

## Ethics and Transport Policy: a working paper

### ABSTRACT

This paper outlines the ongoing work of a partnership between UCL's Transport Institute and UCL Public Policy. This is a multi-disciplinary project intended to bring together academics from disciplines such as moral and political philosophy, civil engineering, geography and transport and town planning combined with contributions from policy makers. The project has explored the hypothesis that, whilst transport decisions may have considerable distributional effects, ethical considerations are rarely explicitly considered in the policy making process. Unacknowledged ethical assumptions such as those implicit in decision support tools like cost benefit analysis have been examined in order to understand their impact on policy decisions. The paper considers three different ethical theories through the lens of transport policy making utilitarianism, the capabilities approach and the work of John Rawls. The paper concludes with a snapshot of one of the positions developed and the argument that if transport is treated as part of the welfare state then this opens policy making up to the consideration of a wider range of values than is the case under current practices.

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### Introduction

This paper sets out an initial report on a work in progress. This is an initiative of the Transport Institute in partnership with UCL Public Policy. The Transport Institute works across the University to foster cross-disciplinary transport research and increase the policy impact of that research. UCL Public Policy is an initiative from the Vice Provost again aimed at enhancing impact and the engagement of policy makers in UCL research. This particular initiative aims to examine the role of ethics in transport policy making with the aim of producing a series of policy recommendations. Our contention here is not that current practices are unethical *per se* but rather that ethical considerations are in the background or worse still unacknowledged. The aim of the paper is to set out, first, the approach and second, some of the ethical theories examined and positions developed by the multi-disciplinary group of practitioners, geographers, moral and political philosophers, civil engineers, planners and transport specialists. In examining the different ethical theories it is hoped that this may contribute to a process of bringing ethics and the ethical implications of transport policy to the fore, something we would hope would enable policy makers to become more aware of the frameworks they are using and the limitations of different ethical theories. In place of a conclusion this paper closes with one of the positions currently under development as an example of the approach taken.

### Work in progress

As this is a work in progress we are happy to invite comment from fellow academics. To begin with it is useful to set out the approach we have taken as there are some differences from one that a conventional study might adopt. The first major difference is the lack of what would normally be the starting point of a piece of research, a systematic review of the literature. This does not mean that no use has been made of academic literature, something that will be discussed in more detail later in the paper, but rather the starting point of the enquiry has been the intuition that ethics has been poorly addressed in current UK transport policy making. This approach stems from the way in which philosophy with its emphasis on argumentation and conceptual clarity appears much more comfortable working from a much smaller evidence base than many of the more empirical disciplines involved.

This intuition has been largely confirmed in interviews conducted with practitioners and academics involved in transport policy making and research. Whilst it is possible to find individuals that are open to or interested in the ethical implications of their work or their research it was hard to find anyone who believed that current practice conceived of transport policy making in explicit ethical terms. Responses, such as the quote below, suggest that whilst the ethical *content* of transport decisions were sometimes acknowledged there was resistance to considering transport decision-making as an area where the explicit consideration of ethics has a role to play.

I don't consider it ethical its just the right thing to do ethical is not use (Academic Interviewee)

This may well reflect the commonly held view that value positions are in some way a matter of personal preference and that practice and policy making ought to, in some way, remain value free. Something that from a philosophical perspective is in itself a value position (Wolff, 2010). This is not to say that different issues that could be considered ethical are not under consideration in transport policy making. The group has heard evidence from the UK Department of Transport (DfT) on the way in which distributional issues are considered part of the WebTAG (DfT, 2014) transport appraisal process. This indicates there is certainly more than the conventional cost benefit analysis methodology at play in policy making. Where, as discussed below, this creates a problem is when the normative positions inherent within tools such as cost benefit or distributional analysis are unacknowledged.

There has been little in the way of consideration of transport issues in the work of philosophers contributing to public policy, this may be as the moral philosophical issues are not as interesting to philosophers as, for example, the clear ethical questions that surround issues such as abortion, assisted dying and drugs policy. Indeed with its emphasis on argumentation, the identification of novel, even irritating positions that are resistant to refutation (Wolff, 2011) the problem of transport policy making presents difficulties for philosophers and those working with philosophers. In particular the trade-offs between what is technically possible, environmentally desirable, fundable or politically acceptable create a gulf between the reality of policy decisions or project implementation and the absolute positions reflected in different ethical theories. For philosophers inconsistency in positions is often seen as refutation, undermining the position adopted, in contrast inconsistency in public policy is common and does not necessarily provide a justification for alternative policy (Wolff, 2010). Yet from the perspective of researchers in transport policy there has been some interest in philosophical frameworks for transport decisions (Tyler, 2004; Martens et al., 2012; Van Wee and Roeser, 2013). One feature of some of this work is a tendency to seek to replace one ethical framework with another (Tyler, 2004; Martens et al., 2012). From the perspective of this enquiry it is probably the work of Van Wee and Roeser (2013) that is most interesting as it considers selecting different ethical theories and how they might be incorporated into existing practice.

### Role of Philosophy in Public policy

In contrast to those that seek new ethical models for transport decision-making the aspirations of this project are, less overtly ambitious. The aims are not to convince policy makers that they are in some way wrong or that the positions they adopt are in some way *unethical*. To do so would risk confirming the worst stereotype of academic practice in explaining to hard pressed practitioners that what they are doing is wrong based on a process of abstract theorising. Notwithstanding t

practitioners has confirmed the belief that there are aspects of transport policy making and practice that make the implementation of measures to which they are committed, difficult. These commitments, although as the above quote suggests, are often not expressed as such, take the form of ethical positions. These are questions of what is the right thing to do about the ratio of cyclists right thing to do in increasing mobility and making public transport more accessible. What thing to do in managing the distributional effects of transport infrastructure born by the most vulnerable.

The aims of the project are also, on the face of it, more modest than the top-down theorising characterised (or possibly caricatured) above, what is adopted here is a more bottom-up problem-driven approach to applied ethics. One where the task is to;

try to understand enough about the policy area to be able to comprehend moral difficulties, and then to connect those difficulties or dilemmas to patterns in philosophical reasoning and reflection. (Wolff, 2011)

The multi-disciplinary nature of the groups has been invaluable in gaining the necessary understanding of the policy area. In addition to this there has been empirical research such as interviews, focus groups and review of policy tools. Yet in seeking to connect dilemmas, such as the ethical dilemmas, identified by practitioners, discussed above, the project aims go beyond simply making the connections. We contend that in making these connections overt we are contributing to making more transparent what is often implicit in transport policy making.

This practice of seeking to make explicit what is implicit is of particular relevance to the interaction between philosophy and public policy. This is a practice and application of philosophy that can be seen in the work of Michael Sandel who, in his teaching on *Justice* seeks to draw out the ethical and value positions that underlie current political debates on issues such as the valuation of human life, property rights and same sex marriage (Sandel, 2011). Policy problems do not begin from a blank sheet; there is always a bias towards the *status quo* with changes requiring justification. Therefore it is worthwhile to both draw out the implicit value positions within the *status quo* and to examine the justification, in terms of values, for any changes.

This is one possible contribution of philosophers, or at least a philosophical approach: the examination of different arguments, distinctions and ways of reframing questions. This may not be restricted to philosophers, as many academics are capable of adopting a similar approach, yet it is seen as something that senior decision-makers and public figures often struggle with (Wolff, 2010). Whilst this is a valuable role played by any academic involved in the policy making process, and something that fits well with current expectations of academic impact, this does not necessarily discount the role of philosophical positions in longer term shifts in values. Pointing out that a situation is unjust or ethically inconsistent may not bring about its immediate resolution. However it may contribute to a wider shift in values. If one takes the example of slavery, an economic justification is now inconceivable in almost all societies yet prior to abolition contemporary arguments certainly weighed costs of compensation against extending principles of individual freedom to all. In the same way it may be that in exposing the inconsistency and intolerable conditions that are currently accepted in transport policy making a contribution can be made to future debates where cyclist fatalities, pollution or unequal distribution of costs and benefits are considered as intolerable as we now consider slavery.

### **Ethical theories examined**

The following section of this paper sets out the ethical positions examined as part of this research. It is far from an exhaustive review of different possible ethical theories but rather an examination of key ethical positions that appear to have some relevance to transport policy dilemmas. In each case a full analysis of the philosophical position considered is beyond the scope of this paper. Rather each position is considered through the lens of transport policy with the discussion hinging on the value or difficulties created by adherence to or ignorance of the ethical framework that underpins policy. The first of these frameworks considered is utilitarianism, as one would expect there is a long history of its application via cost benefit analysis (CBA) and an equally long history of criticism of its use in transport policy

making. Following this there is a discussion of the essentialist positions that are currently associated with the work of Nussbaum and Sen and their application to transport policy via the establishment of minimum standards of, for example, accessibility. Finally there is a discussion of the work of Rawls and the way in which transport can be treated as a means of accessing primary opportunities and self-respect, crucially these are the type of goods distributed by government and have a bearing on the design of public institutions.

### Utilitarianism and Cost Benefit Analysis

The prominence of utilitarianism in transport policy making is through its provision of the foundations for the commonly used practice of CBA. Its basis on the principle that the total benefits of a decision ought to outweigh the total costs was conceived, in its early use in infrastructure decision-making as an alternative to decisions where benefits accrued to a small minority or interest group (Shapiro and Schroeder, 2008). Indeed Bentham's original concerns that government's role was total of happiness or utility was similarly a challenge to decisions taken in the interests of an, then aristocratic or wealthy, elite. In this light it is clear how Bentham's utility principle has been seen as self-evident. As its application through the techniques and practices of CBA has been developed and refined it has increasingly become seen as a value neutral decision support tool (Mackie, 2010). It is useful to first deal with the fundamental criticisms of utilitarianism and its application through CBA and then to consider why and how it has come to be seen as in some way value free and the consequences of this.

One important fundamental criticism is of the utility principle itself. As an alternative to the benefits of government action accruing to an already wealthy elite the idea that the benefits ought to be maximised across the population has an intuitive appeal. However the wholesale adoption of this principle may conversely make it harder to argue for costly measures that benefit a *disadvantaged* minority as, in some cases, greater utility could be achieved if the same resources were used for improvements that benefit the majority. *In extremis* the adoption of the utility principle can allow, what are from an alternative ethical perspective, major injustices. In the case of transport this could be the loss of property or even life. The response to this is that in reality CBA never quite functions in this way as it is contained within a range of alternative moral positions. For example one could not conceive of a justification for a transport intervention that resulted in the death of even a single named identifiable individual, no matter how great the benefits were. While it is true that the cost of human life is often included within CBA it is in a highly abstract form such as the increased risks of death or injury distributed amongst a large group.

Even if we accept that the fundamental objections to utilitarianism as permitting injustice are addressed in the practices of actual CBA there are further problems with the utility principle. The way, in current practices, money is taken as a suitable proxy for utility shows up some of these objections. The economic models on which CBA relies assume the maximisation of economic benefits is a self-evident good. As Frank (2001) points out everyone, rich and poor alike are seen as having an interest in maximising the economic pie as everyone will get a larger slice. Yet this ignores the potentially corrosive effects of high levels of inequality (Wilkinson and Pickett, 2011). Indeed it may actually be better for economic benefits to be evenly distributed even if this is at a cost to overall economic growth. Overall utility or economic growth may actually have to be reduced if distributional fairness is to be achieved. The monetisation of benefits is also, potentially problematic due to the inherent biases that may occur. As it has been noted the value of a unit of currency is not the same to everyone (Self, 1970) and the use of money as a proxy for value may well entrench existing inequalities in wealth as costs to the wealthy, measured in financial terms, tend to be greater than costs to the poor. There is also some criticism that this ignores externalities by favouring costs and benefits that are monetisable, however unless we accept that there is some fundamental objection to seeking to place a value on some things then this objection, at least theoretically, can be overcome. The response from advocates and practitioners of CBA is that in real life decision-making values are always assigned and weighed against each other. The limitations of the tool are acknowledged yet it is still seen as a better alternative than anything else on offer. One response from practitioners was to ask what alternative there was to CBA. These justifications are in many ways compelling, also as Sen (2000) points out so

to is the language of costs and benefits. It would be hard to argue the reverse, a course of action with high costs and little benefit. Therefore it is possible to find quite broad acceptance of the, albeit contentious basic principles (ibid) without acceptance of all of the current practices.

Examining some of the other claims made for CBA is necessary if we are to understand why it has come to be seen as in some way value neutral and the consequences of this. It is claimed to be a means of preventing inefficient decisions (Sunstein, 2001) and overcoming the rational failings of political institutions (Richardson, 2000). This establishes efficiency as a key value in decision-making, possibly to the exclusion of others such as justice or fairness. The implication that other (political) forms of decision-making are in some way inefficient is important here. In the practice of CBA this can be seen in the blurred distinction between CBA as a decision *support* tool or as a decision-*making* tool. The argument here is that if, as those advocates of CBA argue, the solution to the problems are more and better data (Vickerman, 2007) then there comes a point at which, when all relevant values have been included, it becomes hard to claim that it is supporting decisions. If one assumes that all relevant values have been calculated and weighed up then it becomes hard to argue for any conclusion other than the one reached by the analysis. This lends governmental authority to the tool and the principles embedded within it (Dean, 1999), in addition it creates a privileged and arguably undemocratic position for the technical experts whose role it is to administer the tool (Dahl, 1989; Fischer, 1990). The practical implication of this is that the judgment of decision-makers is removed or reduced due either to a lack of trust in that judgement, an undue faith in CBA, or both. Where those decision-makers are democratically elected this becomes even more problematic.

The removal of judgement certainly does not remove value judgements from CBA. As Kelman (1981) points out the calculation of values may in itself be a mathematical exercise however it is the decisions about what values to assign, and the equivalencies between values where judgements take place. The practices of discounting and reaching conclusions about values based on economic methods such as willingness to pay or willingness to avoid are suspect here, in part due to the reasons discussed above with reference to the way this can favour the more affluent. There are further criticisms of these tools as simplistic and not representative preferences which are often complex with individual preference often shaped by the role or the conditions under which it is expressed. For example I may choose not to donate to the victims of some disaster as an individual but that is very different from stating publically that I do not care about the victims or for that matter electing a political representative who says they would ensure the state does nothing to help those same victims. The strong criticism of CBA here, or at least as it is generally practiced, is that it allows no room for the deliberation of values. Nussbaum argues that this allows us to lose sight of the tragic nature of decisions; some of the i by the application of the utilitarian principle. Deliberation over values has intrinsic worth that is neglected by CBA, something of particular relevance to the planning and delivery of transport infrastructure.

Awareness of the wrongness inherent in the chosen course of action, even if justified, should not be lost as this can motivate policy-makers to make amends in some way to those wronged, and to try and change the overall situation so that less of these tra arise in the future

The conclusions reached in our study of utilitarianism and its application through CBA are useful in the sense that they illustrate the value of the approach taken to our examination of ethics in transport policy making. Our findings here are that whilst there are flaws within a tool such as CBA the basic principles have considerable justification when its application supports decisions and sits within a wider ethical framework. Where it becomes problematic is when the ethical assumptions and value judgements inherent within the practice of CBA are unacknowledged and it is presented as value neutral. This leads to an assumption that efficient, potentially undemocratic, decision-making and economic maximisation are the dominant values in transport policy. This may be the case however these values would be better acknowledged. This would allow challenges to these values, the consequences of adopting these over other values to be acknowledged and possible alternatives to be suggested. A situation that, if it facilitated deliberation of and some agreement over values, could then allow for CBA or variations on the same, essentially utilitarian, theme such as social cost benefit analysis or multi criteria analysis

(MCA) which claims to bring a wider range of values into calculation (Thomopoulos et al, 2009; OMEGA Centre 2010). Whilst the debate on whether different forms of CBA or MCA are inherently superior is one we have sought to avoid, the question our analysis poses to any such proposed tool is; to what extent does it make the ethical assumptions that are embedded within it transparent.

### **Wellbeing**

Before considering an alternative to the utilitarian ethical framework reflected in CBA it is of value to consider another iteration of utilitarian thought with particular relevance to transport policy making. Former London School of Economics economist Richard Layard seeks to update the ideas of Benthamite utilitarianism bringing together recent insights from psychology and economics. He calls for policy to be based upon the greatest happiness principle (Layard, 2011) and that actions should be designed to increase happiness. Evaluation ought to be against this principle with actions judged on their consequences in increasing happiness or reducing misery for those who are affected with every individual equal in this respect. He argues this offers an alternative to economic principles that establish growing GDP as the ultimate aim and measure of government policy. This is based on a wealth of data that, beyond a certain point, increasing income does not appear to increase happiness. The consequences of this focus on growth, combined with the individualism and restlessness of modern societies have had a negative impact on what he identifies as the big 7 factors influencing happiness (ibid). These are defined, in order of importance as;

1. Family relationships
2. Financial situation
3. Work
4. Community and friends
5. Health

The last two, personal freedom and values are not ranked implying they are of a different order.

The evidence he cites is the declining reported rates of trust, particularly in America and the UK, participation in community organisation and activities, rising job insecurity and rates of mental ill health. He argues that advances in psychology and neuroscience now enable us to treat happiness as something objective and measurable through the observation of brain activity and its correlation with self-reported happiness. Economics, he believes is still valuable in providing a basic framework for evaluating costs and benefits based on the idea of individuals as self-determining agents. However on its own it is limited requiring the input from other social sciences. Layard favours the northern European social democracies as performing better on many of the measures he cites as well as offering greater stability in terms of employment, housing and community. The policy predictions that flow from this analysis are quite radical in some respects. The first is that, as it is measurable governments ought to be in the business of measuring the average national happiness (ibid), something that is now undertaking to do (Office of National Statistics, 2015). Taxation has an important role to play and needs to be rethought less as a burden and more as a means of dealing with the externalities produced by economic activity. Here he mostly talks about status seeking behaviour and the negative effect it has on relative social status. However under this he also identifies many of the negative externalities produced by increased mobility, the damage to communities, family life and mental health.

In relation to transport Layard's arguments provide a, somewhat superficial, justification for private over public transport, for the reduction of long-distance commuting that may have a negative impact on family and community relationships and action on more active travel in order to promote health. However when it is applied to real policy making the question of measurement of happiness becomes apparent. In order to apply Layard's views in the context of transport policy, we still need a universally accepted technical solution of how precisely interpersonal comparisons of utility can be made. Even if it was assumed that it was as possible to objectively measure happiness and unhappiness, for the purposes of transport decision-making there would still be similar objections to those faced by CBA. For example it may have the same bias towards the *status quo* making it harder to subject regular commuters to the misery of disruption in order to carry out upgrades. It may also favour investments to existing infrastructure to reduce the misery of congestion at the expense

may offer regional economic benefits or long-term environmental benefits to future populations for whom levels of happiness can only be inferred.

### Capabilities

An alternative approach to that of Layard that avoids these criticisms is the focus on capabilities. This approach to human well-being is not merely concerned with achievements (for instance being happy), but rather argues that freedom to choose to live what Aristotle termed the good life is of importance to a person's quality of life. The emphasis, under the capability approach, is not only on how human beings actually function, but also on their having the capability, which is a practical choice, to achieve outcomes that they value and have reason to value (Sen, 2001). Drawing upon the Aristotelian tradition that posits essential features without which human life is not possible, Nussbaum (1992) defines ten basic human functional capabilities of these the particular, clear, relevance to the examination of transport policy making.

1. Being able to live to the end of a complete human life, as far as is possible, not dying prematurely, or before one's life is so reduced as to be not worth living.
2. Being able to have good health; to be adequately nourished; to have adequate shelter; having opportunities for sexual satisfaction; being able to move from place to place.
3. Being able to avoid unnecessary and nonbeneficial pain and to have pleasurable experiences. (ibid)

She states that all are of central importance and all are distinct in quality. Something she argues limits the trade-offs it is possible to make and the scope for forms of cost benefit analysis. A deficit in one cannot be substituted for by an increase in another essential capability. As Sen points out, the freedom to choose is central. Likewise for Nussbaum the role of government is not to push individuals towards choosing to act in certain ways but rather to provide them with the necessary resources and conditions for establishing minimum thresholds and conditions for individuals to act in ways consistent with their choices. If one takes the first of Nussbaum's capabilities and applies it to transport, there would be no objections to someone choosing to use a form of transport that was inherently dangerous to the user alone even though it may result in premature death. However if all forms of transport were associated with high risks of death or life altering injury (due to poorly maintained infrastructure, lax safety standards or inherently unsafe transport technologies being the norm) then government would be deficient. It would have failed in ensuring citizens have the necessary resources and conditions and would have in effect removed choice. This is given that the option not to move does not exist, movement being another essential human capability rooted in the experience of embodiment. A concrete example is failure to provide sufficient cycling or pedestrian infrastructure to ensure that there was not an undue risk associated with these modes. Here not moving is not an option, and given that these forms of transport, in contrast to more sedentary modes, also generate good health this provides a strong justification for more investment and a reduction of rather than acceptance of road deaths for pedestrians and cyclists.

One feature of the capabilities approach that proved particularly challenging for the members of the group familiar with transport planning and decision-making was the need to establish minimum thresholds and the inability to trade-off between capabilities. Trade-offs are a well-understood feature of the decision-making around transport infrastructure where it is acknowledged that there are, by definition winners and losers in any transport decision. Furthermore when this is applied to transport infrastructure the costs of ensuring everyone is above a certain threshold can appear to be prohibitive. To use another real life example there are many rail and underground stations that are not fully accessible to people in wheelchairs, something that appears to violate the principle of allowing everyone the capability to move from place to place. Inaction is justified on the basis that there is insufficient resources to achieve full accessibility and fulfil other priorities for the rail network. In reality there are other mechanisms (mobility vehicles, subsidised taxis etc.) to allow the vast majority of people in wheelchairs to move freely, indicating that capabilities are not usually the responsibility of a single

institution. However if this were not the case it would, under a capabilities approach, be impossible to justify not spending what may be very large amounts of money on a relatively small group.

On the face of it, it may appear that an ethical framework that states that each individual possesses capabilities that cannot be negotiated or reduced has little to offer policy making where resources are often limited and trade-offs must be made. A framework that requires vast expenditure on a small group may result in situations where there are few resources available to meet the needs of the majority. However a closer examination reveals situations where basic thresholds have been established. In most developed countries now, regulations stipulate full disabled access as a planning condition of new transport infrastructure and it would be hard to conceive of this being argued against on grounds of cost. The example of existing infrastructure, if anything, confirms an acceptance of much of the capabilities approach as the alternative mechanisms provided to people in wheelchairs are often resource intensive yet these costs are not born by the infrastructure owners and operators but other parts of the welfare state. Finally, there is value in an ethical framework for addressing situations such as unacceptable road deaths due to lack of cycle and pedestrian infrastructure even though this may not instantly bring about change. As Wolff points out, it may underline the essential injustice of the current situations. Something that denies those responsible the ability to claim that their failure to act is in any way justified

### Rawls

The final ethical theory considered by the group has been that of John Rawls who, with his difference principle, argues that actions that improve the situation of the most well-off in society are only justifiable in so far as they also improve the situation of the least well-off. This principle has been used to justify a greater emphasis on public transport and, beyond a certain point restricting car use as a means of prioritising the needs of groups who require accessibility over those who require ease of movement (Tyler, 2004). This is the point at which car use begins to impinge upon groups, such as people with disabilities, who benefit from mobility and access to public transport. It has also been suggested as an ethical principle with which to guide transport policy making. This is as a means of ensuring that any attempt to improve average levels of accessibility still ensures the gap between the neighbourhoods or areas with the greatest and the lowest levels of accessibility remain within predetermined limits. In short it ensures that any attempts to raise overall levels of accessibility must improve accessibility for those with the least, consistent with Rawls' difference principle (Rawls, 2012). Whilst this is seen as requiring a shift in current practices of equity analysis conducted by transport authorities the introduction of a different ethic is seen as a contribution, made by Rawlsian principles, to wider shifts in values (ibid).

The other relevant component of Rawls theory, discussed by the group, has been his use of the original position in relation to the design of society's public institutions (Rawls, 1999). In the original position we are asked to identify principles that should regulate our society's public institutions. The parties in the original position are supposed to be representative of you and I. They are mutually disinterested and aim to secure as large a set of primary goods for the people they represent as possible. Rawls defines primary goods as, rights, liberties, and opportunities, income and wealth and the social basis of self-respect. In the original position the parties only have general knowledge. Rawls' veil of ignorance such that the parties cannot exploit any personal knowledge about how they will be affected by any agreement. Among other things, they are denied knowledge of the personal preferences, the economic and social position, and the talents of those they represent.

The veil of ignorance is justified on the grounds that knowledge of how any agreement will affect different individuals will bias the parties towards certain agreements and agreements. From this view, this would be unfair. Broadly, the parties in the original position reason as follows. Initially, they agree to an equal division of goods. They cannot agree to an unequal division because, as they do not know whether those they represent would benefit or lose from an unequal division of goods, there is no rational basis for agreeing to unequal division of primary goods. However, given well-known arguments about the benefits of inequality the parties *do* consider unequal distribution. If it is the case that, inequality generates more in absolute terms of a certain good, then we have a reason to depart from equal distribution. Rawls' explanation of this is based upon the idea that political principles are justified to those whom power is exercised over. His solution is the difference principle (discussed

above) on the basis that if inequality can be justified to the least well-off, as, to use Frank's terminology, their piece of the pie gets bigger, then inequality can be justified to the rest of society. The implications of incorporating Rawls theories into the *design of public institutions* related to transport is discussed in the following, final section of the paper.

### Ongoing discussions

It would be wrong to present the final section of this working paper as a conclusion as it is, in reality, a snapshot of an ongoing discussion. However there is some value in drawing together the different strands that have coalesced around a developing position that has emerged from the work we have conducted so far. This position comes from the Rawlsian emphasis on rational design of public institutions taking the position that transport is not currently seen as part of the welfare state despite evidence that there is, in some areas, acceptance that the state has a role in assisting citizens to meet their transport needs. The argument here is that this is inconsistent and that considering transport as part of the welfare state will engender increased sensitivity to values that are currently neglected, yet considered in other areas of state provision.

### Transport and the welfare state

The position being developed here is that transport most obviously connects opportunities and their income and wealth, Rawlsian primary goods. Citizens need access to get to work, and to change job when they want to or when this becomes necessary. This is particularly important in countries where there are regional disparities in economic opportunities. Yet transport also facilitates other opportunities such as seeing family, engaging in cultural activities, attending sporting events, and more generally to exercise what Rawls called individual's conception of the good. When we consider the UK Department of Transport's definition of their own role, it is clear acknowledgement of a role in helping people meet their transport needs.

We [the DfT] work with our agencies and partners to support the transport the UK's businesses and gets people and goods travelling around the country invest in transport infrastructure to keep the UK on the move (DfT, 2015)

Yet in other areas there is an acknowledgement that the state does have a role, the provision of additional facilities for wheelchair users discussed above or policy that sees over £1 billion spent on free bus transport for pensioners (Mackett, 2014). Whilst this appears inconsistent many of the measures, such as the provision of vehicles for people in wheelchairs, are not provided by the DfT. In theory this could lead to situations whereby the actions of the DfT, in not funding measures to increase mobility for all, may inadvertently increase the claims on other departments who are required to fund these supplementary mobility services.

The case for treating transport as part of the welfare state is twofold. First it is the case that transport facilitates citizen's access to primary goods, certainly opportunities, income and wealth, and there is also an acceptance of the role of the state in enabling some citizens (the elderly and those with disabilities) to access those goods. Second, there is clear evidence of market failure. In areas where markets provide for basic needs there is general acceptance that these activities can, largely, be left up to the market. If one takes the provision of food, the state may have some role in regulation and ensuring standards but by and large the business of feeding the population is left to market actors. In contrast transport, as with health, education or policing is an area which, if it were left purely to market forces would result in serious inequalities and injustices. It may seem contradictory to be suggesting transport be treated as part of the welfare state at a time when neoliberal conceptions of the state appear to be seeking to reduce its scope. However this neglects the evidence that even in states, such as the UK where there has been a prolonged period of neoliberal governance there is still considerable public expenditure, in the UK it has hovered around 40 per cent since the late 1980s (HM Treasury, 2015). Whilst this expenditure may have been dictated by different values under neoliberalism, liberty as opposed to equality for example, from a philosophical perspective there are still value positions associated with this particular form of public expenditure.

The questions raised by treating transport more overtly as part of the welfare state are potentially interesting ones. As discussed above some distributional analysis is already part of transport appraisal but were values such as the equality of opportunity, that is reflected in the aims of the Department of Education, to drive the provision of transport then this would have to shift to the fore;

The Department for Education is responsible for education and children s s  
We work to achieve a highly educated society *in which opportunity is equal for children and young people, no matter what their background or family circumstances*. (Department for Education, 2015 emphasis added)

If other areas of the welfare state are considered then, for example, in health it is established practice to consider quality of life issues in appraising the outcomes of medical interventions. In the UK the measurement takes in both quality and length of life expectancy offered by any medical interventions. These are measured in terms of QALYs or quality adjusted life years. One year at full health is measured at 1 QALY, death is 0 with minus scores possible for some health states which are considered, effectively worse than death. Estimates of willingness to pay are between £20,000 and £30,000 per QALY (Philips, 2009). This enables the development of a cost/utility ratio as a means of measuring the value of, or comparing the benefits of different interventions. Whilst this is by no means uncontroversial it does represent a systematic attempt to include values other than simply the valuation of time which is the dominant feature of CBA used in transport appraisal. One final observation of the implications of considering transport as part of the welfare state comes again from the field of healthcare. Members of the group, trained philosophers, are currently working on medical ethics boards, groups made up of physicians and philosophers. Something that is common practice and can result in the need to provide ethical advice at very short notice in the event of an emergency. This raises an interesting question of whether or not the treatment of transport as part of the welfare state might not see similar, more overt, consideration of the ethical dimension of transport policy decisions and even the establishment of transport ethics boards.

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