47 percent of the total.<sup>1</sup> It should be noted that the Big

---

<sup>1</sup> Aldcroft, *British Railways in Transition*, p. 86.

Four did not purchase an interest in all operators belonging to the bus holding companies. The Potteries Motor Traction Company, for instance, remained outside Big Four control, presumably because this territorial suffered from financial difficulties caused by its tramway system being unable to compete with independent bus operators.<sup>2</sup> When the LNER purchased an interest in a territorial, it was agreed the railways shareholding would be equal to that of the owning combine, though the presence of external shareholders meant there was not always a 50/50 division. If two railways were involved in a territorial, they divided the railway holding between them, based on the length of each railway's network within the bus firm's area (see table 2 for details about the proportion of the shares held by the LNER in its bus companies).<sup>3</sup>

To enable the LNER and its associated bus companies to co-ordinate their networks, Standing Joint Committees were established, which met between one and four times a year. These Joint Committees were formed between the Big Four and each associated company, and were attended by two bus and two rail representatives. If two railways were involved in a territorial, one representative would be sent by each.<sup>4</sup>

A significant proportion of the next three chapters will be based on a case study of the LNER's relationship with the West Yorkshire Road Car Company. Founded as the Harrogate Road Car Co. Ltd in 1906 by a group of local businessmen, the firm initially operated buses around this town, but investment by Tilling and BAT after they purchased a controlling interest in 1924 enabled the company to expand, changing its name to West Yorkshire Road Car in 1927. Railway involvement was introduced to WYRC in 1930 when the LNER and LMS each brought a 24.9 percent shareholding

---

<sup>2</sup> Smith, Geoffrey K., *The Potteries Motor Traction Co Ltd: A Retrospective* (Glossop, 2011), p. 37; Hibbs, *British Bus Services*, p. 83.

<sup>3</sup> Davies, 'Public Passenger Transport', pp. 90, 98.

<sup>4</sup> *Ibid*; BA 028561, *passim*.

for £125,586, their combined interest being equal to T&BAT's 49.8 percent. The railways funded further growth, and by 1938 WYRC owned 14 depots at Bradford, Leeds, Harrogate, Keighley, York, Ilkley, Skipton, Malton, Grassington, Easingwold, Boston Spa, Wetherby, Pateley Bridge, Yeadon, and Scarborough (see Map 1). WYRC also agreed to operate buses on behalf of the town corporations in Keighley and York, with a committee being formed of representatives from the company and these corporations to manage the services, and entered the trunk coach and excursions business.<sup>5</sup>

Map 1: WYRC's Operating Area, 1938



Reference: Timetable WYRC July 1938, map.

<sup>5</sup> Jenkinson, *Northern Rose*, pp. 5-31; Plummer, *New British Industries*, p. 138; *Railway Returns*, 1930: Appendix 5: Road Transport: Statements of Accounts rendered under Sections 14 (2) and (3) of the Railway Companies' Road Transport Acts, 1928; Chester, *Public Control of Road Passenger Transport*, pp. 29-31; information about the excursions ran by WYRC can be found in the *Yorkshire Traffic Area: Notices and Proceedings* (YA N&P).



### **a) Financial Results**

On a purely financial basis the LNER's investment in the territorial bus companies was successful.<sup>6</sup> The data contained in table 3 shows the dividend paid to the LNER by its associated bus companies during the 1930s, and how much of the railway's total investment by 1938 had been earned back. While the LNER had not regained all the money it had invested, it had received a reasonable amount back in dividends, recovering an average of 72 percent of the finance given to all firms. As the size of the dividend received from the bus companies generally increased each year, it seems likely that if war and nationalisation had not intervened it would have taken less than five years for the LNER to have earned back its total investment, with better performing firms making up for the lower return received from some territorials. The bus dividends provided the LNER with a return of about 8 percent per annum, better than the 2.1 percent it received on its (admittedly larger) rail operation.<sup>7</sup>

While this profitability for the bus investments can be explained by low operating costs, and the convenience of bus travel for the public, the growth of this revenue was also aided by the LNER's bus development strategies.<sup>8</sup> The first way in which the railway helped the bus companies increase profits was through the rationalisation of the boundaries between the territorials to improve efficiency, as part of the agreement made when the LNER and the other railways purchased their part-ownership. As the LNER's Suburban and Road Transport Committee explained, this gave each firm 'a

---

<sup>6</sup> Davies, 'Public Passenger Transport', p. 198.

<sup>7</sup> The annual dividend earned by the LNER from its associated bus companies was calculated by dividing 72 percent by 9, with most railway shareholdings in territorials being purchased in 1930, though some were brought before and some after. For information about the return of the LNER's rail operation, see Crompton, Gerald and Jupe, Robert, "An Awkward Fence to Cross": Railway Capitalization in Britain in the Inter-war Years', *Accounting, Business & Financial History*, 12, 3 (2002), p. 447; for the absolute receipts earned by the various components of the LNER's business, see Hughes, *LNER*, p. 150.

<sup>8</sup> Bell, Robert, 'Transport Developments in 1936', *Journal of the Institute of Transport*, Vol. 18, No. 8, (June 1937), p. 337; Singleton, 'Ribble Motor Services', pp. 126, 128.

self-contained area of operation', and ensured their territories matched those of their partner railways.<sup>9</sup> The first rationalisation occurred in 1929 when the Big Four arranged for the National group to divide its nationwide operation into subsidiaries that matched the areas of each railway.<sup>10</sup> In 1931 there followed the railway backed merger of the Ortona Motor Company of Cambridge, the Peterborough Electric Traction Company, the Eastern Counties Road Car Company, and United Automobile Services's East Anglian operations, into the Eastern Counties Omnibus Company Limited, and the transfer of any United services in Lincolnshire to the Lincolnshire Road Car Company.<sup>11</sup>

In Scotland, between 1930 and 1932, the LNER and LMS encouraged Scottish Motor Traction to merge the various bus operations which they purchased around this time into three subsidiaries. Services in south-west Scotland were formed into Western SMT, those in Lanarkshire to Central SMT, while Alexander W & Sons Ltd covered the east of the country between the Forth and Inverness. Scottish Motor Traction itself, as well as being a holding company, continued to operate services directly south of the Forth.<sup>12</sup> Finally, the directly operated buses inherited by the LNER from the pre-grouping companies, and the firms controlled by Thompson McKay, were transferred to the territorials.<sup>13</sup>

More significant was the LNER's investment in the physical assets of the associated bus companies. As well as the initial share purchase, the associated firms received

---

<sup>9</sup> Chester, *Public Control of Road Passenger Transport*, pp. 38, 40; NA RAIL 390/57: Minute 106.

<sup>10</sup> Hibbs, *British Bus Services*, pp. 100-101.

<sup>11</sup> Heard, Mike, *United Automobile Services Limited: 80 Years of Service* (Queensbury, Bradford, 1992), p. 28; Wise, Graham, *Lincolnshire Road Car 75* (Sheffield, 2003), pp. 11-12.

<sup>12</sup> Hibbs, *British Bus Services*, pp. 185-186; Hunter, D.L.G., *From S.M.T. to Eastern Scottish: An 80<sup>th</sup> Anniversary Story* (Edinburgh, 1987), p. 52; NA RAIL 390/57: Minutes 129, 190.

<sup>13</sup> Chester, *Public Control of Road Passenger Transport*, p. 38; NA RAIL 390/57: Minutes 101, 128.

railway money throughout the 1930s by selling extra shares.<sup>14</sup> The LNER's total subscription to the associated companies increased by 66 percent from an initial £1,470,775 in the early 1930s to £2,436,220 by 1938 (see table 1). Of course, the LNER was not acting alone. When the LNER purchased extra shares, the owning combine had to buy an equal amount. Likewise, where the LNER and LMS held a joint interest, the extra shares would be split between the two railways, in proportion to the division of the railway holding.<sup>15</sup>

LNER finance enabled the associated companies to expand their revenue by purchasing independent operators (see table 4 for specific examples of the LNER providing money to the territorials for the purchase of independents).<sup>16</sup> Although there is no simple correlation between railway investment and territorial expansion, many associated bus companies did expand rapidly after the railway purchased its initial interest. WYRC purchased only 8 independents between 1924 and 1928, but after receiving railway money in 1929 it brought 21 independents in two years. There is also a correlation between the continued provision of extra LNER finance through the purchase of extra shares, and the extent to which the expansion of an associated firm was sustained throughout the 1930s. United Automobile Services, which received an extra £1,244,336 from the LNER after the initial investment in 1929, purchased 50 independents between 1931 and 1934, and 31 between 1935 and 1938. Alternatively, WYRC did not receive any additional railway money, and only purchased 10 independents between 1931 and 1936, and none after that, though the number of surviving competitors is unknown.

---

<sup>14</sup> Singleton, 'Ribble Motor Services', p. 126; Davies, 'Public Passenger Transport', pp. 100, 127-128.

<sup>15</sup> Davies, 'Public Passenger Transport', p. 184; NA RAIL 390/57: Minute 149.

<sup>16</sup> Singleton, 'Ribble Motor Services', p. 128.

There are exceptions; the inflow of LNER money did not change the rate at which East Yorkshire Motor Services brought independents, possibly because the independent operators in this area were reluctant to sell.<sup>17</sup> Likewise, a lack of railway involvement did not stop Potteries from purchasing 40 independents between 1927 and 1939 after its financial difficulties had been resolved.<sup>18</sup> However, this territorial would have indirectly benefitted from investment in expanding other T&BAT companies being shared with the Big Four, as this would have eased some of the pressure on the combines resources and helped Potteries receive funds.

Because of these acquisitions, between 1930 and 1935 the proportion of the total weekly bus mileage in the York District operated by non-railway associated bus companies declined from 51.1 percent to 38.85 percent.<sup>19</sup> Though LNER officials commented favourably on this trend, the acquisition policy was only intended to reduce competition from independent operators, not restrict the development of bus transport.<sup>20</sup>

Indeed, the LNER was prepared to invest in materially improving the associated bus services.<sup>21</sup> Vehicles received the largest proportion of this money (see table 5 for specific examples of the LNER providing money to territorials for the purchase of vehicles). Singleton's research reveals the LMS associated Ribble Motor Services almost doubled its fleet size after the railway purchased its interest, from 474 vehicles in 1928-29 to 803 in 1930-31.<sup>22</sup> LNER officials recognised fleet investment was

---

<sup>17</sup> Davies, 'Public Passenger Transport', p. 134.

<sup>18</sup> Smith, *Potteries*, p. 36; Hibbs, *British Bus Services*, p. 83.

<sup>19</sup> Davies, 'Public Passenger Transport', p. 204; NA RAIL 390/2045/4: Annual Report: York District Passenger Manager, 1931, p. 34; NA RAIL 390/2045/6: Report for 1935, p. 26.

<sup>20</sup> Singleton, 'Ribble Motor Services', p. 128; NA RAIL 390/954: Memorandum: Report on Results for the Year ended 31<sup>st</sup> December 1934, p. 1.

<sup>21</sup> Singleton, 'Ribble Motor Services', p. 126.

<sup>22</sup> *Ibid*, pp. 122-123.

important for maintaining passenger satisfaction. In 1930, they purchased £25,000 of extra shares in the North Western Road Car Company due to 'strong local considerations in support of...keeping the fleet up-to-date and ahead of actual requirements'.<sup>23</sup>

The expansion of the service offered by the associated companies was also assisted by the development of fixed infrastructure with LNER money. A wave of construction occurred in 1930 after the initial purchase of the railway's interest. WYRC built a new garage in York, and extended buildings in Keighley, Bradford, Leeds and Harrogate; Yorkshire (Woollen District) Electric Tramways brought land in Heckmondwike for £2,350, and authorised the expenditure of £8,200 for the construction of a new garage here; and Scottish Motor Traction was engaged in negotiations for the purchase of properties in Glasgow for £25,000, and planned to build a bus station on the site.<sup>24</sup> The LNER continued to fund investment in buildings during the rest of the 1930s (see table 5 for examples). The railway also sold land to its associated companies. This enabled WYRC to build a garage in Pateley Bridge station yard in 1930, open a bus station next to Harrogate railway station in 1935, and begin construction of a garage next to Malton railway station in 1944.<sup>25</sup>

As well as its investment in the territorials, the LNER, in conjunction with the LMS, also arranged to operate buses in conjunction with two municipal corporations, those in Sheffield and Halifax.<sup>26</sup> Due to the need to get around certain legal restrictions,<sup>27</sup> these

---

<sup>23</sup> NA RAIL 390/57: Minute 132.

<sup>24</sup> NA RAIL 390/837: Scottish Motor Traction Company Ltd: Report on Results for the Financial Period ended 31<sup>st</sup> October 1930, p. 2, West Yorkshire Road Car Co. Ltd: Preliminary Report on Results for Financial Year ended 31<sup>st</sup> December 1930, p. 2, Yorkshire (Woollen District) Electric Tramway Ltd: Preliminary Report on Results for the Financial Year ended 31<sup>st</sup> December 1930, p. 2.

<sup>25</sup> Davies, 'Public Passenger Transport', pp. 114-115; Jenkinson, *Northern Rose*, pp. 19, 27, 31, 37; BA 028558: West Yorkshire Road Car Co Ltd: Minute Book: No. 3: Minutes 1400, 1981, 3022.

<sup>26</sup> Chester, *Public Control of Road Passenger Transport*, p. 26.

<sup>27</sup> For more information about these restrictions, see *ibid*, pp. 26-27.

partnerships were organised with each party having total ownership of a portion of vehicles and routes. The railways ran routes running outside the corporation boundaries, the corporations ran routes that remained entirely inside the boundaries, and both parties jointly owned the vehicles and routes running outside the boundary for a short distance. The vehicles entirely owned by the LNER and LMS were the only buses to remain under direct railway ownership during the 1930s.<sup>28</sup>

These two railway-corporation partnerships are worth discussing briefly, for as the LNER was directly involved in decisions about expenditure in the Sheffield and Halifax operations, more detail is available about the thinking of railway officials with regards to their bus development strategies. Railway officials were highly engaged in improving the customer experience offered by its partner services, with the Suburban & Road Traffic Committee discussing how they should invest in new vehicles to provide more comfort, ease overcrowding, expand service levels, and open new routes. To achieve these aims LNER officials agreed to increase fleet size, replace single-deck buses with double-deck vehicles, provide buses with greater seating capacity, and replace corporation tramways with buses. LNER money was also used to help the corporations fund the transition from petrol to cheaper diesel vehicles. Overall, the LNER spent £73,856 in corporation fleets between 1930 and 1939.<sup>29</sup> That many of the railway's investments in both the territorial companies and the corporation fleets would help the buses compete against the railway, is consistent with a policy of preparing for the diversion of passenger traffic onto the roads.<sup>30</sup> However, on the

---

<sup>28</sup> Ibid, pp. 27-28; Bonavia, *Railway Policy*, p. 96.

<sup>29</sup> NA RAIL 390/57: Minutes 116, 124, 125, 140, 147, 160, 174, 175, 206, 215, 234, 235, 287, 302, 320, 321, 349, 355, 380, 397; Hibbs, *British Bus Services*, p. 148.

<sup>30</sup> Sheffield Joint Committee routes which competed with LNER and LMS lines include Sheffield-Barnsley, Sheffield-Chapelton, Sheffield-Penistone, Sheffield-Buxton, Sheffield-Barrow Hill, Sheffield-Chesterfield, Sheffield-Dronfield, Sheffield-Eckington, Sheffield-Gainsborough, Sheffield-Kiveton Park, Sheffield-Retford, Sheffield-Woodhouse, and Sheffield Worksop, *Sheffield Corporation Tramway and Motor Bus: LMS & LNE Railways- Motor Bus: Time Table: June-July 1938*, p. 165;

ground, it does not appear that the railway's investment in the bus companies led to much modal specialisation.

Table 1: Comparison of the LNER's subscription in bus undertakings between the first full year of railway involvement and 1938 (figures rounded to the nearest £).			
Company	First full year of railway involvement	1938	Percentage increase
Alexander W & Sons Ltd	£225,000 (1930)	£225,000	0%
Eastern Counties Omnibus Company Ltd	£211,335 (1931)	£231,068	9%
Eastern National Omnibus Company Ltd	£146,308 (1930)	£199,743	37%
East Midland Motor Services Ltd	£33,333 (1931)	£41,606	25%
East Yorkshire Motor Services Ltd	£100,170 (1930)	£120,411	20%
Hebble Motor Services Ltd	£12,500 (1932)	£12,500	0%
Lincolnshire Road Car Company Ltd	£17,321 (1930)	£68,357	295%
Northern General Transport Company Ltd	£415,958 (1930)	£349,440	-16%
North Western Road Car Company Ltd	£100,548 (1930)	£123,078	22%
Scottish Motor Traction Company Ltd	£100,000 (1929)	£241,209	141%
Trent Motor Traction Company Ltd	£48,367 (1930)	£74,664	54%
United Automobile Services Ltd	£389,718 (1929)	£514,054	32%
West Yorkshire Road Car Company Ltd	£125,586 (1930)	£125,592	Less than 1%
Yorkshire Traction Company Ltd	£65,068 (1930)	£65,070	Less than 1%
Yorkshire Woollen District Transport Company Ltd	£44,436 (1930)	£44,428	Less than -1%
Total	£1,470,775	£2,436,220	66%

References: *Railway Returns*, 1929, 1930, 1931, 1932: Appendix 5: Road Transport: Statements of Accounts rendered under Sections 14 (2) and (3) of the Railway Companies' Road Transport Acts, 1928; *Railway Returns*, 1938: Appendix 6: Road Transport: Statements of Accounts rendered under Sections 14 (2) and (3) of the Railway Companies' Road Transport Acts, 1928; the decrease in the size of the holding for Northern General and Yorkshire Woollen is probably caused by the LNER devaluing these two shareholdings at some point, which the SR did for the Aldershot and District Traction Company and East Kent Road Car, though Davies offers no firm suggestion about why this occurred, Davies, 'Public Passenger Transport', p.181.



Associated Territorial	Bus Holding Company	Percentage of Capital Belonging to Bus Holding Company	Percentage of Capital Belonging to LNER	Percentage of Capital Belonging to LMS (for firms in which this railway also held an interest)
Alexander W & Sons	Scottish Motor Traction	50%	25%	25%
Eastern Counties	T&BAT	27.6%	24.3%	3.3%
Eastern National	Thomas Tilling	50%	25%	25%
East Midland	T&BAT	50%	33.3%	16.7%
East Yorkshire	T&BAT	49.8%	49.8%	
Hebble	BET	50%	12.5%	37.5%
Lincolnshire Road Car	T&BAT	39.6%	31.7%	7.9%
Northern	BET	44%	44%	
North Western Road Car	T&BAT	49.8%	16.6%	33.2%
Scottish Motor Traction	N/A	N/A	25%	25%
Trent	T&BAT	41.2%	13.7%	27.5%
United	T&BAT	44.6%	44.6%	
West Yorkshire	T&BAT	49.8%	24.9%	24.9%
Yorkshire Traction	T&BAT	47.6%	23.8%	23.8%
Yorkshire Woollen	BET	50%	16.7%	33.3%

Reference: Plummer, *New British Industries*, pp. 136-138.

Table 3: Dividend received by the LNER from its associated bus companies, 1930-1938 (figures rounded to nearest £).

Company	1930	1931	1932	1933	1934	1935	1936	1937	1938	Total	Percentage of the LNER's total investment in bus companies by 1938 (see table 1) which had been earned back
Alexander W & Sons	£12,666	£25,000	£25,000	£25,000	£25,000	£25,000	£25,000	£25,000	£30,000	£217,666	97%
Eastern Counties	£5,397	£4,152	£4,076	£8,156	£8,162	£9,795	£11,427	£17,413	£25,736	£94,314	41%
Eastern National	£5,417	£10,000	£1,560	£13,375	£11,750	£11,865	£14,000	£20,375	£22,043	£110,385	55%
East Midland		£1,944	£3,333	£3,333	£3,333	£3,881	£5,208	£8,333	£8,621	£37,986	91%
East Yorkshire	£4,127	£6,348	£6,366	£6,944	£9,958	£11,949	£11,949	£19,915	£20,602	£98,158	82%
Hebble				£750	£1,250	£1,875	£1,875	£2,250	£2,250	£10,250	82%
Lincolnshire Road Car	£969	£1,857	£2,694	£3,171	£3,174	£3,772	£4,575	£5,593	£6,393	£32,198	47%
Northern	£13,420	£24,536	£25,293	£22,785	£25,237	£24,468	£24,382	£26,819	£32,915	£219,855	63%
North Western Road Car	£4,978	£9,397	£11,200	£9,333	£13,689	£12,444	£12,444	£18,874	£17,165	£109,524	89%
Scottish Motor Traction	£16,388	£19,122	£21,865	£25,610	£26,954	£22,498	£21,461	£21,461	£29,601	£204,960	85%
Trent	£1,466	£3,673	£3,685	£3,685	£3,685	£3,686	£4,265	£5,153	£6,561	£35,859	48%
United	£13,149	£18,898	£26,467	£26,548	£36,854	£41,197	£59,707	£67,919	£89,454	£380,193	74%
West Yorkshire	£2,487	£6,217	£7,461	£7,461	£9,326	£12,310	£14,268	£18,745	£24,697	£102,972	82%
Yorkshire Traction	£2,147	£3,988	£4,004	£4,004	£4,617	£5,844	£7,070	£8,296	£10,537	£50,507	78%
Yorkshire Woollen	£1,094	£2,923	£4,400	£3,667	£4,583	£6,083	£7,000	£8,556	£10,958	£49,264	111%
Total	£83,705	£138,055	£147,404	£163,822	£187,572	£196,667	£224,631	£274,702	£337,533	£1,754,091	72%

References: *Railway Returns*, London & North Eastern Railway Company: Financial Accounts and Statistical Returns: Part I: Financial Accounts: Table No. 8: Revenue Receipts and Expenditure of the whole Undertaking: 1931, 1932, 1934, 1935, 1936, 1937, 1938.

Year	West Yorkshire	Northern	United	East Yorkshire	Lincolnshire Road Car
1920	N/A	N/A	2	N/A	N/A
1922	N/A	N/A	4	N/A	N/A
1923	N/A	N/A	3	N/A	N/A
1924	2	1	1	N/A	N/A
1925	0	1	6	N/A	N/A
1926	3	0	8	4	N/A
1927	5	0	2	2	N/A
1928	5	1	11	3	2
1929	11 (introduction of railway involvement)	1 (introduction of railway involvement)	11 (introduction of railway involvement)	0 (introduction of railway involvement)	1 (introduction of railway involvement)
1930	10	5	19	1	1
1931	1	2	8	0	5
1932	3	1	8	2	3
1933	2	4	23	1	8
1934	2	6	11	0	13
1935	1	1	2	1	10
1936	1	1	9	0	8
1937	0	1	11	0	3
1938	0	0	9	0	7

References: Jenkinson, Keith A., *West Yorkshire* (Glossop, 1977), pp. 20, 145; Jenkinson, Keith A., and Staddon, S.A., *Northern and its Subsidiaries, 1913-1995* (Bradford, 1995), pp. 19, 136; Heard, *United*, pp. 20, 132-134; Jenkinson, Keith A., *Twixt, Wold, Carr & Coast: East Yorkshire Motor Services and its Associates* (Bradford, 1992), pp. 20, 11-27; Wise, *Lincolnshire Road Car*, pp. 8, 188.

Table 5: Major extra shares purchases by the LNER in the associated bus companies, and the reason why extra finance was required by the bus companies, 1930-1937

Year	Company	Proposed size of share increase	Why extra finance was required?
1930	North Western Road Car	£25,000	New vehicles
1931	Eastern National	£25,000	Purchase of independent firms.
1931	Scottish Motor Traction	£48,413	Purchase of independent firms.  New vehicles.  Construction of new garages and bus stations.
1931	Lincolnshire Road Car	£10,000	Purchase of independent firms.  New vehicles.  Construction of new garages.
1931	Scottish Motor Traction	LNER proposed to spend £350,000 on new shares in various Scottish Motor Traction subsidiaries, and to loan the company a sum of £200,000.	Purchase of independent firms.
1935	East Midland	£8,333	Purchase of independent firms.
1937	Eastern National	£18,750	Purchase of independent firms.  New vehicles.  Extending properties.
1937	Trent	£10,380	New vehicles.  Construction of new garages.

References: NA RAIL 390/57: Minutes 132, 149, 150, 168, 169, 270, 339, 346; *Railway Returns*, London & North Eastern Railway Company: Financial Accounts and Statistical Returns: Part I: Financial Accounts: Table No. 5: Details of Capital Expenditure, 1931.

### **b) Successful Integration Arrangements**

With regards to integration on-the-ground, the most successful arrangement was ticket interavailability. This enabled a passenger who made an outward journey on a train or associated bus to make their return journey on the other mode.<sup>1</sup> Its success can be explained by it providing clear benefits to both railway and bus companies and the public, without the complications of creating physical connections between the two networks. The only significant impediment concerned accident liability, but this only delayed the introduction of the arrangement with WYRC, not the other associated territorials, and can be explained by the personal qualms of this company's solicitors.<sup>2</sup> No problems occurred regarding the equalisation of fares where interavailable tickets were to be offered, for, as discussed below, both parties were glad to lessen competition.<sup>3</sup> Furthermore, once in operation the arrangement only required the two networks to accept each other's return tickets, and pay 50 percent of the cost of the tickets they collected to the issuing company.<sup>4</sup>

With regards to the benefits of interavailability, the most important was that it enabled competition between the LNER and WYRC to be minimised on medium-distance routes between towns within the same area (see table 6), which could not be

---

<sup>1</sup> Davies, 'Public Passenger Transport', p. 151.

<sup>2</sup> Ibid, p. 153; BA 028561: Minutes 11, 24, 35, 46, 102, 124, 143, 215; NA RAIL 390/2045/4: Report for 1930, p. 37.

<sup>3</sup> NA RAIL 390/1901: Passenger Managers Committee Minutes, Vol. 5, 1931-1932: Report to Chief General Manager: Rail and Road Co-ordination: Working of Standing Joint Committees, p. 8.

<sup>4</sup> Davies, 'Public Passenger Transport', p. 152; BA 028561: Minute 199.

designated as local or trunk journeys “belonging” to either trains or buses.<sup>5</sup> The facility was more rarely provided to the few villages whose local train service had been reduced (see chapter 4).<sup>6</sup> Another benefit of interavailability, noted by the WYRC Standing Joint Committee in 1930, was that it improved the attractiveness of the associated bus services where they still competed with independents.<sup>7</sup> This benefitted the LNER by drawing some bus users back to the trains.

The specific competitive advantages which interavailability provided can be identified by analysing the 1938 WYRC timetable. It appears WYRC used interavailability to increase the number of possible return services for passengers on routes where their buses only ran on an hourly interval. On the Leeds-Bardsey-Collingham Bridge-Wetherby corridor buses departed Leeds at 15 minute intervals, but the bus terminal for these routes was at the opposite side of the city centre to the railway station (see Map 2), and interavailability offered road passengers the option of returning by train if they finished their business near the station.<sup>8</sup> As interavailability provided clear passenger benefits on established town-to-town corridors it became the most used integration arrangement. For the LNER as a whole, 354,235 passengers used interavailability in 1937, which was available between 969 points.<sup>9</sup>

---

<sup>5</sup> Fenelon, *Transport Co-ordination*, p. 70; The same trend emerged where interavailability was provided with other associated companies, see the various timetables from these operators available at the Bus Archive.

<sup>6</sup> NA RAIL 390/1901: Minutes of Meeting of Unified Ticket Scheme Committee, held on 22<sup>nd</sup> and 23<sup>rd</sup> January 1931: Minute 141; BA 028561: Minute 239.

<sup>7</sup> Davies, ‘Public Passenger Transport’, pp. 155, 208; BA 028561: Minute 4.

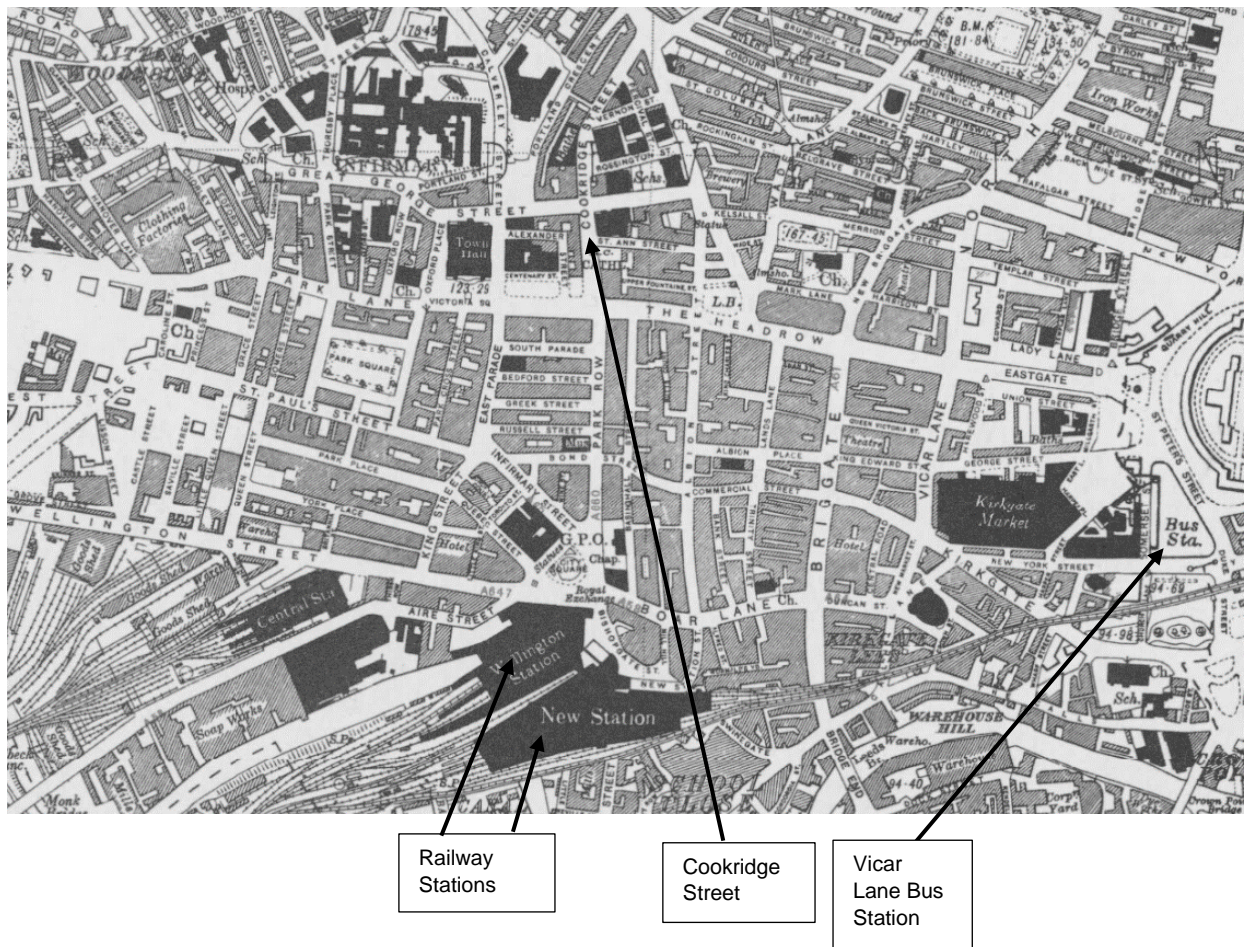
<sup>8</sup> Davies, ‘Public Passenger Transport’, pp. 152, 155; Timetable WYRC July 1938, pp. 35-39, 54, 60-64, 67-68, 80-81, 83-85, 113-118, 140-141.

<sup>9</sup> Davies, ‘Public Passenger Transport’, p. 152.

Table 6: Interavailability between the LNER and WYRC, 1936-1940.	
From	To
Harrogate	Leeds
	Wetherby
	Bradford
	Ilkley
	Otley
	Pateley Bridge
	York
	Boroughbridge
	Spofforth
	Hampsthwaite
	Birstwith
	Darley
	Dacre
Leeds	Wetherby
	Tadcaster
	Scholes
	Thornor
	Bardsey
	Collingham Bridge
Knaresborough	York
	Boroughbridge
York	Copmanthorpe

References: BA 028561: Minutes 199, 224, 232, 239.

Map 2: Location of railway and bus stations in Leeds, 1946.



Reference: 'Reproduced with the permission of the National Library of Scotland', Yorkshire CCXVIII.NW (includes: Leeds.) - Ordnance Survey Six-inch England and Wales, accessed at <https://maps.nls.uk/view/100947065> [17th August 2018].

Interavailability was also introduced on trunk routes in the early 1930s, as a stop gap while the LNER tried to persuade the territorials to withdraw their coach services. Here, the arrangement allowed coach ticket holders to return by train upon payment of a supplement.<sup>10</sup> It was introduced with Scottish Motor Traction between Edinburgh and Glasgow, with the Eastern Counties Omnibus Company between London and several towns in the East of England, and with East Midland Motor Services between London and Sheffield. As on medium-distance routes, trunk interavailability provided

<sup>10</sup> Ibid, p. 155.



clear benefits to customers and both companies. Passengers who had travelled outward on the cheaper coach services could take advantage of higher railway speeds if they wanted a faster journey home, with this proving popular. *The Times* reported in 1931 that 'five-out of seven' outward Sheffield-London coach passengers returned by train.<sup>11</sup> The Passenger Managers Committee noted that this gave the associated companies an advantage over independent coach operators, and by attracting passengers back to the trains, had been 'remunerative' for the LNER.<sup>12</sup>

Another successful integration arrangement was the rail-bus connections provided for special traffic. This can be defined as any *large* and *irregular* passenger movement requiring the railway to provide extra facilities. The temporary nature of special traffic integration arrangements meant they were unaffected by the same operational issues as the more permanent connections supporting intended rail-bus substitution. Furthermore, special integration facilities did not generally suffer from low demand, as they carried either an arranged number of passengers or a large traffic flow (though occasionally individual arrangements would not be as popular as expected)<sup>13</sup>.

The most important forms of special traffic rail-bus connection improved the service offered to leisure travellers. Firstly, party groups travelling on the railway could be supplied with first and last-mile bus transport. The associated companies provided this service 278 times in the York District in 1933, generating £1,838 1s 2d worth of receipts.<sup>14</sup> Secondly, special buses were run to enable residents of rural and suburban

---

<sup>11</sup> NA RAIL 390/1901: Working of Standing Joint Committees, p. 8; *Time Table: Complete for All Areas: 7th July to 14th Sept. 1937: Eastern Counties Omnibus Company Limited*, p. 111; *The Times*, 11<sup>th</sup> December 1931, p. 11.

<sup>12</sup> Davies, 'Public Passenger Transport', pp. 152-153, 155; NA RAIL 390/1901: Working of Standing Joint Committees, p. 8.

<sup>13</sup> BA 028561: Minutes 5, 81, 96, 99; NA RAIL 390/2045/5: Annual Report: York District Passenger Manager, 1932, p. 42.

<sup>14</sup> Davies, 'Public Passenger Transport', p. 60; NA RAIL 393/68, p. 7; NA RAIL 390/2045/5: Report for 1933, p. 44.

areas to travel on excursion trains departing before the ordinary bus service begun operating, and returning after it had finished. In general, these were popular, with the associated companies across the whole LNER operating 488 feeder services and carrying 7997 passengers to excursion trains in 1936, providing the railway with £2,038 in ticket sales.<sup>15</sup>

Thirdly, bus feeders linked special event grounds, such as agricultural shows, horse races, and the York military tattoo, to the stations (see table 7 for a list of these services). Though not serving leisure traffic, similar arrangements were made with United Automobile Services to carry soldiers between Catterick Camp and Richmond and Darlington stations on leave days.<sup>16</sup> Fourthly, combined bus-rail tours were operated. Some tours were arranged by the railway and bus companies and advertised to the general public. Examples include those around the Lincolnshire bulb fields operated by the Eastern Counties Omnibus Company in connection with excursion trains from London, and the bus operated from Harrogate to Bolton Abbey in conjunction with excursion trains. Other tours were arranged on an ad-hoc basis for private parties.<sup>17</sup>

Special integration arrangements also offered the LNER more flexibility in emergencies. The LNER and its associated companies agreed to carry each other's passengers if a bus broke down or the railway was blocked, a bill for the service being sent afterwards. In total, there were 286 cases of the LNER and the associated

---

<sup>15</sup> NA RAIL 390/1903: Passenger Managers Committee Minutes, Vol. 7, 1936-37: Minute 1647.

<sup>16</sup> Davies, 'Public Passenger Transport', p. 112; NA RAIL 390/2045/5: Report for 1933, p. 52.

<sup>17</sup> Hibbs, *British Bus Services*, p. 181; Jordan, Arthur & Elisabeth, *Away for the Day: The Railway Excursion in Britain, 1830 to the Present Day* (Kettering, 1991), p. 188; BA 028561: Minutes 229, 237; NA RAIL 390/1901: Minute 1164.

companies in the York District providing each other with emergency transport between 1931 and 1935.<sup>18</sup>

Table 7: List of special event bus feeder services operated in the LNER's York District, 1930-1935.		
Start Points (Railway Stations) and End Points (Special Events)	Operator	Dates of Operation
Richmond Station to encampments at Wathgill, Gendale and Catterick	United Automobile Services (presumed, operator not mentioned).	1930
Hull Station to Yorkshire Show	East Yorkshire Motor Services (presumed, operator not mentioned).	1930
Withernsea Station to Withernsea Show and Sports	East Yorkshire (presumed, operator not mentioned).	1930
Castleton Station to Castleton Agricultural Show.	United	1930-1931
Stokesley Station to Stokesley Show	United	1930 onwards.
Thirsk Station to Thirsk Races	United	1930 onwards.
Beverley Station to Beverley Races	East Yorkshire	1930 onwards.
York Station to York Races	West Yorkshire Road Car	1931 onwards.
York Station to York Military Tattoo	West Yorkshire	1932-1933
Middlesbrough Station and Yorkshire Show	Middlesbrough Corporation (non-associated operator, used due to United not being granted a service licence).	1933
References: NA RAIL 390/2045/4: Report for 1930, pp. 36-37, Report for 1931, p. 36, NA RAIL 390/2045/5: Report for 1932, p. 41, Report for 1933, p. 52; NA RAIL 390/2045/6: Report for 1934, p. 27, Report for 1935, p. 28.		

<sup>18</sup> Sherrington, *Economics of Rail Transport in Great Britain: Volume II*, p. 292; Davies, 'Public Passenger Transport', p. 112; BA 028561: Minute 19; NA RAIL 390/2045/4: Report for 1931, p. 37; NA RAIL 390/2045/5: Report for 1932, p. 42, Report for 1933, p. 53; NA RAIL 390/2045/6: Report for 1934, p. 27, Report for 1935, p. 29.

The LNER and its associated bus companies also issued much combined publicity. This focused on encouraging travellers to use the “most suitable” mode for each type of journey. To help bus passengers change onto the trunk railway, the departure times of mainline trains from important junctions were printed in associated timetable books and displayed at village bus stops, bus stations, depots, and waiting rooms, and LNER area timetable books were made available on associated vehicles and at depots. To aid railway passengers who needed connecting local buses, the LNER displayed bus timetables on poster boards at important junctions, and supplied 91 of these stations with reference copies of the timetables for all associated companies (small stations only held copies of the local bus timetable).<sup>19</sup> The LNER did not, however, print the times of individual rail-bus connections in its timetable books, due to problems with finding space for this information, the only reference to road transport usually being a little bus symbol next to stations where contact was made (though contact details were provided where buses did replace withdrawn train services).<sup>20</sup> The railway and its associated bus companies also arranged for their maps to illustrate both networks and the interchange points between them,<sup>21</sup> and published ‘Railway and Road-way Holidays’ guides, which helped passengers who had travelled to holiday destinations by train to tour the area using buses.<sup>22</sup>

---

<sup>19</sup> Davies, ‘Public Passenger Transport’, pp. 113-114; BA 028561: Minutes 3, 25, 43; Timetable WYRC July 1938, see insert at back; NA RAIL 393/68, pp. 9-10; NA RAIL 390/1902: Passenger Managers Committee Minutes, Vol. 6, 1933-1935: Minute 1419; *Railway Gazette*, 18<sup>th</sup> December 1931, pp. 785-786.

<sup>20</sup> Hibbs, *British Bus Services*, p. 287; BA 028561: Co-ordination Joint Sub-Committee Meeting, 3<sup>rd</sup> June 1947, Section H, clause i; NA RAIL 943/28: LNER Winter Time Tables: North Eastern Area: 26<sup>th</sup> September 1938 to 30<sup>th</sup> April 1939, passim; NA RAIL 943/26: LNER: East Coast Route, England & Scotland: Summer Time Tables, 5<sup>th</sup> July to 26<sup>th</sup> September 1937, passim.

<sup>21</sup> BA 028561: Minute 66; NA RAIL 943/28: LNER Winter Time Tables: 1938 to 1939, map; see the various associated bus timetables from LNER associated bus companies available at the Bus Archive.

<sup>22</sup> BA 028561: Minutes 25, 43; National Railway Museum: Inventory No. 2000-7626: LNER ‘Railway & Roadways Holidays’ No. 5, 1937, passim.

Likewise, the withdrawal of a few local passenger trains also meant alternative arrangements for the lorry conveyance of the parcels and miscellaneous freight previously carried by these services had to be made. This was done successfully,<sup>23</sup> despite Butterfield suggesting that concerns about this traffic were linked to non-withdrawals.<sup>24</sup> Indeed, the growth of the LNER's parcels cartage operation during the 1930s suggests they had no problems with joint rail-lorry parcels distribution.<sup>25</sup>

However, some of the integration arrangements were truly pointless. The form of physical rail-bus connection that was most common was the running of buses to intermediate railway stations on lines running parallel to the bus route, even though road passengers were unlikely to change mode when their vehicle was already heading to the same destination as the railway. Yet it became the most common form of physical rail-bus connection because it provided a quick means of demonstrating to the public that integration was happening. Examples of intermediate country stations being served by WYRC bus routes running parallel to the railway line include Dacre between Harrogate and Pateley Bridge; Wormald Green between Harrogate and Ripon; Spofforth between Harrogate and Wetherby; Ben Rhydding between Leeds and Ilkley; Bardsey between Leeds and Wetherby; Newtown Kyme between Wetherby and York; Copmanthorpe between Leeds and York; Ingrow between Bradford and Keighley, Goldsborough between York and Harrogate; and Sleights between Pickering and Whitby.<sup>26</sup>

---

<sup>23</sup> NA RAIL 390/61: LNER Traffic Committee Minute Book: No. 4: Minutes 1555, 1604, 1660, 1664, 1721, 1744; NA RAIL 390/62: LNER Traffic Committee: Minute Book No. 5: Minutes 2087, 2319.

<sup>24</sup> Butterfield, 'Branch Lines, Wayside Stations', p. 184.

<sup>25</sup> Aldridge, W.J., and Stevens, S.W., *Railway-Owned Commercial Vehicles* (London, 1999), p. 49; NA RAIL 390/64: LNER Traffic Committee Minute Book: No. 7: Minutes 3069, 3135, 3287, 3293.

<sup>26</sup> Hibbs, *British Bus Services*, p. 181; Davies, 'Public Passenger Transport', pp. 79, 211; NA RAIL 390/1901: Working of Standing Joint Committees, p. 4; Timetable WYRC July 1938, see map.

**c) Continued Development of Trunk Coach Services by the Associated Bus Companies**

The more unsuccessful elements of co-ordination, however, related to the withdrawal of “unsuitable” road and rail services in favour of the “more suitable” mode, which was supposedly the main aim of the railway’s investment in the territorials. Overall, the advantages the railways held for trunk journeys meant that while local customers were lost, the number of long-distance passengers rose during the interwar period. The total passenger miles travelled on the Big Four overall increased by 15 percent between 1923 and 1937, despite the decline in total passenger journeys.<sup>27</sup>

Indeed, during the interwar era there was an increase in demand for long-distance travel. This was caused by the growth in holidaying and, particularly relevant for the LNER, the migration of workers from the North to the South and Midlands and the return flow of these people to visit their families.<sup>28</sup> However, despite railways remaining the most common means of long-distance travel overall, the LNER was unable to fully benefit from this increased demand because of the growth of trunk coach services. These were able to compete as their lower staffing and infrastructure costs enabled them to offer cheaper fares.<sup>29</sup> Table 8 compares LMS fares on the West Coast Mainline with road fares, which are all lower than the rail price, except for some special cheap tickets available from certain stations on overnight trains. The LNER collected data about the impact of this competition, and statistics for routes competing with WYRC coaches are contained in table 9 (though independents also served these routes, as discussed in the next chapter, and the growth of private motoring would

---

<sup>27</sup> Butterfield, ‘Grouping, Pooling and Competition’, pp. 34-35.

<sup>28</sup> Smith, *The Railway and its Passengers*, pp. 128-135; Thurol, *Motoring Age*, pp. 89-110; Pollard, *Development of the British Economy*, p. 60.

<sup>29</sup> Chester, *Public Control of Road Passenger Transport*, p. 164.

also have had an impact). Between June 1932 and June 1933 ticket sales in the 'full fare' and 'other reduced' categories declined on all routes, and sales of 'day and half day' tickets decreased on half of the routes. It was only the success of the new seasonal 'summer' tickets (which extended the time allowed between an outbound and return journey to one month, and offered a discounted price) that caused total numbers to grow on all routes except London-Harrogate and Harrogate-Scarborough.<sup>30</sup>

Though trunk interavailability provided some means of mitigating competition from coaches, the LNER's preferred solution was to try to persuade its associated bus companies to curtail their long-distance services. These discussions initially occurred in the privacy of the Standing Joint Committees, but when WYRC ignored the LNER's opposition, the dispute had to move into the public forum of the Traffic Commissioners (TCs).<sup>31</sup> These were established by Parliament in 1930 to control the growing bus industry, and consisted of regional tribunals which issued licences for bus services. When making decisions they considered the suitability of the route, the service provided by existing companies, the public needs, the co-ordination of buses with other modes, and any objections received from other bus firms, local authorities, and the railways.<sup>32</sup>

---

<sup>30</sup> Bonavia, *Four Great Railways*, p. 99; Chester, *Public Control of Road Passenger Transport*, p. 133.

<sup>31</sup> Davies, 'Public Passenger Transport', p. 204.

<sup>32</sup> Aldcroft and Dyos, *British Transport: An Economic Survey*, pp. 356-357; Bagwell, *Transport Revolution*, pp. 250-251.

Table 8: Comparison of road and rail fares on the London-Warrington-Blackpool route, 1936.				
	Single		Return	
	Road	Rail	Road	Rail (Monthly Ticket)
London to:				
Coventry	9s 6d	11s 9d	15s 0d	15s 9d
Birmingham	10s 6d	13s 11d	16s 6d	18s 9d
Walsall	11s 0d	15s 2d	17s 6d	20s 3d
Cannock	12s 0d	16s 1d	20s 0d	21s 6d
Stafford	12s 0d	16s 9d	21s 0d	22s 6d
Newcastle-under-Lyme	13s 0d	18s 6d	22s 6d	24s 9d
Warrington	15s 0d	22s 10d	22s 6d	30s 6d*
Wigan	15s 0d	24s 3d	25s 0d	32s 6d*
Chorley	15s 0d	25s 4d	25s 0d	34s 0d*
Preston	15s 0d	26s 3d	25s 0d	35s 0d*
Lytham	15s 0d	27s 11d	25s 0d	37s 3d*
St. Annes-on-Sea	15s 0d	28s 3d	25s 0d	37s 9d*
Blackpool	15s 0d	28s 5d	25s 0d	38s 0d*
*Cheap return tickets at approximately the single fare were available for passengers travelling on certain night trains. The 1938 summer timetable for the West Coast Mainline reveals that the LMS only ran sleeping cars from London to Blackpool on Friday and Saturday nights, on other days of the week only ordinary coaches were provided for passengers on this route. Therefore, it seems that these cheap tickets were sold for passengers who were prepared to endure an overnight journey in ordinary seats in exchange for a lower fare.				
Reference: Chester, <i>Public Control of Road Passenger Transport</i> , p. 163; <i>Bradshaw's Railway, Shipping and Hotel Guide for Great Britain and Ireland: July 1938</i> (reprint, Newton Abbot, 1969), pp. 412-413.				

Nevertheless, the railway's objections failed. When the Yorkshire Area Traffic Commissioners (YA-TC) first sat in 1931 the LNER tried to have WYRC's existing Leeds-Scarborough, Leeds-Bridlington, and Leeds-Hull buses withdrawn (despite agreeing to drop this opposition at the Standing Joint Committee a month before the *TC Notices and Proceedings* were published), but the services continued to operate.<sup>33</sup> Later attempts to prevent WYRC from expanding their trunk operation also failed. Despite LNER objections in the Joint Committee and YA-TC, the bus company moved

<sup>33</sup> YA N&P, No. 13, 3<sup>rd</sup> July 1931, p. 20; BA 028561: Application to Area Commissioners, 9th June 1931, services B762 to B778; Timetable WYRC July 1938, pp. 69-73, 76-79.



the start point of a Bradford-Scarborough coach to Keighley in 1931,<sup>34</sup> created a Leeds-Whitby route with United Automobile Services by joining up two shorter journeys in 1934,<sup>35</sup> and in the same year extended a Redcar-Middlesbrough-Leeds coach to Liverpool.<sup>36</sup> Neither was LNER opposition in 1931 and 1932 able to stop WYRC from running long-distance excursions, which collected passengers from set pickup points and took them to a variety of locations. In 1938 the bus company continued to run excursions from Malton, York, Leeds, Shipley, Bradford, and Harrogate to seaside resorts (Whitby, Rhyl, Southport, etc.), football matches (Manchester, St Helens, Sheffield, etc.), and racecourses (Catterick, Redcar, Stockton, etc.).<sup>37</sup>

---

<sup>34</sup> YA N&P, No. 7, 22<sup>nd</sup> May 1931, p. 9; No. 13, p. 21; No. 51, 1<sup>st</sup> April 1932, p. 26; *West Yorkshire Road Car Co Ltd: Motor Bus Time Table: From July 18<sup>th</sup> to September 30<sup>th</sup>, 1932*, p. 116 Q.

<sup>35</sup> BA 028561: Minutes 128, 141.

<sup>36</sup> NA RAIL 390/2045/6: Report for 1934, p. 26; YA N&P, No. 131, 3<sup>rd</sup> November 1933, p. 27; BA 028561: Minute 108.

<sup>37</sup> BA 028561: Application to Area Commissioners, 9th June 1931, services B795, B796, B797, B798, Minute 42; YA N&P, No. 41, 22<sup>nd</sup> January 1932, pp. 11-14; No. 333, 11<sup>th</sup> March 1938, pp. 46-56.

Table 9: LNER third class trunk passenger traffic between selected stations in June 1932 and 1933.

	Full Fare		Excursion and Summer Tickets						Other Reduced		Total			
			Day and Half Day		Period		Summer Tickets							
	1933	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933	1932	Increase (+) or Decrease (-)	%
London-Bradford and return	372	1,428	1,958	2,546	194	312	2,583	-	195	974	5,302	5,260	+42	+0.8%
London-Doncaster and return	454	1,019	2,070	2,406	-	318	2,572	-	213	783	5,309	4,526	+783	+17.3%
London-Leeds and return	853	3,315	4,311	3,941	636	787	8,186	-	623	2,835	14,609	10,878	+3,731	+34.3%
London-Harrogate and return	454	1,369	193	754	-	355	2,145	-	169	582	2,961	3,080	-119	-3.9%
London-Hull and return	828	2,387	3,819	2,347	-	1,030	4,762	-	511	2,046	9,920	7,810	+2,110	+27%
London-Scarborough and return	237	752	409	519	-	817	2,078	-	194	566	2,918	2,654	+264	+9.9%
London-York and return	488	1,535	557	974	491	546	2,601	-	639	1,245	4,776	4,300	+476	+11.1%
Harrogate-Scarborough and return	65	130	1,790	2,196	-	248	502	-	248	350	2,605	2,924	-319	-10.9%
Hull-Leeds and return	751	2,058	1,820	872	-	286	4,938	-	2,595	6,005	10,104	9,221	+883	+9.6%
Leeds-Darlington and return	98	262	518	396	-	24	752	-	319	533	1,687	1,215	+472	+38.8%
Leeds-Newcastle and return	329	910	3,562	3,200	-	164	1,762	-	269	1,069	5,922	5,343	+579	+10.8%
Leeds-Scarborough and return	303	446	18,356	10,116	-	1,296	5,038	-	1,259	1,806	24,956	13,664	+11,292	+82.6%

Reference: NA RAIL 398/22: Road Motor Competition: Comparative Statements of Passenger Journeys between London and Selected Stations, 1932-1933, June Tables A, B, and D.

#### **d) Non-withdrawal of Local Trains**

The most significant part of the LNER's plans for diverting traffic to the "most suitable" mode, however, was the withdrawal of local trains in favour of the roads. Local train routes generated significant losses for the LNER's network, and the case for replacing them with railway owned buses was incredibly strong. The issue of loss-making lines did not begin with the growth of road competition, even in the nineteenth century rural railways were unremunerative. Irving's research reveals that in 1897, out of nine selected NER branch lines, seven made a loss, one broke even and only one was profitable.<sup>1</sup>

Many rural railways were built not for profit, but because they were financially supported by local citizens to serve their provincial needs, or because the larger networks wanted to prevent competing railways from encroaching on their territory. For instance, the Pateley Bridge and Masham branches were only built by the NER after local people raised a portion of the necessary finance and sold the land required at cheaper prices. Likewise, the NER purchased the loss-making Bedale & Layburn Railway in order to prevent the competing Stockton & Darlington Railway from buying the line.<sup>2</sup> The pre-grouping railways were similarly reluctant to open too many intermediate stations on mainlines, and public pressure also had to be exerted on the companies to provide these stations.<sup>3</sup> Once open, however, Irving notes that before 1914 rural lines and stations were at least 'quite busy and provided a genuine service

---

<sup>1</sup> Irving, R.J., 'The Branch Line Problem in British Railway History: The Financial Evidence from North-East England', *The Journal of Transport History*, 14, 1 (1993), pp. 27, 41.

<sup>2</sup> Ibid, p. 27; Simmons, Jack, *The Railway in England and Wales, 1830-1914: Volume 1: The System and its Working* (Leicester, 1978), p. 108; Rogers, James, *The Railways of Harrogate and District* (2000), pp. 77, 95; Parris, H.W., 'Northallerton to Hawes: A Study in Branch-Line History', 2, 4 (1956), p. 243.

<sup>3</sup> Simmons, Jack, *The Railway in Town and Country: 1830-1914* (Newton Abbot, 1986), pp. 323-325.

to their local communities'; the nine branch lines studied by him carried 850,000 passengers in 1897.<sup>4</sup>

Unsurprisingly, the financial situation of local trains worsened after the growth of road transport during the interwar period. At 15 selected rural stations in Yorkshire between 1923 and 1934 the total number of passengers travelling fell by 72 percent from 171,888 to 48,526, and passenger receipts from £12,712 to £3,129 (see table 10). By 1938, Butterfield has found that the more numerous small stations generated a very low proportion of passenger revenue, 53 percent of all North Eastern Area stations earned only 1.9 percent of passenger revenue, while 80 percent was generated by forty-one large stations.<sup>5</sup> Furthermore, he estimates that a very low number of passengers used each train stopping at each station on rural lines (see table 11). For example, only 0.41 passengers boarded each train at each intermediate station on the York-Knaresborough line in 1938.

The problems of low usage were compounded by the heavy fixed costs of railway operation. Table 12 reveals that, while passenger, parcels and mail traffic on the Bradford-Shipley branch earned £6,055 in 1930, the operation of passenger trains on the line needed an estimated £7,366 per annum for track maintenance, stations and signalling, running and maintaining steam locomotives and carriages, covering wages and providing uniforms for guards, station staff and signaller, and ensuring stations were heated, lighted, and stocked with stationary. Of the 14 local routes studied by Butterfield, on only 5 routes did the combined passenger and goods revenue cover their operating and maintenance costs in 1938 (see table 13), and they were only able to do so because of one particularly heavy traffic flow. On the Tees Valley and Wear

---

<sup>4</sup> Irving, 'Branch Line Problem', p. 36.

<sup>5</sup> Butterfield, 'Branch Lines, Wayside Stations', p. 181.

Valley lines it was aggregate traffic, on the Wensleydale branch it was milk traffic, on the Gilling and Pickering branches it was because of the movement of racehorses from nearby stables, and on the Richmond branch it was military traffic.<sup>6</sup>

Station	Passengers booked		Passenger receipts	
	1923	1934	1923	1934
Beningbrough	9668	712	£780	£41
Bardsey	18,923	4442	£1367	£247
Burley	16,090	3775	£1416	£392
Goldsborough	6132	961	£504	£52
Bolton Percy	7718	5044	£620	£315
Copgrove	7237	1481	£457	£92
Copmanthorpe	12,002	5418	£577	£148
Dacre	14,687	3787	£1368	£331
Nafferton	18,820	10,880	£1252	£632
Newton Kyme	8319	1295	£709	£168 (the data for this station had to be taken from 1933)
Wormald Green	13,203	1358	£1337	£174
Pannal	24,029	5662	£1236	£350
Cherry Burton	4368	1384	£416	£103
Warthill	4881	714	£366	£32
Naburn	5811	1613	£307	£52
Total	171,888	48,526	£12,712	£3,129

Reference: NA RAIL 398/293: Station Traffic Book, 1910-1939.

<sup>6</sup> Hoole, Ken, *A Regional History of the Railways of Great Britain: Volume IV: The North East* (Newton Abbot, 1986), pp. 136, 108; Butterfield, 'Branch Lines, Wayside Stations', pp. 185-186; NA RAIL 390/2044/8: Divisional Passenger Managers Newcastle District Annual Report, 1937, p. 25.

Table 11: Number of passengers using each train stopping at each station on selected North Eastern Area rural railway routes, 1938.			
Routes	No. of stations	Passengers booked	Passengers booked for each train stopping
Tees Valley Branch	4	18,040	1.28
Wear Valley Branch	9	30,966	0.89
Wensleydale Branch	15	25,718	1.62
Gilling-Pickering	5	17,209	1.37
Pickering-Seamer	6	8,504	0.57
Whitby-Loftus	5	14,760	0.85
Intermediate stations York-Darlington (except Thirsk and Northallerton)	10	16,356	0.64
Alnmouth-Tweedmouth (except Chathill and Belford)	8	12,033	0.43
York-Beverley (except Market Weighton and Pocklington)	9	10,740	0.50
York-Knaresborough	7	10,300	0.41
Selby-Driffild (except Market Weighton)	11	11,332	0.61
Barnard Castle-Penrith/Tebay	15	28,082	0.73
Picton-Battersby	5	5,692	0.38
Durham-Scotswood (except Blackhill)	10	70,444	0.56
Ferryhill-Bishops Auckland	3	10,404	0.90
Tweedmouth-Kelso	7	11,185	0.67
Alston Branch	5	27,776	1.64
Richmond Branch	4	56,546	2.37
North Wylam Branch	4	189,528	2.99
Reference: Butterfield, 'Branch Lines, Wayside Stations', p. 183.			

Table 12: Revenue and estimated operating expenses on selected North Eastern Area branch lines, 1938

Line	Revenue				Estimated Expenses					Profit (+) or loss (-)
	Passenger	Coaching	Goods	Total	Trains		Other expenses			
					Passenger	Goods	Station Expenses	Maintenance	Total	
Tees Valley Branch	£2,303	£2,987	£15,410	£18,397	£3,499	£548	£2,447	£1,750	£8,244	+£10,153
Wear Valley Branch	£3,164	£4,360	£77,448	£81,808	£7,074	£2,567	£7,412	£4,400	£21,453	+£60,355
Wensleydale Branch	£6,641	£42,655	£52,850	£95,505	£11,273	£4,476	£12,960	£6,800	£35,509	+£59,996
Gilling-Pickering	£4,962	£7,285	£11,393	£18,678	£4,656	£1,174	£4,593	£3,750	£14,173	+£4,505
Pickering-Seamer	£1,634	£2,691	£5,402	£8,093	£4,382	£1,252	£3,914	£3,350	£12,898	-£4,805
Intermediate stations York-Darlington (except Thirsk and Northallerton)	£1,654	£2,812	£3,744	£6,556	£4,820	£2,754	£5,810*		£13,384	-£6,828
Alnmouth-Tweedmouth (except Chathill and Belford)	£1,336	£3,165	£6,325	£9,490	£9,346	£2,003	£7,528		£18,877	-£9,387
Selby-Driffield (except Market Weighton)	£1,175	£2,227	£8,452	£10,679	£5,642	£1,941	£5,488	£4,600	£17,671	-£6,992
Barnard Castle-Penrith-Tebay	£3,902	£6,792	£19,338	£26,130	£14,578	£5,509	£11,505	£12,000	£45,592	-£19,462
Tweedmouth-Kelso	£1,133	£3,121	£4,416	£7,537	£5,477	£1,377	£3,848	£4,400	£15,102	-£7,565
Durham-Blackhill-Scotswood (except Blackhill)	£3,746	£4,976	£12,802	£17,778	£13,349	£1,628	£8,000	£5,200	£28,177	-£10,399
Alston Branch	£1,973	£2,714	£2,639	£5,353	£4,272	£814	£2,260	£2,600	£9,946	-£4,593
Richmond Branch	£23,924	£29,563	£11,817	£41,380	£9,350	£1,298	£5,622	£1,950	£18,220	£23,160
North Wylam Branch	£8,334	£9,460	£6,144	£15,604	£14,888	£344	£3,146	£1,100	£19,478	-£3,874

\*50% of the total estimate, because it was on the mainline the cost of the extra signalman required have been excluded.

Reference: Butterfield, 'Branch Lines, Wayside Stations', p. 189.

Table 13: Estimated annual cost of running passenger trains on the Bradford-Shipley branch, 1930.	
Description	Amount
<i>Maintenance of Way</i>	
Permanent Way	£240
Stations and Buildings	£153
Signalling	£130
<i>Train Running Costs</i>	
Locomotive Running Expenses	£3,169
Locomotive Maintenance	£1,276
Maintenance of Carriages (including Lighting and Lubrication)	£232
Guards Wages	£360
<i>Station Costs</i>	
Clerks	£255
Signalmen	£568
Porters	£727
Fuel, Lighting, etc.	£223
Clothing	£14
Printing, Stationary, etc.	£19
Total Cost	£7,366
<i>Total Revenue from Carriage of Passengers, Parcels and Mails</i>	£6,055
Reference: NA RAIL 393/33: Report of Departmental Committee on Branch Lines: Bradford & Shipley Branch, 8 <sup>th</sup> July 1930, pp. 3-4.	

There were two types of service withdrawal being intended by the LNER. The first was the ending of local passenger services on rural branch lines, where these trains were the only passenger workings. The second was the withdrawal of local passenger trains calling at intermediate country stations on mainlines, where the faster services which shared the tracks would continue running. This latter type of withdrawal, as well as saving the cost of running these trains and maintaining the stations to passenger standards, also had the benefit of allowing for the speeding up of fast trains and increasing the line capacity available for these services.<sup>1</sup>

<sup>1</sup> Fenelon, *Transport Co-ordination*, pp. 75-76; It should be noted that most stations that lost their passenger service continued to handle goods traffic for many years, NA RAIL 390/61: Minutes 1622, 1623, 1660, 1661, 1664, 1721, 1741, 1742, 1744; NA RAIL 390/62: Minute 1902.



The withdrawal of local trains on mainlines was only done in one case, however, to the stopping service on the York-Scarborough line. This, as well as saving running costs of £3,619 (a higher amount than most of the savings from branch lines, probably due to the greater number of stations, see table 16), also enabled a significant number of fast trains carrying holidaymakers to the coast to run over the route on summer Saturdays.<sup>2</sup> On Saturdays in July 1922 there were only 11 fast York-Scarborough and 12 fast Scarborough-York trains, due to the line being shared with 9 eastbound and 7 westbound all-stations and limited stop services. The withdrawal of intermediate stations enabled 30 York-Scarborough and 29 Scarborough-York fast services, many of which ran to or from destinations beyond York, to be run over the route on Saturdays in July 1934.<sup>3</sup> Yet other mainline routes, even the east coast mainline, did not face the same intensity of traffic as the York-Scarborough line did during the holiday season. Therefore, for the LNER, the main priority for deciding if withdrawals should be made to other country stations on mainlines and on rural branches, was whether buses could provide an adequate connection to the mainline for trunk passengers starting their journeys from the route of the abandoned passenger trains.

The LNER did start to substitute local trains with buses, with arrangements being made in each case for the replacement bus to run to a mainline railhead.<sup>4</sup> There was also a secondary interest in using associated buses to link places that had always been unserved by the railways to stations, though this was not discussed as much as

---

<sup>2</sup> Butterfield, 'Branch Lines, Wayside Stations', p. 33; Davies, 'Public Passenger Transport', p. 139.

<sup>3</sup> Fast trains include those which called at Malton or Seamer, as these stations were not closed in 1930 (due to Malton being a town and Seamer being a junction for the line to Filey, Bridlington and Hull), and are still open today. Limited stop trains are services which called at least one of the country stations on the route, or skipped at least one while calling at the majority; Bradshaw's July 1922, p. 758; LNER Time Tables: North Eastern Area: 9<sup>th</sup> July to 30<sup>th</sup> September 1934, p. 31, accessed at <https://timetableworld.com/ttw-viewer?token=66d160cc-d943-40f6-be38-842d1602845c> [22<sup>nd</sup> April 2021].

<sup>4</sup> Bonavia, *History of the LNER II*, p. 68.

the rail replacement services.<sup>5</sup> In some cases, a connection was made between specific bus and rail services. Examples that replaced withdrawn train-train connections were found at Ripon station with a United Automobile Services bus from Masham; at Hexham station with a United bus from Allendale; and at Southwold station with an Eastern Counties bus from Halesworth. Connections from places where there had not been a railway service were offered at Luton with an Eastern National bus from Whipsnade; and in Scotland at Musselburgh station with a Scottish Motor Traction bus from Elpinstone.<sup>6</sup> Through tickets, which enabled passengers to travel by rail to a certain point, and then continue their journey by bus, or *vice versa*, were also provided as direct replacements for the long-distance tickets previously issued to and from some of the rural stations which were closed (see Table 14).<sup>7</sup>

A more general type of rail-bus connection, which did not replace specific local train routes but did create an alternative means of reaching mainline railheads in readiness for withdrawals, was the development of rail-bus 'traffic centres'. Davies, the Chief Commercial Manager of the LMS, described these as 'central railway stations', being used as the main bus terminal for their city. These hubs would enable stopping trains to be withdrawn, and replaced with buses running to these focal points, where passengers could transfer to the mainline railway.<sup>8</sup> York and Norwich provide early examples of this being done. A start on centralising bus routes at stations was made elsewhere. In the WYRC area, apart from the York centre, another hub was created

---

<sup>5</sup> One example of success here was the running of most York suburban buses to York station, though as discussed in the next chapter difficulties did occur with connecting rail replacement buses to this station, Timetable WYRC July 1938, pp. 182-200.

<sup>6</sup> Fenelon, *Economics of Road Transport*, p. 106; NA RAIL 390/1901: Working of Standing Joint Committees, p. 5; the Southwold bus did not serve a former LNER route, but that of the independent narrow gauge Southwold Railway, which closed in 1929, Paye, Peter, *The Southwold Railway* (Lydney, 2018), p. 95.

<sup>7</sup> Fenelon, *Transport Co-ordination*, p. 76; Davies, 'Public Passenger Transport', p. 143.

<sup>8</sup> Fenelon, *Transport Co-ordination*, p. 99; Davies, 'Co-ordination of Transport', pp. 257-258.

Table 14: Through rail-bus tickets issued for use on LNER trains and connecting WYRC services, 1936-1937.		
Train Portion	Bus Portion	Replaces
By train from Middlesborough, Thornaby, Darlington, Northallerton, Thirsk, Selby, or Hull to York.	By bus from York to Haxby, Strensall or Wilburn Lodge (for Castle Howard).	Intermediate stations on the York-Scarborough line.
By train from Selby and York to Malton.	By bus from Malton to Rillington, Sherburn, and Ganton.	Further intermediate stations on the York-Scarborough line.
By train from Leeds, Horsforth, Bradford, Ripon, and York to Pateley Bridge.	By bus from Pateley Bridge to Wath, Ramsgill, Lofthouse, Middlesmoor and Scare	The passenger service on the independent Nidd Valley Light Railway.
References: BA 028561: Minute 200; Croft, D.J. <i>The Nidd Valley Light Railway</i> (Oxford, 1987), p. 36.		

when the associated company opened a new bus station on LNER land next to Harrogate railway station in 1938.<sup>9</sup> In Leeds, some local WYRC routes used a bus station in Wellington Street, near the LNER and LMS joint station, though the majority continued to terminate in Cookridge Street or at Vicar Lane bus station. In Bradford, no WYRC buses from the area served by the LNER made contact with their Exchange station, but more services did serve the LMS's Foster Square station. However, many of these buses took a different route when travelling into or out of the city, and therefore only made contact in one direction.<sup>10</sup>

Nevertheless, the railway effectively abandoned rail-bus substitution after only a few lines were withdrawn.<sup>11</sup> By 1931 the LNER had cut passenger services on 309½ miles of line, closed 128 stations to the public, and saved at least £58,763 (see table 16).

<sup>9</sup> Davies, 'Public Passenger Transport', p. 111; NA RAIL 390/1901: Working of Standing Joint Committees, p. 3; Jenkinson, *Northern Rose*, pp. 27-31.

<sup>10</sup> Timetable WYRC July 1938, pp. 41, 46-104, 140-141, 143, 151-156.

<sup>11</sup> Davies, 'Public Passenger Transport', p. 206.

The lines which were withdrawn tended to be the most hopeless routes.<sup>12</sup> The average passenger and parcels revenue for 15 selected lines that did lose their passenger trains was only £3,244 a year (see table 15). However, the LNER soon abandoned further closures altogether, a Traffic Committee memorandum issued in 1934 stating 'it is not considered that there are many cases left where the company will benefit by cancelling services'.<sup>13</sup> Local train routes in the York District mooted for withdrawal but which continued to operate included the Scarborough-Saltburn, Scarborough-Pickering, and Hull-South Howden lines, and the intermediate stations between York and Doncaster, Scarborough and Hull, York and Hull, Selby and Bridlington, and Beningbrough and Croft Spa on the East Coast Mainline.<sup>14</sup>

Table 15: Annual passenger and parcels revenue on LNER local train services before withdrawal, services withdrawn on various dates between 1930 and 1933	
Wakefield-Barnsley	£2036
Stoke Ferry Branch	£2694
Somerset-Ramsey	£1805
Bourne-Sleaford	£1619
Ely-St Ives	£7562
Mellis-Eye	£2917
Bradford-Shipley	£6055
Holme-Ramsey	£5528
Leen Valley Branch	£6580
Stockton-Wellfield	£1027
Leslie Branch	£686
South Howden-Cudworth	£1544
Dolphinton Branch	£3476
Glencorse Branch	£1868
Gifford Light Railway	£3261
References: NA RAIL 390/61: Minutes 1657, 1660, 1661, 1664, 1741, 1742, 1744, 1745; NA RAIL 390/62: Minutes 1873, 1902, 1909, 1945, 2164, 2204, 2205.	

<sup>12</sup> Smith, *The Railway and its Passengers*, p. 88; Davies, 'Public Passenger Transport', pp. 140, 142-143, 144, 146, 206; Butterfield, 'Branch Lines, Wayside Stations', p. 192.

<sup>13</sup> Quoted in Butterfield, 'Branch Lines, Wayside Stations', p. 193.

<sup>14</sup> NA RAIL 390/2045/3: Report for 1929, p. 33; NA RAIL 390/2045/4: Report for 1930, p. 33; NA RAIL 390/2045/5: Report for 1933, p. 46; Bradshaw's July 1938, pp. 926, 938-941, 944, 953.

Table 16: Savings made by replacing local passenger trains with buses by 1931.

	Year Closed	Mileage	Number of Stations	Estimated Annual Saving	Company Operating Replacement Bus Service
Stamford-Wansford (closed for passenger and freight traffic)	1929	8½	3	£2,750	Eastern Counties Omnibus Company
South Yorkshire Joint Railway (with LMS)	1929	19½	4	£1,200 (3 fifths of total saving)	East Midland Motor Services
Bourne-Sleaford	1930	17½	4	£435	Lincolnshire Road Car
Downham-Stoke Ferry	1930	7	4	£330	Eastern Counties
Somersham-Ramsey	1930	6¾	2	£2,129	Eastern National Omnibus Company
Wakefield-Barnsley	1930	9	3	£1,618	Sheffield Joint Omnibus Committee and Yorkshire Traction Company
Holme-Ramsey	1931	6	2	£1,059	Eastern Counties
St Ives-Ely	1931	15	6	£1,780	Eastern Counties
Mellis-Eye	1931	2¾	2	£978	Eastern Counties
Bradford-Shipley	1931	6¼	4	£2,621	West Yorkshire Road Car
Winsford-Over	1931	6	2	£1,182	North Western Road Car
Lean Valley	1931	18	9	£3,637	Trent Motor Traction and East Midland
Eston Branch	1929	3¼	1	£1,000	United Automobile Services
Wath Branch	1929	8½	3	£3,640	Yorkshire Traction
Ponteland Branch	1929	8¼	6	£3,224	United
Cawood Branch	1929	5¼	2	£200	None
Chewington-Amble	1930	5¾	2	£1,449	United
Alnwick-Coldstream	1930	35¾	10	£3,965	United
Hexham-Allendale	1930	12¼	4	£3,002	United
York-Scarborough (intermediate stations except Malton and Seamer)	1930	N/A	13	£3,619	United and West Yorkshire
Malton-Gilling	1930	12¼	4	£486	Non-associated firm
Melmerby-Masham	1930	7½	2	£400	United
Pittington-Durham Elvet	1930	4	2	£1,264	United and Northern General Transport
Stockton-Wellfield	1931	13½	4	£623	United
Carmyllie Railway (joint with LMS)	1929	5	5	£628 (50% of total saving)	W. Alexander & Sons Ltd
Slamannan & Morningside Branches	1930	23¼ 17¾	11 4	£11,449	Scottish Motor Traction
Dunfermline-Kincardine-Alloa	1930	15½	6	£2,833	Scottish Motor Traction
Old Meldrum Branch	Unstated	5¼	3	£514	W. Alexander & Sons
Leslie Branch	Unstated	4¼	1	£748	W. Alexander & Sons
Total		309.5	128	£58,763	

Reference: NA RAIL 393/33: Closing of Branch Lines for Passenger Traffic, 1931.

### **Conclusion**

This chapter has shown that, while the LNER did invest in improving its associated bus services in preparation for the diversion of local train passengers to the road, and this policy helped the railway receive growing bus dividends, with regards to on-the-

ground connections only the integration arrangements which did little to encourage modal specialisation were successful. Interavailability was merely a 'way of reallocating receipts' between the LNER and associated bus services running along parallel routes.<sup>15</sup> The arrangements for special traffic, though encouraging passengers to make trunk journeys by train and use buses to reach their final destination, clearly did not help encourage regular passengers to make an intermodal journey. While combined publicity was aimed at helping passengers use local buses to reach mainline trains, it was only a paper exercise. Likewise, the most common form of buses running to stations was rather superficial, with vehicles calling at stations on open lines running parallel to the bus routes.

With regards to attempts to implement the "most suitable" division of traffic, despite co-ordination theorists arguing that trunk traffic was better suited to railway travel, the LNER was unable to persuade its associated companies to curtail their trunk coach services. Likewise, despite the huge losses generated by rural passenger trains, only a few of these were cut. When trying to answer why more rural lines were not cut, historians have previously overlooked that it was intended, at least by the LNER, to replace these local trains with associated bus services running to mainline railheads. Where local trains were withdrawn, facilities such as buses running to stations and through tickets were provided. Therefore, to explain why more local trains were not replaced with railway associated buses, the problems facing these rail-bus connections must be evaluated, alongside the wider considerations influencing railway officials.

---

<sup>15</sup> Davies, 'Public Passenger Transport', p. 154.

## **CHAPTER 3: WHY WAS MODAL SPECIALISATION NOT SUCCESSFUL?**

### **Introduction**

This chapter will explain why modal specialisation failed. Ultimately, it was because the retention of the status quo was perceived by railway and road managers to be more remunerative for the wellbeing of their companies. With regards to the non-withdrawal of profitable trunk coach services, it is easy to understand why associated bus managers were reluctant to abandon these operations. With loss-making local trains it is more complicated, why did LNER officials not save money by replacing these services with associated buses? The problem related to how these routes were perceived as relating to the wider network. Not only was the LNER's freedom of action limited by the extent to which the rest of the railway could absorb displaced staff, but its officials held a misguided belief in contributory revenue. This meant they overreacted to several practical and regulative problems with the linkages between associated buses and the surviving railway network, and to a perceived low demand for many of the integration arrangements.

#### **a) The Market Niches of Trunk Coach Services**

The LNER and the associated bus companies made two contrasting arguments about trunk coach services. The railway's opposition to these operations focused on the ideal of each mode only carrying the traffic for which it was "most suited". As one LMS official argued 'there was no need whatever for these very long-distance coach services'.<sup>1</sup> Indeed, unlike the railways, the associated bus companies were not legally obliged to provide these trunk services.<sup>2</sup> The earnings from trunk coach services were only

---

<sup>1</sup> Davies, 'Public Passenger Transport', p. 125; *The Times*, 11<sup>th</sup> December 1931, p. 11.

<sup>2</sup> Chester, *Public Control of Road Passenger Transport*, p. 132.

moderate, one associated bus company partnered with the SR, Southdown Motor Services, earned 10 percent of its revenue from this market.<sup>3</sup> However, bus managers were reluctant to abandon a tenth of their income just to comply with abstract theories about modal specialisation.<sup>4</sup>

Bus managers reasoned that because trunk coaches served different market niches, they had not taken passengers from the railway.<sup>5</sup> As one Scottish Motor Traction director explained in 1930, 'I look upon the further development of long-distance road travel as in no sense competing with railway interests, but as a lively awakening of a new desire to travel'.<sup>6</sup> Specifically, he explained further, trunk coaches appealed to passengers who wished to save money, while trains were used by those wanting a faster journey.<sup>7</sup> Another niche identified by the associated bus managers, was that coaches carried passengers from towns that were poorly served by express trains. As a group of associated companies argued at the Metropolitan TC in 1931, to refute railway objections to the operation of coaches from Bradford, Keighley, Harrogate, Scarborough and Hull to London, the railways were providing 'the same service' between these towns and the capital 'as they had about 50 years ago'.<sup>8</sup> The TCs continued to grant trunk road licences for similar reasons, they recognised the public had become accustomed to coach services, and that they served some niches which were not adequately provided for by the railways. However, they did offer a limited

---

<sup>3</sup> Davies, 'Public Passenger Transport', pp. 59-60.

<sup>4</sup> Fenelon, *Transport Co-ordination*, p. 74.

<sup>5</sup> Healey, *Yorkshire Coaching Pools*, p. 12; Hibbs, John, *The Bus and Coach Industry: Its Economics and Organization* (London, 1975), pp. 78-79; Hibbs, John, *Bus and Coach Management* (London, 1985), p. 11.

<sup>6</sup> Thomas, William J., 'Long Distance Omnibus Services-Their Place in the National Scheme of Transport', *Journal of the Institute of Transport*, Vol. 11., No. 9., (July 1930), p. 473.

<sup>7</sup> Ibid.

<sup>8</sup> Chester, *Public Control of Road Passenger Transport*, pp. 136-137; *The Times*, 11<sup>th</sup> December 1931, p. 11.



amount of protection to the trains by restricting the number of extra vehicles which could be provided by the bus companies for each departure.<sup>9</sup>

The associated bus companies also pointed out that they faced competition on the roads from other coach operators. Despite the territorial absorption of independent operators, in 1938 non-associated operators still competed with WYRC, running services on Newcastle-London, Newcastle-York-Hull, and South Shields-Coventry routes.<sup>10</sup> As WYRC argued at the Standing Joint Committee in defence of a number of proposed Sunday excursions from Leeds, Harrogate and Bradford to Saltburn and Redcar in 1932, if they 'do not cater for this business their competitors...will do'.<sup>11</sup> Indeed, this concern with independents caused LNER officials to occasionally drop their opposition to WYRC applications for trunk coach services. For example, they agreed to drop opposition to the proposed Skipton-Scarborough route in 1931 after WYRC explained it would prevent 'competitive Long-Distance Operators' providing this service.<sup>12</sup>

### **b) Linkages between Local Train Routes and the Wider Network**

With regards to local trains, the reasons for non-withdrawal are more complicated, as the financial case for cutting these loss-making services was undisputable. Ultimately, LNER officials held back from widespread withdrawals because of how local train routes related, or were perceived as relating, to the wider railway network. For a start,

---

<sup>9</sup> Chester, *Public Control of Road Passenger Transport*, pp. 134-138.

<sup>10</sup> Fenelon, *Transport Co-ordination*, pp. 71, 74; Hibbs, *British Bus Services*, p. 168; *The Roadway Official Time Table for Motor Coach Services and Holiday Guide: Great Britain: Early Summer Edition: Current to 3<sup>rd</sup> July 1938*, Tables 52C, 121A, 126S.

<sup>11</sup> BA 028561: Minute 42; YA N&P, No. 41, pp. 11-14.

<sup>12</sup> Hibbs, *British Bus Services*, pp. 168-169; BA 028561: Application to Area Commissioners, 9th June 1931, services B760 and B761, B793; YA N&P, No. 6, 15<sup>th</sup> May 1931, pp. 13, 17; other examples of the LNER dropping its opposition to proposed associated coach services can be found regarding a Harrogate-Blackpool coach at BA 028561: Minute 168; and regarding some Yorkshire-Birmingham coaches at BA 028561: Application to Area Commissioners, 9th June 1931, services B661 to B673; YA N&P, No. 10, 12<sup>th</sup> June 1931, pp. 16-18.

the two networks were interconnected with regard to staffing policy. Some railway workers were naturally worried that rail-bus substitution would lead to job losses, with the Paddington Branch of the National Union of Railwaymen (NUR) expressing this concern in May 1928.<sup>13</sup> Nevertheless, Howell notes the leadership of the NUR believed its members interests could best be protected by reaching middle-ground solutions through negotiation with the companies, and Crompton observes that railway managers also preferred this course of action in order to avoid strikes.<sup>14</sup> As J.H. Thomas, the NUR's Political Secretary argued in 1928, 'the standard of life of railwaymen will be endangered' if the Big Four became unprofitable due to them lacking road powers with which 'to meet unfair competition'.<sup>15</sup> It was therefore agreed that the staff affected by rail-bus substitution would be given roles elsewhere on the network. For example, the three signalman made redundant from the Bradford-Shipley branch were given new jobs at Beeston, Hunslet, and Penistone.<sup>16</sup> This agreement probably discouraged modal specialisation, for local trains could only be replaced with buses at the rate at which the rest of the network could absorb their staff.

The running of replacement buses to mainline railheads also faced several practical problems. The creation of connections between specific bus and train services was hindered by difficulties in modifying the two services to connect with each other, without disturbing the movement of other traffic flows. The LNER claimed to adjust the

---

<sup>13</sup> Foreman-Peck, James and Millward, Robert, *Public and Private Ownership of British Industry: 1820-1990* (Oxford, 2011), p. 243; Modern Records Centre (MSS): 127/NU/PO/1/2/A+B: NUR Political Department Minute Book: The General Secretary's Report to and Decisions of the Quarterly Meeting, May 21<sup>st</sup>, 22<sup>nd</sup>, 23<sup>rd</sup>, 24<sup>th</sup>, 25<sup>th</sup>, 26<sup>th</sup>, 29<sup>th</sup>, 30<sup>th</sup>, 31<sup>st</sup>; June 1<sup>st</sup> and 2<sup>nd</sup>, 1928, pp. 65-66.

<sup>14</sup> Howell, David, *Respectable Radicals: Studies in the Politics of Railway Trade Unionism* (Aldershot, 1999), p. 395; Crompton, Gerald, "Squeezing the Pulpless Orange": Labour and Capital on the Railways in the Interwar-War Years', *Business History*, 31, 2 (1989), p. 75.

<sup>15</sup> *The Times*, 2<sup>nd</sup> January 1928, p. 11.

<sup>16</sup> MSS.127/NU/1/1/16: NUR Proceedings & Reports: General Secretaries' Report to the Annual General Meeting: To be held on July 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup>, 1928, p. 5; NA RAIL 393/33: Shipley Branch: Conversion to Single Line, 14<sup>th</sup> June 1932.

times of one train would affect other passenger and goods workings. Bus officials, meanwhile, were 'not disposed to exaggerate the benefit to them of connecting with trains', preferring to prioritise the bulk of passengers not requiring railway connections, and in any case were unable to change their timetable without the TCs permission.<sup>17</sup>

Likewise, the creation of bus service hubs at more LNER stations was prevented by several practical problems. In 1932 the Passenger Managers Committee noted these issues included their being limited space at stations, narrow streets or low bridges restricting access to the sites, local authorities insisting bus services had to terminate at a central bus park, or the associated company already having their own bus station elsewhere. Naturally, associated bus companies were reluctant to use railway station hubs if better sites were available closer to city centres.<sup>18</sup> For example, in 1932 United Automobile Services opted to open a bus station near Darlington city centre on Grange Road (see map 3), despite LNER officials complaining this was 'ten minutes walk away from the railway station'.<sup>19</sup> Indeed, the opening of WYRC's bus station next to Harrogate railway station seems to have only occurred because this site did happen to be near the town centre, not due to a concern with railway connections; where the LNER offered the bus company land elsewhere they only built garages (see chapter 2).<sup>20</sup>

---

<sup>17</sup> Davies, 'Public Passenger Transport', pp. 163-165; NA RAIL 390/1901: Working of Standing Joint Committees, pp. 4-5.

<sup>18</sup> Bonavia, *Railway Policy*, p. 100; NA RAIL 390/1901: Working of Standing Joint Committees, p. 3.

<sup>19</sup> Heard, *United*, p. 129; *United Automobile Services Ltd: Official Timetable, June 1<sup>st</sup> 1938*, p. 1; Quote from a former LNER official, A.A. Harrison, interviewed in Bonavia, *Railway Policy*, p. 100.

<sup>20</sup> Jenkinson, *Northern Rose*, pp. 27, 31; A similar pattern occurred with the SR and its associated companies, see Davies, 'Public Passenger Transport', pp. 114-115.

Map 3: Present day satellite image showing the locations of Darlington railway station and Grange Road.



Reference: Google Maps [accessed 17<sup>th</sup> August 2018].

Even where these rail-bus traffic centres were established, operational limitations hindered their working, as revealed by the discussions of the WYRC Standing Joint Committee about the York station hub. The first issue arose in 1934, when the LNER complained that 50 percent of the buses running into York from the Scarborough and Malton direction had stopped serving the station. This led to public complaints and broke an agreement that this bus would provide a link to the LNER after the closure of the intermediate stations on the York-Scarborough line in 1930. This service restriction was forced on WYRC by the police, who advised the TCs about congestion when road service licence applications or renewals were being discussed, with the bus company unsuccessfully appealing to the Chief Constable to reverse this decision in 1936.<sup>21</sup> Likewise, in 1939 WYRC was unable to fulfil an LNER request for the Thirsk-York bus to terminate at the station instead of 0.6 miles away at Exhibition Square (a 12 minute walk in the present day), because of issues with congestion and their being 'no time available in the schedule' for running vehicles across the city.<sup>22</sup>

---

<sup>21</sup> BA 028561: Minutes 133, 144, 151, 173; Timetable WYRC July 1938, pp. 69-73; Chester, *Public Control of Road Passenger Transport*, p. 144.

<sup>22</sup> BA 028561: Minute 231; Information about modern day walking distances from Google Maps [accessed 6<sup>th</sup> May 2019].

LNER officials were concerned that practical problems hindering the ability of rail-bus connections to provide adequate trunk connections from rural areas would affect their ability to comply with government regulations obliging them to provide the public with 'reasonable facilities'. If local communities felt their needs were not being met, they could appeal to the Railways and Canal Commission, a judicial body established in 1888 to arbitrate over disputes between the railways and their customers. Past decisions by this commission had had severe impacts on the railways. They also held reasonability for resolving disputes about freight rates, and a 1900 case had set a precedent that prevented the railways from increasing these charges altogether for a few years.<sup>23</sup>

With regards to decisions about the closure of branch lines during the 1930s, two cases of opposition were brought before the commission.<sup>24</sup> Affecting the LNER in 1931 were the objections of the Winsford Urban District Council in Cheshire to the cutting of passenger trains on the Winsford & Over branch of the Cheshire Lines Committee, a joint railway owned by the LNER and LMS. It was arranged with North Western Road Car to provide a new bus from Winsford which connected with Manchester-Chester trains at Cuddington station, and for the existing Winsford-Northwich Town bus to be extended to Northwich station.<sup>25</sup> Yet, some passengers complained this did not guarantee a continued connection to the mainline railway. One man wrote to *The Times* to complain that 'recent fogs have caused the omnibus service to be suspended occasionally, and passengers after completing the rail portion of their journey are compelled to walk some seven or eight miles late in the evening'.<sup>26</sup>

---

<sup>23</sup> Butterfield, 'Branch Lines, Wayside Stations', p. 193; Dimock, Marshall E., *British Public Utilities and National Development* (London, 1933), pp. 72-73, 87; Cain, 'Railways 1870-1914', p. 108.

<sup>24</sup> Dimock, *British Public Utilities*, pp. 87-88.

<sup>25</sup> Miller, R.W., *The Winsford & Over Branch* (Witney, Oxfordshire, 1999), pp. 71-72.

<sup>26</sup> *The Times*, 8<sup>th</sup> January 1931, p. 8.

In this case, the commission decided that the railways did not have to run services if demand was not high enough to cover its costs.<sup>27</sup>

Yet, this risk of negative publicity seems to have caused LNER officials to be more cautious when making line closure decisions, lest they be accused of not providing reasonable facilities for passengers who wished to reach the mainline. This is illustrated by the Traffic Committee's discussion about the withdrawal of passenger services on the Invergarry-Fort Augustus branch in 1933. The Traffic Committee made sure to clarify that because a bus was making connections with trains on the West Highland line it 'should be sufficient to cater satisfactorily for all the traffic in the district, and it is not anticipated that any serious objections will be made to the withdrawal of the trains'.<sup>28</sup>

Practical problems with rail-bus connections did not just slow co-ordination, in case widespread closures affected the LNER's reputation, but also led to a concern that passengers made fewer trunk journeys after the withdrawal of local trains. LNER officials noted the disappointing use of the replacement rail-bus integration arrangements.<sup>29</sup> In 1937, the LNER reported at the WYRC Standing Joint Committee there was 'no demand' for through tickets, and decided to stop providing the arrangement.<sup>30</sup> Similar events seem to have occurred elsewhere, with none of the other LNER associated bus company timetables listing through tickets, through the Eastern National Omnibus Company did offer some with the LMS.<sup>31</sup> With regards to the associated bus timetables kept for reference at important stations, the Passenger

---

<sup>27</sup> Dimock, *British Public Utilities*, pp. 87-88.

<sup>28</sup> NA RAIL 390/62: Minute 2319.

<sup>29</sup> Davies, 'Public Passenger Transport', p. 140, 159-160.

<sup>30</sup> Davies, 'Public Passenger Transport', pp. 148, 151, 169; BA 028561: Minutes 184, 211.

<sup>31</sup> See the various timetables from LNER associated bus companies available at the Bus Archive.

Managers Committee complained in 1934 there were few enquiries about connecting road services. Therefore, they decided to not provide further stations with the complete set of associated company timetables.<sup>32</sup> In cases where the associated company did not already provide a service, they had to introduce a new bus route to replace withdrawn local passenger trains. Yet, despite the lower operating costs of buses, these services which specialised in feeding the mainline railway did not earn enough to cover their operation. The LNER's passenger manager's conference reported in 1932 that to 'retain through traffic to rail' they had started to pay subsidies to the associated companies on some of these routes. For example, a payment was made to cover the operating costs of the bus substitute for the Holme and Ramsey North line.<sup>33</sup>

Notwithstanding this latter point, it does seem that some passengers who did make trunk journeys from country stations did transfer their custom to the replacement rail-bus connections where local trains were withdrawn. This is suggested by the public complaints made about the running of fewer buses to York station from the area formerly served by stopping trains on the York-Scarborough line. Furthermore, the Passenger Managers Committee admitted that, though reference timetables were little used, that higher usage was found amongst 'long-distance passengers travelling to places off the Main Line' where local trains had been withdrawn, or where buses provided an alternative service on Sundays when fewer stopping trains ran.<sup>34</sup> Yet, this was fewer than the LNER was expecting. That the railway effectively abandoned more widespread local train withdrawals after noticing this suggests they had wrongly concluded that passengers were discouraged from travelling by the need to change

---

<sup>32</sup> NA RAIL 390/1902: Minute 1419.

<sup>33</sup> NA RAIL 390/1901: Working of Standing Joint Committees, pp. 1-2.

<sup>34</sup> *Ibid.*

from bus to train. This misunderstanding can be explained by looking at the LNER's misconceptions about local train economics. It was these misguided beliefs that caused officials to overreact to the potential threats of low demand, practical problems and 'reasonable facilities' regulations.

### **c) Contributory Revenue**

LNER officials overestimated the past financial significance of rural railways. Despite the consistent losses earned by these lines since the Victorian era, Irving and Aldcroft observe that railway officials both before and after the grouping did not know the absolute financial contribution of each individual route to total network revenue.<sup>35</sup> To justify the construction or absorption of rural railways by the larger companies in the nineteenth century, due to public demands or for competitive reasons, despite these lines being hardly remunerative, the railways developed the concept of contributory revenue.<sup>36</sup> For example, when the West Midland Railway leased the Severn Valley Railway in Shropshire and Worcestershire in 1860, its belief it would gain significantly from through traffic was revealed by it agreeing to pay 55 percent of the contributory revenue it earned from traffic off this line to its original promoters. Furthermore, the branch's first timetable advertised connections for such distant places as Bristol, Gloucester, Cheltenham, London, Oxford, Chester, Warrington, Manchester, Birkenhead, Liverpool, Holyhead and Kingstown in Ireland.<sup>37</sup> Yet, even by the mid-nineteenth century the concept of contributory revenue was being criticised by some economists, with one early railway historian arguing in 1852 that 'branches...courted

---

<sup>35</sup> Aldcroft, *British Railways in Transition*, p. 64; Irving, 'Branch Line Problem', p. 27.

<sup>36</sup> Parris, 'Northallerton to Hawes', p. 246; Simmons, *The Railway in England and Wales, 1830-1914: Volume 1*, p. 111; Aldcroft, *British Railways in Transition*, pp. 13-14.

<sup>37</sup> Marshall, John, *The Severn Valley Railway* (Newton Abbot, 1989), pp. 44, 53.



as *feeders*...proved to be *suckers*'.<sup>38</sup> This statement has been confirmed by more recent analysis. Irving's research included contributory revenue to estimate total branch receipts, and most of his lines were unprofitable.<sup>39</sup>

This is true with regards to contributory revenue. On a limited number of feeder lines, with low operating and maintenance costs and a significant traffic source, contributory revenue was real; but on the majority of rural railways, serving less populated areas and with higher costs, this theory was not correct.<sup>40</sup> The cases of two contrasting branch lines, both proposed for closure in the 1930s but which survived until after nationalisation, will substantiate these points. The Wivenhoe-Brightlinsea line was fairly busy, due to Brightlinsea being a seaside resort and having oyster and sprat fishing industries, but also had low maintenance and operating costs due to being only  $5\frac{1}{2}$  miles long. Therefore, in 1930 the contributory revenue of £17,468 was able to cover the estimated maintenance and operating cost for passenger train working of £3,614. The Haughley-Laxfield branch is more representative of the situation on the majority of rural routes. This line was served a sparsely populated area in Suffolk affected by the agricultural depression, and had higher maintenance and operating costs due to its greater length of 19 miles. Revenue earned by local passenger and parcels traffic came to £1,034 in 1930, and the estimated operating and maintenance costs came to £5,283, a deficit of £4,249. Thus, the total contributory revenue of £2,196 did not justify the operation of passenger trains on this branch.<sup>41</sup>

---

<sup>38</sup> Williams, Frederick S., *Our Iron Roads: Their History, Construction, and Social Influences* (London, 1852), p. 63.

<sup>39</sup> Irving, 'Branch Line Problem', pp. 32-33, 41.

<sup>40</sup> Ponsonby, *Transport Policy*, p. 54, footnote 1.

<sup>41</sup> Gordon, *Eastern Counties*, pp. 67-68, 99-100; NA RAIL 390/204: Report on the Problems and Costs of Converting into a Motor Road the Haughley-Laxfield Branch Railway (G.E. Section), 1<sup>st</sup> December 1932, pp. 2, 4-5, 13-14, and the Wivenhoe-Brightlingsea Railway, pp. 1, 3-4, 10-11. I calculated passenger train costs by dividing the total passenger and goods operating cost, and by dividing the total branch maintenance and renewal cost by half, and then adding these figures

Nevertheless, the concept of contributory revenue was so ingrained that LNER officials did not question it enough during the existence of their company. After nationalisation, a consideration of contributory revenue remained an important part of line closure decisions.<sup>42</sup> This concern prevented local train cuts, for LNER officials were only prepared to make withdrawals if they could guarantee that a significant amount of contributory revenue would be retained. They made sure to confirm that because an independent bus company had agreed to connect with trains on the West Highland line from the route of the Fort Augustus branch (no railway associated bus company operated in this area), that an estimated '80% of the contributory Passenger traffic will be retained to rail'.<sup>43</sup>

Yet, that on a line the LNER was prepared to close officials still expected to lose 20% of contributory revenue, suggests they were not convinced bus-rail connections could be relied on for this purpose. The practical problems with rail-bus connections can be shown to have directly caused the effective abandonment of further rail-bus substitution by triggering concerns about contributory revenue. As Selway explained at the Institute of Transport in 1939 that, rather than redraft the bus schedule to

---

together. The amount of costs I have apportioned to passenger trains on these branches is probably an underestimation, their actual cost would have been higher. Regarding operating costs, all of Butterfield's estimates (see table 12) of passenger and goods train costs for various local lines shows those of passenger services were significantly higher in all cases. Likewise, with maintenance and renewal costs, goods trains would have run less frequently than the passenger trains (there were 3 passenger services a day in each direction on the Haughley-Laxfield line in 1938, and 13 Wivenhoe-Brightlinsea and 12 Brightlinsea-Wivenhoe trains on a normal weekday), would have allowed the track to be maintained to a lower standard, and enabled signalmen to be abolished and replaced with train crews and porters operating the points (this also occurred on the Bradford-Shipley and the Winsford-Over lines when their passenger services were withdrawn). Indeed, many lines closed to passengers during the interwar era survived for freight traffic until after nationalisation; Bradshaw's July 1938, pp. 867, 870-871; NA RAIL 393/33: Extract from the minutes of the Traffic Committee, dated 4<sup>th</sup> June 1931; Miller, *Winsford & Over Branch*, pp. 91-96; Welbourn, Nigel, *Lost Lines: Joint Railways* (Hersham, 2010), p. 91; Ingram, Andrew C., *Branch Lines Around Wisbech from Peterborough, Sutton Bridge, March, Watlington and Upwell* (Midhurst, West Sussex, 2015), see section titled 'Historical Background', and captions 79-83.

<sup>42</sup> Sanderson, *Railway Commercial Practice*, p. 135.

<sup>43</sup> NA RAIL 390/62: Minute 2319.

connect with specific mainline trains, it was better to maintain the local rail service, whose timetable was built around these connections.<sup>44</sup> Likewise, when the closure of the intermediate stations on the York-Scarborough line to passenger traffic was first raised it was also proposed the stopping trains be withdrawn on the York-Doncaster, York-Hull, Scarborough-Saltburn, Scarborough-Hull, and Selby-Bridlington routes, and on the East Coast Mainline north of York between Beningbrough and Croft Spa.<sup>45</sup> These closures did not occur, suggesting the problems at the York hub made LNER officials reluctant to replace further feeder local trains with rail-bus hubs.

The LNER was worried that passengers would not travel long distances because of the need to change mode after the withdrawal of local passenger trains. But it is plausible that the low usage of replacement rail-bus integration arrangements simply reflected a lack of demand for trunk travel from rural areas. As discussed below, LNER officials did not count the number of passengers using local trains to connect with mainline services. And it is quite likely that managers misinterpreted their data about contributory revenue. For a start, the figures quoted as being the amount of contributory revenue, while seeming to be quite large numbers compared to the depressed local train revenue, were relatively small compared to other sources of railway income. The contributory revenue for passenger and parcels traffic of £3,280 earned by the Bradford-Shipley branch in 1930 (compared to a local revenue of £1,166), for instance, was insignificant compared to the earnings of large freight flows. The North Eastern Area's 1938 station traffic index lists 212 individual traffic flows from various stations larger than £3,280. Company resources may have been better spent

---

<sup>44</sup> Selway responding to Redman, 'Passenger Transport by Road', p. 198.

<sup>45</sup> NA RAIL 390/2045/3: Report for 1929, p. 33; NA RAIL 390/2045/4: Report for 1930, p. 33.

on halting the decline of this revenue rather than protecting the relatively small contributory revenue earned by local trains.<sup>46</sup>

Railway officials did not attempt to actually count how many passengers from country stations continued onto the mainline. If they had done, they would have realised that the large proportion of local train receipts earned by through passengers actually consisted of a small number of people holding more expensive tickets, as demonstrated by my own statistical analysis below. The depression in receipts from local journeys simply meant the impact of these few passengers became disproportionate to their number. In actuality, it seems that the situation in the 1930s was the same as that found by Thomas in the 1960s, while rural people did prefer to use local trains to reach the mainline where a choice existed, they only made these journeys on rare, but personally important, occasions.<sup>47</sup>

Data about passenger numbers only reveals the ticket type used, but calculations can be made to get a rough idea of the number of longer-distance passengers (see table 17). This involved dividing the total revenue earned by each ticket type at each station on the Church Fenton-Wetherby-Leeds line by the number of passengers buying it, to reveal which tickets were more expensive per passenger, and therefore which tickets were used to travel longer distances. Then the number of passengers buying the more expensive tickets at each station were added together until the number of passengers which earned half of each station's revenue was reached. Combined, the small town of Tadcaster and the semi-suburban stations of Thorner and Scholes outside Leeds

---

<sup>46</sup> NA RAIL 393/33: Particulars of Passenger Train Traffic Receipts, Train Miles and Cost of Working per Passenger Train Mile: Shipley Branch; NA RAIL 398/39: London & North Eastern Railway (North Eastern Area): Station Traffic Index: Tons and Gross Receipts of Principal Traffics Forwarded from Each Station During the Year 1938, passim.

<sup>47</sup> Thomas, David St John, *The Rural Transport Problem* (London, 1963), p. 54.

Table 17: Usage of stations on the Church Fenton-Wetherby-Leeds line (but excluding these junctions) in 1938, and how many passengers buying more expensive tickets did it to earn half of each station's revenue					
	Total Revenue	Half of Total Revenue	Total Passengers	Number of passengers buying more expensive tickets who earned half of revenue	Divided by 313 (number of days stations open, the line not operating on Sundays)
Tadcaster (Small Town)	£1,303	£652	1578	756*	2.4
Newton Kyme (Village)	£192	£96	7667	202	0.6
Thorp Arch (Village)	£237	£118	2908	392	1.3
Collingham Bridge (Village)	£241	£120	3608	614	2
Bardsey (Village)	£150	£75	2937	405	1.3
Thorner (village but near Leeds)	£438	£219	9383	2534	8
Scholes (village but near Leeds)	£403	£201.50	10594	3642	11.6
Total	£4,370	£2,185	52844	10130	27.2
This was calculated by working out the average price paid for each type of ticket at each station, and adding up the number of passengers who brought the highest priced tickets until half the revenue of each station was reached.					
*Calculation includes £1 charge for a private saloon coach.					
References: NA RAIL 400/62: Passenger Traffic Returns: North Eastern Area, 1938, entries for 'Bardsey', 'Collingham Bridge', 'Newton Kyme', 'Scholes', 'Tadcaster', 'Thorner', and 'Thorp Arch', Bradshaw's July 1938, p. 933a.					

had an average of 22 passengers buying more expensive tickets each day, about 7 passengers from each station. More representative of the majority of stations served by local stopping trains, however, were the small country stations of Bardsey, Collingham Bridge, Thorp Arch and Newton Kyme, which when combined only had an average of 5 passengers a day buying the more expensive tickets, fewer than one passenger per station. It seems LNER officials wrongly concluded that because a significant amount of a station's revenue was earned by passengers buying higher

priced tickets, that there must have been a large number of passengers making trunk journeys.

There were simply not enough reasons for rural people to make many trunk journeys. Starting with the largest demographic segment, the rural working-class, the most important flow would have been from those who migrated to the towns as they returned to the villages to visit friends and family.<sup>48</sup> However, it is unlikely that those who moved a significant distance away would have had the time or money to return more than once or twice a year. Few rural workers would have been able to take holidays, due to a lack of finance and spare time, unlike their urban counterparts who benefitted from the growth in paid holidays.<sup>49</sup> Regarding the rural middle-classes, such as farmers, doctors, clergy, and solicitors, while they would have had more reasons to travel and the means to do so, much of this traffic would already have been lost to all forms of public transport, as these people were more likely to purchase their own motor car.<sup>50</sup> Therefore, the only traffic from the middle-classes would have been from the older and younger members of this group. Older middle-class residents would have been able to take holidays, while the younger members of this group would have needed to travel to university and military service. Furthermore, as with the working-class, there would have been the occasional visits home by former young middle-class residents who had moved permanently into the towns to take white-collar jobs.

While increasing numbers of urban professionals were moving into the countryside, many of them owned a car, and most of those that did use public transport would have

---

<sup>48</sup> Pugh, Martin, *'We danced all night': A Social History of Britain between the Wars* (London, 2008), p. 271.

<sup>49</sup> Howkins, Alun, *The Death of Rural England: A Social History of the Countryside Since 1900* (London, 2003), pp. 86, 92; Middleton, Victor T.C., and Lickorish, L.J., *British Tourism: The Remarkable Story of Growth* (Oxford, 2007), p. 7.

<sup>50</sup> O'Connell, *The Car and British Society*, p. 172.

lived alongside a direct link to their destination, not requiring a two-stage public transport journey with a local feeder and a trunk section.<sup>51</sup> Finally, while tourists increasingly visited rural destinations, their numbers do not appear to have been as great as those heading to the seaside.<sup>52</sup> It seems that the theory of contributory revenue was so ingrained in the LNER's thinking, that they overlooked the need to evaluate the actual size of this income, or the actual traffic flows from rural areas onto the mainline railway. Railway officials did not assess the actual demand until the Standing Joint Committees reported on the usage of the rail-bus integration facilities introduced to replace the few local trains which were withdrawn, and wrongly concluded that rural people made fewer trunk railway journeys if they had to use a bus to reach the mainline station.

### **Conclusion**

This chapter has demonstrated that modal specialisation failed because both the LNER and its associated bus managers felt their company's revenue would be better maintained by continuing to run services considered "unsuitable" for their mode. Associated bus managers were far more realistic than railway managers. The territorial companies had done more research into the traffic carried on their trunk coaches, and were able to justify the continued operation of these remunerative services by pointing out they served different market niches to the railway. Likewise, when local trains were withdrawn, new roles had to be found for the displaced staff,

---

<sup>51</sup> Pugh, *We danced all night*, p. 272; Howkins, *Death of Rural England*, p. 100; O'Connell, *The Car and British Society*, pp. 172-173.

<sup>52</sup> Howkins, *Death of Rural England*, pp. 104-106; see Thomas, David St John and Whitehouse, Patrick, *The Great Western Railway: 150 Glorious Years* (Newton Abbot, 2002), pp. 111-122, for a description of the significant effort made by this railway to transport large numbers of passengers to seaside resorts. Indeed, despite the efforts made by the GWR's publicity department to attract tourists to rural areas, a view of the timetable for expresses heading to West Country seaside resorts reveals that this is where most passengers went; Thompson, 'A Master Whose Heart is in the Land', pp. 274-349; Medcalf, 'What to Wear and Where to Go', pp. 59-67; Bradshaw's July 1938, pp. 26-35.

which would have slowed the rate at which lines could have potentially been cut. However, the most important factor here was the railway's continued belief in the misguided nineteenth century concept of contributory revenue. The LNER was right to be concerned about unreliable rail-bus connections to an extent. A 1978 study revealed that 14 percent of respondents had opted to not make a combined bus-rail journey beyond the end of several selected branch lines closed in the 1960s due to problems with the interchange.<sup>53</sup> Nevertheless, this data was from the age of mass car ownership, and is probably a result of the railways abandoning their attempt to develop an efficient method of rail-bus integration 40 years earlier. Had they thought about the problems facing rail-bus connections practically, they could have found a means of getting around these issues.<sup>54</sup> Instead, their concern with contributory revenue caused them to overreact when integration did not operate as smoothly as imagined, and give up on their plans to replace further local trains with rail-bus integration arrangements. They also assumed that practical problems with rail-bus connections would generate negative publicity by enabling local communities to accuse the railway of not providing 'reasonable facilities', when most passengers do not seem to have found the facilities to be inadequate where local trains were withdrawn.

Likewise, their belief in contributory revenue meant LNER officials just assumed the integration arrangements replacing local trains would be popular, and did not attempt to gauge the actual demand for these facilities. Therefore, where rail-bus substitution did occur, they were surprised when these facilities were little used, and wrongly assumed it was due to passengers being reluctant to change mode. In reality,

---

<sup>53</sup> Hillman, Mayer and Whalley, Anne, *The Social Consequences of Rail Closures* (London 1980), pp. 82-83.

<sup>54</sup> See Thomas, *Rural Transport*, pp. 52-55 for suggestions.



passengers did transfer to the new arrangements, the problem was simply that the local trains they had replaced had not carried more than a moderate number of longer distance travellers. Rather than trying to further publicise the travel options made possible by rail-bus integration arrangements, the LNER wrongly concluded they needed to continue running unremunerative local trains to entice rural people to make trunk journeys. While LNER officials abandoned the direct form of modal specialisation, however, the next chapter will show the theory continued to discreetly influence the railway's passenger policy.

## **CHAPTER 4: LNER PASSENGER POLICY AFTER THE FAILURE OF MODAL SPECIALISATION**

### **Introduction**

This chapter will consider how the LNER's passenger policy changed after the effective abandonment of rail-bus substitution. Railway officials instead took advantage of the new legislative road transport controls to stabilise their competitive environment in terms of price. To place the less convenient local trains on an equal footing with the associated bus services, the railway prevented road fares from being lowered while they cut the price of train tickets, so these rural lines did at least have some means of retaining passengers. Similar policies were pursued to protect the mainline railways from the trunk coach services which continued to operate. This was in-line with moves in wider industry, where Greaves notes the National Government moved from trying to promote rationalisation, to simply taking measures to 'recast' the economic environment to help business recovery. However, the theory of industrial reorganisation still influenced the manner in which these stabilising measures were implemented by the government,<sup>1</sup> and likewise the framework of the co-ordination ideal still influenced how the LNER developed services. These trends demonstrate that though Britain's railways had started to move towards focusing on specific market niches where they had a competitive advantage in the interwar era, an observation made by Roth with regards to European railways in the twentieth century generally,<sup>2</sup> the failure of direct modal specialisation meant this was not a sudden or smooth

---

<sup>1</sup> Greaves, *Industrial Reorganisation*, pp. 77, 97-98.

<sup>2</sup> As well as long-distance express passengers, Roth also notes suburban commuter and heavy freight as the other niches European railways have focused on; Roth, Ralf, 'From Rail to Road and Back Again? A Century of Transport Competition and Interdependency', in *From Rail to Road and Back Again?*, pp. 23-31.

process.<sup>3</sup> Indeed, a niche focused railway network would not be developed in Britain until the 1960s and 70s.<sup>4</sup>

### **a) Fare Policy**

During the 1930s the LNER turned to using the TCs, who had to authorise the prices charged by road operators, to prevent the associated bus companies from increasing competition with the railways on both local and trunk routes by further lowering road fares.<sup>5</sup> Chester notes the TCs had a duty to prevent 'wasteful competition', and therefore generally refused to sanction lower bus fares if they were opposed by the railways or other road operators.<sup>6</sup> The data in table 18 illustrates how this opposition caused WYRC's fares to mostly stay at the same price between 1931 and 1938 for town-to-town and village-to-town journeys which competed with LNER lines. For 22 out of 28 town-to-town tickets, and 12 out of 14 village-to-town tickets (single and return tickets between the same stops being counted separately), there was no change in the bus fare. The fare was only reduced for 4 town-to-town and 1 village-to-town tickets, and was increased for 2 town-to-town and 1 village-to-town tickets.

The only way the bus company could compete was through expanding the number of workmen's fares, which offered passengers travelling outward before a certain time in the morning a reduced price.<sup>7</sup> Table 19 illustrates that between 1931 and 1938 on routes competitive with LNER lines, WYRC introduced 15 new workman's tickets, and replaced 3 single workman tickets between bus stops on the Otley-Ilkley route with

---

<sup>3</sup> This point has been noted on a theoretical level by Pirie, Gordon, 'Revolutionary Limits in Transport', *The Journal of Transport History*, 34, 1 (2013), p. iii.

<sup>4</sup> Wolmar, Christian, *Fire & Steam: How the Railways Transformed Britain* (London, 2008), pp. 288-296.

<sup>5</sup> BA 028561: Minutes 97, 106, 129, 210, 220; NA RAIL 390/1951: North Eastern Area: Passenger Department Annual Report, 1937, p. 20; NA RAIL 390/1952, p. 23.

<sup>6</sup> Chester, *Public Control of Road Passenger Transport*, pp. 153, 155.

<sup>7</sup> Davies, 'Public Passenger Transport', pp. 38, 40.

more attractive returns. WYRC could only reduce the price of one existing workman's ticket, however, a Bradford and Cullingworth return by 2d. Other workmen tickets available in both years remained at the same price, except for one increase.

Similar policies were adopted by the LNER to combat competition from the trunk coach services the associated companies refused to withdraw. The success of railway opposition to proposed reductions in trunk coach prices is illustrated by table 20, which shows that fares were identical in 1931 and 1938 for 5 out of the 8 selected WYRC tickets (single and return fares between the same places being counted separately). The only reduction was a 2s drop for the Keighley/Harrogate-Birmingham return ticket, while the only increases were rises in the return and single fares between Scarborough and Bradford.

After stabilising their competitive environment by preventing reductions in bus fares, the LNER turned to engage in its own price cuts. It may seem anomalistic that the railways, who were beyond the TCs jurisdiction, could launch a fare reduction policy while the associated companies were prevented from responding.<sup>8</sup> However, more flexible buses held a significant service advantage on local routes, and had offered cheaper fares than the railway on both local and trunk routes to start with, so this policy just equalised the situation. The LNER had started the expansion of cheap railway fares during the 1920s as an initial response to the lower prices offered on the buses. Between 1925 and 1926 on lines that would later compete with WYRC, the LNER introduced cheap fares between all intermediate stations on the Leeds-Ilkley line and between 21 other points.<sup>9</sup> However, it was only when the restrictive force of the TCs

---

<sup>8</sup> Ibid, pp. 48, 63, 200; Hibbs, *British Bus Services*, p. 114.

<sup>9</sup> Aldcroft, *British Railways in Transition*, p. 60; NA RAIL 390/2045/1: Report for 1925, p. 35; NA RAIL 390/2045/2: Report for 1926, p. 47, Report for 1927, p. 44.

Table 18: Comparison of ordinary WYRC fares for selected town-to-town and village-to-town journeys which competed with LNER train services, 1931 and 1938.

Route	1931	1938
<u>Town-to-town journeys</u>		
Leeds-Wetherby return	1s 6d	1s 6d
Leeds-Wetherby single	1s	1s
Tadcaster-York return	1s 4d	1s 4d
Tadcaster-York single	10d	10d
Harrogate-Wetherby single	8d	8d
Harrogate-Skipton return	3s 11d	3s
Harrogate-Skipton single	2s 5d	2s 3d
Harrogate-Bradford return	3s	3s
Harrogate-Bradford single	1s 9d	1s 9d
Harrogate-Boroughbridge return	1s 6d	1s 6d
Harrogate-Boroughbridge single	1s	1s
Harrogate-Pateley Bridge return	2s 3d	2s 3d
Harrogate-Pateley Bridge single	1s 6d	1s 6d
Leeds-Harrogate return	2s 3d	2s 3d
Leeds-Harrogate single	1s 6d	1s 6d
Harrogate-Ripon return	1s 6d	1s 6d
Harrogate-Ripon single	1s	1s
Harrogate-York return	2s 7d	2s 7d
Harrogate-York single	1s 9d	1s 9d
York-Thirsk return	2s 6d	2s 6d
York-Thirsk single	1s 9d	1s 9d
Leeds-Ilkley single	1s 1d	1s
York-Scarborough return	5s	5s
York-Scarborough single	2s 10d	2s 10d
Bradford-Leeds return	1s 2d	1s 4d
Bradford-Leeds single	8d	9d
Keighley-Bradford return	1s 9d	1s 9d
Keighley-Bradford single	1s 3d	1s
<u>Village-to-town journeys</u>		
Leeds-Bardsey return	1s 2d	1s 2d
Harrogate-Copgrove	6d	7d
Harrogate-Spofforth return	9d	9d
Harrogate-Spofforth single	6d	6d
Harrogate-Dacre return	1s 8d	1s 8d
Harrogate-Dacre single	1s	1s
Harrogate-Wormald Green return	10d	10d
Harrogate-Wormald Green single	7d	7d
Harrogate-Goldsborough return	1s 1d	1s 1d
Leeds-Burley single	10d	9d
York-Copmanthorpe return	9d	9d
York-Copmanthorpe single	5d	5d
Keighley-Cullingworth return	9d	9d
Keighley-Cullingworth single	5d	5d

References: *West Yorkshire Road Car Co: Motor Bus Timetable Commencing July 14<sup>th</sup>, 1931, and until further notice*, pp. 181-182; *West Yorkshire Road Car Co Ltd, Keighley-West Yorkshire Services Ltd, York-West Yorkshire Joint Services: List of Fares and Stages, July 1938*, pp. 8-65.

Table 19: WYRC workman's fares which competed with LNER train services, 1931 and 1938.

Route	1931	1938
Otley-Pool return	Not yet introduced	4d
Ilkley-Burley single	2d	Replaced with 4d return
Otley-Burley single	1d	Replaced with 3d return
Otley-Ilkley single	3d	Replaced with 7d return
Leeds-Otley return	Not yet introduced	10d
Leeds-Burley return	Not yet introduced	1s
Leeds-Ilkley return	Not yet introduced	1s 4d
Leeds-Horsforth return	6d	8d
Leeds-Horsforth single	Not yet introduced	7d
Keighley-Bradford return	1s	1s
Keighley-Ingrow single	Not yet introduced	1d
Thornton Tram Terminus-Denholme Gate single	2d	Abolished, no need for this ticket as most passengers would have purchased a return.
Denholme-Thornton return	4d	4d
Keighley-Cullingworth return	8d	8d
Keighley-Denholme return	9d	9d
Bradford-Cullingworth return	1s	10d
Bradford-Denholme return	Not yet introduced.	9d
Bradford-Ingrow return	Not yet introduced.	1s 2d
Leeds-Keighley return	Not yet introduced	1s 6d
Harrogate-Leeds return	Not yet introduced	2s
Leeds-Tadcaster return	Not yet introduced	1s 6d
Scarborough-Seamer return	Not yet introduced	5d
Leeds-Scholes return	Not yet introduced	8d
Bradford-Otley return	Not yet introduced	1s 1d
Bradford-Harrogate return	Not yet introduced	2s 8d

References: Timetable WYRC July 1931, pp. 183, 196, 201, 210, 213, 216-217; WYRC: List of Fares and Stages, July 1938, pp. 11, 14-16, 18, 25-26, 30-32, 34, 37, 47, 52, 55.

Table 20: Comparison of ordinary trunk WYRC fares over selected routes, 1931 and 1938.		
	1931	1938
Bradford-Scarborough single	5s 6d	6s
Bradford-Scarborough return	9s	10s
Keighley/Harrogate/Bradford, Halifax/Leeds-London single	16s	16s
Keighley/Harrogate/Bradford/Halifax/Leeds-London return	26s	26s
Keighley/Harrogate-Birmingham single	11s	11s
Keighley/Harrogate-Birmingham return	20s	18s
Liverpool-Newcastle single	13s	13s
Liverpool-Newcastle return	23s	23s
References: Timetable WYRC July 1931, pp. 30-31, 190-191, 198; WYRC: List of Fares and Stages, July 1938, pp. 97-105, 110-115.		

became available to equalise the competitive position of trains and buses, that cheap fares were able to offer a suitable alternative to the full monopolisation of each traffic type for one mode only.

On local village-to-town routes, railway officials saw cheap fares as a means to re-attract passengers to the trains after they had decided against substituting these with associated buses. Therefore, cheaper fares were introduced in 1934 between York, Scarborough, and the intermediate stations on the Whitby line, despite these stations being mooted for closure in 1929 and United Automobile Services running a bus along the route. Likewise, the intermediate stations between York and Thirsk had been proposed for closure in 1930, with WYRC operating buses in the area. In 1935, however, the railway reduced the York-Pilmoor, York-Sessay, and Beningbrough-Thirsk return fares from 2s 1d, 2s 3d and 2s 2d respectively to 2s for each ticket.<sup>10</sup> Though cheap tickets could not halt the decline of rural railways, they did at least slow

---

<sup>10</sup> NA RAIL 390/2045/6: Report for 1934, p. 27. Unfortunately, the exact price of the cheap fares on the Scarborough-Whitby line was not specified by the York District; NA RAIL 390/2045/6: Report for 1935, p. 27.

the loss of passengers.<sup>11</sup> As table 21 shows, a significant proportion of the passengers still using selected country stations near WYRC routes in 1938 were travelling with cheap fares; certainly outnumbering trunk passengers. The LNER issued 7712 experimental day tickets in 1938, earning around £272 for the railway, compared to only 431 ordinary or standard fare tickets, earning £74.

On trunk routes, the LNER turned to fare reductions after failing to persuade its associated bus companies to curtail their coach services. Unfortunately, no lists of reduced tickets available on the East Coast Mainline or cross-country corridors can be found, though evidence does exist to show they had an impact. In 1935 the LNER reported associated coach services 'have been affected adversely' by such fares.<sup>12</sup> Examples of specific reduced tickets are available for some routes between inland towns and seaside resorts, with cheap day tickets being introduced between Bridlington, Filey and Leeds in 1934, and between Scarborough and Harrogate in 1935.<sup>13</sup>

---

<sup>11</sup> Butterfield, 'Grouping, Pooling and Competition', p. 33; Thomas and Whitehouse, *Country Railway*, pp. 68-70.

<sup>12</sup> NA RAIL 390/954: Report on Results for 1934, p. 1.

<sup>13</sup> NA RAIL 390/2045/6: Report for 1934, p. 27, Report for 1935, p. 27.



Table 21: Types of tickets issued at selected North Eastern Area stations near WYRC bus routes, 1938.

Stations		Types of Ticket Issued	
		Ordinary or Standard Fare	Experimental Day Ticket
Bardsey	Total Tickets Issued	5	1009
	Gross Throughout Receipts	£3 1s 5d	£23 2s 4d
Beningbrough	Total Tickets Issued	1	42
	Gross Throughout Receipts	£11 8d	£1 9s 5d
Ben Rhydding	Total Tickets Issued	37	1308
	Gross Throughout Receipts	£22 15s 3d	£90 12s 8½d
Birstwith	Total Tickets Issued	242	1822
	Gross Throughout Receipts	£6 0s 1½d	£59 10s 9½d
Copgrove	Total Tickets Issued	8	791
	Gross Throughout Receipts	15s 11½d	£22 18s 5d
Copmanthorpe	Total Tickets Issued	19	971
	Gross Throughout Receipts	£3 4s 3d	£18 15s 6d
Dacre	Total Tickets Issued	0	1
	Gross Throughout Receipts	£0 0s 0d	5s 0d
Goldsborough	Total Tickets Issued	41	104
	Gross Throughout Receipts	£2 5s 11d	£4 0s 8d
Newton Kyme	Total Tickets Issued	37	347
	Gross Throughout Receipts	£8 14s 4d	£5 7s 11½d
Pannal	Total Tickets Issued	3	982
	Gross Throughout Receipts	£1 7s 6d	£28 5s 6d
Warthill	Total Tickets Issued	12	126
	Gross Throughout Receipts	£2 8s 2d	£3 9s 1d
Wormald Green	Total Tickets Issued	26	209
	Gross Throughout Receipts	£12 13s 7½d	£9 13s 2½d
Totals	Total Tickets Issued	431	7712
	Total Gross Throughout Receipts (individual entries rounded to nearest £1 when doing calculations)	£74	£272

References: NA RAIL 400/62, entries for 'Bardsey', 'Beningbrough', 'Ben Rhydding', 'Birstwith', 'Copgrove', 'Copmanthorpe', 'Dacre', 'Goldsborough', 'Newton Kyme', 'Pannal', 'Warthill' and 'Wormald Green'.

### ***b) Service Policy***

Though the LNER was interested in equalising the competitive position of its trains and associated bus routes in terms of fares, the railway's service policies still followed the framework of co-ordination theory. After deciding to continue operating most rural railways, on some branch lines the LNER tried a compromise solution between the complete substitutions of local trains with buses and the retention of the full service. This involved providing a skeleton local train timetable, which lowered the operating cost but still provided a link to the mainline junction for trunk travellers, while leaving most local traffic to the associated bus companies.<sup>14</sup> This was done on the Sheffield-Barnsley via Chapelton, Holme-Ramsey, Harrogate-Pateley Bridge, and Harrogate-Boroughbridge lines (see table 22).

However, further concerns about contributory revenue prevented this half-substitution policy from being applied more widely. It seems railway officials concluded that a reduction in the number of train-train connections would discourage through passengers. Instead of cutting stopping trains during the 1930s, they frequently preferred to keep the existing service level but adjust the timetable to improve mainline connections. Therefore, in 1936 the North Eastern Area noted they had modified local timetables to create connections at Hull between a new service from London and trains to Beverley, Bridlington, Withernsea and Hornsea. Likewise, the local train service between Newcastle, Morpeth and Alnwick was adjusted to enhance links with express services.<sup>15</sup>

---

<sup>14</sup> Thomas and Whitehouse, *Country Railway*, pp. 70-71; Thomas, *Rural Transport*, pp. 31-32.

<sup>15</sup> NA RAIL 390/1950, p. 27.

Table 22: Examples of train service reductions on LNER local routes during the 1930s.			
Route	Number of Trains		Date of Timetable Change
	1922	1938	
Sheffield to Barnsley via Chapeltown	9, plus 1 Saturdays only service.	5, plus 4 Saturdays only services.	1930
Barnsley to Sheffield via Chapeltown	9	5, plus 4 Saturdays only services.	
Holme and Ramsey (both directions)	7	3	1931
Harrogate and Pateley Bridge (both directions)	7	4, plus 2 Saturdays only and 1 Thursdays and Saturdays only service.	Some point after 1930.
Harrogate and Boroughbridge (both directions)	4 (plus 1 train which ran on the 17 <sup>th</sup> and 31 <sup>st</sup> of the month only).	2, plus 2 Saturdays only services.	Some point after 1930.
References: Bradshaw's July 1922, pp. 353, 721, 752-753; Bradshaw's July 1938, pp. 882, 918-9, 937, 945; NA RAIL 390/849: Associated Road Companies. Report on Rail-Road Co-ordination, and estimated financial return on the Company's Investments, 28 <sup>th</sup> January 1931, Appendix B; NA RAIL 390/61: Minute 1745; NA RAIL 943/16: London & North Eastern Railway Timetable: 7 <sup>th</sup> July to 21 <sup>st</sup> September 1930, pp. 291-292.			

However, though not cutting local train services, neither did the LNER improve services on the majority of rural railways, with the York District only reporting enhancements on coastal lines or lines around the North Yorkshire Moors, which had tourist potential.<sup>16</sup> Indeed, an analysis of the LNER's timetable for local routes competing with WYRC buses (see table 23) reveals that on most routes, the number of daily weekday full line all-stations trains remained the same between 1922 and 1938.<sup>17</sup> On most lines, if there was a variation, it was only by 1 or 2 trains added or

<sup>16</sup> Thomas, *Rural Transport*, p. 35; NA RAIL 390/2045/5: Report for 1932, p. 37, Report for 1933, pp. 45-46; NA RAIL 390/2045/6: Report for 1934, p. 25, Report for 1935, pp. 24-25.

<sup>17</sup> Butterfield, 'Branch Lines, Wayside Stations', p. 193.

removed. A significant reduction in services only occurred on 2 out of the 10 lines studied, and these were in one direction only.<sup>18</sup> This occurred between York and Thirsk heading north, and on the Harrogate-York line heading east. Furthermore, most of these trains were not cut completely, but became limited stop services which continued to call at some stations.<sup>19</sup> Likewise, only one of the lines had a noticeable increase in services. The number of daily all-stations trains between Leeds and Wetherby, in the northbound direction only, increased from 8 in 1922 to 11 in 1938.

Rather than service improvements, the LNER preferred to put effort into finding means of cutting some of the costs of running the retained local train routes, while maintaining the same number of services and avoiding a radical rationalisation of the operation of rural lines.<sup>20</sup> The wage bill was cut by giving stationmasters control over more than one station, and by 1934 this policy was saving the LNER a total of £145,493 per annum.<sup>21</sup> Maintenance and staffing requirements were also lowered by the closure of signal boxes which had become surplus to traffic requirements.<sup>22</sup> The railway also introduced railcars to new routes during the 1930s, despite the unsuccessful experiments with these vehicles during the 1920s (discussed in chapter 1). While they did not attract more passengers to the railway, railcars did at least lower operating costs. On the Saltburn-Scarborough line, LNER officials felt withdrawal would result in a loss of revenue greater than the savings made, most likely due to the contributory revenue believed to have been generated by tourist traffic. Therefore to lower costs,

---

<sup>18</sup> Some routes did have a couple of extra services running only on certain days of the week, or short workings not running the full length of the route, and there were both downward and upwards variations in the number of these services, see table 21.

<sup>19</sup> NA RAIL 390/2045/4: Report for 1931, p. 31.

<sup>20</sup> Thomas and Whitehouse, *Country Railway*, p. 61.

<sup>21</sup> NA RAIL 390/61: Minute 1756; NA RAIL 390/62: Minutes 1968, 2184

<sup>22</sup> NA RAIL 390/61: Minutes 1442, 1618, 1766; NA RAIL 390/62: Minutes 1824, 1845, 1923, 1925, 1939, 1961, 1977, 1986, 1987, 2013, 2115, 2173, 2214, 2245, 2334.

in 1932 they ordered three new steam railcars to replace steam locomotives and coaches, with this being estimated to offer savings of £1,377 per annum.<sup>23</sup>

Table 23: LNER all-stations stopping trains on local routes which competed with WYRC buses, 1922 and 1938.				
Route	Years	Daily Weekday Full Line All Stations Services	All Stations Variations	Date of Significant Timetable Changes
Bradford-Queensbury	1922	17		
	1938	15		
Queensbury-Bradford	1922	16		
	1938	16		
Queensbury-Keighley	1922	16	4 short journeys.	
	1938	17	1 short journey every weekday to Thornton. 1 Saturdays only short journey to Ingrow.	
Keighley-Queensbury	1922	16	3 short journeys.	
	1938	17	1 Saturdays only full line train. 1 short journey everyday starting from Thornton.	
York-Thirsk	1922	4		Some point after 1930.
	1938	1		
Thirsk-York	1922	3	1 Saturdays only full line train.	
	1938	2		
Leeds-Ilkley	1922	5		
	1938	4	1 Saturdays only full line train. 1 short journey everyday starting from Arthington.	
Ilkley-Leeds	1922	6	1 short journey to Arthington.	
	1938	7		
Harrogate-Leeds	1922	10	1 short journey, all stations from Horsforth.	
	1938	10	4 short journeys.	
Leeds-Harrogate	1922	9		
	1938	10	4 short journeys (note: one of these trains ran limited stop Saturdays only).	
Ripon-Harrogate	1922	4		
	1938	4		
Harrogate-Ripon	1922	4	1 Wednesdays and Saturdays only full line train	
	1938	4	1 Saturdays only full line train	
Harrogate-York	1922	6 (excludes Wilstrop)		Some point after 1930.
	1938	3		
York-Harrogate	1922	4 (excludes Wilstrop)		
	1938	4		
Leeds-York	1922	4	1 short journey to Church Fenton.	
	1938	4	1 short journey, starts at Church Fenton.	
York-Leeds	1922	4		
	1938	3	1 service starts at Church Fenton.	
Leeds-Wetherby	1922	8		Gradual increase, 9 all-stations services in 1927, 11 in 1930.
	1938	11	1 Saturdays excepted full line train.	
Wetherby-Leeds	1922	10		
	1938	8		
Church Fenton-Wetherby	1922	7		
	1938	7		
Wetherby-Church Fenton	1922	8		
	1938	7	1 SO full line train.	

References: Bradshaw's July 1922, pp. 370, 728-732, 750-751, 763, 766-767, 770-771; Bradshaw's July 1938, pp. 822-828, 931, 933a, 946-955; NA RAIL 943/13: London & North Eastern Railway Timetable: 11<sup>th</sup> July to 25<sup>th</sup> September 1927, p. 324; NA RAIL 943/16: LNER Timetable: July to September 1930, pp. 36-44, 291-292.

Railway officials preferred to follow co-ordination principles, and concentrated their efforts on improving mainline train services.<sup>24</sup> The most important improvement was the introduction of new express trains. Examples of new trains noted by North Eastern Area reports between 1936 and 1938 include new London-Hull and York-Edinburgh restaurant car expresses, with the later service conveying through carriages from the capital; a new York-Middlesbrough return service to cater for business travellers; an hourly-interval service of buffet car expresses between Newcastle and Middlesbrough; and a new Bristol-Birmingham-Newcastle train. The LNER also created more journey options by modifying its timetable to improve connections between mainline services. The North Eastern Area reported that a new 6.55 pm departure from York to Scarborough was introduced to provide a connection from the northbound 'Coronation' streamlined train; the departure of the 7.10 pm Newcastle-York express was pushed back to 8.00 pm to provide a connection to Northallerton and Thirsk from the Glasgow-Leeds express, which skipped these stations; and services on the Newcastle-Carlisle line were remodelled to provide more connections with LMS trains to West Cumberland, Penrith, Keswick, Manchester, Liverpool and south-west Scotland.<sup>25</sup>

LNER officials also worked on gaining a competitive advantage by improving the quality of the service they provided to mainline passengers. For a start, they focused upon the ability to run trains faster than road vehicles. Therefore, the railway

---

<sup>24</sup> Loft, *Beeching's Last Trains*, p. 17; For a general overview of improvements to LNER mainline train services during the interwar period, see Bonavia, *History of the LNER II*, pp. 60-64; Hughes, *LNER*, pp. 43-50. Due to the development of pooling arrangements and other means of co-operation between the Big Four during the interwar years, these improvements to mainline trains would have been more focused on combating road transport than competition from other railways, though some rivalry for prestige between the LNER and LMS was associated with the development of streamlined trains, Bonavia, *Four Great Railways*, pp. 169-174.

<sup>25</sup> NA RAIL 390/1950, pp. 3, 26-27; NA RAIL 390/1951, pp. 14-15; Bradshaw's July 1938, p. 828; NA RAIL 390/1952, p.18.

introduced a series of luxurious high-speed trains with streamlined locomotives and coaches, for passengers who were prepared to pay a supplement for a quicker journey. Furthermore, the LNER developed its facilities for providing passengers with refreshments on the move, which was impossible on the roads. Accordingly, the York District introduced buffet cars in 1932 on Liverpool-Newcastle and Leeds-Hull trains, as these provided more accessible refreshment facilities than traditional restaurant cars.<sup>26</sup> Another means of improving on board facilities which was tried was the provision of cinema coaches, which were inserted into the King's Cross-Leeds train in 1935 and the Leeds-Edinburgh express in 1936.<sup>27</sup>

The LNER's attitude towards the development of the service offered by the associated bus companies also reflects continued support for the modal specialisation framework. On local routes, while the LNER insisted that the less convenient railway offered the cheapest fares, they had accepted that the bus companies offered a more accessible service. Therefore, they only opposed enhancements to local road services in specific circumstances.<sup>28</sup> For a start, the railway tried to protect rural railways where tourist traffic could be developed as an alternative to closure. The LNER therefore lodged unsuccessful objections with the YA-TC in 1934 about the extension of United Automobile Services's Scarborough-Hayburn Wyke bus to Ravenscar, located on the coastal Scarborough-Whitby line.<sup>29</sup> Furthermore, the railway tried to prevent the associated bus network from expanding into areas where trains had not yet been affected by road competition. This led to the LNER opposing in 1939 the proposed

---

<sup>26</sup> Bonavia, *History of the LNER II*, pp. 22-33; Hughes, *LNER*, pp. 49-50; NA RAIL 390/2045/5: Report for 1932, p. 38.

<sup>27</sup> Bonavia, *History of the LNER II*, p. 60.

<sup>28</sup> Davies, 'Public Passenger Transport', pp. 136-137.

<sup>29</sup> Thomas, *Rural Transport*, p. 35; NA RAIL 390/2045/6: Report for 1934, p. 25; YA N&P, No. 173, 7<sup>th</sup> September 1934, p. 25.

diversion of WYRC's Leeds-York service to Appleton Roebuck, near Bolton Percy station, this village not yet being served by WYRC buses.<sup>30</sup>

On most routes, the LNER did not oppose improvements to associated bus services. Indeed, as discussed in chapter 2, expansion was partly funded by the LNER. For example, the LNER did not oppose WYRC's application to introduce a Harrogate-Burn Bridge bus in 1937, despite this competing with Pannal station.<sup>31</sup> In the same year, the LNER did not object to WYRC's application to improve their Leeds-Knaresborough, Leeds-Bardsey, and Leeds-Wetherby services. This enabled the bus company to introduce an earlier first departure from Leeds to Knaresborough at 6.20 am, when previously it had been 7.10 am, to increase the frequency of buses on the Leeds-Wetherby route from a 20 minute to a 15 minute interval during parts of the day, and to provide several new short journeys between Leeds and Bardsey.<sup>32</sup>

### **Conclusion**

This chapter has illustrated that the result of the abandonment of rail-bus substitution was the creation of a half co-ordinated railway network. With regards to fares, the LNER turned to using the new regulative environment to shield local train routes from the worst effects of road competition. The railway was less convenient than the buses, so insisted on being able to offer lower fares than the roads. Therefore, the LNER introduced cheap tickets to restore passenger numbers on the local lines retained after the abandonment of rail-bus substitution, while using the TCs to prevent the

---

<sup>30</sup> BA 028561: Minute 228; *Ordnance Survey: One-inch Map of Great Britain: York: Sheet 97, 1955*; See map 1 for WYRC routes.

<sup>31</sup> BA 028561: Minutes 205, 213; YA N&P, No. 300, 14<sup>th</sup> May 1937, pp. 8, 21; No. 305, 18<sup>th</sup> June 1937, p. 92; *Omnibus Timetable: West Yorkshire Road Car Co Ltd: May 12<sup>th</sup> 1937 until further notice*, p. 6; Timetable WYRC July 1938, p. 17; *Ordnance Survey: One-inch Map of England & Wales: Leeds & Bradford: Sheet 96, 1947*.

<sup>32</sup> BA 028561: Minute 221; YA N&P, No. 338, 14<sup>th</sup> April 1938, pp. 3-5; No. 339, 29<sup>th</sup> April 1938, p. 19; Timetable WYRC May 1937, pp. 61-67; Timetable WYRC July 1938, pp. 60-64.



associated territorials from lowering their prices in response. Similar policies were pursued on certain medium-distance routes where interavailability could not be used to share the traffic, and to protect mainline routes from continued competition from the trunk coaches which were still operated by associated companies. These policies were successful in keeping some local passengers on rural trains, but little effort was put into developing the services offered on these lines. Service policy still broadly followed the framework of co-ordination theory. Except for a few lines in tourist areas, “unsuitable” local trains were run down despite not being withdrawn, the LNER looked for ways to cut costs and tried to cut the frequencies of trains, but concerns about contributory revenue prevented more widespread timetable reductions. Alternatively, railway officials were prepared to spend more time improving trunk rail services, which carried traffic considered “more suitable” for the trains, by increasing the number of services and improving on-board facilities. The LNER was also prepared to allow the associated bus companies to continue holding the advantage in terms of service on local routes, the more flexible buses being considered “more suitable” for this work, and did not usually oppose proposed improvements to bus timetables at the TCs.

## **CONCLUSION**

This thesis explained why the LNER did not withdraw loss-making local train services in rural areas during the 1930s, despite its investment in the territorial bus companies. Chapter 1 showed that the LNER intended to replace local trains with buses when they applied for road powers in 1928. Their pre-grouping predecessors had always used other transport modes to feed the railway network, but, taking a cue from events in America, the LNER moved to wishing to replace the local railway with buses after realising they offered significantly greater flexibility and lower operating costs than trains on these routes. However, railway officials framed this belief in terms of theories about wider “transport co-ordination”, which argued Britain’s transport network should be reconstructed so that each mode only carried the traffic for which it was “most suited”. Hence, the LNER also moved to use lorries and aeroplanes as substitutes for certain railway services, and wanted there to be a parallel withdrawal of trunk coach services in favour of the “more suitable railway”. The LNER’s wish to fully encourage the development of local road transport was reflected in their decision to invest in the existing territorial bus companies, as railway officials respected the expertise of bus managers who had established substantial networks in just 10 years.

Chapter 2 demonstrated that the LNER’s involvement in the territorials did lead to some benefits. The LNER received a growing dividend from the associated companies throughout the 1930s, this being aided by the railway’s investments in improving local bus services in preparation for the intended withdrawal of rural trains. Other successes include the provision of ticket interavailability, rail-bus connections for special traffic, replacement transport for emergencies, combined publicity, and alternative arrangements for the lorry conveyance of parcels. When it came to implementing

modal specialisation little was done. The associated bus companies continued to expand their trunk coach network, and only a limited number of local train routes were replaced with buses before this policy was effectively abandoned by the LNER, even though these rural lines generated a significant loss.

Chapter 3 explained that, ultimately, the economic theories been followed by LNER officials were incompatible with the realities of the situation. For a start, they failed to realise they would not be able to force the curtailment of associated trunk coaches, for despite the LNER's claims that longer distance passenger traffic "belonged" to the railway, these road services served different market niches to the trains. Likewise, following an agreement between the Big Four and the NUR, local train routes could not be cut until new roles were found for the workers on these services, which probably restricted the speed at which withdrawals could be undertaken. Most significantly, the framing of rail-bus substitution through the technocratic idealism of co-ordination theory meant officials did not consider with sufficient care the economics of implementation. Their mistaken assessment of the extent of contributory revenue caused them to overact to any problems which occurred in the few cases where local trains were replaced with buses. LNER officials did not try to resolve the practical issues with rail-bus connections, or to attempt to assess the actual likely use of these linkages. When practical issues occurred or when the integration arrangements were used less than they were expecting, railway managers decided to retain the majority of loss making local train routes in case their withdrawal threatened contributory revenue, and by extension, the ability to provide "reasonable" connections from rural areas to the mainline. Yet there was no actual evidence that in most cases the passengers who did make trunk journeys from rural areas were discouraged from

making them by the need to change mode, nor that they felt the new facilities did not comply with reasonable facilities rules.

Chapter 4 established that the abandonment of direct model specialisation slowed the movement of the railways towards focusing their business on serving specific market niches. Services outside these niches were able to survive because the LNER used the legislative controls over road transport fares introduced in the 1930s to stabilise its competitive environment. With road fares now controlled, the railway was able to equalise its position by introducing cheap train fares, without triggering a response from the bus companies. This helped rural passenger trains to halt their decline to a limited extent. However, the railway's policies regarding service competition demonstrated continued support for theories about modal specialisation and moving towards specific niches. Though mainline railway services also received protection from fare competition, on these trains the LNER was more prepared to invest in service improvements. Conversely, on local routes, the LNER allowed the associated companies to compete on service, while it looked for means to lower the fixed costs of running rural railways without reducing train frequencies.

Overall, this thesis has added to the historiography by providing a specific case study of how the Big Four's response to road competition was hampered by the misguided frameworks through which railway officials viewed their network, elucidating upon the observations of Edwards and Dienel. LNER officials were technically enterprising, and they had a solid practical understanding of the benefits that would accrue to their business if they replaced loss making rural train services with railway associated buses. However, LNER officials struggled to implement their ideals because they thought about their network through an inaccurate framework. They viewed rail-bus substitution in an idealistic fashion, considering this as helping to create a "perfect" co-

ordinated transport system. This meant they underestimated the practicalities of their plans; not considering that territorial bus managers would not wish to curtail remunerative trunk coach services, or that the unions would oppose attempts to rapidly cut local train operations. Most importantly, they did not question their beliefs about the economics of their network, enabling the misguided concept of contributory revenue to force the effective abandonment of rail-bus substitution. During the rest of the 1930s, the LNER's policies towards the service provided on the surviving rural lines suggests they still wished to rid themselves of this burden, but were unable to break out of their obsession with contributory revenue.

### **Envoi**

Divall, Hine and Pooley argue that present day policymakers should learn from the past when making transport decisions and that transport historians should consider the modern relevance of their research.<sup>1</sup> In the twenty first century, despite most public transport services in Britain being ostensible privatised, the government retains control over most significant decisions. To solve the environmental problems associated with high car usage, the government must encourage more people to use public transport. However, my study of the attempt by the private railway managers of the interwar era to create a co-ordinated transport network, suggests that government officials today should be prepared to re-evaluate the minutiae of network functioning, and should avoid getting distracted by high profile “engineering” projects. The current Conservative administration is certainly guilty of this latter point, focusing their public transport policies on large rail investment schemes, such as upgrades on the trunk

---

<sup>1</sup> Divall, Colin, Hine, Julian, and Pooley, Colin, ‘Why Does the Past Matter?’, in Divall, Colin, Hine, Julian and Pooley, Colin (eds.), *Transport Policy: Learning Lessons from History* (London, 2016), p. 1.

lines radiating out from London, High Speed 2, the Thameslink programme, Crossrail, Northern Powerhouse Rail, and reopening some of the lines closed by Beeching.<sup>2</sup> However, the benefits of these schemes are counteracted by the cuts to bus services which have occurred over recent years.<sup>3</sup> Officials should recognise the widespread benefits that could accrue from resolving the small scale issues that discourage people from using buses, and move away from just trying to gain positive publicity by focusing on big rail infrastructure works (though this is not to say these schemes are not needed as well).<sup>4</sup>

With regards to future research, now this thesis has examined the LNER's attempt to replace local trains with associated buses in the 1930s; perhaps historians should examine in more depth how the railways considered their lorry operations and aeroplane investments as a possible substitute for certain railway services?<sup>5</sup> Of course, such substitution did not happen widely. Indeed, not only did the interwar railways try to cling onto local passenger traffic with their bus investments, but the result of the failure of rail-bus substitution was the creation of a passenger railway which prioritised serving the express market, while also continuing to operate rural services in a state of stasis. The emergence of this half co-ordinated network can be

---

<sup>2</sup> Wolmar, *Fire & Steam*, pp. 311-312; Bagwell and Lyth, *Transport in Britain*, pp. 210-211; <https://www.gov.uk/government/publications/department-for-transport-single-departmental-plan/department-for-transport-single-departmental-plan--2> [accessed 4th July 2020]; 'Crucial Factors to Making your Reopening Dream a Reality', *Rail*, Issue 908, (1<sup>st</sup>-14<sup>th</sup> July 2020), pp. 32-33.

<sup>3</sup> <https://www.bbc.co.uk/news/uk-england-51815726> [accessed 4<sup>th</sup> July 2020].

<sup>4</sup> See Dobbie, Fiona, McConville, Susan, Ormston, Rachel, 'Transport Research Series: Understanding Why Some People Do Not Use Buses', Scottish Government Social Research, 2010, pp. 27-33, <https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2010/04/understanding-people-use-buses/documents/0097941-pdf/0097941-pdf/govscot%3Adocument/0097941.pdf> [accessed 4th July 2020], for examples of these problems.

<sup>5</sup> Divall has considered discourse about lorry substitution, but research into on-the-ground policy still needs to be done, see Divall, 'Conceiving Distribution', pp. 91-106; likewise, Aldcroft's study concluded that the railways only invested in air transport to protect their trains from competition, see Aldcroft, 'The Railways and Air Transport', pp. 226-239. Yet, Aldcroft was not able to use documents from the National Archives, and, as discussed in chapter 1, these do seem to suggest the LNER was interested in using aeroplanes as an alternative to rail in some cases.

explained by the railways continued belief in tenuous theories about railway economics. Though Edwards has considered the impact of 'implicit' means of evaluating costs on a broad level, historians should do more research to identify other specific case studies of these concepts hindering the Big Four's attempts to refocus their business onto rail suitable niches.

## **Bibliography**

### **Primary sources**

National Archives, Kew, London

#### NA RAIL 943: LNER Public Timetables

NA RAIL 943/13: London and North Eastern Railway: Public Timetables including Continental Services: 1927 July- 1928 July.

NA RAIL 943/16: London and North Eastern Railway: Public Timetables including Continental Services: 1930 July-1931 July.

NA RAIL 943/26: London and North Eastern Railway: Public Timetables including Continental Services: 1937 July- 1938 July.

NA RAIL 943/28: LNER Winter Time Tables: North Eastern Area: 26<sup>th</sup> September 1938 to 30<sup>th</sup> April 1939.

#### NA RAIL 390: LNER Minutes and Reports

NA RAIL 390/57: Suburban & Road Traffic Committee.

NA RAIL 390/61-62, 64: Traffic Committee.

NA RAIL 390/204: Conversion into Motor Roads of the Haughley-Laxfield and Wivenhoe-Brightlingsea Branch Lines.

NA RAIL 390/728: Traffic Committee- Road Motor Transport: Purchase of Passenger Buses, Garage Accommodation, Hertford & St. Ives.

NA RAIL 390/837: Suburban & Road Traffic Committee- Reports on Financial Results of Various Road Services for Year ended 30<sup>th</sup> September 1930.

NA RAIL 390/849: Associated Road Companies. Report on Rail-Road Co-ordination, and estimated financial return on the Company's Investments, 28<sup>th</sup> January 1931.



NA RAIL 390/954: Associated Road Companies- Report on Results for Year ended 31<sup>st</sup> December 1934.

NA RAIL 390/1613/2: Passenger Road Motor Services in the Durham District.

NA RAIL 390/1613/3: Documents relating to Carthorpe and District Motor Omnibus Services.

NA RAIL 390/1613/4: Purchase of Omnibus Undertaking of Mrs. Wallis of Carlisle, 1929.

NA RAIL 390/1701: Memorandum: Development of Road Services in N.E. Area, 1929.

NA RAIL 390/1901-1903: Passenger Managers Committee.

NA RAIL 390/1950-1952: Passenger Department- North Eastern Area Annual Reports.

NA RAIL 390/2044: Divisional Passenger Managers Newcastle District Annual Reports.

NA RAIL 390/2045: Divisional Passenger Manager York District Annual Reports.

NA RAIL 393: LNER Miscellaneous Books and Records

NA RAIL 393/33: Papers relating to the Closing of Branch Lines and miscellaneous other matters.

NA RAIL 393/68: Memorandum on Co-ordination of Passenger Road & Rail Services, 1937.

NA RAIL 398: LNER Various Statistics

NA RAIL 398/22: Road Motor Competition: Comparative Statements of Passenger Journeys between London and Selected Stations, 1932-1933.

NA RAIL 398/39: Tonnages and Receipts: North Eastern Area, 1938.

NA RAIL 398/293: Station Traffic Book, 1910-1939.

NA RAIL 400: LNER Accountants Records

NA RAIL 400/62: Passenger Traffic Returns: North Eastern Area, 1938.

NA RAIL 967: NER Public Timetables

NA RAIL 967/44: North Eastern Railway: Public Timetables: 1900.

NA RAIL 1124: Parliamentary and Departmental Reports relating mainly to Railways

NA RAIL 1124/226: Minutes of Proceedings: Railway (Road Transport) Bills.

Bus Archive, Droitwich Spa

BA: Uncatalogued: Report on Road Motor Transport in Relation to the Railways, Railway Clearing House, 29<sup>th</sup> July 1925, p. 23.

BA 028558: West Yorkshire Road Car Co Ltd: Minute Book: No. 3.

BA 028561: West Yorkshire Road Car Co. Ltd: Minute Book: Standing Joint Committee.

BA B02119/017561: United Automobile Services: Purchase of Shares by LNER and Tilling & British Automobile Traction Ltd.

National Union of Railwaymen documents, Modern Records Centre, University of Warwick

MSS. 127/NU/PO/1/2/A+B: NUR Political Department Minute Book.

MSS.127/NU/1/1/16: NUR Proceedings & Reports for the Year 1928.

National Railway Museum Search Engine Archives, York

Inventory No. 2000-7626: LNER 'Railway & Roadways Holidays' No. 5, 1937.

Published Primary Sources

*Journal of the Institute of Transport.*

*London & North Eastern Railway Magazine.*

*Railway Gazette.*

*Returns of the Capital, Traffic, Receipts, and Working Expenditure, Etc. of the Railway Companies of Great Britain, His Majesties Stationary Office.*

*The Times.*

*Yorkshire Traffic Area: Notices and Proceedings.*

Timetables and Faretables

*Bradshaw's General Railway and Steam Navigation Guide for Great Britain and Ireland: July 1922 (reprint, Newton Abbot, 1985).*

*Bradshaw's Railway, Shipping and Hotel Guide for Great Britain and Ireland: July 1938 (reprint, Newton Abbot, 1969).*

<https://timetableworld.com> [accessed 22<sup>nd</sup> April 2021].

*Sheffield Corporation Tramway and Motor Bus: LMS & LNE Railways- Motor Bus: Time Table: June-July 1938.*

*The Roadway Official Time Table for Motor Coach Services and Holiday Guide: Great Britain: Early Summer Edition: Current to 3<sup>rd</sup> July 1938.*

*Time Table: Complete for All Areas: 7th July to 14th Sept. 1937: Eastern Counties Omnibus Company Limited.*

West Yorkshire Road Car:-

- *July 14<sup>th</sup> 1931, and until further notice.*
- *July 18<sup>th</sup> to September 30<sup>th</sup>, 1932.*
- *May 12<sup>th</sup> 1937 until further notice.*
- *July 1<sup>st</sup> 1938 until further notice.*
- *West Yorkshire Road Car Co Ltd, Keighley-West Yorkshire Services Ltd, York-West Yorkshire Joint Services: List of Fares and Stages, July 1938.*

*United Automobile Services Ltd: Official Timetable, June 1<sup>st</sup> 1938.*

Various other associated bus timetables available at the Bus Archive have also been utilised to identify trends.

### Maps

Google Maps.

*Ordnance Survey: One-inch Map of England & Wales: Leeds & Bradford: Sheet 96, 1947.*

*Ordnance Survey: One-inch Map of Great Britain: York: Sheet 97, 1955.*

The National Library of Scotlands digitised historical map collection, <https://maps.nls.uk/>

### Government documents

*Hansard.*

Road Traffic Act, 1930 [20 & 21 Geo. 5. Ch. 43], p. 62, accessed at [http://www.legislation.gov.uk/ukpga/1930/43/pdfs/ukpga\\_19300043\\_en.pdf](http://www.legislation.gov.uk/ukpga/1930/43/pdfs/ukpga_19300043_en.pdf) [25th February 2019].

Road and Rail Traffic Act, 1933 [23 & 24 Geo. 5. Ch. 53], p. 15, accessed at [www.legislation.gov.uk/ukpga/1933/53/pdfs/ukpga\\_19330053\\_en.pdf](http://www.legislation.gov.uk/ukpga/1933/53/pdfs/ukpga_19330053_en.pdf) [25th February 2019].

*Royal Commission on Transport. Final report. The co-ordination and development of transport, 1931, 20<sup>th</sup> Century House of Commons Sessional Papers, Paper Number: Cmd. 3751, Vol. 17.*

Sources utilised for information about modern day transport issues

<https://www.bbc.co.uk/news/uk-england-51815726> [accessed 4<sup>th</sup> July 2020].

<https://www.gov.uk/government/publications/department-for-transport-single-departmental-plan/department-for-transport-single-departmental-plan--2> [accessed 4<sup>th</sup> July 2020].

*Rail* magazine.

## **Secondary sources**

### **Books**

Albitreccia, A., and Wohl, Paul, *Road and Rail in Forty Countries* (London, 1935).

Aldcroft, Derek H., and Dyos, Harold .J., *British Transport: An Economic Survey from the Seventeenth Century to the Twentieth* (Leicester, 1969).

Aldcroft, Derek H., *British Railways in Transition: The Economic Problems of Britain's Railways since 1914* (London, 1968).

Aldcroft, Derek H., *British Transport since 1914: An Economic History* (Newton Abbot, 1975).

Aldridge, W.J., and Stevens, S.W., *Railway-Owned Commercial Vehicles* (London, 1999).

Allen, Cecil J., *The London & North Eastern Railway* (London, 1966).

Bagwell, Philip, and Lyth, Peter, *Transport in Britain: From Canal Lock to Gridlock* (London, 2002).

Bagwell, Philip, *The Transport Revolution: 1770-1985* (London, 1988).

Biddle, Gordon and Simmons, Jack (eds.), *The Oxford Companion to British Railway History: From 1603 to the 1900s* (Oxford, 1999).

Birks, John A., with Beetham, Tony, Brittan, Yvonne, and Dickie, Keith A.S., *National Bus Company, 1968-1989: A Commemorative Volume* (Glossop, 1990).

Bonavia, Michael R., *A History of the LNER II: The Age of the Streamliners, 1934-39* (London, 1990).

Bonavia, Michael R., *Railway Policy Between the Wars* (Manchester, 1981).

Bonavia, Michael R., *The Four Great Railways* (Newton Abbot, 1980).

Bonavia, Michael R., *The Organisation of British Railways* (London, 1971).

Booker, Frank, *The Great Western Railway: A New History* (Newton Abbot, 1980).

Channon, Geoffrey, *Railways in Britain and the United States, 1830-1940* (Aldershot, 2001).

Chester, D.N., *Public Control of Road Passenger Transport: A Study in Administration and Economics* (Manchester, 1936).

Croft, D.J. *The Nidd Valley Light Railway* (Oxford, 1987).

Cummings, John, *Railway Motor Buses and Bus Services in the British Isles: 1902-1933: Volume One* (Oxford, 1978).

Dimock, Marshall E., *British Public Utilities and National Development* (London, 1933).

Ellis, Hamilton, *British Railway History: An Outline From the Accession of William IV to the Nationalization of Railways: 1877-1947* (London, 1959).

Fenelon, K.G., *The Economics of Road Transport* (London, 1925).

Fenelon, K.G., *Transport Co-ordination: A Study of Present-Day Transport Problems* (London, 1929).

Filarski, Ruud, in cooperation with Mom, Gijs, *Shaping Transport Policy: Two Centuries of Struggle Between the Public and Private Sector- A Comparative Perspective* (Den Haag, 2011).

Foreman-Peck, James and Millward, Robert, *Public and Private Ownership of British Industry: 1820-1990* (Oxford, 2011).

Gibson, Thomas, *Road Haulage by Motor in Britain: The First Forty Years* (London, 2001).

Gordon, D.I., *A Regional History of the Railways of Great Britain: Volume V: The Eastern Counties* (Newton Abbot, 1977).

Greaves, Julian, *Industrial Reorganisation and Government Policy in Interwar Britain* (Aldershot, 2005).

Grieves, Keith, *Sir Eric Geddes: Business and Government in War and Peace* (Manchester, 1989).

Grinling, Charles H. (with supplementary chapters by Borley, H.V., and Ellis, C. Hamilton), *The History of the Great Northern Railway: 1845-1922* (London, 1966).

Hadfield, Charles and Biddle, Gordon, *The Canals of North West England: Volume II* (Newton Abbot, 1970).

Healey, Keith, *Yorkshire Coaching Pools* (Glossop, 2003).

Heard, Mike, *United Automobile Services Limited: 80 Years of Service* (Queensbury, Bradford, 1992).

Hibbs, John, *Bus and Coach Management* (London, 1985).

Hibbs, John, *The Bus and Coach Industry: Its Economics and Organization* (London, 1975).

Hibbs, John, *The History of British Bus Services* (Newton Abbot, 1989).

Hillman, Mayer and Whalley, Anne, *The Social Consequences of Rail Closures* (London 1980).

Holt, G.O., *A Regional History of the Railways of Great Britain: Volume X: The North West* (New Abbot, 1978).

Hoole, Ken, *A Regional History of the Railways of Great Britain: Volume IV: The North East* (Newton Abbot, 1986).

Hoole, Ken, *North Eastern Railway Buses, Lorries & Autocars* (Knaresborough, 1969).

Household, Humphrey, *With the LNER in the Twenties* (Gloucester, 1985).

Howell, David, *Respectable Radicals: Studies in the Politics of Railway Trade Unionism* (Aldershot, 1999).

Howkins, Alun, *The Death of Rural England: A Social History of the Countryside Since 1900* (London, 2003).

Hughes, Geoffrey, *LNER* (London, 1987).

Hunter, D.L.G., *From S.M.T. to Eastern Scottish: An 80<sup>th</sup> Anniversary Story* (Edinburgh, 1987).

Ingram, Andrew C., *Branch Lines Around Wisbech from Peterborough, Sutton Bridge, March, Watlington and Upwell* (Midhurst, West Sussex, 2015).

Jenkinson, Keith A., and Staddon, S.A., *Northern and its Subsidiaries, 1913-1995* (Bradford, 1995).

Jenkinson, Keith A., *Northern Rose: The History of West Yorkshire Road Car Co. Ltd* (Bradford, 1987).

Jenkinson, Keith A., *Twixt, Wold, Carr & Coast: East Yorkshire Motor Services and its Associates* (Bradford, 1992).

Jenkinson, Keith A., *West Yorkshire* (Glossop, 1977).



Johnston, Kenneth H., *British Railways and Economic Recovery: A Sociological Study of the Transport Problem* (London, 1949).

Jordan, Arthur & Elisabeth, *Away for the Day: The Railway Excursion in Britain, 1830 to the Present Day* (Kettering, 1991).

Loft, Charles, *Government, the Railways and the Modernization of Britain: Beeching's Last Trains* (London, 2006).

Marshall, John, *The Severn Valley Railway* (Newton Abbot, 1989).

Middleton, Victor T.C., and Lickorish, L.J., *British Tourism: The Remarkable Story of Growth* (Oxford, 2007).

Miller, R.W., *The Winsford & Over Branch* (Witney, Oxfordshire, 1999).

O'Connell, Sean, *The Car and British Society: Class, Gender and Motoring, 1896-1939* (Manchester, 1998).

Paye, Peter, *The Southwold Railway* (Lydney, 2018).

Plummer, Alfred, *New British Industries in the Twentieth Century: A Survey of Development and Structure* (London, 1937).

Pollard, Sidney, *The Development of the British Economy, 1914-1990* (London, 1997).

Ponsonby, G.J., *Transport Policy: Co-ordination through Competition* (Westminster, 1969).

Pugh, Martin, *'We danced all night': A Social History of Britain between the Wars* (London, 2008).

Rogers, James, *The Railways of Harrogate and District* (2000).

Sanderson, S.F., *Railway Commercial Practice* (London, 1952).

Savage, C.I., and Barker, T.C., *An Economic History of Transport in Britain* (London, 1974).

Semmens, Peter, *A History of the Great Western Railway 1: Consolidation, 1923-29* (London, 1990).

Semmens, Peter, *A History of the Great Western Railway 2: The Thirties, 1930-39* (Cambridge, 1988).

Sherrington, C.E.R., *The Economics of Rail Transport in Great Britain: Volume II: Rates and Services* (London, 1937).

Simmons, Jack, *The Railway in England and Wales, 1830-1914: Volume 1: The System and its Working* (Leicester, 1978).

Simmons, Jack, *The Railway in Town and Country: 1830-1914* (Newton Abbot, 1986).

Smith, David Norman, *The Railway and its Passengers: A Social History* (Newton Abbot, 1988).

Smith, Geoffrey K., *The Potteries Motor Traction Co Ltd: A Retrospective* (Glossop, 2011).

Stevens, W.J., *The Future of British Railways: A Plea for Co-operation* (London, 1938).

Thomas, David St John, *The Rural Transport Problem* (London, 1963).

Thomas, David St John and Whitehouse, Patrick, *The Great Days of the Country Railway* (Newton Abbot, 2002).

Thomas, David St John and Whitehouse, Patrick, *The Great Western Railway: 150 Glorious Years* (Newton Abbot, 2002).

Thuroid, Peter, *The Motoring Age: The Automobile and Britain, 1896-1939* (London, 2003).

Vallance, H.A., *The Great North of Scotland Railway: The History of the Railways of the Scottish Highlands- Vol 3* (1989).

Walker, Gilbert, *Road and Rail: An Enquiry into the Economics of Competition and State Control* (London, 1947).

Welbourn, Nigel, *Lost Lines: Joint Railways* (Hersham, 2010).

Williams, Frederick S., *Our Iron Roads: Their History, Construction, and Social Influences* (London, 1852).

Wise, Graham, *Lincolnshire Road Car 75* (Sheffield, 2003).

Wolmar, Christian, *Fire & Steam: How the Railways Transformed Britain* (London, 2008).

### Articles

Aldcroft, Derek H., 'The Railways and Air Transport, 1933-9', in Aldcroft, Derek H., *Studies in British Transport History, 1870-1970* (Newton Abbot, 1974), pp. 226-242.

Barker, T.C., 'Slow Progress: Forty Years of Motoring Research', *The Journal of Transport History*, 14, 2 (1993), pp. 142-165.

Butterfield, Peter, 'Branch Lines, Wayside Stations and Road Competition', *The Journal of Transport History*, 16, 2 (1995), pp. 179-195.

Butterfield, Peter, 'Grouping, Pooling and Competition: The Passenger Policy of the London & North Eastern Railway, 1923-39', *The Journal of Transport History*, 7, 2 (1986), pp. 21-47.

Cain, P.J., 'Railways 1870-1914: The Maturity of the Private System', in Aldcroft, Derek H., and Freeman, Michael J., (eds.), *Transport in Victorian Britain* (Manchester, 1988), pp. 92-133.

Crafts, Nicholas, Mills, Terrence C., Mulatu, Abay, 'Total Factor Productivity Growth on Britain's Railways, 1852-1912: A Reappraisal of the Evidence', *Explorations in Economic History*, 44, 4 (2007), pp. 608-634.

Crompton, Gerald and Jupe, Robert, "An Awkward Fence to Cross': Railway Capitalization in Britain in the Inter-war Years', *Accounting, Business & Financial History*, 12, 3 (2002), pp. 439-459.

Crompton, Gerald, 'Efficient and Economical Working'? The Performance of the Railway Companies, 1923-1933', *Business History*, 27, 2 (1985), pp. 222-237.

Crompton, Gerald, 'Squeezing the Pulpless Orange': Labour and Capital on the Railways in the Interwar-War Years', *Business History*, 31, 2 (1989), pp. 66-83.

Dienel, Hans-Liuder, 'Why so late? Questions concerning Intermodality of Transport Junctions', in Dienel (ed.), *Unconnected Transport Networks: European Intermodal Traffic Junctions 1800-2000* (Frankfurt, 2004), pp. 11-34.

Divall, Colin, 'Civilising Velocity: Masculinity and the Marketing of Britain's Passenger Trains, 1921-39', *The Journal of Transport History*, 32, 2 (2011), pp. 164-191.

Divall, Colin, 'Conceiving Distribution in the United Kingdom: The (London and) North Eastern Railway's Discursive Response to Road Haulage, 1921-39', in Roth, Ralf and Divall, Colin (ed.), *From Rail to Road and Back Again? A Century of Transport Competition and Interdependency* (London, 2016), pp. 91-108.

Divall, Colin, Hine, Julian, and Pooley, Colin, 'Why Does the Past Matter?', in Divall, Colin, Hine, Julian and Pooley, Colin (eds.), *Transport Policy: Learning Lessons from History* (London, 2016), pp. 1-13.

Divall, Colin and Shin, Hiroki, 'Cultures of Speed and Conservative Modernity: Representations of Speed in Britain's Railway Marketing', in Fraser, Benjamin, and Spalding, Steven D. (eds.), *Trains, Culture and Mobility: Riding the Rails* (Lanham, 2012), pp. 11-29.

Dobbie, Fiona, McConville, Susan, Ormston, Rachel, 'Transport Research Series: Understanding Why Some People Do Not Use Buses', Scottish Government Social Research, 2010,  
<https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2010/04/understanding-people-use-buses/documents/0097941-pdf/0097941-pdf/govscot%3Adocument/0097941.pdf> [accessed 4th July 2020].

Edwards, Roy, 'Conceptualising Cost: The Analysis of Management Information on Britain's Railways, c. 1935-56', *Contemporary British History*, 13, 3 (2008), pp. 72-81.

Edwards, Roy, 'Divisional Train Control and the Emergence of Dynamic Capabilities: The Experience of the London, Midland and Scottish Railway, c. 1923- c. 1939', *Management and Organizational History*, 6, 4 (2011), pp. 391-410.

Edwards, Roy, 'Is Management Accounting just what Management Accountants do? Implicit Cost Analysis on Britain's Railways c. 1923-1939', *Accounting, Business and Financial History*, 8, 3 (1998), pp. 331-349.

Edwards, Roy, 'Job Analysis on the LMS: Mechanisation and Modernisation c. 1930-c.1939', *Accounting, Business and Financial History*, 20, 1 (2010), pp. 91-105.

Edwards, Roy, "Keeping unbroken ways': The Role of the Railway Clearing House Secretariat in British Freight Transportation, c. 1923- c. 1947', *Business History*, 55, 3 (2013), pp. 479-497.

Edwards, Roy, 'Shaping British Freight Transport in the Interwar Period: Failure of Foresight or Administration, 1919-34', in Roth and Divall, *From Rail to Road and Back Again?*, pp. 77-90.

Fenelon, K.G., 'British Railways Since the War', *Journal of the Royal Statistical Society*, 96, 3 (1933), pp. 381-437.

Harcourt, Keith, 'Railway Containers in the United Kingdom and Europe during the 1920s and 1930s', in Roth and Divall, *From Rail to Road and Back Again?*, pp. 109-132.

Hey, Kevin, 'Transport Co-ordination and Professionalism in Britain: Forging a New Orthodoxy in the Early Inter-war Years', *The Journal of Transport History*, 31, 2 (2012), pp. 25-41.

Irving, R.J., 'The Branch Line Problem in British Railway History: The Financial Evidence from North-East England', *The Journal of Transport History*, 14, 1 (1993), pp. 27-45.

Medcalf, Alexander, "'We Are Always Learning': Marketing the Great Western Railway, 1921-39', *The Journal of Transport History*, 33, 2, (2012), pp. 186-211.

Medcalf, Alexander, "'What to Wear and Where to Go": Picturing the Modern Consumer on the Great Western Railway, 1921-1939', in Fraser and Spalding, *Trains, Culture and Mobility*, pp. 55-81.

Parris, H.W., 'Northallerton to Hawes: A Study in Branch-Line History', 2, 4 (1956), pp. 235-248.

Pirie, Gordon, 'Revolutionary Limits in Transport', *The Journal of Transport History*, 34, 1 (2013), pp. iii-iv.

Quail, John, 'Accounting's Motive Power- the Vision and Reality for Management Accounting on the Nationalised Railways to 1959', *Accounting, Business and Financial History*, 16, 6 (2006), pp. 419-446.

Scott, Peter, 'British Railways and the Challenge from Road Haulage: 1919-39', *Twentieth Century British History*, 13, 2 (2002), pp. 101-120.

Singleton, John, 'Ribble Motor Services and Co-operation in the Inter-war Bus Industry', *The Journal of Transport History*, 16, 2 (1995), pp. 117-133.

Roth, Ralf, 'Rails and Roads between Competition and Interdependency: A Long and Winding Relationship with Many Innovations that Failed', in Roth and Divall, *From Rail to Road and Back Again?*, pp. 41-76.

Temple, Richard, 'A difficult and peculiar section': Provincial Bus Company Workers, 1934-47', *Labour History Review*, 78, 2 (2013), pp. 197-226.

Turnock, D., 'The Historical Geographer's Approach to Railway History: The Relations between Railways and Canals', in Ambler, R.W., (ed.), *The History and Practice of Britain's Railways: A New Research Agenda* (Aldershot, 1999), pp.

Williams, Michael Aufrere, 'The Whitby-Loftus Line: 'a more spectacular example of a loss-making branch would be hard to find'. Is this really the case?', *Journal of the Railway & Canal Historical Society*, No. 216 (2013), pp. 33-46.

#### Unpublished thesis

Davies, Reginald Arthur Murray, 'Public Passenger Transport in Inter-war Britain: The Southern Railway's Response to Bus Competition, 1923-39', PhD Thesis, (2014), University of York.

Thompson, Josef Evan Matthew, 'A Master Whose Heart is in the Land': Picturing the Tourist Utopia of the Great Western Railway, 1897-1947', PhD Thesis, (2011), University of York.