

Paper written for presentation at a workshop at the 13<sup>th</sup> Annual Transport Practitioners' Meeting, London Metropolitan University, 1-2 July 2015

## TRANSPORT AND POVERTY IN BRITAIN

Roger Mackett and Helena Titheridge  
Centre for Transport Studies, University College London

### 1. INTRODUCTION

13 million people in the UK live in poverty, with average incomes falling by 9% between 2007/08 and 2012/13 (MacInnes et al., 2014). The purpose of this paper is to examine the link between transport and poverty and see whether there are transport interventions that can help to reduce poverty. The paper is based on a project carried out for the Joseph Rowntree Foundation (Titheridge et al., 2014).

### 2. POVERTY

There is no single agreed definition of poverty but it can broadly be defined as “When a person’s resources (mainly their material resources) are not sufficient to meet their minimum needs (including social participation)” (Goulden and D’Arcy, 2013). ‘Resources’ may include income, financial assets and material goods (e.g. car or bicycle). Resources may also include in-kind goods and services made available either formally, such as the provision of reduced bus fares, or informally, such as the occasional use of a car, or lift-giving from community organisations, friends and family (Goulden and D’Arcy, 2013). The level and type of resources required and access to them depends on psychological, social, cultural and physical factors. For example, a person’s caring responsibilities and employment conditions may affect the time they have available for other activities and when those activities can be fitted into their day.

‘Needs’ include the items required for basic subsistence but can also include the ability to earn an income, education, healthcare, social participation and leisure (Goulden and D’Arcy, 2013). Needs may be defined in absolute terms, in terms of the minimum standards required for living, or relative terms related to societal norms and the wider economic context. Needs also depend on the characteristics and circumstances of individuals.

It should be noted that the resources that a person has available change over time, as do their needs. Poverty may be temporary, recurring or persistent over time (Goulden and D’Arcy, 2013). Some people and groups are more

vulnerable to poverty than others. Vulnerable groups include those on low incomes, including students and the unemployed, those living in rural areas, those living in areas of urban deprivation, people with disabilities, and the elderly (Titheridge et al. 2014). Policy tends to focus on these vulnerable groups rather than individuals in poverty. This may be partly because it is easier to identify vulnerable groups from national datasets and partly due to the importance of preventing poverty rather than simply providing routes out of poverty.

### 3. THE RELEVANCE OF TRANSPORT TO POVERTY

Because of the way in which society is spatially organised, it is usually necessary to travel to obtain the goods and services required to meet needs. Providing transport facilities or reducing financial (and other) barriers to travel can offer ways to address poverty, through, for example, widening the range of opportunities for employment and education that can be reached. Transport can be seen as a service or resource which can reduce poverty by enhancing opportunities (Gannon and Liu, 1997).

There is a strong link between transport and income (Mackett, 2014a). The percentage of total expenditure on travel increases with income, as do the purchase of vehicles such as cars and the operation of personal transport (Office for National Statistics, 2014). Expenditure on rail and Tube fares also increases with income because rail travel is relatively expensive and is often associated with commuting and business travel particularly in South East England where incomes tend to be higher. In contrast, the percentage of total expenditure spent on bus and coach travel decreases with income, reflecting its characteristic as the cheapest form of public transport. The positive relationship between income and expenditure on travel is reflected in the levels of car ownership and volumes of travel, as shown in Table 1.

Table 1 Distances travelled and car ownership levels by income group, 2013

	Income level					
	Lowest	Second level	Third level	Fourth level	Highest real income level	All income levels
Distance travelled per person in 2013 in km						
Car	4389	6259	7946	10272	12408	8160
Bus	838	610	547	338	286	530
Train	626	614	810	987	2283	1040
Total	6485	8176	10134	12342	16126	10534
% of households with a car	52	70	80	90	86	75

Source: Department for Transport (2014)

It can be seen that the total distance travelled increases with income, reflecting greater access that having a higher income facilitates. This is underpinned by the increase in car use with income, reflecting the increase in car ownership with income. Similarly, rail travel tends to increase with income. In contrast, lower income people tend to travel by bus, which is relatively inexpensive with many people travelling free because they are elderly or disabled many of whom have low incomes.

Reducing the cost of owning and running a car is one way to help reduce poverty but not the only solution since the inability to afford a car is not the only reason for not owning one. People without access to a car may be transport poor due to the low quality of public transport. For example, the limited frequency and route coverage of public transport can make it difficult for people without access to a car to co-ordinate work, childcare and other activities.

The transport environment in many deprived areas and the high dependence on walking for those with low incomes mean that they are often exposed to the negative impacts of transport such as pedestrian fatalities and injuries, pollution and spatial segregation (Mackett, 2014a).

When considering transport options, it is also important to consider time poverty (Turner and Greico, 1998). Journeys by public transport often take considerably longer than the same journey by car, and can generate scheduling difficulties because of the low frequency of services or their limited hours of operation. This can be a particular problem for working lone parents who need to coordinate work with child care arrangements, escorting children to their activities and other domestic responsibilities.

The role of transport in helping to address poverty has been recognised by the government. The Transport White Paper issued in 1998 (Department for Transport, 1998) said: "Being unable to afford transport can limit everyday life. Job, training and education opportunities are more limited and there is less choice in shopping, adding to the family budgets of those least able to bear the cost". The guidance to the 2010 UK Child Poverty Act (Department for Transport, 2010) says: "Transport infrastructure, and accessibility to local services for children and parents, and employment opportunities for parents, are important in all local areas and are likely to be particularly so for those living in more remote or rural areas where the effects of growing up in poverty may be compounded by poorer access to services".

#### **4. USING TRANSPORT TO ADDRESS POVERTY**

Because transport is the main means to reach employment and educational opportunities, reducing the barriers to travel can help to address poverty. This can also allow people from low income households to enjoy similar opportunities as other members of society. In this section, examples of transport schemes in Great Britain that provide access for people from low income households will be discussed.

#### **4.1 Schemes to address unemployment**

Some people have low incomes because they are unemployed. One way to help unemployed people into jobs is to offer them cheaper travel to find work. Transport for London (undated) offers a travelcard for use on buses and the Underground which allows travel at half the adult rate to people on Jobseekers Allowance and to those on Incapacity Benefit, Employment and Support Allowance or Income Support if they are actively engaged with an adviser in returning to employment. It is valid for up to three months.

West Yorkshire PTE carried out a Travel to Work project which involved 4250 jobseekers being assisted into employment by providing a free countywide ticket for the first month of employment and personalised travel information before and after the take up of employment (Greener Journeys, 2012). Feedback from questionnaires sent 13 weeks after receipt of a ticket revealed 23% would not have been able to accept the job without the ticket, 66% were still working for the same or other employer and 76% of those still working were continuing to travel by bus. At the end of the PTE project a 33% discount on tickets was agreed with bus and train operators in the area with the discounted tickets being purchased by Job Centre Plus.

Greener Journeys (2012), which is a consortium of the large bus operators in Great Britain, has proposed the introduction of more discounted bus travel schemes for young people. As a first step, they are advocating the development of a concessionary bus travel scheme for apprentices. The proposal is that the funding reforms for apprenticeships should include discounts on bus travel for apprentices. This would help young people with low incomes enter apprenticeships that they might otherwise have to forego because they cannot afford to travel to the workplace. The report claims that there would be a net economic benefit to society and that the discount level could be set at 30% or 50%.

Greener Journeys (2012) has also proposed a 'Bus Bonus', to encourage people to commute by bus. This would be a new tax incentive, designed to promote a modal shift. The idea is that employees at workplaces with more than 10 employees would be able to buy a season ticket for bus travel before

the deduction of income tax and national insurance. The scheme would be administered by employers. This would be a tax benefit to those in work paying the standard rate of income tax. The benefit would be less for those with lower marginal tax rates. It might lead to more bus services which would benefit low income people.

An alternative approach to enabling people to reach jobs is to provide vehicles, usually mopeds or motor cycles, but could be cars. It is also necessary to provide training where the person concerned needs to learn to ride or drive the vehicle. Wheels 2 Work (W2W) schemes (Wheels to Work Association, undated) provide mopeds or scooters to individuals, particularly young people in rural areas who have received a firm offer of a job or training placement but who find that they do not have any way of travelling to their place of work due to a lack of suitable public or private transport, at a cost of about £20 per week. The schemes were mentioned in 2011 Transport White Paper (Department for Transport, 2011) as a useful way help people enter the work force.

The majority of existing W2W schemes specifically target young, unemployed people, with the age limit for eligibility typically between 16 and 25 years. Some schemes have extended eligibility further to include people who are currently employed but require assistance with transport in order to sustain their existing employment and people wishing to access post-16 education opportunities. Schemes exist in many places such as North Yorkshire (Northallerton & District Voluntary Services Association, 2012).

The Motor Cycle Industry Association (2010) has calculated the costs and benefits of providing a motor cycle to a young person, and estimated that, over a six month period, a young person in work earning £15,000 per annum would pay £1,957 in taxation and would have received £3,511 in benefits (Job Seeker's Allowance, Council Tax Benefit and Housing Benefit) had they not started work, and that providing a motor cycle under the W2W scheme would cost £2,600. Hence, assuming that they would not have taken up the job otherwise, enabling the young person to work would produce a saving to the country of £2,868, as well as providing him or her with greater income and the various intangible benefits of employment such as companionship and pride in being in work. This is a hypothetical calculation by the Motor Cycle Industry Association (2010) and there are no data available on the numbers who would not have taken up jobs if the option were not available.

## **4.2 Schemes to reach education**

Education offers the opportunity to acquire knowledge and skills that can widen the range of job opportunities available, so schemes that help those

with low incomes to reach educational facilities can help address poverty in the longer run.

All children in the UK between 5 and 16 qualify for free transport to school if they go to their nearest suitable school and live at least 2 miles from the school if they are under 8 and 3 miles from the school if they are 8 or older. The rules are less restrictive for children from low income households defined as being in receipt of the maximum Working Tax Credit or their children being entitled to free school lunches. According to the GOV.UK (2015) website children from families with low incomes can have free transport to school if the school is at least 2 miles away for children aged 8 and over, subject to some fairly complicated conditions for those aged 11 to 16.

Some local authorities offer extended schemes. For example, Surrey County Council (2015) offers financial help to children travel to school and college above the age of 16 under some circumstances, which are fairly complex. This means that those who are eligible to claim the funding have to have knowledge and tenacity to take advantage of the scheme.

#### **4.3 Concessionary fares for older and disabled people**

Concessionary travel passes for all older people and those with disabilities offering half-price off-peak bus travel were introduced under the 2000 Transport Act, with the specific objective of encouraging older people on low incomes to use public transport more replacing the large number of local schemes (Department for Transport, 1998). The scheme was extended to free local off-peak bus travel in 2006 and then to free off-peak travel across the country in 2008 (Mackett 2013, 2014b). There is a higher take-up rate of the passes by those with low incomes. Humphrey and Scott (2012) used multivariate analysis to estimate the influence of various factors on concessionary travel pass use. They found that socio-economic classification and income were not statistically significant when other variables were controlled for, suggesting that access to a car is the critical factor rather than income per se. As shown in Table 1, car ownership is highly correlated with income.

In some rural areas there are few buses, so having a concessionary travel pass is of little value. Some local authorities offer taxi vouchers as an alternative to concessionary travel passes. For example, Cheshire West and Chester Council (undated) currently offers taxi vouchers to the value of £72 a year to permanent residents of the area who live in specified rural areas, do not hold a current UK driving licence or do not have access to a vehicle, and are eligible for a concessionary bus pass on the grounds of age or disability who wish to exchange their bus pass for taxi vouchers. Vouchers can be used

in full or part payment of a taxi journey licensed by Cheshire West and Chester Council who have agreed to participate in the taxi voucher scheme or approved Cheshire West and Chester community transport services. However, this scheme will cease to operate in April 2016, because it is argued that improvements to local transport such as community transport schemes provide a better alternative.

#### **4.4 Public transport schemes**

Since the deregulation of local bus services in 1986, bus services in Britain have been provided by the private sector. In London, Transport for London decides the pattern of routes and services that it wishes to see operated and then invites bus companies to tender to operate the routes under contracts for a set period of years. Outside London, bus operators decide where they wish to operate based on where they perceive they are able to make a profit and so they determine the route and service pattern of bus services. If a local authority thinks that there is a need for further bus services it can invite bus operators to tender to operate these 'socially-necessary' services and subsidise them to do so. The socially-necessary services may be to serve places that the local authority believes need to be served or may be at particular times such as in the evening or on Sundays when demand is insufficient to provide enough revenue to attract a commercial operator. A local authority might choose to fund a service from an area where there large numbers of unemployed people live to a place of employment. It can be argued that the franchising system in London allows much greater control over the operation of bus services and so greater opportunity to address issues such as poverty.

Public transport schemes have features that help to overcome spatial and economic barriers for vulnerable populations to enable them to access opportunities. Since people with low incomes are more likely to use buses than other people, there is a case for improving local bus services. A local authority might choose to fund a bus service from an area where large numbers of unemployed people live to a place of employment. Examples of improvements are shown in the Campaign for Better Transport's study in St Albans which examined ways of improving public transport by bringing together relevant organisations (Abrams, 2013). Four key points were identified as necessary for success: information (i.e. better real-time information, with information on timetabled and real-time public transport made freely available), interchange (focused on passenger needs rather than the transport modes), connections (more focus on punctuality and reliability) and ticketing (such as the smart ticketing program being developed by the Department for Transport to ensure the introduction of simple, zoned integrated fare structures).

## 4.5 Community based transport schemes

Whilst buses are used more by people with low incomes than others, and therefore there is a strong case for ensuring that there are suitable bus services everywhere, in some places the population density is too low to make conventional bus services viable. In these areas, community transport often has a useful role to play. This is transport, often using minibuses, with volunteer drivers which provides a service to meet a community need. Funding comes from the fares paid and sometimes from local authorities. As the Transport White Paper issued in 2011 says in Paragraph 8.9 on page 82 (Department for Transport, 2011): “For example, 20% of our population lives in rural areas where there are higher levels of car dependence (including for lower income households) coupled with a lower availability of public transport.. With lower levels of patronage, high frequency bus services are rarely commercially viable and often very costly for local authorities to subsidise, resulting in a poorer quality service. In those areas, community (voluntary) transport operators can often provide valuable and well-tailored services, including to geographically isolated areas, and can often work with local authorities to offer ‘demand responsive’ services, such as bookable minibuses”. The White Paper then goes on to say in Paragraph 8.13: “A welcome development is the growing number of community transport organisations which operate social enterprise models, for example using contract income to subsidise social transport, and thus removing the need for direct grant funding.” This would involve community transport organisations bidding for and being awarded contracts by local authorities to carry passengers on socially-necessary routes and then using the surplus to fund other schemes identified as useful by the community.

Community transport has an important role to play particularly in rural areas. The Rural Social Enterprise Programme (RSEP) has funded eight rural community transport organisations (CTOs) to employ development managers with the express aim of significantly increasing the percentage of their income derived from securing public service contracts (Community Transport Association, 2011).

Another form of community transport scheme mentioned in the 2011 Transport White Paper (Department for Transport, 2011) in Paragraph 8.15 is the Community Rail Partnerships which might assist in maintaining railways in rural areas so that people with low income can reach jobs.

Volunteer drivers using their own cars are another type of community scheme. An example is the Volunteer Driving Service operated by the Retired Senior Volunteer Programme (RSVP) North East, which uses older drivers to offer

transport to people who need to attend health appointments and collect repeat prescriptions (Centre for Social Justice, 2010). There are similar schemes all over the country (Community Service Volunteers, 2007).

#### **4.6 Taxi schemes**

Taxis can meet very specific travel needs, typically taking one or two people door to door, but are expensive. They could be operated in a more flexible way. The Local Services (Operation by Licensed Hire Cars) Regulations allow owners of private hire vehicles to use their vehicles to provide local bus services providing more flexible services than the conventional 'exclusive hiring' by a single passenger and the 2011 White Paper on Transport (Department for Transport, 2011) stated that this was being encouraged by the Government, but this is only happening on a limited basis. The Campaign for Better Transport (2012) recommends that taxis should be integrated into public transport networks and that the Government should use the Law Commission review of laws governing taxis to promote this, with taxi licensing powers based with local authorities that have other transport powers and duties (in some parts of the country such as Hertfordshire, taxi licensing powers lie with the district council while planning of socially-necessary bus services lies with the county council).

### **5. CAN TRANSPORT HELP IN REDUCING POVERTY?**

Various ways in which transport can help to address issues of poverty have been outlined above. However there are some issues that need to be considered:

- Few, if any, transport schemes are aimed at reducing poverty directly, instead they are aimed at, for example, getting people into jobs.
- Whilst a concessionary travel scheme offering free bus travel aimed at those with low incomes could be introduced, it would be bureaucratic and expensive because of the need to means test and might be stigmatic.
- Schemes such as the 'Bus Bonus' which offer tax relief would benefit those on higher tax rates more than those on lower rates.
- In some areas bus fares are expensive and season tickets require large up-front payments.
- Schemes to help people find work are often short term.
- Some people offered a motor cycle under W2W may have nowhere to store it.

A good example of a policy that was introduced to help a segment of the population with low incomes is the concessionary travel pass (CTP) scheme for older people, discussed in Section 4.3 above. The policy has produced large benefits for older and disabled people, almost certainly exceeding the

£1 billion a year they cost (Mackett, 2014c). PTEG (2013) argues that people with low income people make more free bus trips that previously would have been paid for than those with higher incomes, suggesting that the scheme has a positive effect. However, CTPs are a universal benefit and many of those using them can afford to pay for their bus travel. Andrew Last (2010) analysed smartcard data in Lancashire and found that half the passholder made no trips with their passes in the 5-week period being studied and 2.4% of passholders accounted for 25% of local concessionary bus trips, suggesting that the benefits are not spread very widely in the community.

It could be argued that the £1 billion the scheme costs each year could be used to new or more frequent bus services benefitting the whole population, which would assist those on low incomes. But, if the scheme were abolished or amended significantly, there is no reason to believe that it would be used to fund bus services or to alleviate poverty.

A number of recommendations can be made based on the examples above:

- The system of bus service provision that exists in London should be extended to the rest of the country.
- The licensing of taxis should be transferred to local transport authorities so that they can be planned better.
- Transport systems need to be set up integrating buses provided by commercial operators and community transport operators and taxis operating under contracts to the local transport authority.
- Volunteer driver schemes should be extended to provide travel for a greater range of people and needs.
- Networks of local travel brokers should be established in rural areas to provide information and advice about the local travel services offered by the combination of volunteers and commercial services in the area with these being made as widely known as possible.
- Were these recommendations to be instituted, travel training should be offered to help people to navigate the resulting more complex transport system.

More generally, a transport system to help address poverty should have the following characteristics:

- To incorporate a variety of different types of service;
- To be regulated with sufficiently flexible to allow for innovation in supply as needs change;
- To be a balance between formal and informal services, voluntary, private and regulated services;
- To be integrated to create an anxiety-free, truly flexible system.

## 6. CONCLUSIONS

There is a wide variety of schemes in Great Britain at both the national and local level that aim to either make transport more affordable or to improve transport options for those who do not own a car. There has, however, been very little work to evaluate these schemes to see how effective they are in addressing issues of poverty, partly because the schemes are rarely set up specifically for this purpose. More effective monitoring and evaluation of such schemes is needed.

It is clearly complicated: it seems clear that transport can help to address poverty but it is not clear that investing in transport rather than other policy areas is always the best investment. On the other hand, transport can be a necessary complement to other policies: for example, a scheme to provide jobs to unemployed people may offer a positive way to address poverty, but that will only work if those in need can reach the jobs, which means that affordable, convenient transport needs to be provided. Hence there is a very strong case for investing in transport as part of a package of measures to address poverty.

## ACKNOWLEDGEMENT

This paper is based on work that was funded by the Joseph Rowntree Foundation. The contribution of Nicola Christie, Daniel Oviedo and Runing Ye to that work is acknowledged.

## BIBLIOGRAPHY

Abrams, M. (2013) Tackling transport isolation, *Eurotransport*, 11 (5), 2013, 30-31.

Campaign for Better Transport (2012) *Recommendations for further work and policy changes to tackle transport related poverty*, available from <http://www.bettertransport.org.uk/sites/default/files/research-files/Transport-and-poverty-recommendations.pdf>.

Centre for Social Justice (2010) *Breakthrough Britain: The Forgotten Age. Understanding poverty and social exclusion in later life*, 2010. Available from: <http://www.centreforsocialjustice.org.uk/UserStorage/pdf/Pdf%20reports/ForgottenAge.pdf>.

Cheshire West and Chester Council (undated) *Taxi vouchers*. Available from [http://www.cheshirewestandchester.gov.uk/residents/transport\\_and\\_roads/public\\_transport/concessionary\\_travel/taxi\\_vouchers.aspx](http://www.cheshirewestandchester.gov.uk/residents/transport_and_roads/public_transport/concessionary_travel/taxi_vouchers.aspx).

Community Service Volunteers (2007) *Retire into Action, Retired and Senior Volunteer Programme*. Available from <http://www.csv-rsvp.org.uk/site/home.htm>.

Community Transport Association (2011) *Rural Social Enterprise Programme update*. Available from <http://www.ctauk.org/in-your-area/rural-social-enterprise-development-programme.aspx>.

Department for Education (2010) *A guide to part 2 of the Child Poverty Act 2010: duties of local authorities and other bodies in England*.

Department for Transport (1998) *A New Deal for Transport: Better for Everyone*, Transport White Paper, available from <http://webarchive.nationalarchives.gov.uk/+http://www.dft.gov.uk/about/strategy/whitepapers/previous/anewdealfortransportbetterfo5695>.

Department for Transport (2011) *Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen*, Cm 7996, 2011, available from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/3890/making-sustainable-local-transport-happen-whitepaper.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3890/making-sustainable-local-transport-happen-whitepaper.pdf).

Department for Transport (2014) *National Travel Survey*, available from <https://www.gov.uk/government/collections/national-travel-survey-statistics>.

Gannon, C. A., and Liu. Z. (1997) *Poverty and Transport*, TWU-30, World Bank, Washington, DC, available from <http://siteresources.worldbank.org/INTURBANTRANSPORT/Resources/twu-30.pdf>.

Goulden, C. and D'Arcy C. (2013) *A definition of poverty*. Joseph Rowntree Foundation. 2013.

GOV.UK. (2015) *Free school transport*, available from <https://www.gov.uk/free-school-transport>.

Greener Journeys (2012) *Access to jobs*, available from <http://www.greenerjourneys.com/2012/06/access-to-jobs/>.

Humphrey, A. and Scott, A. (2012) *Older People's Use of Concessionary Bus Travel*, report by NatCen Social Research for Age UK, 2012. Available from [http://www.ageuk.org.uk/documents/en-gb/for-professionals/research/concessionary\\_bus\\_travel\\_2012.pdf?dtrk=true](http://www.ageuk.org.uk/documents/en-gb/for-professionals/research/concessionary_bus_travel_2012.pdf?dtrk=true).

Last, A. (2010) Smartcard data on use of free concessionary travel by older and disabled bus passengers, *Proceedings of the 2010 European Transport Conference*, Glasgow, Scotland.

MacInnes, T., Aldridge, H., Bushe, S., Tinson, A., and Born, T.B. (2014) *Monitoring Poverty and Social Exclusion 2014*. Joseph Rowntree Foundation, York.

Mackett, R. L. (2013) Impact of concessionary bus travel on the wellbeing of older and disabled people, **Transportation Research Record: Journal of the Transportation Research Board**, 2352, 114-119, doi: <http://dx.doi.org/10.3141/2352-13>.

Mackett, R. L. (2014a) The health implications of inequalities in travel, **Journal of Transport and Health**, 1, 202-209, doi: <http://dx.doi.org/10.1016/j.jth.2014.07.002>.

Mackett, R. L. (2014b) *The Impacts of Concessionary Travel Passes for Older and Disabled People - a review of the evidence*, Report produced as a contribution to the work of the CILT Concessionary Travel Group and the CILT Accessibility and Inclusion Forum, Chartered Institute of Logistics and Transport, 2014, available from [www.bit.ly/concessionary](http://www.bit.ly/concessionary).

Mackett, R. L. (2014c) Has the policy of concessionary bus travel for older people in Britain been successful? **Case Studies in Transport Policy**, 2, 81-88, doi: <http://dx.doi.org/10.1016/j.cstp.2014.05.001>.

Motor Cycle Industry Association (2010) *Wheels to Work in 2010: A review of the nationwide moped loan scheme for young people*, available from [www.mcia.co.uk/Controls/OpenDocument.ashx?id=20](http://www.mcia.co.uk/Controls/OpenDocument.ashx?id=20).

Northallerton & District Voluntary Services Association (2012) *Wheels to Work: North Yorkshire*, available from <http://www.wheels2work.co.uk/>.

Office for National Statistics (2013) *Poverty and Social Exclusion in the UK and EU, 2005-2011*, available from [www.ons.gov.uk/ons/rel/household-income/poverty-and-social-exclusion-in-the-uk-and-eu/2005-2011/index.html](http://www.ons.gov.uk/ons/rel/household-income/poverty-and-social-exclusion-in-the-uk-and-eu/2005-2011/index.html).

Office for National Statistics (2014) *Family Spending*, available from <http://www.ons.gov.uk/ons/rel/family-spending/family-spending/2014-edition/index.html>.

PTEG (2013) *The Case for the Urban Bus: The economic and social value of bus networks in the metropolitan areas*. Available from

<http://www.pteg.net/resources/types/reports/case-urban-bus-economic-and-social-benefits-investing-urban-bus>.

Surrey County Council (2015) *Post 16 Transport Policy*, available from <http://www.surreycc.gov.uk/roads-and-transport/roads-and-transport-policies-plans-and-consultations/roads-and-transport-policies-and-plans/post-16-transport-policy>.

Titheridge, H., Christie, N., Mackett, R., Oviedo, D. and Ye, R. (2014) *Transport and Poverty: A review of the evidence*, Report produced for the Joseph Rowntree Foundation, July 2014.

Transport for London (undated) Jobcentre Plus Travel Discount, available from <https://www.tfl.gov.uk/fares-and-payments/adult-discounts-and-concessions/jobcentre-plus-travel-discount?intcmp=1754>.

Turner, J. and Grieco, M. (1998) Gender and time poverty: the neglected social policy implications of gendered time, transport and travel, Paper presented at the International Conference on Time Use. University of Luneberg, Germany.

Wheels to Work Association (undated) Your local Wheels to Work Scheme, available from <http://www.wheels2workassociation.org/index.php>.