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Free for some? Setting the context for the 'On the Buses' study

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Free for some? Setting the context for the 'On the Buses' study

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Introduction

Just over sixty years ago a LSHTM scientist, Jerry Morris, is said to have 'invented exercise' (Kuper 2009). The evidence he used "to show that exercise can extend your life" (Kuper 2009) came not from gymnasia or playing fields, as one might expect, but from observations made while riding London's buses. Out of this surprising setting Morris showed that 'unavoidably active' bus conductors had substantially fewer heart-attacks than their 'protypically sedentary' bus driver counterparts (Kuper 2009). This despite these research subjects sharing similar social class backgrounds.

On the fieldwork carried out by him and his team, Morris recalls that they "spent many hours sitting on the buses watching the number of stairs they [the conductors] climbed" (Kuper 2009), and so it seems fitting that six decades on a team of LSHTM researchers will, in the name of public health, be acquainting themselves with the activities taking place on London's buses once more. This time around the primary interest for the researchers is in neither the health outcomes of bus drivers nor of long-departed bus conductors. Rather, as the scope for transport policy to mediate health-promoting activities is realised, and while at the same time substantial public spending cuts loom large, this study will focus on the relationship between fare exemptions for younger and older patrons of London's public bus network and public health in the capital.

As with Morris's 1949 research, the current 'On the buses' researchers will draw, in part, on data derived from 'natural' settings to make their claims. In the present study, the researchers are interested in the health-promoting or health-damaging consequences that can be attributed to policy interventions that were directed towards reducing the financial costs of travel for young people in London. The specific interventions concerned are the removal of bus fares for 12-16 year-olds in September 2005 and the removal of bus fares for 17 year-olds in full-time education September 2006. [1]

These fare exemptions for young people were introduced during the tenure of the previous Mayor of London, Ken Livingstone (Mayor 2000-2008), who was known for introducing public transport subsidy schemes during his time as leader of the

[1] Fares are exempted for London residents in this age bracket (12-17) who apply for a 'Zip Card' from TfL and use it according to the terms and conditions of the issuer TfL (2010, 09/03/2010). "Tickets > Students and children: 11-15." Tickets > Students and children. Retrieved 1 November, 2010, from http://www.tfl.gov.uk/tickets/14310.aspx.

, TfL (2010, 19/03/2010). "Tickets > Students and children: 16-18." Tickets > Students and children. Retrieved 1 November, 2010, from http://www.tfl.gov.uk/tickets/14308.aspx.

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Greater London Council (GLC) in the 1980s.[2] When the first (2005) intervention concerned was launched, secondary school-aged children had paid a reduced, 40p flat fare for journeys on the London bus network.[3] As well as grant the cardholder unlimited free travel on all buses and trams displaying the London Buses symbol (both within and just outside London (see TfL 2010)), Zip Cards also act as conventional 'Oyster' cards and can be loaded up with pre-pay or travelcards for the cardholders to use other parts of the TfL network (Tube, DLR, London Overground and most National Rail services operating in the capital) at a variety of discounted rates (see TfL 2010: 6-11).

When the fare exemptions with which we are concerned were unveiled, the stated rationale for universally eliminating bus fares for young people in London was to help them to continue studying, improve employment prospects and promote the use of public transport" (TfL 2006: 7). That is, it was aimed first and foremost at mitigating the potential social exclusion effects for young people of fare-based urban transport systems (see Social Exclusion Unit 2003). As it has been stated more recently on the TfL website:

> *Granting young people free travel is part of the Mayor's strategy to embed more environmentally sound travel habits from an early age while helping young people to unlock education, sport, leisure and employment opportunities* (TfL 2007).

By removing any need to pay, at the point of use, for travel on buses, the argument went that young people would be better (and more equally) able to access goods and services (schools, libraries, leisure facilities etc.) and so reduce the chances of their suffering from transport poverty. At the same time, it was hoped that by encouraging bus use from an early age more environmentally sustainable travel practices would become ingrained. The effectiveness of the Zip Card scheme in relation to these posited outcomes is still up for debate, though there is some broader evidence for the value of such interventions (e.g.Ogilvie, Mitchell et al. 2006).

For us, however, our interest lies not in the success or not of the Zip Card in relation to its initial objectives, but rather in the public health impacts of these fare

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[2] Most notable is the 'Fare's Fair' scheme that Livingstone launched in 1981. This scheme used government subsidies to reduce public transport fares but was ruled illegal by the Law Lords Mann, N. (2000, 05/05/2000). "Ken Livingstone: Rebel Mayor." Retrieved 30 September, 2010, from http://news.bbc.co.uk/1/hi/in_depth/uk_politics/2000/london_mayor/736460.stm.

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[3] Personal communication received in relation to meeting between Charlotte Kelly (Institute for Transport Studies and 'On the Buses' team) and Alex Phillips and Lisa Labrousse (TfL) on 17/08/2010.

exemptions. That is, this study addresses the consequences for the broader public health of a social policy that was not introduced with health in mind in any explicit way but which may significantly shape the health outcomes of Londoners all the same.

The bus network in London – a summary

In order to better understand the impact of these fare concessions on young people in London it is first worth providing a summary of London's contemporary bus network. Over the past ten years, and since the establishment of the Greater London Authority (GLA) as a strategic governing authority for London in July 2000, London's bus network has been subject to significant operational changes (including changes to bus 'service levels'[4] as well as to the ways that contractual agreements between TfL and bus operators are monitored and regulated). These changes have been driven right from the top, with the GLA's first Mayor, Ken Livingstone (2000-2008) stating that to resolve the contemporary problems posed to "the business efficiency and quality of life of the city" by an inadequate transport system, "[t]he only viable approach…is one where passenger travel to, from and within central London must primarily be served by public transport" (GLA 2001: 12).[5] Such has been the extent of the focus on public transport heralded by Ken Livingstone that TfL (GLA 2009: 139) regards the bus network as "one of London's transport success stories over the last decade." If we take ridership as the key measure of success, this pronouncement does seem to be borne out by the official figures, which indicate that "[t]he capital's buses now carry 2.2 billion passengers each year – the highest level since 1962, with service levels at their highest since 1957" (GLA 2009: 139).[6]

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[4] In the transport field, "[s]ervice levels can be defined according to a number of dimensions, the key ones being the frequency of public transport services (services per hour), the hours they operate (period of operation), where they operate and the origins and destinations they serve (both related to network coverage)" KonSULT (2010). "Public Transport Services: Summary." Retrieved 1 November, 2010, from http://www.konsult.leeds.ac.uk/private/level2/instruments/instrument042/l2_042summ.htm.

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[5] It is worth noting here too that right from the off Ken Livingstone framed public transport improvements in terms not only of economic efficiency but also quality of life.

[6] Another measure of success, arguably of particular significance to quality of life outcomes, is bus reliability. In this instance, the 'Excess Wait Time' (EWT) for buses on high-frequency routes fell from 2.1 minutes in 1999/2000 to 1.1 minutes in 2004/05 TfL (2007). Achievements 2007. G. B. P. P. a. G. Publishing. London, TfL**:** 83.

. Reliability on low-frequency routes also improved, with, for example, TfL recording an unprecedented high of 77.2% on-time departures in 2005/06 TfL (2007). Achievements 2007. G. B. P. P. a. G. Publishing. London, TfL**:** 83.

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Looking at passenger journey stage numbers (millions) for bus use since 1971 (see Figure 1) we can see that since 2000 the number of journey stages[7] completed on buses in London has increased by ca. 0.9 billion and that of this increase about 0.4 billion bus passenger stages have been added since the first of the interventions we are interested in was introduced (September 2005).

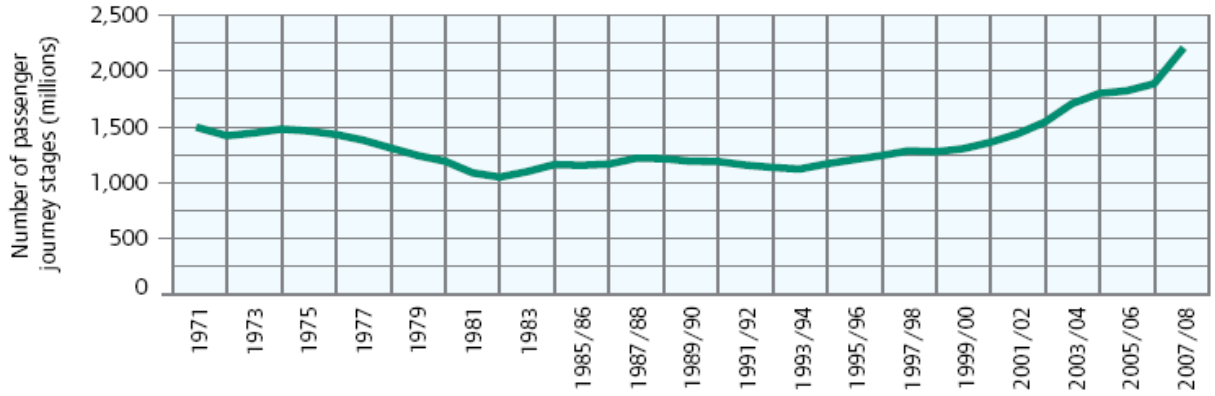

Figure 1 - London bus use since 1971 (GLA 2009: 140, Figure 37)

Overall, and as the *Mayor's Transport Strategy (Public Draft)* states , "the bus network has...[seen] an increase in service volume of about 40 per cent in the last 10 years" (GLA 2009: 52).

At present there are almost 700 bus routes in being operated in the Greater London area (London TravelWatch 2009: 4). TfL break these routes down into four categories, namely:

- **High frequency (non-timetabled) routes** [the majority of routes fall into this category];
- **Low frequency** (timetabled) routes;
- **Night bus routes**;
- **Low frequency London Local Service Agreement (LLSA) routes** ["a small number of cross-borough-boundary bus services...that operate as part of the TfL network within Greater London, and outside of London on a commercial basis" (London TravelWatch 2009: 5)].[8]

[7] The term 'journey stages' refers to "the segments of a trip, with each stage using a single mode of transport" TfL (2010). Transport for London: Travel in London, Report 2. London, Transport for London**:** 371.

[8] For a full breakdown of London bus routes according to these four categories see TfL TfL (2010). London Buses Quality of Service Indicators: Route results for London Bus Services, First Quarter 2010/11, 1st April 2010 – 25th June 2010. London, Transport for London**:** 22.

London Buses Quality of Service Indicators: Route results for London Bus Services, First Quarter 2010/11, 1st April 2010 – 25th June 2010.

In terms of governance, in 1985 bus services *outside of* London were deregulated such that "any licensed operator could apply to run a new route even if another company already ran a service along the same roads" (TfL 2007). London, however, was exempted from this policy of deregulation, though measures were introduced to set in train the decentralisation of control of the capital's bus network.[9] Specifically, in 1985 London Transport (LT) set up a 'Tendered Bus Division' which was responsible for initiating the process of competitive tendering for bus routes and services. This development required LT's subsidiary body, London Buses Limited (itself brought into being as a result of the London Regional Transport Act 1984), "to compete against operators in the private sector for the opportunity to run individual bus routes on behalf of LT" (TfL 2007).

The Conservative government at the time, however, decided to postpone formally deregulating the London bus network until after the May 1997 General Election. The result of this election therefore changed the course of transport governance in the capital, with the incoming Labour government committed to reintroducing a strategic governing authority for London. This commitment led to the replacement of LT by Transport for London (TfL) in July 2000, TfL being one of the four 'functional bodies' of the GLA.[10]

As a result, public buses in London now operate according to a complex management and funding structure in which TfL's role is to plan routes and monitor service quality, as well as manage bus stops, stations and other support services. The bus services themselves are operated largely by private sector companies under contract to London Bus Services Limited ('London Buses'), part of TfL. At the time of writing there are 18 bus operators running buses in this way in London (see Appendix 1). To borrow directly from a report by London TravelWatch (2009), "[t]hese contracts contain a number of incentives which give financial benefits or penalties depending on performance. The present contract scheme, Quality Incentive Contracts (QICs), gives financial incentives to operators for the quality of service they deliver. The key features of these contracts are:

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[9] In the decade and a half (1970-84) immediately preceding this deregulation of bus services in the UK, 'London Transport' (the strategic body for transport in London) had come under direct control of the Greater London Council (GLC). London Transport was then brought under central government control by the London Regional Transport Act 1984 TfL (2007, 16/03/2007). "Transport for London: London Buses, History." Retrieved 11 October, 2010, from http://www.tfl.gov.uk/corporate/modesoftransport/londonbuses/1554.aspx.

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[10] The four 'functional bodies' of the GLA are: Transport for London (TfL), London Development Agency (LDA), London Fire and Emergency Planning Authority (LEEPA), and Metropolitan Police Authority (MPA) GLA (2010, 03/03/2010). "The four key agencies working with the Mayor." Retrieved 27 October, 2010, from http://www.london.gov.uk/who-runs-london/greater-london-authority/gla-functional-bodies.

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- Contracts are designed to provide incentives to operators to improve quality;
- Routes are generally tendered individually, but often at the same time as other routes in the same area to facilitate service changes;
- Contracts are normally for 5 years, with a potential 2 year performance related extension available to the operator;
- It is a continuing programme of tendering, with between 15% and 20% of the network typically tendered each year;
- Tender evaluation is based on best value for money, taking into account quality and safety as essential features;
- Contract payments are related to the mileage operated and overall reliability of the service;
- Comprehensive quality measurements are used across all aspects of delivery."[11]

For 2009/10, across the bus network overseen by TfL (a network spanning 1,580 square kilometres plus a few services into outlying areas (see TfL 2007)), bus network costs are forecast to be in the region of £1.69 billion, with about two-thirds of this (£1.12 billion) being met by bus network income and the remaining £0.57 billion being met bus subsidy (TfL 2009: 72). In 2009/10, 497.2 million vehicle kilometres were scheduled for operation across the London bus network, though 14.4 million of these vehicle kilometres were 'lost' (i.e. not operated) owing to staff, mechanical, traffic and 'miscellaneous' reasons (TfL 2010). This compares to 450 million vehicle kilometres being operated on the network in 2004/05 (TfL 2007) and immediately prior to the first of the interventions that concerns us.

Bus ridership data and trends – overview

One of the key background trends for this study is the substantial increase in the use of mass public transport recorded in London in recent years. For example, it has been shown that "[t]otal passenger kilometres travelled on [all public transport] services operated by TfL were almost 70 per cent higher in 2008/09 than in 1991/92" (TfL 2010: 45). As the authors of the above-cited report go on, "this growth…was especially pronounced on the bus network" (TfL 2010: 45). Specifically, in the same period (1991/92 to 2008/09) bus patronage increased by 93 per cent; moreover, between 2000/01 and 2008/09, recorded bus passenger kilometres increased by 64% (see TfL 2010: 45).

In 2008/09, then, Transport for London's 'best estimate' is that 7,942 million passenger kilometres were travelled by bus (TfL 2010: 47, Table 2.5). This

[11] For further details on these contractual arrangements please see *London's Bus Contracting and Tendering Process* TfL (2008). London's Bus Contracting and Tendering Process. L. B. S. Ltd. London, Transport for London**:** 26.

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compares to 6,755 million passenger kilometres travelled by bus in 2004/05 (just prior to the first of the interventions with which we're concerned was introduced), 4,709 million passenger kilometres in 2000/01 (the year that the GLA was established) and 3,996 million bus passenger kilometres in 1991/92 (the earliest figures given in the document presently cited).[12]

In 2008, using journey stage data, bus travel (including tram travel) accounted for 20% of the modal share of transport in London, the highest for any public transport mode (see Figure 2).

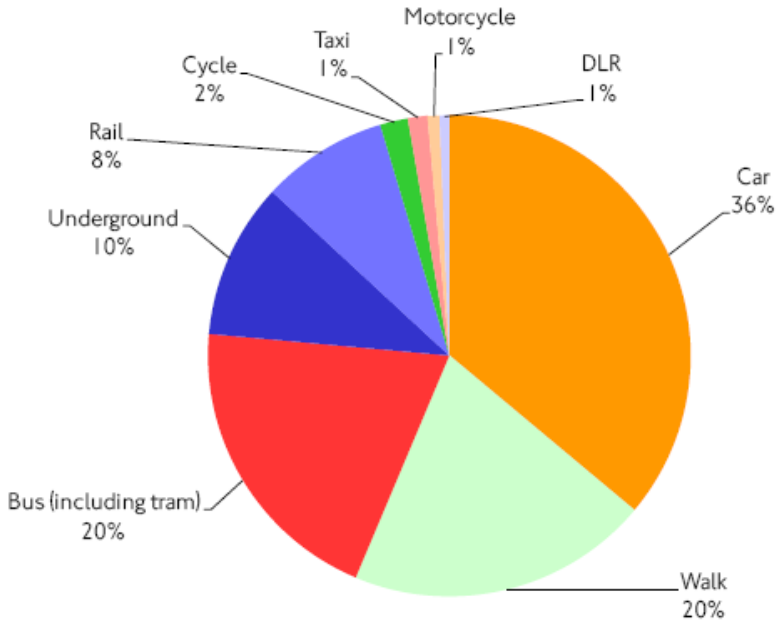

Figure 2 - Modal shares of daily journey stages in London, 2008 (TfL 2010: 44, Figure 2.3)

In 2005 this share was 18.8%, in 2000 14.6% and 1993 13.5%. Between 2000 and 2008, then, the modal share of buses in London (calculated using journey stage-

[12] N.B. between 2006/7 and 2007/8 TfL made a significant change to the methodology used to estimate bus trips and journey changes. In short, from 2007/8 onwards they have used Oyster card validations as the primary source of these estimates rather than ticket sales. The Oyster card validation record, they argue, "provides more robust estimates of total bus and tram use" TfL (2010). Transport for London: Travel in London, Report 2. London, Transport for London**:** 371.

. The effects of the estimation method change in 2007/08 were to "add almost 0.4 million bus trips and 0.5 million journey stages to the daily average, and [to increase…] the estimate of bus mode shares by 1 percentage point" TfL (2010). Transport for London: Travel in London, Report 2. London, Transport for London**:** 371.

. See *Transport for London: Travel in London: Report 2* TfL (2010). Transport for London: Travel in London, Report 2. London, Transport for London**:** 371.
for further information on this travel data estimation change.

based data) increased by 5.4%. That is, in the past decade a significant shift in modal choice towards buses has been evidenced. Importantly, this period is one characterised by a shift to GLA/TfL oversight of London's transport infrastructure and services. More broadly, as TfL (2007) sum it up succinctly, in London "[b]us usage is growing at its fastest rate since 1946." The backdrop to our study and the fare policy interventions we are concerned with is, therefore, one of high levels of and pronounced increases in bus usage in the capital.

Bus ridership data and trends – some preliminary cuts of the aggregate data

Beneath these aggregate level statistics, two aspects of the data arguably warrant particular attention. Firstly, notable differences in transport patterns between inner and outer London boroughs need to be acknowledged. Table 1 sets out data from 2006-9 for modal share by borough of residence (for which the mode assigned is the main mode used within a given trip), we see that over a seven-day week in inner London, bus (including tram) travel accounts for 19% of trips. By contrast, it only accounts for 12% of the modal share in outer London, with car/motorcycle travel accounting for a much larger share in this sub-region of the capital[13] (TfL 2010: 70).

[13] Table 1 shows that in Outer London 50% of residents' main mode trips are undertaken by car or bus, nearly double the percentage for residents' main mode trips undertaken by car or bus in Inner London (26%).

London borough	Percentage of residents' trips by main mode							
	Rail	Under-ground /DLR	Bus/ tram	Taxi/ other public	Car/ motor-cycle	Cycle	Walk	All modes
Camden	3%	12%	17%	3%	19%	3%	42%	100%
City of London	2%	17%	10%	2%	10%	0%	59%	100%
Hackney	3%	6%	30%	1%	21%	4%	35%	100%
Hammersmith and Fulham	1%	14%	17%	3%	24%	4%	37%	100%
Haringey	3%	14%	19%	1%	31%	2%	31%	100%
Islington	3%	10%	25%	2%	17%	3%	40%	100%
Kensington and Chelsea	1%	13%	12%	3%	25%	4%	42%	100%
Lambeth	6%	9%	21%	1%	31%	3%	28%	100%
Lewisham	11%	4%	17%	1%	38%	2%	28%	100%
Newham	3%	11%	15%	2%	31%	0%	37%	100%
Southwark	5%	5%	28%	1%	27%	3%	31%	100%
Tower Hamlets	1%	16%	16%	1%	20%	2%	42%	100%
Wandsworth	7%	9%	15%	2%	32%	3%	32%	100%
Westminster	2%	11%	15%	3%	19%	3%	48%	100%
Inner London	**4%**	**10%**	**19%**	**2%**	**26%**	**3%**	**36%**	**100%**
Barking and Dagenham	3%	6%	14%	1%	42%	1%	32%	100%
Barnet	2%	7%	11%	1%	50%	1%	29%	100%
Bexley	7%	0%	8%	1%	60%	1%	24%	100%
Brent	2%	9%	16%	1%	40%	1%	31%	100%
Bromley	8%	1%	8%	1%	54%	1%	27%	100%
Croydon	8%	0%	15%	1%	53%	1%	22%	100%
Ealing	2%	11%	15%	1%	45%	1%	26%	100%
Enfield	3%	5%	15%	1%	49%	0%	27%	100%
Greenwich	8%	3%	18%	1%	44%	1%	26%	100%
Harrow	1%	8%	9%	1%	53%	1%	27%	100%
Havering	6%	2%	10%	2%	61%	1%	19%	100%
Hillingdon	1%	4%	12%	1%	56%	1%	25%	100%
Hounslow	3%	6%	14%	0%	47%	3%	26%	100%
Kingston upon Thames	7%	2%	8%	1%	49%	2%	32%	100%
Merton	7%	6%	11%	1%	42%	1%	32%	100%
Redbridge	2%	8%	9%	1%	54%	1%	26%	100%
Richmond upon Thames	8%	4%	10%	2%	43%	4%	30%	100%
Sutton	6%	1%	10%	1%	58%	1%	23%	100%
Waltham Forest	4%	11%	12%	1%	41%	1%	30%	100%
Outer London	**4%**	**5%**	**12%**	**1%**	**50%**	**1%**	**27%**	**100%**
All London boroughs	**4%**	**7%**	**14%**	**1%**	**41%**	**2%**	**31%**	**100%**

Table 1 - Mode shares (main mode of trip) by borough of residence, 2006/07 to 2008/09 average, seven-day week (TfL 2010: 70, Table 3.3)

Bus usage varies significantly between London's key (inner and outer) sub-regions, and this variation is likely to be an important lens for framing our research findings as they emerge. For instance, we need to consider whether or not the modal shift (if any) precipitated by the interventions in which we are interested is different in inner and outer London. If the shift is predominantly from private motorised travel to bus travel in outer London, for example, we might see increases in active travel as young people in outer London boroughs are likely to have to travel longer distances than their inner London counterparts to reach their nearest bus stop. If this is the case, results akin to findings from the US (Besser and Dannenberg 2005; Edwards 2008; Zheng 2008) may be generated, whereby increasing access to public transport can increase levels of active transport to the extent that a public health impact on obesity is fostered.

Conversely in inner London, with its densely connected public transport geography, distances travelled using active travel modes may fall as young people potentially opt to interchange between multiple buses rather than walk any short intervening distances between their primary bus and home/school. The intersection of broad variations in the transport geography of inner city and suburban parts of London with the behavioural impacts of the policy interventions with which we are concerned could therefore be an important consideration.

The other aspect of the data to consider is the travel patterns of young people in London as a distinct group. For most of the young people we are interested in, much of their travel will be captured by Department for Education (DfE) data that has been collected on travel to and from secondary school. Looking at secondary school pupils resident in London Boroughs in 2010, then, we see that "[o]n average the pupils attending school in London travel 1.5 miles to school, the same as in 2009. Of the pupils attending school in London, pupils who reside and attend school within the same Local Authority travel an average of 1.2 miles. Pupils who attend a school within another Local Authority travel an average of 3.3 miles, an increase of 0.3 miles since 2009" (Department for Education 2010: 3). To help interpret this distinction, we also know from the same report that "21.6% (82,799) of the pupils resident in London attend a school within another Local Authority" (Department for Education 2010: 3).

At the macro level, we also know that 44.8% (at least – 5.6% of this modal share data is 'unknown') of secondary school pupils attending schools in London used public transport as their mode of travel from home to school (see Table 2).

	Public Transport	Walk	Car	Car share	Cycle	Other	Unknown
London 2009	40.7	32.2	9.5	1.4	1.1	2.0	13.2
London 2010	44.8	34.8	10.3	1.6	1.1	1.9	5.6
England 2009	30.7	40.5	15.9	2.3	3.0	1.1	6.4
England 2010	32.0	42.4	16.3	2.4	3.1	1.1	2.8

Table 2 - Proportions of secondary school pupils (2009 and 2010) attending schools in London and in England by mode of travel (Department for Education 2010: 9, Table 2.6)

Since this particular mode of travel data set was only collected from 2007 (i.e. post-interventions) onwards, it cannot provide us with a handle on changes to school travel patterns over time. For the first time this year, however, the data have been provided at local authority level, and so we can see significant variation in travel patterns among secondary school children between boroughs of residence. In this respect, the DfE (2010: 9) report highlights some examples:

- "Kensington and Chelsea has the highest proportion of its school population travelling to school by public transport (71.1%) whilst Waltham Forest has the lowest (28.3%).
- Newham (57.4%) and Waltham Forest (57.3%) have the highest proportion of their school population travelling to school by foot, whilst Westminster (17.2%) and Enfield3 (17.7%) have the lowest.
- Redbridge has the highest proportion of its school population travelling to school by car (18.3%) whilst Southwark has the lowest with 1.9%.
- Richmond upon Thames has the highest proportion of its school population travelling to school by bicycle with 6.1%. Kingston upon Thames has the second highest with 3.4%. Westminster has the lowest (0.1%)."

When we come to analyse our data these significant variations in school choice and travel patterns across London could be taken into account in our analyses so as to provide a more nuance understanding of the policy interventions with which we are concerned.[14]

London – a paragon of bus subsidy in the UK

As our research proposal acknowledges (LSHTM 2010: 5), this is a single case study of a city that "is unique in its transport systems, with a faster growth in bus transport than other parts of the UK, and lower levels of car ownership." This uniqueness stems from the synergy of various features – geography, institutions,

[14] For example, if our systematic review indicates that significant public health benefits of active travel only start to accrue once evidence-based minimum distances or durations of regular active travel exceeded then we might be able to start to unpick one facet of the differential effects of free bus travel on the health outcomes of young Londoners.

demography, public service financing and so on – of this capital city. Important among these is the particular package of transport subsidies that, post-administrative devolution with the establishment of the GLA in 2000, London managed to secure. As Shaw et al. (2009: 559) put it in their analysis of recent political devolution and transport policy in the UK, "[i]t was in London…that the most significant transformation of fortunes for bus travel took place." The authors go on to detail these 'fortunes,' explaining that the huge increases in bus patronage discussed earlier were "[i]n the main…the result of aggressive pro[-]bus measures such as a large increase in vehicle kilometres operated, significant investment in bus priority, and, perhaps most significantly, **a staggering 5108% increase in bus operating subsidy, to £625 million per annum in 2006/07**" (Shaw, Mackinnon et al. 2009: 559 [emphasis added]).[15]

It would seem, therefore, that pricing considerations, and specifically the subsidisation of bus fares (which in part underpins the two interventions that we are concerned with), were crucial determinants of the upsurge in bus use that has been witnessed in London over the past decade. Notably, the package of subsidies that London received for bus transport in this period was disproportionate, with TfL so committed to improving bus services that by 2006/07 "it was paying around two thirds of all bus subsidy in England" (Shaw, Mackinnon et al. 2009: 559). As these authors presently cited conclude, with regard to comparative supplementary financial support for bus services in the UK, "London became divergent in that it pursued improvements entirely out of proportion with the other administrations"[16] (Shaw, Mackinnon et al. 2009: 559). For these authors, then, the 'success story' that is the renaissance of London's bus network is but another example to add to others from Europe "that excellent bus networks are usually possible only with very significant financial support" (Shaw, Mackinnon et al. 2009: 559).[17]

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[15] For a further discussion of these pro-bus measures implemented in London see *Buses and light rail: stalled en route?* Knowles, R. and P. Abrantes (2008). Buses and light rail: stalled en route? Traffic Jam: 10 Years of Sustainable Transport Policy in the UK. I. Docherty and J. Shaw. Bristol, Polity Press**:** 99-118.

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[16] The 'other [devolved] administrations' referred to here being Scotland, Wales and Northern Ireland.

[17] See Shaw and Docherty Shaw, J. and I. Docherty (2008). New deal or no deal? A decade of sustainable transport in the UK. Traffic Jam. I. Docherty and J. Shaw. Bristol, Polity Press**:** 3-28.

for a more in-depth discussion of the evidence for a correlation between levels of financial support and bus network quality.

The bus stops here? Subsidies, fares and concessions into the future

Notably, as part of the Government's 'comprehensive spending review' (CSR) the financial support received by the GLA from the Department of Transport (DfT) is due to fall over the coming years. Thus the future grant settlement outlined by the Secretary of State for Transport, Phillip Hammond, sees the GLA Transport Grant diminish from £2,804m in 2010/11 to £2,404m in 2014/15 (Hammond 2010: 4, paragraph 10). While the detail of this settlement has not yet been fleshed out, TfL has been informed that the level of Bus Service Operators Grant (BSOG) paid by the Department for Transport is currently being reviewed and is can be expected to change "in London as in other parts of the country" (Hammond 2010: 5, paragraph 18) . Even before the October 2010 CSR the bus subsidy apportioned to the London bus network by TfL was set to fall from £653m in 2007/08 (KPMG LLP 2009: 14) to £452m in 2017/18 (TfL 2009: 72) and we can fairly surmise that further subsidy reductions are likely once the BSOG review is complete.

The implication of these grant and subsidy cuts is that either public transport services will have to be cut, infrastructure improvements deferred, efficiencies identified or the resulting gap in the finances will have to be made up from other sources of income. Fares have by no means been capped in this respect, and as the GLA's (2009: 22) report on the impact of the Mayor's 2009 fare decision puts it succinctly, "[t]he balance of TfL's funding between the government and London fare payers is increasingly shifting towards fare payers."

In this broader political-economic context of austerity, concerns are already starting to be raised about potential threats to the Freedom Pass scheme for pensioners (e.g. Brown 2010). So far, concerns that the bus fare exemptions for young Londoners in which we are interested are similarly threatened have not been publicly aired in the same way. Moreover, the Mayor has recently stated that "[t]here are no plans to alter the current range of concessions [on buses]" (Johnson 2010: 2), and for 2011, at least, the Mayor has signed-off on a package of fare changes in which "[f]are concessions and discounted fare rates will be generally unchanged" (GLA 2010: 5).

However, significantly at the GLA we are starting to see concerns being raised about precisely the health disbenefits of granting young people free bus travel. Specifically, at a recent roundtable event organised by the GLA Transport Committee to consider 'the future of London buses,' Steven Norris (TfL Board member and former Minister for Transport in London) explicitly "queried the value of providing free bus travel for children when there was a nationwide push to combat childhood obesity" (GLA 2010: 12). That is, the link between free bus travel for young Londoners and the public health – in this case envisioned as a detrimental

relationship – has already been aired by a key figure at TfL at a major GLA event (see Appendix 2 for Steven Norris's full statement).

One final point to make in this purview of the context for this study is that our contribution is more or less unprecedented. Thus, while at the macro level the transformation of the public transport network that has been witnessed since Transport for London assumed control of it has been argued to "address…social (reducing exclusion) concerns almost by default" (Shaw, Mackinnon et al. 2009: 559), and at the micro level the interventions with which we are concerned sought to mitigate transport exclusion for young Londoners, it is notable that to date little analysis of the wider social impacts of London's buses has been conducted.

Specifically, the GLA (2010)Transport Committee's 'future of London's buses' report concludes by posing a series of six questions to the Mayor. Among there, they ask: *"[w]hat if any cost/benefit analysis of London's buses has been undertaken that takes account of their wider social and environmental benefits?"* (GLA 2010: 15). Responding directly to this question, the Mayor succinctly states "[n]o cost benefit has been carried out" (Johnson 2010: 3). Our study comes, that is, not only at a time when interest in the public health-bus travel link is stirring, but also precisely at a moment when evidence, which has been lacking to date, of the social impacts of bus travel in London are being sought.

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Appendix 1 – Bus operating companies operating in London (October 2010)

- Abellio London
- Arriva
- Blue Triangle
- Ealing Community Transport
- East London Bus Group[18]
- First (London)
- First (Essex)
- HCT Group
- London Central
- London General
- London United
- London Sovereign
- Metrobus
- Metroline
- NCP Challenger
- Quality Line
- Sullivan Buses
- Transdev[19]

[18] N.B. On 15th October 2010 East London Bus Group was acquired by Stagecoach Group plc Stagecoach Group plc (2010, 15/10/2010). "Stagecoach Group acquisition of bus business from East London Bus Group Limited." Retrieved 1 November, 2010, from http://www.stagecoachgroup.com/scg/media/press/pr2010/2010-10-15/.

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Appendix 2 – TfL Board Member Steven Norris on the relationship between free bus travel for young people in London and health

The following is a statement made by TfL Board Member Steven Norris at the GLA Transport Committee seminar 'The Future of London's Buses.' This statement was made in response to a direct question to Steven Norris (the wording of the question is also provided below) by the Chair of the seminar, London Assembly Member Caroline Pidgeon. This seminar was held at London's City Hall on 8th December 2009 and a full transcript of the discussion has been made publicly available (GLA 2010).

Caroline Pidgeon (Chair): *Steven, do you want to particularly pick up the point from Joanne [McCartney] about are we going to see longer waiting times in outer London if we are going to see the subsidy go down?*

Steven Norris (TfL Board Member): *…Secondly, just a comment on one of the issues around free travel and this idea of 40% of people travelling free. Of course the Freedom Pass is, effectively, a national facility and it is, in fact, paid for. It is paid for by the boroughs and, therefore, when you say it adds to subsidy that is not strictly fair. The reality is that we are paid, in effect, for those journeys by the boroughs, so we have got that revenue. What we are talking about is the gap that then exists thereafter and it is really not about the Freedom Pass that we are looking at all. The Freedom Pass is absolutely sacrosanct and this Mayor is very, very, very clear about that.*

I personally ask, for example, in a world in which the Government is spending a fortune on combating paediatric obesity, when we are trying desperately to get more people to walk and cycle, why we then give schoolchildren the opportunity to take a bus, as it happens during the peak hour, to school? It would be a positive benefit to everybody in London, including those childen [sic], if we said, for example, what always used to be the case when I was at school - admittedly they went in front of the bus with a red flag in those days but, nonetheless! - in those days the assumption was that if your home was less than three miles from your school you were not entitled to free travel because the assumption was you could walk. Now maybe in today's much, much more heavily trafficked world in London, we would want to make that more like two miles, I do not know, but the fact is I think the case there for rethinking the generosity of some of the concessions really is overwhelming, on health grounds, never mind in terms of the cost to the bus service at peak hours.

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